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A corpus-based account of morphosyntactic evidentiality in discourse in Chhitkul-Rākchham

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Department of Linguistics

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Abstract

Chhitkul-Rākchham is a Tibeto-Burman language of the Bodic branch spoken in Northern India.

Evidentiality is expressed by means of a range of morphosyntactic devices: copulas, auxiliaries, suffixes, clitics, particles and converb constructions.

Chapter 1 deals with the language context. High-caste members – the Chhitkul-Rakchham speakers – were not the original inhabitants of this area. Chhitkul-Rākchham is not Tibetic, rather, it shows similarities with the Kiranti subgroup.

Chapter 2 provides a chronological and thematic overview of evidentiality from the beginning of the 20th century to the present. I introduce my own theoretical apparatus and I address issues related to methods.

Chapter 3 introduces the Chhitkul-Rākchham verbal system: finite and non-finite verb inflection and negation.

Chapter 4 focuses on copula clauses, where five copula verbs and a set of syntactic allomorphs are part of an epistemic scheme that notably includes emphasis. Their distribution is to a large extent semantically and pragmatically driven.

Chapter 5 deals with auxiliation. I demonstrate that it is the *hierarchical arrangement* of the verbal categories – main verbs, second verbs and auxiliaries – and not auxiliaries taken in isolation, which provides an adequate overview of the phenomenon.

Chapter 6 gives an account of reported evidentiality, never epistemically neutral and expressed by means of a hearsay clitic and a quotative adverbial complementizer.

Chapter 7 sheds light on a few converb constructions invariably followed by the perceptual copula (or a syntactic allomorph). The copula dampens the dubitative or emphatic meaning carried by the converb.

Chapter 8 shows that a pair of discourse particles – one emphatic and one assertive – is part of the evidential system.

Chapter 9 deals with evidentiality at the noun phrase level, expressed by morphosyntactic means already present at the verbal level (final particles and copulas).

I uncover seven evidential distinctions: perceptual, dubitative, assertive, personal experience, personal assertive, reported, and neutral.

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This thesis is dedicated to the people of Kinnaur in general and to the Chhitkul and Rākchham community in particular.

देखो मगर प्यार से

Dekho, magar pyār se

(seen on a bus to Chhitkul)

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List of abbreviations:

1 = First person

2 = Second person

3 = Third person

ABL = Ablative

ABS = Absolutive

ACT = Active participal

AGR = Agreement

AGT = Agentive

ALL = Allative

ANIM = Animate

APPL = Applicative voice

ASS = Assertive

ATT = Attributive

AUG = Augment

AUX = Auxiliary

BEN = Benefactive

CAUS = Causative

CJ = Conjunct

CLT = Clitic

COM = Comitative

COMP = Comparative

COMPL = Complementizer

COND = Conditional

CONJ = Conjunction

CONN = Connective

CONS = Consent

CONSLT = Consultative

CONSEC = Consecutive

COP = Copula

CVB = Converb

DAT = Dative

DEF = Definite

DEM = Demonstrative
DISJ = Disjunction
DIST = Distal
DJ = Disjunct
DMEAN = Demeaning (particle)
DU = DUAL
DUB = Dubitative
E = Epenthetic
EGO = Egophoric
EMPH = Emphatic
ENR = Enumerative
ERG = Ergative
EXCL = Exclusive
FEM = Feminine
FOC = Focus
FUT = Future tense
GEN = Genitive
HAB = Habitual
HON = Honorific
HORT = Hortative
HSY = Hearsay
INCEP = Inceptive
INCL = Inclusive
INDF = Indefinite
INESS = Inessive
INF = Infinitive
INFR = Inferential
IMP = Imperative
IMPV = Imperfective
INSTR = Instrumental
INT = Intensifier
INTEN = Intentional
INTERJ = Interjection
INTR = Intransitive

IRR = Irrealis
GEN = Genitive
GER = Gerund
LOC = Locative
MASC = Masculine
MID = Middle voice
MODIF = Modifier
MOT = Motion
NEG = Negative
NFUT = Non-Future
NHON = Non-honorific
NOMI = Nominalizer
NUM = Numeral
OBJ = Object
OBL = Oblique
∅ = Unmarked
PASS = Passive
PE = Perceptual
PEEX = Personal Experience
PFV = Perfective
PL = Plural
POSS = Possessive
POST = Postposition
PREV = Preventive
PROG = Progressive
PROSP = Prospective
PROX = Proximal
PRS = Present tense
PTCL = Particle
PTCP = Participial
PURP = Purposive
QNT = Quantifier
QP = question particle
QUER = Querying (particle)

QUOT = Quotative

REAL = Realis

REDUP = Reduplication

REFL = Reflexive

REL = Relator

RELV = Relativizer

ROOT = Verb root

RPT = Reportative

SG = Singular

SIM = Simultaneous

SM = Subject Marker

SML = Semblative

SUBJ = Subjunctive

SUBL = Sublative

SUPRESS = Superessive

TR = Transitive

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Chapter 1: The ethnography of the Chhitkul-Rākchham language

1.1 Language context

Chhitkul-Rākchham (ISO 639-3 code CIK; Glottolog code chit1279) is an unwritten Western Tibeto-Burman or Bodic (in the sense of Bradley 1997: 3) language commonly assigned to the West-Himalayish subgroup and spoken in the Kinnaur district of Himachal Pradesh, northern India.

The names of the language hitherto found in the literature include Chitkhuli (Bailey 1920; Bradley 1997: 14; Widmer 2014), Tśitkhuli (Shafer 1967), Chithkuli (Benedict 1972), Chhitkuli (Sharmā 1992; Huber 2013), Chitkal (Saxena 1992: 4, 1995: 258), Chitkuli (Grimes 1996; Saxena 2005) and Chitkul (Saxena 2011).

Several of these terms include the suffix *-i*, an Indo-Aryan borrowing added to many TB languages of the area. These names are inadequate in that they do not take into account that the language is not only spoken in Chhitkul (population 700, altitude 3,450m.), but also in Rākchham (population 750, altitude 2,900m.). The spelling with two ‘h’ stems from the Hunterian Transliteration System (William Wilson Hunter 1871) in which the grapheme <chh> refers to the aspirated voiceless alveolo-palatal affricate /tʃʰ/ (or /tʃʰ/). In fact, the village names containing the sound /tʃʰ/ are spelled with two ‘h’ throughout Kinnaur.

1.1.1 Existing research

The West-Himalayish subgroup allegedly comprises 15 languages,¹ all of them spoken in the States of Himachal Pradesh and Uttarakhand² (Widmer 2018: 77). The distribution of the available data is unequal across the subgroup.

Full grammars are available for Rongpo (Zoller 1983), Bunan (Widmer 2014) and Darma (Willis 2019). Kinnauri is the object of numerous publications, where it is referred to with

¹ The fifteen languages are Kanashi, Lower Kinnauri, Standard Kinnauri, ‘Chitkhuli’, Jangrami, Shumcho, Tinan, Manchad, Chaudangsi, Byangsi, Darma, Rangkas, Rongpo, Sunnami, and Bunan. According to Sharmā (1994: 5) and Van Driem (2001b: 934), Rangkas is now extinct.

² Uttarakhand was separated from Uttar Pradesh in November 2000.

different spellings:³ a word list in Gerard (1842), Tribe (1884) and Diack (1896), a brief grammar and a dictionary in Bailey (1909, 1911, 1938) and Joshi (1909), a grammar and a word list in Johannes (1967), a descriptive analysis in Ramasubrahmanian (1967), a descriptive grammar in Sharmā (1989), a description in Nishi (1993), a phonological inventory in Ju (1996), and a linguistic sketch (Saxena 2017, 2019).

In addition, a string of research papers put the emphasis on verbal morphology (Saxena 1992, 1995, 2004; Takahashi 2001, 2007, 2009, 2012) and reported speech (Saxena 2000, 2002). These works deal with either Lower Kinnauri or the standard variant of a dialect cluster to which Chhitkul-Rākchham would belong⁴.

Chhitkul-Rākchham has received far less attention. Linguistic data is limited to a very brief account consisting of forty-seven sentences and a short dictionary (Bailey 1920: 78-86), a sketch grammar (Sharmā 1992: 197-304), a 210 word list (SIL 1998),⁵ and a few words from the Swadesh list (Widmer 2014). The degree of relatedness among nine ‘Kinnauri varieties’ is discussed in Saxena (2011) based on a revised Swadesh list and a few grammatical constructions. Chhitkul village is part of the study, but Saxena provides very few data. Mehta (2020) deals with Chitkuli verb inflection⁶, but the data she presents is actually from Kinnauri – she notably mentions the same three copula forms (*to*, *du*, and *ni*) as in Saxena’s papers.

Thomas Grahame Bailey was the first to engage in a linguistic description, however succinct, of Chhitkul-Rākchham. He was born in Ambala, India, in 1872, and served the Church of Scotland’s mission in Wazirabad (now Gujranwala district, Punjab, Pakistan) from 1895 to 1919. In addition to translating the New Testament into Northern Panjabi, Bailey produced several grammars and textbooks and provided descriptions of numerous Northern Indian languages, including Kinnauri and ‘Chitkhuli’, based on several visits in Kinnaur (1906, 1910, 1911 and 1914). On his return to England in 1919, he became Reader in Hindustani – later changed to “The Nizam’s Readership in Urdu in the University of London” at the School of Oriental and African Studies (SOAS) – until he retired in 1940.

³ Koonawur in Gerard (1841), Kunawar in Gerard (1842), Kunawari in Tribe (1884), Kanawar in Konow (1905), Kanwari in Grierson (1909), Kanauri in Bailey (1909), Kanāwari in Joshi (1909), Kanauri in Neethivanan (1971), and occasionally with different names altogether – Hamkadaya Hamskad in Sankrityayan (1957) [1948], Komskad in Bajpai (1991: 43).

⁴ Bailey (1909: 661-2) distinguishes four dialects of Kinnauri: ‘Kanauri proper’, ‘Lower Kanauri’, ‘Thebör Skad’, and ‘a dialect spoken in the Baspā Valley in two villages called Chhitkhul and Raksham’.

⁵ The same list, based on Blair (1990: 28-9), was collected in twenty different locations of Kinnaur district.

⁶ Zoomdemic 2.0, https://m.youtube.com/watch?v=F7TQAm_JOz8 [accessed 03-06-2020].

D. D. Sharmā's sketch grammar deals with phonology, parts of speech, case marking, object marking, TAM, voice – but not evidentiality as such. Although confusing in some places, his contribution is very useful. D.D. Sharmā obtained his PhD in Sanskrit in 1958. He provided accounts of a great number of Indian Tibeto-Burman languages in the series *Studies in Tibeto-Himalayan Languages*, published during the 1980s and the 1990s. Born in 1928, he was Professor at Panjab University, Chandigarh, until 1989.

1.1.2 Language classification

In this section, I deal with how the relationship between Chhitkul-Rākchham and Kinnauri is usually described in the literature (§1.1.2.1), I discuss the position of the former within the so-called 'West-Himalayish' branch (§1.1.2.2), and I situate 'West-Himalayish' within the Tibeto-Burman language family (§1.2.2.3).

1.1.2.1 Chhitkul-Rākchham and Kinnauri

The discrepancy observed in terms of coverage between Kinnauri and Chhitkul-Rākchham should not be surprising. In some internal classifications of the West-Himalayish subgroup, the latter, if even mentioned,⁷ is said to belong to the Kinnauri language cluster (Shafer 1967, Thurgood and LaPolla 2017: 26), to the Kanauri sub-type (Benedict 1972), or is referred to as a "divergent variety" of the same (Bradley 1997: 14). Saxena (2011: 15) describes the language spoken in Chhitkul village as a 'Kinnauri variety'. Negi (2012: 101) uses the term 'Rakcham-Chitkul Kinnauri'. In the *People's Linguistic Survey of India* (PLSI),⁸ only two lines are devoted to 'Chitkuli-Rakshami', introduced as a 'variant' of Kinnauri (Negi and Negi 2017: 205). Bailey (1909: 662, 1920: 78) and Sharmā (1992: 197) use the term 'dialect'.

All these characterizations may have discouraged any further study to some extent. Twenty years ago, van Driem (2001b: 939) observed, "the dialectical diversity within Kinnauri is evidently great enough to warrant considering these local varieties [Chhitkul-

⁷ No mention is made of Chhitkul-Rakchham in the Linguistic Survey of India (Grierson 1909). Only Kinnauri, as part of the 'western subgroup'. Chhitkul-Rākchham is not included in Saxena's (1992) either, nor in Thurgood & Lapolla's (2003, 2017) classifications.

⁸ PLSI refers to a survey carried out by scholars, writers and activists to raise awareness of language diversity and provide an overview of the languages spoken in India by 2011-2012.

Rākchham included] as separate languages”. Sadly, almost no-one seems to have followed up on this observation.

Already Bailey (1909: 662, 1920: 78) underlined that Chhitkul-Rākchham “is not understood at all by ordinary Kanauris” and noted that “the inhabitants of these two villages speak a dialect of Kanauri which is very different from other Kanauri dialects, including Standard Kanauri, so different that it is not understood by people from any other part of Kanaur”. Furthermore, T.S. Negi (1976: 190) distinguished “what is spoken in Rākchham and Chhitkul” from “main Kinnauri Homs Kad”. Sharmā describes Standard Kinnauri and ‘Chhitkuli’ in two separate volumes, taking good note that the latter is “considerably distinct” from the former (1992: 199). Widmer (2018) abandons this two-sided treatment, making ‘Chitkhuli’ a language proper assigned to the so-called ‘Kinnaur subgroup’, together with Lower Kinnauri, Standard Kinnauri, Jangrami, Shumcho and Kanashi.

Irrespective of the previous observations, Ethnologue mentions two criteria when it comes to investigating the nature of a relationship between two language varieties. According to the first criterion, namely the “inherent understanding of the other variety”, Chhitkul-Rākchham and Kinnauri are two separate languages because they are mutually unintelligible. Their rate of lexical similarity, as measured by SIL (1998: 21), is not conclusive. Methods that rely on lexicon analysis – notably lexico-statistical and phylogenetic studies – often do not take morphosyntax into account. As for the criterion of “the existence of a common literature or of a common ethnolinguistic identity with a central variety that both understand”, this does not apply since the “central variety that both understand” does not exist.

It follows that from a strict linguistic perspective, one should treat Kinnauri and Chhitkul-Rākchham as two separate languages. The persistent use of the term ‘dialect’ to characterize the latter refers to extra-linguistic considerations. The widespread use of the term ‘dialect’ among Kinnauri speakers of English indicates an ideology of contempt. Chhitkul-Rākchham simply lacks prestige compared to Hindi and even to Kinnauri, the second main lingua franca in the area.

The Chhitkul-Rākchham case reminds us that one should consider internal classifications with extreme caution. As argued by Blench and Post (2014: 74): “in absence of any sort of systematic comparison [...] “subgroupings” are essentially vacuous. The use of pseudo-genetic labels such as “Himalayish” [...] inevitably give an impression of coherence which is at best misleading”, an argument in favour of Van Driem’s (2014) “fallen leaves” model.

1.1.2.2 Position of Chhitkul-Rākchham within West-Himalayish

Despite the lexical evidence (Grierson 1909: 428; Nishi 1991) of a genetic relationship between the fifteen previously mentioned languages, the term ‘West-Himalayish’ is problematic. The cardinal point ‘West’ gives too much credence to the geographical criteria. The number of languages classified under this denomination varies from one research paper to another: some classify Raji-Raute (‘Džangali’), Thangmi (‘Thami’), Barām (‘Bhramu’) and Dhuleli, all spoken in Nepal, as ‘West-Himalayish’.

Further subdivisions of the alleged ‘West-Himalayish’ family – into a western and an eastern branch (Benedict 1972; Saxena 1992), a Kinauri and Almora branch (Thurgood and LaPolla 2003: 16, 2017: 26), north-northwestern, northwestern and Almora (Shafer 1967), or north-northwestern, northwestern, Kanashi and Almora (Bradley 1997) – are purely anecdotal, because almost exclusively based on lexical data.

Comparing apparent cognates between Bunan, Darma, Byangsi and Chaudangsi, Widmer (2017: 44) notes that Bunan, although ascribed to the western branch, “exhibits an astonishing number of lexical parallels to the languages of the eastern branch”. Based on Widmer’s examples, Chhitkul-Rākchham, which reportedly also belongs to the western branch, finds itself in the exact same situation. Meillet (1925: 48) rightly observes that vocabulary is “the most unstable thing in language”, being easily borrowed and as such lexical correspondence “never provides absolute proof”. However, it is only when one combines shared vocabulary and shared morphology (especially irregular) that the validity of a distinction between Eastern and Western branch may be confirmed.

Within the ‘West-Himalayish’ subgroup, Chhitkul-Rākchham consistently appears peculiar. Bailey (1920: 78) and Sharmā (1992: 199) are not alone in claiming that the language is ‘different’ and ‘considerably distinct’ (from Kinnauri) respectively. The SIL survey (1998: 22-

23) concludes that “the lexical similarity range of Chitkuli with the other [nineteen] varieties suggests that Chitkuli is a distinct language” and that “based on a lexical similarity study, the languages of Kinnaur can be roughly divided into five language groupings: Kinnauri, Chitkuli, Thebarskad,⁹ Tibetan, and Indo-Aryan”. Relying on a different sample of varieties, Saxena (2011: 22) reaches the same conclusion. ‘Chitkul’ and Labrang “fall somewhere in between these two distinct groupings [the first one consisting of Sanglā, Nichar, Ropā and Kalpā, the second of Pooh, Kuno and Nako] being (separately) closer to one or the other group concerning some linguistic features, but distinct with regard to other linguistic features”.

During my field trip, a few people from inside and outside the community underlined a high degree of lexical similarity between Chhitkul-Rākchham and Jangrami, spoken in Lippa, Jangi, and Asrang. SIL (1998: 21) happened to measure this lexical similarity, as Lippa village was part of its sample. The percentage of lexical similarity between Lippa and Chhitkul and Rākchham is 50% and 52% respectively. A rate that is similar to the lexical similarity between Chhitkul-Rākchham and other Kinnauri varieties, that is, not high enough to justify any merging.

1.1.2.3 West-Himalayish within Tibeto-Burman

To which sub-branch of Tibeto-Burman ‘West-Himalayish’ belongs is equally unclear. Thurgood and LaPolla (2003) propose that ‘West-Himalayish languages’, alternatively called ‘Kinnauri-Almora’ (ibid, p.16), together with rGyalrongic, Dulong-Rawang and Kiranti languages, belong to a larger group called ‘Rung’. LaPolla (2013), elaborating on an earlier paper by Thurgood (1984), justifies this grouping by the existence of shared features in terms of person marking system – first and second person singular suffix, dual and plural marker, inverse marking and reflexive/middle marking *-si.

Whether verb agreement, attested in some TB languages but completely absent in others, is the result of shared innovation (LaPolla) or traces back to the Proto language (Bauman 1975, DeLancey 1980) is to date an unresolved issue. Van Driem (1993: 328-32), among others, is adamant that verbal agreement systems, since they are attested in various

⁹ Bailey (1909: 661) grouped the varieties spoken in the villages of Lippa, Asrang, Labrang, Kanam, Shunnam and Shaso under a single denomination, namely ‘Thebör Skad’. Nishi (1991) and Van Driem (2001b: 939) use the same term, which covers the same locations.

geographically non-adjacent Tibeto-Burman branches, must have their provenience in Proto-Tibeto-Burman. Referring to Nichols (1996: 48), LaPolla (2013) rests upon the criteria of “multiple paradigmaticity” and cognancy to support the ‘Rung’ hypothesis. DeLancey (2010: 31) dismisses LaPolla’s surmise on grounds that “since the only evidence for Rung is shared agreement morphology, if that morphology derives from PTB, the Rung hypothesis is pointless”, the middle marking *-si¹⁰ offering a good example.

With regard to methodological considerations, Meillet (1925: 34) reminds us of the absolute primacy of “correspondence rules” over “phonetical similarities”. Seen from this perspective, the occurrence of the reflexive/middle marker *-si in the alleged ‘Rung’ languages is inconclusive.

Jacques and Pellard (2021: 19) point out that person indexation is not a recent innovation, but an “archaic feature”. The data from Chhitkul-Rākchham (see table 78 in §6.4) confirm that person indexation did not emerge recently. Investigating phylogenies based on lexical innovations, Jacques and Pellard conclude that lexical innovations in verb are not exclusively shared by the Rung group. Instead, lexical evidence casts light on alternatives (Burmo-Rgyalrongic and Tibeto-Rgyalrongic) to the Rung hypothesis. Consequently, the Polysynthetic Proto-Sino-Tibetan Hypothesis (PPSTH), according to which languages devoid of person indexation from a synchronic perspective have lost this feature, is reinforced.

New insights from linguistics, genetics, archeology and the ad hoc study of migration paths will help reach a definitive answer. As argued by LaPolla (2013: 472):

We need to keep in mind the fact that there has been wave after wave of migration, and we should not assume that all people in a particular area are necessarily related, even if they appear similar

Regarding the issue of migration, the account given in §1.3 suggests Chhitkul-Rākchham was in intense language contact when the community was located in the Garhwal region (and was likely to be so prior to that period), an observation that does not allow us to dismiss the Rung hypothesis entirely. However, the latter has to account for the significant geographical distances separating Rgyalrongic, Nungish, Kiranti and West-Himalayish

¹⁰ See also Bauman (1975: 94), van Driem (1993: 320) and Jacques et al. (2016).

languages. In this regard, it is worth noting that the neat distinction between the system of person indexation and ‘egophoric’ is a typological rarity found in a few languages separated by roughly the same distances (see §5.11.1).

The data provided in this thesis makes it clear that both Chhitkul-Rākchham and Kinnauri are Tibeto-Burman languages¹¹. Benedict’s (1972: 7) observation that Tibeto-Kanauri “includes two subnuclear groups, viz. Bodish and Himalayish”, with the latter comprising “Kanauri, Chitkhuli, Thebor, Kanashi, Rangloi (or Tinan), Bunan, Manchatī and Chamba Lahuli, while a minor subtype is made of four little-known languages of the state of Almora (Rangkas, Darmiya, Chaudangsi, Byangsi)” is inadequate, see §1.3.

1.1.3 Languages spoken in Kinnaur

The number of languages spoken in the district of Kinnaur is about fifteen or sixteen. Seven of them are Tibeto-Burman: Sunnam, Shumcho, Jangrami, Lower Kinnauri, Standard Kinnauri, Chhitkul-Rākchham and western Tibetan (spoken in upper-Kinnaur). The language of the lower castes is an Indo-Aryan variety as shown in the documentary corpus, which includes two monologues from two different speakers, one from each village. Lower-caste people purportedly speak the same language throughout Kinnaur. Members of the lower castes call it *amro bolī* (*amro* means ‘our’ in this Indo-Aryan variety, while *bolī* means ‘language’ in Hindi). In Chhitkul village, since there is only one low caste, members of the high caste refer to *amro bolī* as *tʃʰamaŋ kat* (*tʃʰa:ma:nu kat* in Kinnauri) or ‘language of the Chamangs’ (weavers). People from the high caste, as pointed out by Cunningham (1844), do not understand the lower caste language, otherwise referred to as ‘harijan bolī’ (West-Pahari sub-group) in Saxena (2005).

As pointed out by Riaboff (2005: 47), “the Brahman caste is totally absent from Kinnaur”; only lama monks and nuns play a religious (Buddhist) function that may require some knowledge of Tibetan, but ability to speak the language is limited to some villages from Upper-Kinnaur (Pooh, Spiti, etc.).

¹¹ I give no credit to Konow (1905: 124) and Grierson’s (1909: 427) claim that subject agreement and object marking make Kinnauri closer to the Muṇḍā languages. More interesting is Konow’s view that the lexicon “is more closely connected with that in use in the Tibeto-Burman languages of Assam and further India than with the Tibetan one” (ibid, p. 119), and that Kinnauri and Bunan are not “closely related” (ibid, p. 124).

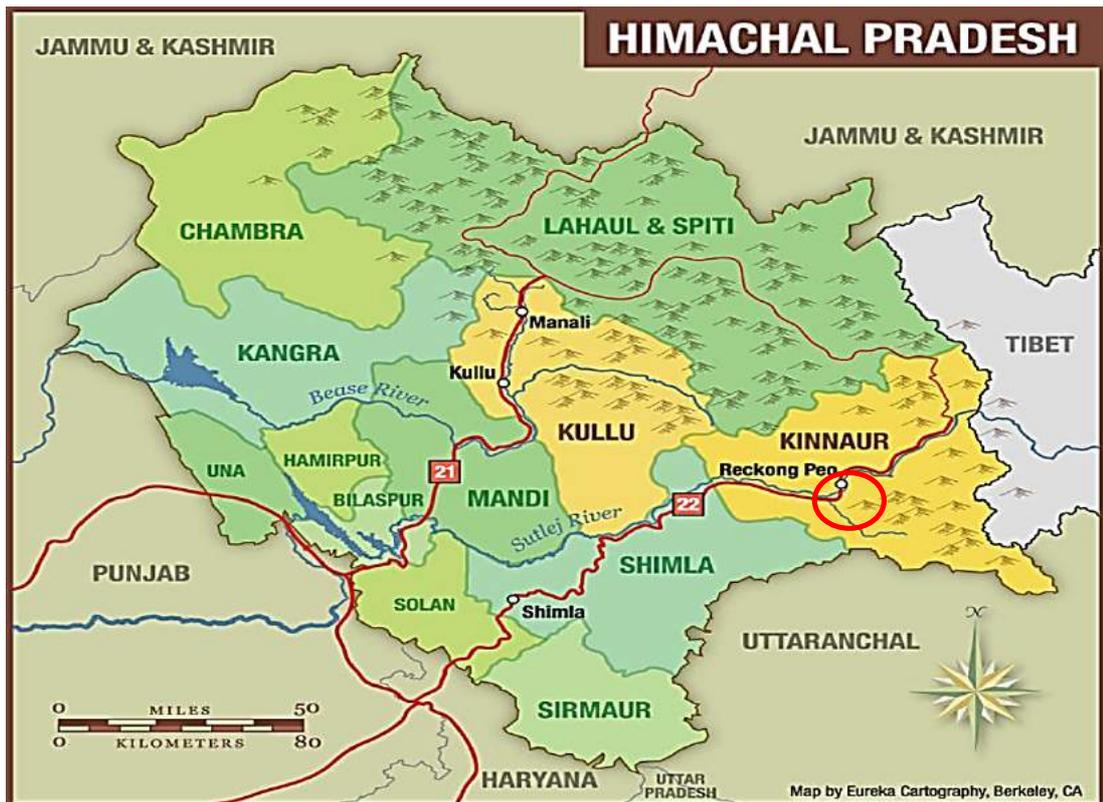
Languages other than Tibeto-Burman spoken in Kinnaur include Hindi, the official language and main medium of instruction of Himachal. The vast majority of Kinnaurese people have a good command of it. Furthermore, Sanskrit has been the second official language of the State since The Himachal Pradesh Official Language Bill, passed in February 2019, although the actual level of knowledge and use is next to non-existent. Some educated male members of the Chhitkul and Rākchham communities are conversant in English, the knowledge of which may be required for some government jobs. In addition, Pahari, Dogri, Kangri, Bihari, Punjabi (all five Indo-Aryan), and Nepali are in use, either as part of the linguistic ecology found in Kinnaur district (Pahari) and in Himachal Pradesh (Dogri and Kangri), or as languages spoken by migrant workers (Bihari, Punjabi and Nepali).

1.1.4 Speaker demographics

Chhitkul-Rākchham is the main medium of communication for only two small lower-Kinnaur villages, Rākchham (2,900m.) and Chhitkul (3,450m.), the latter being shortened to 'Chhul' in colloquial language (latitude 31.350787, longitude 78.436627). Chhitkul village is the more remote of the two.

1.1.4.1 Location

Rākchham and Chhitkul villages are located 70-80 kilometers (three-four hours by bus) from Reckong Peo, the headquarters of Kinnaur. Patches of land and wooden dwelling units under the name Khrogla and Dhangdhangshi, 3 kilometers further down from Rākchham, are formally part of the latter. Both villages are located on the bank of the Baspā River, in Sanglā valley, separated from Tibet (to the east) by the Zaskar Mountains, from Uttar Pradesh (to the south) by the Dhaula Dhar range and from the district of Lahaul and Spiti (to the north) by the rivers Spiti and Pare. Often dubbed 'the last Indian village' – for tourism purposes – Chhitkul is actually the last village of the Baspā Valley on the old Hindustan-Tibet road commissioned by the British Governor General of India, Lord Dalhousie in 1850 (Minhas 1998: 83). Opening a trade route with Tibet seems to have been one defining factor in this decision. Charles Napier designed the road and the East India Company was responsible for its execution. Chhitkul became accessible by road during the 1980s, via National Highway 22.



Map 1, Himachal Pradesh (Eureka Cartography, Berkeley, CA)

1.1.4.2 Speaker numbers

Recent infrastructure development (notably bridges) provides some useful information in terms of population¹². A board next to the last bridge before Rākchham village indicates that it benefited 1,254 people in 2008 (the figure includes Chhitkul). Reliable sources (the leadership of both villages) put the number of inhabitants at 742 for Rākchham and 705 for Chhitkul (2018). The Chhitkul-Rākchham speech community, once considered from a social perspective (Corder 1973, Hymes 1974, Dorian 1982) or as a ‘community of practice’, see Eckert and McConnell-Ginet (1992: 464), therefore includes about 1,450 members.

Gauging speaker numbers is a more challenging task. One must consider two important factors. Chhitkul-Rākchham is the language of the high-caste people, who are also numerically dominant. In most cases, members of the lower-caste(s), whose language is an Indo-Aryan variety, use Hindi and Kinnauri in their interactions with other community members. Around 14-15 households, out of 105, belong to lower-caste people in Chhitkul

¹² According to the 2011 Census of India, Chhitkul had a population of 582 and Rākchham 597, which gives a total population of 1,179 www.census2011.co.in [accessed 25-01-2021].

village. Assuming that the situation is somewhat similar in Rākchham, members of the lower-caste(s) may represent between 10-15% of the total population. When women from neighbouring villages marry into Chhitkul and Rākchham, they gain some understanding of the language, but very often do not speak it. Instead, they use Hindi and Kinnauri. Based on these considerations, an estimate of speaker numbers is about 1,000, close to the estimate (1,060) provided by Ethnologue (Chamberlain, Chamberlain and Pavey 1998: 14) thirty years ago.



Map 2, Kinnaur district, Himachal Pradesh

<http://himachalpradeshtravel.com/wp-content/uploads/2016/08/Tourist-Map-Kinnaur.jp>

A comparison between the number of households in Chhitkul village in 1958 (58) and in 2018 (105) shows a relatively sharp increase. However, some elder community members explicitly referred to earlier times (end of 19th century?) when this number was 360. A disease is said to have forced a large part of the population to migrate to the neighbouring

state of Uttarakhand, which suggests there may be speakers of Chhitkul-Rākchham in Uttarakhand too. Further research will confirm or disprove these accounts.

1.1.5 History of Kinnaur

Every myth is grounded in reality and yet, it distorts it. A paucity of written records along with geographical remoteness poses methodological constraints that Lévi-Strauss [1979] (1995: 38) perfectly captured:

The problem is: where does mythology end, where does history start? In the case, entirely new to us, of a history without archives, there being of course no written documents, there is only verbal tradition, which is claimed to be history at the same time.

One would therefore do well to crosscheck information, which is exactly what Singh (1989), former Deputy Commissioner of Kinnaur (1980-1983) accomplishes. Drawing on a body of literature from six different languages, Singh (ibid, p. 59) identifies seven main periods in the history of Kinnaur, among other riveting chapters. I retain these main periods in the following brief historical description, as they appear to be consensual (see also Negi 1976: 18):

- (1) The pre-Tibetan period (Antiquity-7th century A.D.) – Proto History;
- (2) Tibetan period (7th century A.D. - 13th century A.D.);
- (3) Period of early State formation (14th century A.D. - 17th century A.D.);
- (4) Period of consolidation of State formation (18th century - 1815);
- (5) Period of British Paramountcy over Bushahr (1816-1947);
- (6) Post-independence period till 1960 (1948-1960);
- (7) Post-1960 period.

The pre-Tibetan period (Antiquity-7th century A.D.) – Proto History:

Early literature from various traditions – Puranic, Jain and Buddhist (the *Jākata Stories*) – makes mention of a tribe called *Kinnaras*, among many other groups having their abode in modern northern India. The *Manusmṛiti* and the *Bhāgavata Purāṇa* depict the *Kinnaras*, among other tribes (the *Gandharvas*, the *Yakshas*, and the *Apsaras*), as skilled musicians

and intermediaries between humans and gods (Panchmukhi 1951: 7). Two *Jākata Stories* (in Pāli), *Candakinnara-jātaka* (485) and *Bhallāṭiya-jātaka* (504), make a specific mention of the *Kinnaras* (Fausbøll 1877-1896). Early literature also refers to another tribe, the *Kirātas*, on which name I elaborate below.

The *Kinnaras* are among the non-Aryan tribes mentioned in the Epic literature, notably in the *Mahābhārata* (books 1, 2, 3, 4, 5, 7, 8, 12, 13 and 14), the compilation of which Smith (2009: introduction 67) estimates from 400 BC to 400 AD. The *Kinnaras* are described as “half-men and half-horses” (1.66.3317)¹³, with a “sweet voice” (1.174.8900), and “well-versed in musical measures and motions, singing celestial tunes in proper and charming voices” (2.4.123). They are sometimes referred to as *Kimpuruṣas*, “half-lions and half-men” (1.66.3318), but the term seems to designate all the tribes that were living in what became modern Himachal Pradesh. Arjun, the third of the five Pandava brothers, allegedly encountered all the Himachali tribes when King Bhagadatta (2.25), who ruled the area, gave him permission to lead military expeditions further in the Northern territories.

The *Kinnaras* are also part of Indian iconography. Describing the rock relief Descent of the Ganges at Maamallapuram (near Madras), undertaken by the Pallava kings of South India in the 7th century, which depicts the story of the descent of the sacred river Ganges to earth from the heavens led by Bhagiratha, Zimmer (1992: 119-20) provides the quintessence of how Kinnaurese people are usually introduced in the literature:

Above these [the forehead of the great elephant, on a crag, perch a pair of monkeys, impassive and concentrated, studying the flow of water] are to be seen a couple of fabulous beings, half human, half bird, with bird legs and wings, called *kinnaras* or *kimpurushas*, meaning “what kind (*kim*) of human being (*nara, purusha*)”. The *kinnaras* are heavenly musicians. Such creatures are supposed to inhabit a semi-celestial region high in the Himalayas where earthly saints who have attained perfection (*siddha*) consort with superhuman beings.

Zimmer’s description highlights one major limitation in these early accounts: tribe names are hardly recognizable from each other. Zimmer conflates the terms *kinnaras* and

¹³ *The Mahabharata of Krishna-Dwaipayana Vyasa*, translated into English Prose by Kisari Mohan Ganguli, Bharata Press, Calcutta (1883-1896), www.sacred-texts.com [accessed 15-09-2019].

kiṃpuruṣas as only the second is part of Vedic literature. However, *Kinnaras* are a distinct “class” from the *Kiṃpuruṣas* according to both the *Bhāgavata Purāṇa* and Jain sources (Panchmukhi 1951: 11, 13). To complicate things further, Parpola (2015: 171) claims “Kinnara predates Kiṃpuruṣa: it is a Dravidian word, which was misunderstood to be Sanskrit, so that *nara-*, which in Sanskrit means “man”, was rendered by Sanskrit *puruṣa-*, “man””.

Other more general terms may subsume the *Kinnaras*. Lévi (1905 vol. 2: 77) contends the term *Kirātas* came to be used by the Hindu of the plains to refer to all the Tibeto-Burman communities dwelling in the Himalayan region. In the Laws of Manu (*Manusmṛiti*, X, 43-44), the *Kirātas* are among a few tribes that have been degraded from Kshatriyas to Sudras “by neglecting rites and by failing to visit Brahmins” (Olivelle 2004: 183). The term also appears in Vedic literature (*Śukla Yajurveda*, *Vājasaneyī Saṃhitā*, XXX, 16 and *Kṛṣṇa Yajurveda Tāittirīya Brāhmaṇa*, III, 4, 12, 1). In the *Mahābhārata* (IV, 35, 2; IV 25, 17) and in the *Rāmāyana* (*Kiṣkindhyā-Kāṇḍa*, 40, 27, 28), they are associated with the *Cīnas* based on their physical appearance: ‘shining like gold’, hence Chatterjī’s (1951: 16-23) term ‘Indo-Mongoloid’ to characterize the tribe:

It seems quite probable that long before 1000 B.C. some of these early Tibeto-Burmans had penetrated within the frontiers of India, either along the southern slopes of the Himalayas, through Assam (and established themselves in the sub-Himalayan tracts as far West as Garhwal and Kumaon), or by way of Tibet, going up the Tsangpo or Brahmaputra and then crossing the Himalayan barrier into Nepal and Garhwal-Kumaon

A few 19th century Orientalists¹⁴ established a connection between the *Kirātas* and the *Kirantis*, the latter referring to “ethnic groups mainly located in the mountains of East Nepal but also numerous in Sikkim and Darjeeling (India) (...) mainly composed of Rāi (also called Khambu, more diverse linguistically) and of Limbu people (also called Yakthumba)” according to Schlemmer (2004: 121).

¹⁴ See for example Hamilton (1819) and Hodgson (1858).

However, Chatterjī (1951: 18) describes the term *Kirant* as “a Sanskritisation [‘highlanders’] of some Sino-Tibetan tribal name”. In other words, *Kirant* is not an endonym and one should therefore use the term with caution. Based on a restricted view, *Kirant* refers to two main communities, and as such the term is much more specific than *Kirātas*, which designates, in its most restrictive definition, “foreign tribes which border the frontiers of India” (Lévi 1905-8: 9), but we may also ascribe it a more generic sense that does not diverge from that of *Kināras*.

Chatterjī’s (1951: 16) claims the *Kirātas* lived “in the mountains, particularly the Himalayas, and in the North-Eastern areas of India”. The location is sufficiently vague to leave open the possibility that a great deal of the *Kirāta*’s community had been living within the current frontiers of India, but this hypothesis rests on early literature that is almost exclusively Indo-Aryan. One may take Chatterjī’s *Kirata-jana-krti – The Indo-Mongoloids: their contribution to the history and culture of India* – as an attempt to include the tribe in the Indo-Aryan national narrative, or at least to suggest that the *Kirātas* were under the Indo-Aryan sphere of influence from an early period in history.

A few other scholars are less conservative as to the ancestral location of the tribe. Referring to the *Markendya Purana*, Chemjong (1966: 9) is adamant “the famous seven Kirat[a] kingdoms during the *Mahābhārata* time were Aswa Kut or Kabul, Kulya or Kulu Valley, Matsya or North Bihar, Paundra or Bengal, Sumer or Assam, Malak or Mlek or Lohit, Kinnaur Kirat[a] or Garhwal and Nepal”¹⁵.

Chemjong’s assessment is stimulating although Schlemmer (2004: 123) makes it clear that as a Kiranti scholar Chemjong is part of an ‘indigenist’ movement that rewrites history, “from clanic factionalism to Pan-Mongol unity”¹⁶.

According to Schlemmer (2004), the religious system that prevailed among the *Kirātas*, called *mudhum* (‘little tradition’ in Limbu) involved “animal sacrifice, roaming spirits, worshipping of nature and ritual dance performed in circle”¹⁷, all core characteristics of the Chhitkul-Rākchham community (see §1.2.5). Father Giuseppe, who arrived in Nepal in 1770,

¹⁵ Based on folklore, Chemjong (1966: 5) posits a close relationship between the *Kirātas* and the *Hazara* (alternatively *Golku*) tribe of Kabul.

¹⁶ Chemjong also establishes a link between the *Kirātas* and Eurasia. Moses would have expelled tribe members from Babylon in about 2400 BC and the Greeks were supposedly acquainted with a tribe named *Kirhadi-Kereti* (endonym) under the Syrian king David (1049 BC).

¹⁷ Gaenzle (1997: 367) contends the function of ritual dances is to request propitious crops.

observed that the *Ciratas* “profess no religion” (1801: 308), and are consequently respectful of both Hinduism and Buddhism. The ruling of deities is not part of the *mudhum*, which is concordant with the claim, also discussed in §1.2.5, that *Mata Devī*, Chhitkul’s most conspicuous deity, originally came from Vrindavan (Uttar Pradesh) at a later stage¹⁸. Referring to T.S. Negi (1976), Singh (1989: 247) dates the emergence of village gods to the period where Thakurs ruled principalities, which means no earlier than the 14th century.

Some critical evidence – the origin of *Mata Devī*, the migration episode mentioned in §1.1.4.2, the local songs, interspersed with Garhwali language – strongly suggest that both the Chhitkul-Rākchham community has close ties with Uttar Pradesh and Uttarakhand. Saklani (1998) takes a convincing intermediate stance between Ronnow (1936) and Shafer (1954): the *Kirātas* were people of Mongoloid feature, some of whom settled in the *Garhwal* region amid Kol settlements (Kol languages are ‘pronominalized’). The dominance of the *Khasas* would have resulted in the scission of the *Kirātas* into two distinct groups, one of which retreated to more remote and mountainous areas.

The addition of Chhitkul and Rākchham’s communities to the list of “remnants of that Kirata branch”, namely “the Bhoṭ of Ladakh, Lahuli of Lahaul, Spitian of Spiti, Mahani of Kullu, Marchchhas and Tolchchhas of Niti and Mana, Rajis of Askot, many subcastes of Nepal and the Nagas of Assam” (ibid, p.40), is therefore worth considering.

Bailey¹⁹ (1938: 661) points out, “the country of Kanaur is called by its inhabitants *kānōriṅ*, a man of the country *kānōrōs*, fem. *kānōrē*”. My main consultant, a speaker of Kinnauri, claims the terms are *Kanoras* (masculine) and *Kanore* (feminine), which means people from Kinnaur refer to themselves by a name²⁰ that is similar to that mentioned in the early literature.

Who among the Kinnauras or the Khasas, an Aryan tribe that migrated to the Western Himalayas between 1500 and 1000 BC (Berreman 1972: 15), “not earlier than 1500 BC – probably nearer 1200 BC than 1500 (Chatterji 1951: 7) were the first to settle in the area remains a matter of deep controversy. According to Majumdar (1944: 110), the Khasas

¹⁸ Singh contends Badrinath of Kamru (Naga deity), the eldest local deity, is also from Garhwal.

¹⁹ T.S. Negi (1976: 12) claims that inhabitants call themselves “Kanaures (singular) and Kanaurya (plural)” in Kinnauri.

²⁰ Riaboff (2005: 47) lists *Kanaura*, msg (= masculine singular); *Kanauraga*, mpl (= masculine plural); *Kanauri*, fsg (= feminine singular); and *Kanauriga*, fpl (= feminine plural), but these terms would only apply to inhabitants living between Chora and Pangli.

“most probably occupied various parts of Northern India in prehistoric times (...) large areas from Kashmir to Nepal”. Van Driem (2001b: 411-7) nevertheless speculates on a link between Indian Eastern Neolithic, the earliest phases of which are estimated between 10,000 and 5000 BC, and Western Tibeto-Burman populations. During his journey to Kinnaur, Sankrityayan (1957: 297-299) investigated some graves in the village of Lippa. The analysis of the bones revealed a different origin from present-day people of Kinnaur. According to Singh (1983: 248), these graves “corroborate philological evidence of the existence of some ancient tribe pre-dating Buddhist influence”, but archeological and genetic data remains too scarce.

Tibetan period (7th century A.D. - 13th century A.D.):

The ancient kingdom of *Žaň-žuň* (western and northwestern Tibet) was the first political power in the western Himalayas. The kingdom extended beyond the actual Tibet autonomous region, but whether it also included Kinnaur has not been ascertained. The area was subsequently conquered by the Tibetan (Bhoṭ) empire in the middle of the 7th century (Van Driem 2001a: 31), which resulted in the *Žaň-žuň* language becoming extinct. *Žaň-žuň* is allegedly the medium by which the Bön religion propagated, but the evidence for this claim is very thin, namely a 12th-century Bön text.

The hypothesis of a close affinity between *Žaň-žuň*, West-Himalayish and Bön is nonetheless very enticing when observing that Bön, with its shamanic rituals, seems to be one defining layer of the collective religious identity found in the villages of Kinnaur, Chhitkul and Rākchham included.

Referring to local folk songs, Francke (1908: 21-22) and Tucci and Ghersi (1935: 69) speculate on the existence of an ancient animist Bonpo tribe predating Buddhist influence, which is said to have resorted to human sacrifice.

Regardless of these considerations, the *Žaň-žuň* language is of relevance for the Tibeto-Burman language family in general, and possibly for Kinnaur in particular, in that some scholars (Shafer 1937, 1957; Haahr 1968; Stein 1971; Hoffmann 1972; Matisoff 2001; Bradley 2002: 80; Martin 2010) assign it to the West-Himalayish subgroup. Hoffmann (1972) underlined etymological similarities between *Žaň-žuň* and Bunan. Based on a word list and a Bön cosmological scripture, the *Mdzod phug*, available in both Tibetan and *Žaň-žuň*,

Martin (2010: 18) establishes a close connection with Darma, spoken in Uttarakhand. Again, some substantial comparable morphological data is missing.

The degree of influence that the Tibetan empire exerted on Kinnaur is equally unclear. The claim that “Bhots must have ruled in Kinnaur because their descendants are higher caste predominant people” (Singh 1989: 71) seems convincing, but I do not support it (see §1.3). However, their dominance was weakened from the downfall of the Tibetan empire (in 842) to the 14th century. Phonological evidence shows the Tibetan empire left an imprint on the language ecology found in Kinnaur. Investigating the sound system of Nāvakat, spoken in Nako village (Upper Kinnaur), Saxena (2012: 185) contends it “exhibits many features which are typically associated with the sound system of Tibetan. It shows especially close affinity with the sound systems of Tibetan varieties such as Tabo and Ladakhi” and “differs from the sound system of Sangla Kinnauri”.

A 13th century Tibetan text, *Mar-lung-pa rmam-thar* (hagiology), “personally dictated by Mar.lung.pa (1153-1241) to his son, Thon Kun.dga’ rin.chen and to his disciple Byang.chub.’bum, who put it into the written form” (Vitali 1996: 291) makes mention of a king of Khu.nu (upper Kinnaur in Tibetan) by the name O-ru-bha-tra ras (ras for rājā). According to Vitali (1996: 22, 224), the King had “sovereignty over Ti.se and Pu.hrang” which “can be dated to around the third quarter of the 9th century”. Here McKay’s (2015: 176) conjecture, referring to Joshi (1988), that “much of Kinnaur was probably tributary to the primarily Śaivite Katyuri dynasty – which succeeded the first ruling dynasty quoted in the *Mahābhārata* (VI, 1054), namely that of the *Kunindas* (*Kulindopatyakas*) – prior to Katyuri decline in the 11th century” is an interesting lead²¹. The Katyuri Kings ruled over Kumaon from 700 to 1200 AD. Kumaon is one of the two divisions (with Garhwal) of Uttarakhand, home of Byangsi, Chaudangsi, Darma and Rangas. Atkinson (1990) contends the Katyuris originally came from the Kabul Valley, positing a link with the Kators of the same region. What is more readily admitted is that the region was spared the recurring conflicts between the kingdoms of Kullu and Ladakh (which did involve the neighbouring district of Lahaul and Spiti), and remained outside of the Mughals’ influence.

²¹ Regional dominance would have then passed to the Khas Malla kings of the Jumla region (McKay 2015: 201), in Western Nepal. The Khas Malla Kings would have invaded Kumaon and Garhwal in 1191, becoming “the dominant power there during the 13th century” (ibid), which is confirmed by a 1223 inscription in the Baleswar temple (see Vitali 1996: 448).

Period of early State formation (14th century A.D. - 17th century A.D.):

Kinnaur consisted of seven dominions ('Sāt Khund') at the beginning of the 14th century (Hutchison and Vogel 1933: 12; Sankrityayan 1957: 306, Singh 1981: 75 also mentions a "manuscript on birch leaf in Tānkri in the possession of Lambardār Keshwā Singh of Sanglā"). A 'Thākur', or local lord ruled each dominion, but no dominion was strong enough to prevent frequent plunderings from Spiti (Lloyd and Gerard 1840, vol. II: 266-7) or Tibet. No dominion deserved comparison with mighty neighbours such as Ladakh (under the Namgyal dynasty starting during the 16th century) or the Guge Kingdom (established in 967), hence the edification of a few fortresses throughout Kinnaur (see for example the fortress of Kamru, a village near Sanglā).

In this fragile political context, the birth of the Bushahr State is shrouded in mystery. According to Captain C.F. Kennedy (1824²²), an immigrant from Deccan, Rana Danbar Singh, founded the State of Bushahr in 1412. Frazer (1820: 269) adds that Rana Danbar Singh was from a Rajput family in Chittor. Based on genealogies, the princely State counted between 120 and 122 different rulers.

According to Francke (1908: appendix D, 124), a concord between the seven dominions occurred only later, under the rule of Rājā Kehri Singh (1639-1696). As Singh (1981: 57) observes, it is only "towards the end of the 17th century" that the so-called Bushahr State emerged. Precisely because of its late emergence and a range of intriguing factors – there is no mention of it in the Muslim world, written records in Kinnaur are almost inexistent, the Rājās's dynastic name, Singh, was certainly not in use before the 15th century (Francke 1908: 8) – the Bushahr State as a powerful actor is doubtful.

The origins of the 'Thākur' are unknown. As Singh (1981: 75) observes, contrary to the neighbouring State of Lahaul, local lords and Rājās were not of Tibetan descent nor did they come from prominent families, which explains the 'mythification' of their origins as an instrument of legitimization. McKay (2015: 177) observes "the key to Bushahr's rise was cross-border [Kashmir-Tibet] trade", which took the Sutlej route after "Ladakh closed its Kashmir frontier" in 1639, which precisely corresponds to Rājā Kehri Singh's ascent to power. Seen from this perspective, the rise of the Bushahr State would have had more to

²² Letter of Captain C. F. Kennedy, Assistant Deputy Superintendent, Sikli and Hill State to Lt. W. Murray, Deputy Superintendent, Sikh and Hill States, dated 6th July, 1824, Foreign Political Department, Progs No. 8, dated 6th July, 1824, N. A. I. (National Archives of India, New Delhi).

do with a fluke than indigenous factors. Progress was achieved during the end of the 16th and beginning of the 17th century with Chatter Singh and his successor, Kehri Singh, who helped Tibet during the Tibetan-Mughal war and received part of Upper Kinnaur and a free trade agreement with Tibet that “remained in force until 1948” (Brentnall 2004: 107) as a result.

Period of consolidation of State formation (18th century - 1815):

State consolidation was partially achieved through a long process of “Rājputization of the tribes” (Sinha 1962: 36; Negi 1975: 21; Kulke 1976) based on several top-down homogenizing initiatives, notably the recognition of local deities by the Rājā in exchange for legitimacy, the incorporation of the Brahmins into the institutional apparatus, and, as late as in 1930, permission granted by the Rājā to his Kanet (caste of farmers) subjects to give themselves the title of Rājput. The latter measure finds an echo in the Harijan (lower caste) population taking Negi as a surname since the 1970s. No sooner than a relative unity was in place that the Gurkhas of Nepal invaded the area from the end of the 18th century, ransacking the newly established capital under Rāja Ram Singh, Rampur, and destroying the records of the Bushahr State.

Period of British Paramountcy over Bushahr (1816-1947):

Having gained a foothold in the region at the battle of Plassey (1757), the British Empire declared war against the Ghurkas in 1814. The Treaty of Sugauli (1816) marked the expulsion of the Gurkhas from the area. The Sikhs, who from the 18th century onwards had challenged the Mughals and had achieved unity under the rule of Maharaja Ranjit Singh (1801-1839), subsequently tried to contest British rule. At its height, the Sikh Empire (see Grewal 2008: 99-127) included part of western Tibet, but not Kinnaur. The Sikhs were also defeated in 1845 (at the battle of Ferozeshah, end of the first Anglo-Sikh war) and 1849 (end of the second Anglo-Sikh war and annexation of the Punjab by the British). East India Company surveyors (Hodgson, Herbert, and Webb) were the first foreigners to visit the high ranges of the Himalayas at the beginning of the 19th century (Fleetwood 2018).

From 1817 onwards, European travellers, explorers, and military men produced various accounts of Kinnaur on such topics as geography, lifestyle, religion, history, economy, botany, geology, and language, essentially Kinnauri and Tibetan varieties (Gerard 1824:

221, 1841: 533-538; 1842a: 488; Herbert 417-422, Cunningham 1854: 397-419)²³. Gerard (1841: 87) observes “there are five different dialects spoken in Koonawur, but I have only got a vocabulary of three of them”, namely Kinnauri, Tibetan, and Sunnami, the remaining two being Shumcho, for which he provides a short vocabulary list (1842b: 548-550), and Jangrami. Very few Europeans ventured to Rākchham and Chhitkul. Gerard (1841: 17-18; 41-45) explicitly refers to ‘Chetkool’ and ‘Rakcham’ when describing the ‘Buspa’ Valley and the passes from Kinnaur to the outer Himalayan range. ‘The Buspa Valley from the village of Chhitkul’ photograph, taken by the British explorer Samuel Bourne in 1865, made Chhitkul known to the world at the exact same time that the Moravian Mission established a station in Pooh.



Picture 1: The Buspa Valley from the village of Chitkul by Samuel Bourne 1865, British Library, London

At about the same time, the construction of the Hindustan-Tibet road gave an impetus to trade between Kinnaur and Tibet. During the whole British period, Kinnaur was part of the Bushahr State, or Princely State, one of the two types of territories under the British Raj (1858-1947). In 1898, the British administration took over (although the Rājā was still formally in charge), notably due to descendency issues²⁴ (Brentnall 2004: 108-9).

²³ Gerard, (1824; vol. 2, 1840: 48-64; 1841: 87-8, 155-7); Fraser (1820, 254-277); Kennedy 1824; Herbert 1825; Jacquemont (vol. 1, 1835, 263-269); Hutton 1839, 1840; McClelland (1839, 1842); Cunningham (1844: 172-253); Madden 1846; Thomson (1852: 51-95); Cunningham (1854); Waldemar & Kutzner (1857).

²⁴ Another explanatory factor is “the considerable decline in the state’s revenues” (Brentnall 2004: 108).

Succeeding Tikka Raghunath Singh in 1898, the young Prince Marender Singh died in 1899 with no heir, reason why The British ended up formally taking over during the period without any Rājā (1914-1917). Discontent from the local population led to the installation of Padam Singh as new Rājā in November 1917, until 1947. Virbhadhra Singh succeeded him and witnessed the State's accession to the Indian Union on the 15th of April 1948.

Post-independence period until 1960 (1948-1960):

After India's independence (1947), Kinnaur became part of the Mahasu district. Kinnaur became a separate district with three administrative subdivisions, namely Nichār, Kālpa and Pooh in May 1960. A few years after, Reckong Peo replaced Kālpa as the headquarters of Kinnaur. In 1966, Shimlā, Kangrā, Kullu, Lahaul, and Spiti became part of the State of Himachal.

Post-1960 period:

The 1962 Sino-Indian war put an end to all trade between Kinnaur and Tibet. Trade with Tibetans used to occur in May and June, often during trade fairs. Local people would get rock salt, butter, goats, sheep, yaks, wool and pashmina from the Tibetans and provided them with all kinds of grains (wheat, opla, maize, rice, etc.). Recurring tensions between India and China – the last diplomatic crisis lasted 71 days during summer 2017, when China started building a new road in Doklam, an area Bhutan has an eye on as well – are not without consequences for Kinnaur. As Chhitkul is the last village of the Baspā Valley before the border with Tibet, it has become a strategic location. A twenty-kilometer road between Chhitkul and Dhumti has been under construction since 2013 for military purposes. Hindi and Nepali are therefore likely to tighten their grip on the language ecology in the area.

1.2 Socio-linguistic context

§1.2.1 provides an outline of the local economy, emphasizing the profound evolutions that the district of Kinnaur has undergone since it officially came into existence. §1.2.2 deals with language use, notably the Ta(n)kri script, until recently in use, and the interaction between Chhitkul-Rākchham and the neighbouring languages, mostly Hindi. §1.2.3 provides an assessment of Chhitkul-Rākchham's vitality based on the UNESCO nine-factor model (Brenzinger and al 2003) and the Language Endangerment Index (LEI). §1.2.4 discusses the social organization of the two villages through various aspect of social

stratification: the caste system, the *khandan*, the *Panchāyat*, the temple committee and the practice of polyandry. §1.2.5 gives an overview of the ritualistic life found in both villages.

1.2.1 Local economy

The district of Kinnaur has experienced remarkable improvements in living standards since 1960, navigating a rather successful transition from a traditional subsistence-based economy (pastoralism and crops) to commercial horticulture (apples, potatoes, apricots, grapes, almonds, chilgozas (*Pinus gerardiana*), and honey). State-led policies have played a decisive role in this regard. Successive land reforms, implemented between the 1950s and the 1970s, together with the development of infrastructure (the National Highway 22), have made it possible for Kinnaurese people to export their production.

Rahimzadeh (2016: 23-49) emphasizes the fundamental inclusive logic of the land reforms, notably the Nautor²⁵ Land Rules of 1968 and the 1972 Himachal Pradesh Ceiling on Land Holding Act, which resulted in the allocation of land to landless populations, at the junction of critical societal evolutions such as the demise of polyandry.

Because the Indian government still considers Kinnaur district to be a 'tribal area', the locals benefit from comparative advantages, notably in terms of income taxation. Protectionist measures (section 118 of the Himachal Pradesh Tenancy and Land Reforms Act (1972) restricts people from other states from buying land in Himachal) ensure economic benefits are channeled locally.

Moreover, continuous infrastructure development, including hydroelectric projects (Karchham and Wantoo) were initiated throughout the district less than twenty years ago, providing numerous job opportunities. Rapid growth in domestic tourism fuels, at least partly, the boom that is currently taking place in the construction sector. The strong pace of economic development has resulted in a surge of migrant workers from Nepal (orchard laborers), Kashmir (carpenters), and Bihar (construction laborers) over the past few years (Rahimzadeh 2016: 17).

²⁵ The term Nautor refers to a local practice in force under the rule of the Rājās whereby landless people received some common land was for cultivation purposes (Hobley 1992).

Whether the current pace of development is sustainable is doubtful, however. Recent admonitions have been dealt out, notably by National Geographic (2019)²⁶ and a panel of international experts in The Hindu Kush Himalaya Assessment (2019). The district is currently enjoying the positive effects of climate change, but the long-term prospects are unsettling. Snowfall has declined, the rainy season has weakened, and the glaciers are receding, which means water shortage may become an issue.



Picture 2: View from the upper part of Chhitkul village © Philippe Antoine Martinez 26-06-2017

Living standards have been significantly higher in Rākchham than in Chhitkul since the beginning of the 1990s due to one crucial difference: nearly all Rākchham community members have become horticulturalists whereas climate change has not yet made Chhitkul a suitable place for large-scale apple production.²⁷

Although as “the last Indian village”, Chhitkul receives more tourists – tourism took off four or five years ago – few inhabitants benefit from it. Most tourists do not stay in the village due to rather poor infrastructure and a lack of hotel managers and cooks. In order to respond to the increasing demand, concrete is the most popular material used to build

²⁶ “Climate Change is roasting the Himalaya region, threatening millions”, *National Geographic*, 4th of February 2019.

²⁷ Apple production did start, however, in an area called Mustarang, located between Rākchham and Chhitkul and owned by Chhitkul people (Rahimzadeh 2013: 67-8).

guesthouses. These constructions now stand in sharp contrast with traditional wooden houses²⁸, which are better suited for harsh winter conditions and give authenticity to the area.

Consequently, Chhitkul's income sources remain largely traditional: cash crops (potatoes, peas, and grains, kept in small wooden storage units called *urtsu*), animal husbandry, wheat and wool. The local government (education, social, health, police and army services) employs about 15% of the overall adult population in both villages.

Every household owns small patches of land, used for self-subsistence (wheat, mustard, barley, but no rice, which is eaten during festivals only). In addition, most households also own a small plot, *khanda*, in the high elevation upland areas. These *khanda* were unsuitable for cultivation until recently and served only for pastoralism. Climate change now makes them accessible during summer, what Rahimzadeh (2013: 68) refers to as a 'temporary landscape of opportunity'. In Chhitkul, people are using a place named Rani Khanda, located 10 kilometers from the village, for grazing. People say widows and single women inhabited the area until about 1920. From then onwards, people abandoned the area as the soil was not sufficiently fertile.

Chhitkul village's most conspicuous deity plays a prominent role in the local economy as land and flock owner and moneylender. The temple committee I discuss in §1.2.4.4 plays a central role in this regard. The *Boi* (account book) Festival celebrated in both Rākchham and Chhitkul village every year during the month of November offers a good illustration of this particularity. Community members collect cereals and grains from the inhabitants, notably for ritual purposes. On such an occasion (but also at any time during the year), the deity provides loans (up to one year) at an annual interest rate of 12%. Fear of the deity's wrath entails that nearly all borrowers fully repay their loans. In some exceptional cases, the deity may write off the debt.

Some patches of land or orchards are cultivated in her name. In Chhitkul village, the breeding of yaks and oxen takes place in the name of *Mata Devī*. The Rājās of Bushahr purportedly introduced the concept of deity ownership, initiating a virtuous circle by which

²⁸ Wood makes these constructions more vulnerable to fire. A fire ravaged Chhitkul village in 1944, sparing the main temple, but not the one flanked-to-the-mountain side, which burnt down entirely. Fires occurred in Rākchham in 1948 and on the 18th of November 2002 as well. In 2002, 120 houses burnt along with the ancient Kāli temple, reportedly rebuilt in the exact same way.

revenues derived from land property, together with donations, fuel the loan system, which in turn allows for the acquisition of property assets by the deity.

1.2.2 Language use

In the following two sub-sections, I provide some information about a script still known by older generations (§1.2.2.1) and an assessment of the extent of language borrowing, mainly from Hindi (§1.2.2.2).

1.2.2.1 The Ta(n)kri script

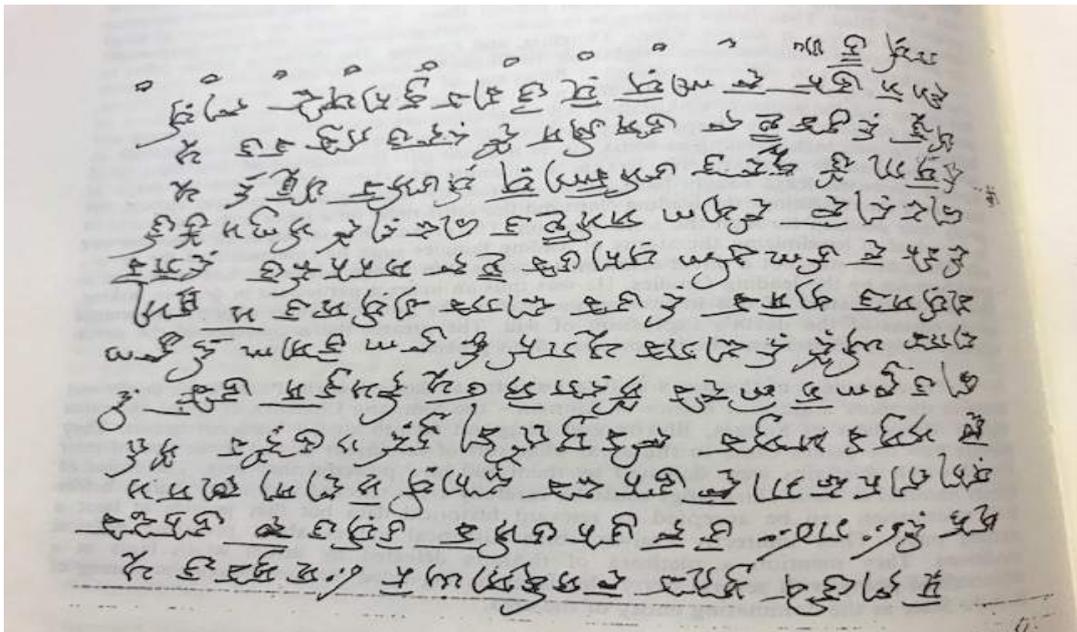
Chhitkul-Rākchham is unwritten. Until Hindi became an obligatory part of the curriculum in elementary school, that is, until very recently, information was transmitted almost exclusively orally. The Ta(n)kri script (*taṅkri* in the local language), of the Brahmic family, was nonetheless in use in both villages, mostly for business and revenue record purposes, until about fifty years ago. A few elders are still conversant with it. Written evidence suggests the script was also used in documents of a more official and administrative nature during the Bushahr period, as shown in picture 3 (Singh 1989: 50): manuscripts, copper plates, inscriptions on paintings, stamps, etc. Magotra, Kaushik and Kaul (2019: 513) provide a list of “machine-printed writings” in Takri.

The Tankri script, according to Grierson (1911: 802-3), is derived from ‘Takka’, which refers to a tribe or a ruling class from Punjab that dominated the area where Western Pahari, a generic term used to refer to the Indo-Aryan languages spoken in Himachal (Grierson 1916, vol. 9, part IV, p. 1), was spoken. It would have originated from the Sharada script (Kaul Deambi 2008: 70), described by Grierson (1916: 693-4), and “popular in use in the mountainous regions of the Pir Panjal range comprising today’s J&K, Punjab, Himachal Pradesh, Uttarakhand, Haryana until the beginning of the 13th century” (Magotra, Kaushik and Kaul *ibid*, p. 510).

There seems to have been different versions of the script and no standardized form. The erstwhile Chamba State used one version as the official script. Another version, known as Dogra Akkhar, was in use to write Dogri. Magotra, Kaushik and Kaul list 13 variations of Takri suggesting a “class of scripts rather than a single script” (*ibid*, p. 511). The script was

closely associated with the former princely states of Jammu and Kashmir, Chamba, Punjab and Bushahr and came into use from the 16th and 17th century onwards, in conjunction with the Rājās' ascent. It underwent a decline with their demise from the middle of the 19th century, and almost disappeared following the promotion of Hindi and English under the British period, and the rise of Devanāgarī.

A few initiatives aiming at its revival are under way in connection with Dogri (Kishtwari region) and some Pahari dialects such as Kullvi, Garhwali, Gaddi and Chambyali, spoken in the States of Jammu, Kashmir and Himachal Pradesh. The Bhuri Singh Museum (Chamba district) preserves documents and inscriptions in the Takri script and trains people in the writing system in association with Indira Gandhi National Open University and one leading expert, Dr. Vijay Sharmā.



Picture 3: 'A genealogical chart of the Rajas of Bushahr' (Singh 1989: 50)

Himachali languages were mostly written in the Tankri script, which resembled the Gurumukhi script (of Punjabi) and the Nastaliq script (Urdu) more than the Devanāgarī.

1.2.2.2 Language contact

Himachal Pradesh became a fully-fledged state in 1971, with Hindi as its sole official language. In terms of language management, the state follows the national policy,

encapsulated in the 'three-language formula', devised during the 1950s and officially recommended by the National Policy on Education at the end of the 1960s. According to the formula, Hindi speaking states like Himachal commit to taking the necessary measures to ensure that Hindi, English and preferably one southern language become part of the curriculum. The policy is not legally binding and does not apply to private schools, however. In practice, all Rākchham and Chhitkul inhabitants nowadays are conversant in Hindi, as it is taught from elementary school onwards. Knowledge of English is more limited but on the rise. The third language is rarely a southern one due to the lack of incentives (Annamalai 2005: 30) and due to ideological and political pressure to impose classical languages.

However, local primary schools have only been playing the role of vectors for Hindi expansion since the 1950s (1952 in Chhitkul village). Secondary schools are a novelty in both villages. Chhitkul and Rākchham were largely cut-off from the rest of Kinnaur in the absence of any jeepable road until the end of the 1960s. Only then did contacts with Hindi intensify. The rise of Hindi is a more recent trend in Chhitkul and Rākchham than in the rest of Kinnaur or in the neighbouring district of Lahaul and Spiti. Referring to the latter, Jäschke (1867: 175) observed that most male inhabitants had a good grip on Hindi already by the second half of the nineteenth century. A similar development took place in Chhitkul and Rākchham only a few decades later, essentially due to their geographical remoteness.

Over the past sixty years, Chhitkul-Rākchham has increasingly borrowed from Hindi. The documentary corpus reveals that about 25-30% of what community members say stems from what has become the unrivaled lingua franca of the area. In addition to verb stems and words, borrowings include basic terms such as numerals. Words are slowly but surely vanishing via a process of code-mixing, a change – mostly lexical – from one language to the other in the course of a single utterance (Wardhaugh 1986: 103) and based on underlying factors such as bilingualism and prestige (Kim 2006: 43). This is a process all the more difficult to reverse in that it is invisible.

In addition to Hindi, Chhitkul-Rākchham borrows from English, and from Kinnauri (*grifi kat*), the ancestral contact language. Prestige, and everything tied to it, notably better job opportunities, is what drives language change and borrowing. Knowledge of Tibetan has been on the wane since the Sino-Indian war (1962), and it is now quasi non-existent in

both villages. Further research will ascertain the extent of borrowing from Tibetan among older generations. In the absence of language contact, younger generations do not borrow from Tibetan.

1.2.3 Language vitality

The brief vitality assessment presented below relies on the UNESCO nine-factor model (Brenzinger and al. 2003). These factors are intergenerational transmission, absolute number of speakers, proportion of speakers within the total population, trends in existing language domains, response to new domains and media, materials for language education and literacy, governmental and institutional language attitudes and policies, community member's attitudes, and amount and quality of documentation. The model is not without flaws, but it is nonetheless a first and important step on the path towards 'ideological clarification' (Kroskrity 2009: 73) and language revitalization.

(1) Intergenerational transmission:

Fishman (1991) emphasizes intergenerational transmission. Based on the EGIDS scale (13 levels), Ethnologue (1998) describes Chhitkul-Rākchham as 'vigorous' (level 6a). At the time of this study, intergenerational transmission was still taking place. However, transmission is now disrupted: in many instances, grandparents and parents exclusively speak in Hindi with their (grand-)children. On this factor alone, I describe Chhitkul-Rākchham as 'shifting' (level 7), as "the child-bearing generation can use the language among themselves, but it is not being transmitted to children".

(2) Absolute number of speakers:

As mentioned earlier, my estimate of the absolute number of speakers today is about 1,000. The community of speakers has always been small, which means that this factor is less salient than intergenerational transmission.

(3) Proportion of speakers within the total population:

Once we take lower-caste people, who speak an Indo-Aryan variety, and women getting married into Chhitkul and Rākchham (who often do not speak the language) into consideration, about two thirds of the total population are speakers of the language.

(4) Trends in existing language domains:

Chhitkul-Rākchham is most resilient in the domain of ritualistic life. Chhitkul-Rākchham has not completely lost any language domain as such, but it is now under severe pressure from Hindi at home and in inter-group communication.

(5) Response to new domains and media:

Youngsters mix Hindi and Chhitkul-Rākchham – based on the Devanāgarī script – when communicating with each other through new technologies (smartphones), an interesting feature that needs further research.

(6) Materials for language education and literacy:

The language is unwritten and not taught at school (nor at home).

(7) Governmental and institutional language attitudes and policies:

The current context is undoubtedly more conducive to language documentation and description. The grass-root initiative *People's Linguistic Survey of India* (PLSI) succeeded in raising awareness of minority languages²⁹ and in putting the mother tongue issue on the agenda. Part of its success comes from the fact that it is not a governmental initiative.

Government initiatives have followed the involvement of the Indian civil society in language issues. The Central Institute for Indian Languages (CIIL), which holds regular workshops on minority languages, committed in February 2014 to documenting 500 languages within the following ten years. CIIL had also commissioned the Scheme for Protection and Preservation of Endangered Languages (SPPEL) a few months earlier. However, these much-needed initiatives, whether of grassroots or governmental nature, have had no impact on a community like Chhitkul-Rākchham.

The current revision process of the three-language formula shows that language policy remains top-down. The National Education Policy 2020 (NEP 2020³⁰) approved by the Union Cabinet of India in July 2020, recommends that all students will learn three languages, at least two of which should be from India. The policy puts the emphasis on the use of the mother tongue or local language as the medium of instruction until at least class

²⁹ The film industry is also lending a hand. *Liar's Dice* (Mohandas 2013) features a woman from Chhitkul village traveling in search for her missing husband.

³⁰ https://www.mhrd.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf

5, advisedly up to class 8. The policy states that “no language will be imposed on any State” (2020: 14). However, the NEP only provides recommendations and guidelines.

(8) Community members’ attitudes:

Language attitudes may stand in the way when it comes to taking concrete action to preserve a language. A language attitude is likely to reveal a lack of prestige, especially among younger generations. During their schooling, which often takes place outside of the villages, youngsters are victims of stigmatization when using the local language. They experience an unrelenting pressure to conform and to learn Hindi, which they reportedly fail to master precisely because of their language background; to all community members, Hindi is the voice of integration.

(9) Amount and quality of documentation:

The amount of documentation is limited. Sharmā’s (1992) sketch grammar is a good place to start. The recent PLSI survey did not provide any description of the language. Sociolinguistic knowledge has so far been very fragmentary. This thesis, which includes a linguistic description, together with the documentary corpus, enhance the amount and quality of the documentation significantly.

I attribute a five-point score to all nine factors based on my own subjective assessment, but following the UNESCO methodology to attribute a specific score (each score is accompanied by a description). Consequently, we may represent the vitality of Chhitkul-Rākchham in the way described in figure 1. Arguably, a minority language like Chhitkul-Rākchham is not expected to reach a five-point score in all categories like English or Hindi would do, and a minority language may even be resilient without scoring well in all categories, but the diagram has the advantage to highlight strengths and, more importantly, weaknesses (language in education and intergenerational transmission).

Until recently, remoteness was a defining factor in the preservation of the language. The National Highway 22 changed the game. Unless local authorities rapidly take measures targeting younger generations (informal teaching at home, digital storybooks for children), what lurks, in one or two generations from now, is community members facing the last gleams of their language. In one of the recordings, a member of Rākchham leadership

envisions that *kat ta te patʃa:s sa:tʰ sa:l niŋ kʰatam nete* ('the language will become extinct within fifty-sixty years, won't it?'³¹).

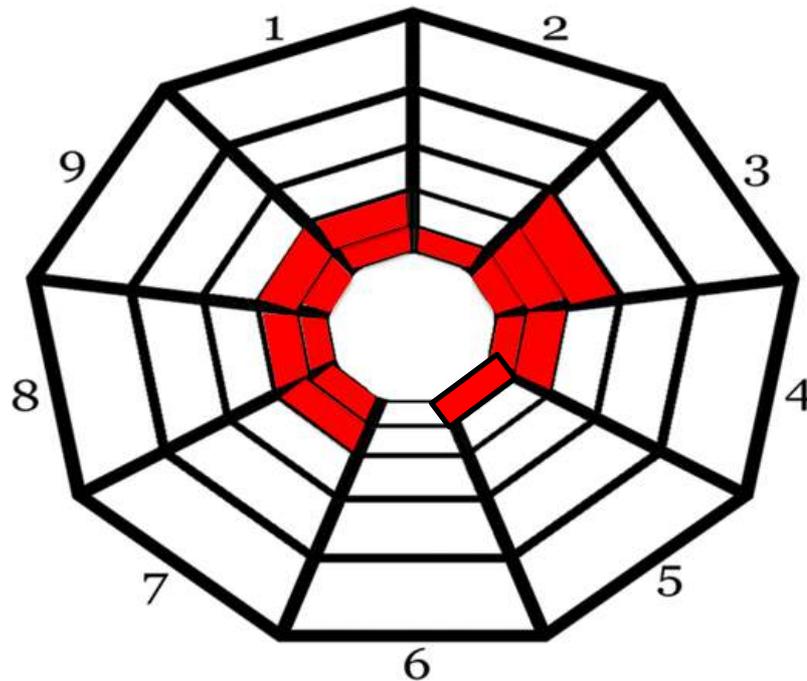


Fig. 1: *The vitality of Chhitkul-Rākchham*

Another way to assess language vitality is by means of the Language Endangerment Index (LEI), developed for the Endangered Languages Catalogue (ELCat). The model relies on a more limited number of factors (number, transmission, trends, and domains), all assessed with a zero to five-point score, and weighs the intergenerational transmission score twice as much as the other factors. Based on the levels and descriptions provided by the Language Endangerment Index, I attribute a 2,5 score to 'number' (because the number of speakers is close to 1,000), 1,5 to 'transmission', 1 to 'trends' and 3,5 to 'domains'. Based on the LEI formula,³² the level of endangerment is 50%, that is, within a range (41-60%) for which a language is 'endangered'.

1.2.4 Social organization

Mention was made earlier of the role played by the deity as owner and moneylender. It does not escape anyone's notice, when visiting the two villages, that the deity is the

³¹ DEB_cik07-RKKF-SS3-2019-05-27-66. This sentence consists of 50% of Hindi.

³² Level of endangerment = $\frac{[(\text{intergenerational transmission score} \times 2) + \text{absolute number of speakers score} + \text{speaker number trends score} + \text{domains of use score}]}{\text{total possible score based on number of factors used}} \times 100$.

epicenter of all events and festivals. However, the main village deity, as “a divinity, a doctor, a magistrate, a judge, the Chief Executive, an astrologer, the village hero, the cynosure of all eyes etc. all rolled into one” (Negi 1975: 39), is simply the most prominent agent of social cohesion.

In this section, I investigate social organization beyond the deity, providing an overview of the caste system (§1.2.4.1), the lineage groups called *khandan* (§1.2.4.2), the village council, or *Panchāyat* (§1.2.4.3), the temple committee, or *Dev Sabhā* (§1.2.4.4). The section ends with a discussion on polyandry (§1.2.4.5).

1.2.4.1 The caste system

Social organization in both Chhitkul and Rākchham villages rests on a system with a dominant caste and dominant clans (*khandan*) within that caste. In that respect, the Chhitkul-Rākchham case is reminiscent of the ‘dominant caste model’ (Srinivas 1955: 18): “a caste may be said to be ‘dominant’ when it preponderates numerically over the other castes, and when it also yields preponderance in economic and political power”. To follow Sriniva’s reasoning further, “decisive dominance” (1959: 2) indeed characterizes the situation found in both villages, as, in addition to economic and political power, “numerical strength”, “ritual status”, and “Western education and occupations” (ibid, p. 15) are core attributes of high caste people.

Chhitkul and Rākchham count two castes, the upper caste and the lower caste. Over 80% of the overall population across both villages belongs to the upper caste. One commonly refers to their members as *Rājput*, or *Koshia* (declared Scheduled Tribe (ST) by the government). The lower caste (Scheduled Caste (SC)) may include subgroups according to occupation. There is only one lower caste in Chhitkul. People who belong to this caste are ‘Chamang’ (weavers). People from other villages and foreigners are carpenters and blacksmiths in Chhitkul – the carpentry work is done by the high caste in other villages. There are two lower castes in Rākchham: ‘Chamang’ and ‘Domang’ (blacksmiths).

Members of the lower castes adhere to strict rules of obedience in the domain of ritualistic life. When a *pūzā* or any kind of ritual takes places, they cannot perform any task other

than playing music³³ inside the temple precinct. Rules forbid lower-caste members going inside temples and touching the deities. In the practice of everyday life, members from the lower castes cannot enter the house of upper caste members, nor enter a place where a member of the upper caste is cooking; lower caste members cannot touch the dead bodies of upper caste people.

Nowadays, lower caste membership does not preclude any occupation. People from the lower castes are weavers, blacksmiths, farmers, guesthouse owners and government employees – through a reservation system. In contrast, inequalities in terms of income³⁴ and access to higher education endure.

Ketkar (1909) lists endogamy and hereditary membership as the two most central features of the caste system found in India. These two criteria are also very relevant in the case of Chhitkul and Rākchham, where the only force constraining rank endogamy is the kinship system (*khandan*): high caste members of the same *khandan* cannot marry each other. As pointed out by Blunt (1931: 47), “generally speaking, the marriage restrictions govern all other restrictions”. In both villages, endogamy is the prerequisite to the continuance of the caste system, and applies to the two low castes found in Rākchham as well: a male ‘Domang’ can only marry with a female from the same sub-group (‘Dominik’; the feminine form ‘Chamang’ being ‘Chamri’).

“Decisive dominance” as a concept “crucial to the understanding of rural social life in most parts of India” (Sriniva 1959: 1), and endogamy as a crucial parameter, are purely descriptive and have poor explanatory value, however. The caste system that prevails in Chhitkul and Rākchham immediately becomes more distinctive when considered through the lenses of ethnic heterogeneity.

Migration waves as a driving factor of a broad range of changes, including linguistic and social, in the Himalayan region is a well-known fact, and according to Toynbee (1934: 217), the encounter of various ethnic populations results in either “extermination, assimilation, or caste”. Considering how disparate immigrant groups found themselves incorporated into the latter, Pieris (1952: 414) surmises the dominant caste to be “originally a powerful

³³ Some instrument names are borrowed from Hindi (Dhol, Ranshing), but some are in Chhitkul-Rākchham: bugzal, shonnal, bhan, bureng and nangār.

³⁴ The term *orang* refers to differences in economic status.

invading group [which] once established as the governing caste relegates all future immigrant groups to the ranks of the aboriginal inferior castes". Pieris's view is consistent with my own conclusion about the local community (see §1.3).

Caste as the product of cultural contact (Karve 1961, Watson 1963) or as "a means for ordering the relations among disparate groups" (Berreman 1967: 366) accounts for the absence of hypergamy in both villages, a form of endogamous marriage whereby higher caste males marry women from a lower caste (but not vice-versa). As argued by Davis (1941: 386), there is no hypergamy where the caste system rests on ethnic lines since "the offspring will inevitably bear the mark of the lower caste" (ibid, p. 387). In fact, hypergamy is strictly forbidden, in Chhitkul and Rākchham, but also all over Kinnaur. Hypergamy would result in the exclusion of the involved persons from their community.

Caste through the lenses of ethnic heterogeneity aligns with the syncretism observed between Hinduism, Buddhism and pre-Buddhist beliefs (see §1.2.5) in both Chhitkul and Rākchham, which should by no means downplay the role, even though dwindling, played by ritualistic life in the continuous re-enactment of the power divide.

The survival of the caste system despite the profound socio-economic evolutions experienced by the Kinnaur district over the past fifty or sixty years may appear surprising. Some invoke the failure of the central state in implementing policies that target its abandonment. Whether the central authorities have this issue at the top of their agenda is doubtful, however, especially when considering the remote 'little republic' (Metcalf 1979) of Chhitkul and Rākchham. Two main factors seem to fuel the resilience of the caste system: the reproduction of profound economic inequalities and the survivance of rituals as instrument of its legitimization.

There are nonetheless no significant differences between upper and lower caste in terms of housing. Houses seem to be less intermingled in Rākchham village, however. Regardless of caste membership and gender, most local people wear the traditional Kinnaurese hat (*num* in Chhitkul-Rākchham). Nehru-like grey or brown vests are popular among men. Women wear traditional dresses down to foot, alternatively the churidar, a modern variant of the Salwar Kameez.



Picture 4: Six elders from the Chhitkul's community in front of the temple's carved wooden door; Mata Devī, can partly be seen through the door left ajar - © Philippe Antoine Martinez 24-06-2017



*Picture 5: Two members from the Rakchham community after a recording session
NDB_cik04-MK-SD1-2018-11-24 © Philippe Antoine Martinez*

1.2.4.2 The *khandan*

In addition to caste membership, community members belong to several unilineal (patrilineal-agnatic) segmentary lineage groups referred to as *khandan*. The term means 'clan' in Hindi-Urdu and originally comes from Persian *khānadān* 'family', 'domestics' or 'household' (Richardson 1777: 390; Chatterjee 2004: 168; Lal 2005: 180). The number of *khandan* and their names differ greatly in the two villages. Upper-caste people in Chhitkul belong to eight different *khandan*, lower-caste people belong to two while the number is four and three respectively in the case of Rākchham.

The overall system in both villages is somewhat hierarchical, although people from the same *khandan* do not necessarily fulfill the key ritualistic functions of oracle, interpreter, worshipper and storekeeper (manager of the deity's property). In addition, *khandan* membership does not reflect occupation³⁵ as most people are still farmers.

From a historical perspective, a division of the *khandan* into new ones is a rare phenomenon, which nevertheless took place in Chhitkul village about half a century ago. To ease the rules of marriage – not permitted within the same *khandan* – the upper *khandan*, called *tshana* (alternatively *bogjato*), was subdivided into three branches.

Women from other villages take the *khandan* of their husband, but they cannot occupy any ritualistic position, restricted to the 'original' *khandan*. Members of the same *khandan* have mutual intra-group social obligations towards each other. Intra-*khandan* group dynamics result in specific rules of conduct. In case of birth or death events, members of the same *khandan* cannot attend a function at the temple for a given period, usually eight days because all members are considered impure. The rule stems from Hinduism, the so-called *sutak*, or 'pollution period'.

1.2.4.2.1 The *khandan* system in Chhitkul village

The table below lists the *khandan* names found in Chhitkul village. There are eight different *khandan* for the high caste and only two for the low caste. The first name is the official one.

³⁵ Descent and marriage are therefore the two most important markings of caste and *khandan* membership.

Whenever an alternative is part of table 1, it refers to the name that community members use among themselves:

Table 1: Khandan names for the high caste in Chhitkul village, from the highest rank to the lowest (2019):

<i>Ts^hana, or Bogjato</i>
- <i>Ts^hara Tolaᅇ</i>
- <i>Ts^hana Tolaᅇ</i>
- <i>Paᅇlisa Tolaᅇ</i>
<i>T^hokoto, or Basian</i>
<i>Junu tolaᅇ, or Pudzarəs</i>
<i>Tsəᅇ^haᅇ, or ᅇ^haᅇ T^hakurəs</i>
<i>Darela, or ᅇᅇᅇfa</i>
<i>Kufu Tolaᅇ</i>
<i>ᅇ^haᅇᅇᅇfa</i>
<i>Lamatfa</i>

The first rank, *ts^hana*, alternatively *bogjato*, includes three sub-branches: *ts^hara tolaᅇ* (*tolaᅇ* means group; typically interpreters), *ts^hana tolaᅇ* (interpreters) and *paᅇlisa tolaᅇ* (oracles and storekeepers). To the highest *khandan* belong oracles, interpreters, worshippers and storekeepers. The main oracle is referred to as *grəktsu*, his secondant as *ma:su grəkts*. The interpreter is called *maᅇ^ha*. The worshippers, or *puzari*, perform *puza* in the morning and *a:rti* in the evening. Two community members serve the functions of oracle, interpreter, and worshipper in Chhitkul village. Storekeepers (two or three people), called *bandari*, manage the deity's property. Only male members of *Ts^hana* or *Bogjato* can perform ritual functions. Men performing these functions cannot eat food from outside of the village to stay pure. If they do eat outside of the village, they have to take a holy bath with cow urine, dung and milk in the river, which is in accordance with the precepts of Hinduism, where these are treated as purifiers.

Lower caste people, about 15% of the overall population of Chhitkul village, belong to two different *khandan*: *kəᅇᅇjan* and *t^hum*, the latter referring to member originally coming from Jangi village, where Jangrami is spoken. The origins of the former are not clear at this stage.

My main consultant is adamant *khandan* is a relatively recent innovation for members of the lower caste.

1.2.4.2.2 The *khandan* system in Rākchham village

The table below lists the *khandan* names found in Rākchham village, four for the high caste and three for the low caste:

Table 2: Khandan names for the high caste in Rākchham village, from the highest rank to the lowest (2019):

<i>Ragudēn Biljantu</i> or <i>Kōlseā Biljantu</i>
<i>Komo Biljantu</i> or <i>Useā Biljantu</i>
<i>Beraṅ Biljantu</i> or <i>Dauseā Biljantu</i>
<i>(Sella) Repaltu</i> or <i>Timtfaṅ</i>

Social stratification in Rākchham village is less extensive and appears to be less hierarchical – there is no clear difference between *Biljantu* and *Repaltu* – although ranks exist within the *Biljantu khandan*, *Biljantu* in all likelihood referring to the name of the first family members to settle in the village. Members of *Ragudēn Biljantu* designate ‘those whose house is against the rocks’. Then comes *Komo Biljantu*, ‘those who belong to the house’, or ‘insiders’. The lower rank among *Biljantu* is *Beraṅ Biljantu*, ‘outsiders’.

There was allegedly a fifth *khandan* in earlier times. Some villagers mentioned a sub-*khandan* to *Ragudēn Biljantu*, namely *Dabro*, reportedly the result of a merging between two other sub-*khandan*, *T^hiṅsea* and *Njuksea*. *Sella Repaltu* originates in the story of two sisters who came to inhabit Rākchham village; they married men from Sanglā who belonged to the *Repaltu khandan*. We may therefore surmise that *Sella* refers to the original *khandan* of the two sisters. Like in Chhitkul, there are official names, and names that villagers use among themselves – the alternative provided in table 2.

In Rākchham too, village of origin determines *khandan* name or membership for people from the lower castes. People originally from Rākchham belong to the *khandan* called *Dzi(r)a*, whereas *Rabi*: designates low caste people from Riba village and *Bar* or *Barpa* low

caste people from Kamru village, located near Sanglā. A member of the low caste in Rākchham village told me the story of his grandfather, who was living in Sanglā, but who received order by one of the three deities of Rākchham to settle to work on the local deity's ornaments in the village. The low caste member is now living in Rākchham.

1.2.4.3 The Panchāyat

The *Panchāyat*, or 'assembly of five' – a village council and a form of local government – has a long history in India, but it was not before the so-called Himachal Pradesh Panchāyat Rāj Act, which came into force in 1953 that it came into force in Chhitkul and Rākchham. Gandhi was keen on restoring a system of local self-governance after the British dominance that had resulted in its weakening. Local self-governance likely took another form before 1953 as it had in many parts of India since time immemorial (due to social necessity and remoteness).

The Panchāyat standard function is to run government schemes (public property, sanitation, construction, administrative records such as population, births, marriages and deaths, local festivals, judicial functions³⁶, etc.) at the village level. It is composed of five elected members for a five-year period. Every adult of 18+ (including lower-caste people) may participate in the elections.

Until forty or fifty years ago, there was only one *Panchāyat* for both Chhitkul and Rākchham. Regulations make sure that women represent at least 1/3 of the total number of people elected in the *Panchāyat*. The *Panchāyat Bhawan* hosts regular meetings in each village. A *Grām Sabhā*, or general meeting, is held in both villages on a quarterly basis. One member of each household is invited and any resolution can be put to a vote; to be adopted, a 2/3 majority is needed.

Women are the main beneficiaries of the introduction of the *Panchāyat* as it offers an opportunity to occupy elective roles, notably *pradhān* ('president') and *upradhān* ('vice-president'). In fact, the most recently elected (2015) presidents of Chhitkul and Rākchham are both women. Members of the low castes, as a small minority, have no prospect whatsoever of occupying these functions.

³⁶ *Nyāya Panchāyat* refers to a sub-system of dispute resolution that deals with crimes and offences in keeping with Article 39A of the Constitution of India.

1.2.4.4 The Temple Committee (Dev Sabhā)

There is a Temple Committee acting in the name of the deity in every village of Kinnaur. The deity designates the members, through the oracle and interpreters during rituals, but each position within the Committee – *Bhandari* (the head storekeeper), *Patlika* (storehelpers) and *Mutami* (financial matters accountant) – is restricted to a specific *khandan*. The Temple Committee is responsible for granting loans. Only the deity can write off a debt (partially or wholly) on a yearly basis during rituals. As members of the Temple Committee are not paid, Singh (1990: 251) describes membership as “a social honour and a way of participating in the power structure”, progressively shifting to “a social obligation”, with the piecemeal loosening of the deity’s grip on community members’ lives. Consequently, commercial banks have tended to replace the local deity as credit providers.

1.2.4.5 Polyandry

The practice of polyandry was widespread in both villages until very recently. Back at the end of the 1980’s, polyandry was “the general system of marriage practised in Chhitkul [and in Rākchham]”, (Swarup and Singh 1988: 46), even though it had begun its retreat. The practice traces back to mythology, notably to the legend of Draupadi, a prominent figure of the epic *Mahābhārata*, with her five husbands, the Pandava brothers. In the same epic, Vārکشī, the daughter of a sage, is also the wife of ten husbands. What Parmar (1975: 149) calls the ‘psychological’ motivation to polyandry, the weight of traditions, is often considered an explanatory factor.

However, although the *Mahābhārata* has a large audience throughout India, polyandry is a local phenomenon that only gained a footing in Northern areas. Draupadi does not measure up to Sita, the heroine of the Ramayana in the collective imaginary of India.

Still according to Parmar (1975: 149), “in the interior of the Himalayas, such as Upper Kangra in Sirmur, Jubbal, Kumarsain, Koonawar, etc. it [polyandry] is still practised, not because the social outlook remains unchanged but because of the scarcity of women”. This explanatory factor, which he refers to as “biological” (ibid), relates to cultural and religious practices. Following the precepts of Buddhism, parents in some parts of Kinnaur used to

send some unmarried girls to monasteries, where they would attain zomohood (nun ordainment).

We must nevertheless keep in mind that Hinduism is more prevalent in Lower Kinnaur villages such as Chhitkul and Rākchham. When Mann (1996: 19) claims zomohood takes a more flexible form nowadays, “the unmarried young girls [being] allowed to stay in their parental house and carry their usual routine there”, which implies contributing to the well-being of the family, he actually describes what took place in Kinnaur years ago, when polyandry was at its peak. In other words, the link usually established in the literature (see Raha and Mahato 1985: 319 for another example) between polyandry and zomohood is rather weak in some parts of Kinnaur. That polyandry and zomohood entered into a simultaneous decline does not illustrate any causal relationship between both, but must be explained against the backdrop of economic improvements and the opening of communications.

The reason why polyandry enjoyed so much popularity until recently has to do with the imperative to adjust to challenging (local) ecological conditions, notably the impossibility of relying entirely on land cultivation, owing to its scarcity and limited fertility. Polyandry allowed for a family, where husbands were typically brothers, not only to avoid “land fragmentation” (Raha and Mahato 1985: 175), but also to get several sources of income based on a division of labour (cultivation, flock, trade, etc.). Polyandry had also the advantage that it prevented over-population. In a way, the practice was part of the Traditional Ecological Knowledge (TEK) – see Berkes (1993: 2) – attaining a certain degree of efficiency from ecological, social, and economic points of view.

As pointed out by Raha and Mahato (1985: 173), some official records³⁷ indicate that economic sanctions cemented the practice: “polyandry was in former days directly encouraged by the State through penalties exacted on partition”. The rule of inheritance, according to which, “the eldest brother, after the death of his father, inherits the property” (ibid, p. 174), further discouraged any attempt from part of the other brothers to challenge the system.

³⁷ Punjab States Gazetteer, vol. VIII, Simla Hill States 1910, Lahore (1911: 15-6).

While the previous considerations provide some useful clues to why polyandry endured for so long in Northern India and in Kinnaur in particular, they give the false impression of a distinct and isolated practice, an essentialist view that our cultural bias may reinforce. By coining the term “poly-gynandry” in connection with Himalayan polyandry, Majumdar (1962: 73) implicitly postulated a more versatile and flexible situation in marital unions, with both multiple husbands and wives.

At the exact same time, Berreman (1962: 72) observed in Jaunsar Bawar that polyandry “is evidently not a sufficiently unitary phenomenon to be explained in the same terms everywhere”. Elaborating on Fortes’s (1971) “developmental cycle of the domestic group”, Berreman (1975) highlights the prominence of “developmental” (alternatively, “temporal”) aspects in comparison to the more “circumstantial” ones (mainly of ecological and economic nature) mentioned earlier. With a time perspective, the careful description of life histories reveal fraternal polyandry is in fact only one type – transitory but cyclically recurring – of marital union among many (polygynandry, monogamy, etc.).

1.2.5 Ritualistic life and religious views

In the following sub-sections, I provide information about the main temples found in both villages (§1.2.5.1), the local deities (§1.2.5.2), the main ritualistic functions and local practices such as animal sacrifice (§1.2.5.3). Finally, the section ends with a brief mention of the main festivals (§1.2.5.4).

1.2.5.1 Temples found in Chhitkul and Rākchham

Chhitkul village has three temples. A resident of Garhwal reportedly built the main temple, *Mathi* temple, in reference to *Mata Devī*, about five hundred years ago. This rumour seems likely, judging by the information provided below about the origins of *Mata Devī* and by Singh’s (1989: 247) consensual claim that village gods emerge during the 14th century at the earliest. *Mathi* temple hosts rituals and *puzas*. Rituals and animal sacrifice take place during festivals.

The *Kagyupa*³⁸ temple (*Laan* in the local language, a loan from Tibetan *lha khang* ‘deity building’) contains precious Buddhist artefacts, including an image of the *Śakyamuni* Buddha and a Wheel of Life mandala.

There are no rituals or events in the precincts of the third temple of Chhitkul village, namely *Guptirāje tsoreṅ*, or *Gupt Rāj* temple, which also serves as retreat to *Mata Devī* during winter.

Rākchham has three temples as well: *Kali* temple (see the picture below), *Shiva* temple, and the Buddhist temple. The main temple, *Kali* temple, hosts most rituals and pujas.

1.2.5.2 The local deities

The main deity of Chhitkul village is a god: *Gupt Raaj*. It is said he was the first deity to reach Chhitkul, hence its privileged status. Community members often refer to *Gupt Raaj* as a *Rishi* in a permanent state of meditation. He has no head and no body, contrary to the other deities, usually incarnated by means of wooden palanquins, a crown of yak hair, heavy silver (sometimes copper and gold) masks made by local blacksmiths, and some colourful drapery. *Gupt Raaj* never leaves the village and is not the object of a regular worship. Women may not touch him. *Mata Devī* (alternatively *Mathi*) is the second – but most visible - deity of Chhitkul. *Mata Devī* is reportedly *Gupt Raaj*’s aunt. Both *Gupt Raaj* and the goddess *Mata* are located in the same temple, where they hibernate during winter.

The goddess *Mata* originally came from Vrindavan in Uttar Pradesh, the place where Lord Krishṇa allegedly spent his childhood, and it was Lord Krishṇa himself that assigned *Mata Devī* to Chhitkul village. This critical information is part of a narrative from the documentary corpus³⁹ and contradicts McKay’s (2015: 184) claim that *Mathi*, as Sri Badrinath’s wife, originates from Tibet (Guge kingdom).

Another clue to *Mata Devī*’s origins is that she leaves the jurisdiction on rare occasions – accompanied by a few select community members and porters – when embarking on a two-month pilgrimage to Gangotri (the source of the Ganges River) and Badrinath, both

³⁸ When and how this specific school of Tibetan Buddhism gained prominence in Chhitkul remains to be ascertained.

³⁹ The narrative is by Jiya Lal, who was *Mata Devī*’s oracle for 60 years.

located in Uttarakhand⁴⁰. The migration towards Uttarakhand (which formed a single State together with Uttar Pradesh until 2000) described in §1.1.4.2 leads to the same conclusion: it is not by chance that a population affected by a disease chooses to migrate as far as Uttarakhand⁴¹.

Karu Devta and *Ragunu Devta* are *Mata Devī*'s bodyguard gods. Only the latter has a temple. *Sham Sher Dev*, *Bagwati Devī* and *Nages* are Rākchham's three deities. The former is another nephew of *Mata Devī*. Each deity has a special power. The goddess *Mata's* is to favour female fertility. In Sanglā, the deity is a rainmaker. In Rākchham, *Sham Sher Dev's* special power is to control the weather; *Bagwati Devī* and *Nages* combat negative energy.

Deities from Chhitkul and Rākchham belong to a jurisdiction called *Tij K^hunaŋ*, or 'seven divisions', which also includes the villages of Batseri, Sanglā, Kamru, Shong and Chasu. When there is a function or an event (*Ju:kud*⁴², wedding, etc.) in these villages, all community members get an invitation. *Mata Devī* plays a supervisory role of the *Tij K^hunaŋ*. Village deities throughout Kinnaur follow a hierarchical order. *Chandika Devi*, from Kothi village, near Reckong Peo, is the highest ranked deity.

One can ask for the deity's blessing on different occasions (after a wedding for example, or when one has health issues). One may donate to the deity who in turn donates to the community. One may even invite the deity to one's own house on specific occasions (birthdays, celebration of end-of-year examinations, etc.). Lower-caste members may do so as well, but in a specific area in the village.

1.2.5.3 Inherited functions and rituals

The deity has two main representatives to assist her: the Oracle (*grɔktsu*), through whom she speaks, and the Interpreter, *Ju)mat^ha* in Chhitkul-Rākchham and *Ju)mat^hes* in Kinnauri.

⁴⁰ Traditional Chhitkul-Rākchham songs are interspersed with lyrics in Garhwali, spoken in Uttarakhand, which suggests a connection between Chhitkul-Rākchham and the linguistic varieties found in Gharwal. The most famous songs (song = *gret*) include *Tjandar Kantae Gret*, *Go Kul Rame Gret*, and *Umputie Gret*. *Ts^haŋ Git^haŋ* refers to narratives that lasted all night long.

⁴¹ Badrinath of Kamru (Naga deity) is the oldest deity of the region (Singh 1989: 247) and came originally from Garhwal. One usually offers Brahma Kamal flowers to local deities. This flower grows from an altitude of 4,500 meters and allegedly blooms only one night a year. The Brahma Kamal is the State flower of Uttarakhand.

⁴² From *Ju*: (deity) and *kud* (call) in Kinnauri: an invitation of the deity to one's house to celebrate fortunate events (birth, new job, etc.).

Both typically inherit their respective functions, the deity appointing them officially⁴³, and both are invariably men.

When performing a ritual, the Oracle enters into a trance with the upper part of his body naked and occasionally with the deity's sword⁴⁴ (*kuṛṭḥal*) pointing at his belly, thus saluting participants in the name of the deity. The Oracle may speak in languages other than Chhitkul-Rākchham, Hindi, or Kinnauri, hence the need for the Interpreter. The Oracle does not speak non-human languages as shamans typically do. His main attribution is to lead the ritual. In that, his function is different from that of the village monk, who deals with funerals, thus acting as a psychopomp. The complementary role played by the village monk and the oracle is notably highlighted in Dumont and Pocock's (1959: 55-6) description of possession throughout India. Although his main function is to lead the ritual, his abilities go beyond the temple precinct. It is said oracles perform miracles: touching fire, opening locks without keys, seeing hidden things, touching boiling oil, displaying healing abilities, etc.

The Interpreter's role is maybe less apparent, but no less important. His main function is to interpret what the deity says through the Oracle, and like him, his attributions extend far beyond ritualistic performance. His *raison d'être* is to ask questions. When not taking part in a ritual, he enquires about the psychological and spiritual well-being of the villagers.

During a ritual, when answering questions, if the deity is jumping, it means 'yes'; if the deity is tilting to the right or to the left, it means 'no'. Mustard seeds are one important medium in the aim to interpret what the deity says. A liquor called *p^hasur*⁴⁵, made of barley, and to which fruit flavour (apple, apricot) is often added, is commonly drunk by adult participants with their bare hands.

Inherited functions at the temple also include worshippers and storekeepers. Senior members of the community teach children ritualistic practices from childhood. The deity designates a few additional members of each village to perform sheep and goat sacrifices by means of a machete. According to my main consultant, the deity is the medium for

⁴³ These functions are inherited, but occasionally the deity may appoint a specific brother within the family.

⁴⁴ Other symbols of the deity are her sceptre, called *tsoro* (made of silver, with the middle part in gold), and the *chauri*, a whisk made of white-coloured yak tail's hair. Symbolizing authority, chauris are also in use in all Hindi temples and Sikh gurdwaras.

⁴⁵ *P^hasur* is an intoxicating alcohol similar to *soma*.

sacrifices, the aim of which is to appease the malevolent spirits, referred to as *sauniṅ*⁴⁶. The centrality of spirits gives more credit to the hypothesis that Kinnaur was an area “ruled” by mountain powers before the advent of Buddhism.

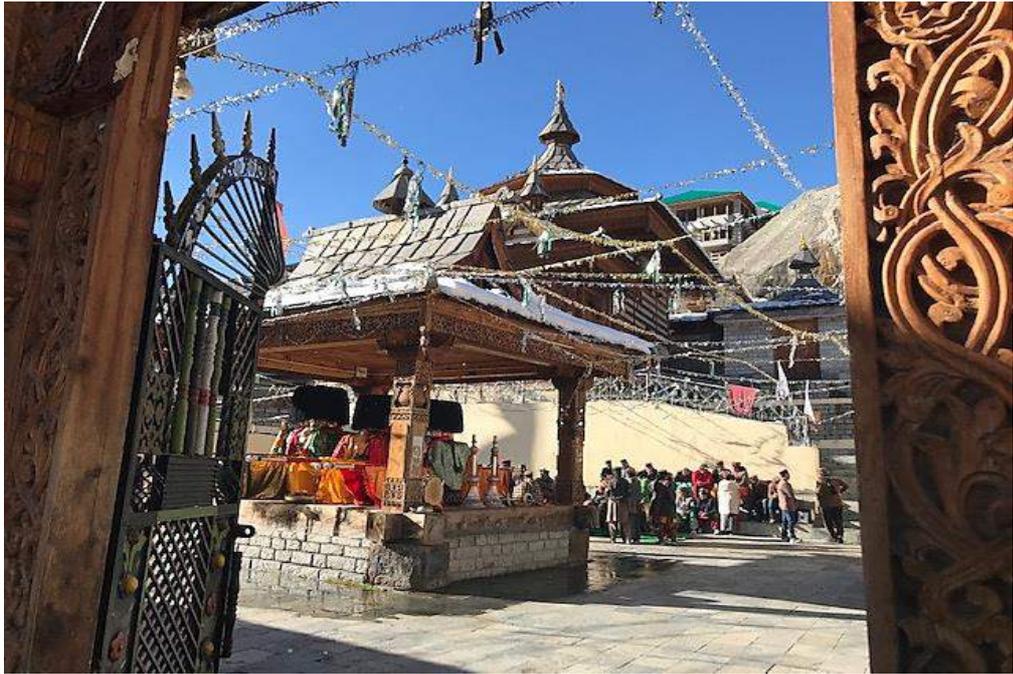
Animal sacrifice has become a contentious issue. The Himachal Pradesh High Court banned the practice in September 2014⁴⁷, but the Supreme Court of India, the highest judicial body under the Indian Constitution, has so far refused to legislate on that matter. The practice of animal sacrifice is not easy to discard as its roots lie in pre-Buddhist and Vedic times. Sacrificing animals is the eternal reenactment of an act of creation performed by the gods at the dawn of time (Eliade [1949] 1991). An act of creation out of death and burning which first extends to human beings as the liver of the sacrificed animals is cut into small pieces and given to the *puzari* men. Other participants receive other parts of the goat meat.

At the beginning of the ritual, one pours a bit of water onto the goat’s head and ears. If the goat shivers, the sacrifice will take place; if not, its life will be spared. Only male goats are sacrificed. The sacrifice takes place in a holy place (the temple), but also within a specific ‘sacred’ time reference. As argued by Eliade ([1949] 1991: 115): “we are confronted with the infinite repetition of the same phenomenon (creation-destruction-new creation) adumbrated in each yuga [‘age’] (dawn and twilight) but completely realized by a Mahāyuga [‘complete cycle’, composed of four ages]”, a cyclical conception of time already found in the Atharva Veda (X, 8, 39-40)⁴⁸.

⁴⁶ *Sonigs* in Sur Das (1938: 20).

⁴⁷ https://realitycheck.files.wordpress.com/2014/10/himachal_animal_sacrifice_ban_judgment_ccwp87112012.pdf

⁴⁸ One female speaker from Rākchham, commenting on heavy snowfall, climate change and the deep uncertainties tied to our times, reminds us the current age is *Kali Yuga*, the ‘age of darkness’ (TOP_cik11-BD-2019-03-07-6).



Picture 6: Rākchham's main temple – Kali temple – with the village's three deities, Sham Sher Dev, Bagwati Devī and Nages © Philippe Antoine Martinez 05-11-2018

In most of the available literature on Kinnaur, religious life is described as a syncretism of Hinduism and Buddhism. A good illustration is the story of *Mata Devī's* origins, which ascribes a prominent role to Lord Krishna, a central figure in Hinduism who plays a less important role in Buddhism (see the *Jataka* tales). However, Hinduism is generally dominant in Lower Kinnaur, where Chhitkul and Rākchham are located, whereas Buddhism is more prevalent in Upper Kinnaur. An unmistakable sign of the secondary role played by Buddhism is the almost total absence of portraits or imagery of the Dalai Lama in both villages, particularly in comparison to Reckong Peo.

Even though Hinduism is dominant, the Buddhist influence is conspicuously reflected in the Kagyupa temple. Losar (*Sa:zo*), the Tibetan New Year, is also celebrated in both villages, which is not the case for two important Hindu festivals, Nāg Panchami and Diwālī. Finally, yet importantly, monks are formally in charge during funerals, reciting prayers in Tibetan. At least one monk is available in the Buddhist temple of each village. The village monk may be a community member or may come from another village. The body of the deceased is usually cremated.

Some features, for example the worshipping of stones, reflect older practices that we cannot ascribe to one specific religion. Rather, *Nāg* (*Nāga* in the local language)

worshipping would reveal the importance of spirits for the community. In Chhitkul village, the stone located on the upper side of the main temple is called *Taṅ Taṅ Nāga*, while the second, located next the current bus stand, is no other than *Karu Devtā*, a male god and one of Chhitkul's five deities. Both communities worship *Nāg* deities⁴⁹, but only once a year does *Nāga*⁵⁰ become the center of attention, during the month of *Ma:ṅ* (mid-January-mid-February).

1.2.5.4 The main festivals

Festivals still punctuate the ritualistic life of Chhitkul and Rākchham's community members. One such festival, if not the most important in Chhitkul and Rākchham – but also all over Kinnaur – is *Sa:zo*, devoted to *Nāga*.

A ritual (*ka:r*) called *fumi:* seems to be of particular importance for the local community. Three or four days after the start of the festival, marked by the worshipping of *Nāga*, nine selected members – representing the *khandan* of the village – live for nine or ten days inside the main temple, bringing edibles from their home. These nine men, whom one is designated a priest, follow clear instructions and a strict schedule, how to sit, how to eat, how to drink, etc. They stay secluded for nine or ten days, cooking and sitting together. Baths are taken – with cow urine – in the morning before daybreak. These nine holy men may not use languages other than Chhitkul-Rākchham for the whole period. The festival ends with the worshipping of Lord Krishṇa, and everyone wishing each other prosperity for the year to come. At about the same time, villagers make drawings (*kha*) inside their homes. These drawings have a revelatory property, providing clues about how the year is going to unfold.

Other festivals include *Niratro* (beginning of April), when *Mata Devī* comes out from winter hibernation, followed by *Eaṭ^haṅ/Bi:sh*, the inauguration of the harvesting season (springtime). The Flower Festival (*Usko*), celebrated during the first week of October, marks the end of summer. *Usko* lasts three days, with rituals at the temple and at the village monastery.

⁴⁹ *Nāga* deities refer to half-human half-serpent beings.

⁵⁰ *Nāga*, a male deity, stays in the *pra* (the highest wooden construction in Chhitkul village) in winter and lives in a cave near the village during summer.

1.3 Some speculations about the origins of the Chhitkul-Rākchham community

Discussing the origins of the Chhitkul-Rākchham community is a slippery slope when their history does not appear in archives. My own linguistic and ethnographic data, coupled with insights from the available literature, allow us nevertheless to map some scenarios of the origins of the language and the speaker community.

Table 42 (§4.7.2) leads to the conclusion that the morpho-syntactic expression of evidentiality and the resulting evidential categories are very similar in Chhitkul-Rākchham and Kinnauri. Morphological and syntactic correspondence extends beyond the evidential system, but it is not a guarantee for mutual intelligibility, especially when lexical similarity does not exceed a certain level. There is however little doubt that both communities have been in close contact with each other for quite a long time.

Despite obvious influences from Tibetan: the pair of egophoric copulas and auxiliaries *to* and *tōts* (see §4.7) future tense constructions (see table 46 in §5.4), the pair *no* (emphatic) and *=o* (focus) – see §8.1, §8.2 and §8.3, Chhitkul-Rākchham is not Tibetic. Based on the observations I provide in this section, a connection with the *Kirāntis* from Nepal and the communities (Bhutan, Northeast India) discussed below is worth investigating. I refrain from taking a position on a prior Eurasian origin for now, although the presence of a syntactic element like ‘converb’ (Ramstedt 1903: 55) echoes a phenomenon especially attested across the Eurasian continent.

The Chhitkul-Rākchham community presumably followed a migration path from current day Nepal to Garhwal under the Katyuri Kings. The arrival of the *Khasas* would have resulted in some *Kirāta* tribes, including Kinnauri-speaking communities, to retreat towards the North. The hills and some of the mountainous areas of Kinnaur being already inhabited, the Chhitkul-Rākchham community would have settled in two remote places, subjugating a small Indo-Aryan population. This scenario leads to two observations. First, the community would have left Garhwal before the advent of local deities, that is, *Mata Devī* would have reached Chhitkul at a later stage. Second, it contradicts the widespread claim that languages spoken in the more remote and mountainous areas are usually the oldest, having been forced to retreat in the wake of various immigration waves (Witzel 1999: 3-4).

There are arguments of both ethnographic and linguistic nature in favour of a close relationship between the Chhitkul-Rākchham community and the *Kirāntis*. In §1.1.5, I note the close resemblance in terms of ritual dances, animal sacrifice, roaming spirits, worshipping of nature, respect of both Hinduism and Buddhism, the role played by masks during specific festivals, etc.

The term *k^hunaŋ*, a borrowing from Kinnauri, is very intriguing. It refers to an administrative unit or area. To my knowledge, only the Dimasa Kachari community from Assam and Nagaland uses the exact same term, with the meaning of ‘village head’ (Bordoloi 1976: 63-5). The difference is that ‘village head’ in the Dimasa Kachari community is usually a function occupied by the eldest member of a village, whereas *Mata Devī* embodies this position in Chhitkul-Rākchham. The traditional village council consists of eight members including the *k^hunaŋ*, that is, the same total number found in *tif k^hunaŋ* ‘seven villages’ plus *Mata Devī*. These observations tie Chhitkul-Rākchham and Kinnauri with languages such as Kachari, Boro (alternatively Bodo), Koch, etc. Further, *tif k^hunaŋ* is consistent with Singh’s (2008: 383) observation about an “age-old seven clan” distinction still in force in the hilly areas of present Nepal (see §1.1.5).

There are similarities in terms of lexicon: *tuŋ* ‘drink’, *p^hul* ‘flour’, and *dum*⁵¹ ‘meet’ are three examples (Gerber and Grollmann 2018: 123, 125), although we may treat these as cognates going back to much older Tibeto-Burman roots. *Maŋ* ‘to dream’, also found in Bantawa (Jacques 2017: 5) is another example. The Indigenous autonym *rakduŋ for *Kirānti* (Michailovsky 2017: 646) is intriguingly similar to Chhitkul-Rākchham *ra:k* ‘stone’⁵², which forms the etymological basis of the name Rākchham (‘stone’ and ‘bridge’).

Chhitkul-Rākchham and Kinnauri share the feature of ‘pronominalization’ with the *Kirānti* languages of Nepal, although their verbal agreement system exhibits some differences – see Jacques (2012: 84-6) for an overview of Kiranti.

The presence of fused or portmanteau morphemes is a well attested feature of Kiranti languages (van Driem 1990). It is notably attested in the Chhitkul-Rākchham dubitative irrealis *-no*, which also conveys simultaneous aspect. A cognate is found in Sherpa *-nok*

⁵¹ In Chhitkul-Rākchham, *Dumt^haniŋ* (from *dum* ‘meeting’ and *t^han*, the place where the deity is seated), a meeting place in Rākchham village. Further, *dumsa* ‘large gathering’ is a borrowing from Kinnauri.

⁵² Alternatively, *ra:*, which suggests ancient final *-k yields long vowel in this precise case.

(Volkart 2000: 138) with a somewhat similar meaning of uncertainty. Van Driem mentions allomorphy, at the heart of the Chhitkul-Rākchham copula system (see §4.1.2) and Herce (2020) stem alternation, see appendix 1, §1.5.1.1.

The negative triplet *ma-*, *man* and *mat ti* is almost exclusively circumscribed to Central and Eastern Kiranti (van der Auwera and Vossen 2017: 43) and a few Tibeto-Burman languages spoken in North-East India: Mising (or Plains Miri, see Prasad 1991) and Galo (Post 2015). Ebert (2008) identifies negative converbs (see §4.4.6 and §7.2) in seven Kiranti varieties.

Another defining clue is the occurrence of compound (or serial) verbs (Michailovsky 2017: 25-7).

Other leads invite us to broaden the investigation a bit beyond Nepal, namely to Bhutan and Eastern India. As discussed in §6.5, there are similarities between Chhitkul-Rākchham and languages such as Mongsen Ao and Lepcha in terms of reported speech. The infinitive suffixes *-ŋ*, *-aŋ* and *-saŋ* have cognates in Kurtöp, Lepcha and Bumthang – see appendix 1, §1.3.3.2.

§5.13 points in the same direction. Chhitkul-Rākchham and Kinnauri differ greatly from Bunan and Darma, notably in terms of verbal morphology – including derivational – (see appendix 1, §1.3.3).

1.4 Concluding remarks

The introductory part of this chapter emphasizes the distinctiveness of Chhitkul-Rākchham *vis-à-vis* Kinnauri, urging us to exert caution with regard to its classification. The information provided in §1.3 and in this thesis makes a strong case for the Kiranti hypothesis. By doing so, I trade one subgroup that is not clearly delimited (‘West-Himalayish’) for another one (Kiranti) with a similar flaw. Both denominations almost exclusively rely on the geographical location criterion and on lexical data.

A few Tibeto-Burman languages spoken in Nepal, notably Thangmi and Barām (Schafer 1974: 145) have been assigned to the Eastern branch of West-Himalayish. At the same time, Turin (2004) emphasizes the comparatively high number of lexical correspondences

between Thangmi and Classical Newar. The pendulum movement between 'West-Himalayish' and Kiranti does not necessarily mean these two denominations are invalid as long as they are supported by some more substantial and eclectic comparative data. Most probably, this movement invites us to consider both (or a few languages within both groups) as part of a larger subgroup.

There is no doubt that *Mata Devī*, the most prominent Chhitkul's deity, originally came from Vrindavan (Uttar Pradesh), and not from Tibet. This piece of information is critical because it reinforces the hypothesis that people from the high caste were not the original inhabitants of the village, despite its remoteness. Consequently, the preservation of a complex morphology, as described throughout this thesis, must be understood in a pre-modern era context characterized by several migrations and intense language contact.

From a historical perspective, village deities are a relatively recent phenomenon. We may surmise *Mata Devī's* arrival to Chhitkul village did not take place before the 15th or 16th century. Moreover, the phenomenon of the village deities does not tell us much about the nature of the pre-Buddhist beliefs alluded to in this chapter. Further investigation of the so-called 'Nāga cult' could provide a few answers in this regard.

Chapter 2: Theoretical and methodological considerations on evidentiality

2.1 Evidentiality in the literature: a historical overview

Providing a relatively succinct account of evidentiality in the literature is not an easy task. The choice between a historical rendering and a thematic one may fall short of important insights, and it is for this reason that I start with a chronological overview, supplemented by a discussion on the most salient points of contention (§ 2.2.2).

2.1.1 Evidentiality according to the pioneers (first part of the 20th century)

Although already described by the grammarian Pāṇini during the 6-5th century BC (Hock 2012: 93-101), touched upon in works such as the anonymous grammar of Quechua (1603 [1586], printing press Antonio Ricardo), or simply hinted at in some 19th century publications (see Ioseliani 1863 on Georgian), it is only in early 20th century descriptions of Native American languages that evidentiality was introduced in Western academic circles. The term ‘evidentiality’ was not used as such, but a link between ‘evidence’ (Boas 1911: 43), ‘subjective knowledge’ (ibid, p. 443), ‘source of information’ (ibid, p. 496; Lee 1938: 102), ‘source or nature of the speaker’s knowledge’ (Sapir 1921: 115), ‘source and certainty of knowledge’ (Boas 1947: 237, 245) and some verbal suffixes was established.

As one practical example, Boas (1911a: 43), in his account of Kwakiutl, is mindful of the fact that the translation of an English sentence such as ‘the man is sick’ may vary depending on several factors: newness of information, visual evidence, hearsay, dream, etc. He mentions different sets of ‘primary’ suffixes, some of which “denoting degrees of certainty [...] emotional states [...] modality”, and “the source of information whence knowledge of the idea expressed is obtained” (ibid, p. 455). These suffixes are part of a larger category “denoting subjective judgments or attitudes relating to the idea expressed” (ibid). In other words, the superordinate category is both ‘grammatical’ (ibid, p. 43) and epistemic.

The suffixes that convey “degrees of certainty” (*-lax*; *-āna*; *-gwanEm*, ibid, p. 492) are all dubitative. Markers of source of information include hearsay (*-l(a)*, ‘it is said’, and *-Emsk*, ‘as I told you before’), visual evidence in a dream (*-Engra*), and perceptual (?) *-xEnt* (ibid, p.

496). In a subsequent publication (1947: 235), Boas lists suffixes denoting “source of information, p.e. quotative, evidential”, and suffixes denoting “degree of certainty, i.e. probably, perhaps”, listing dubitative, but also assertive forms.

In his *Introduction to the Study of Speech*, which investigates how a set of grammatical categories can be treated differently from a cross-linguistic perspective, Sapir (1921: 115) comes across verbal forms expressing “the source or nature of the speaker’s knowledge (known by actual experience, by hearsay, by inference)”. In Takelma (1922: 200), Sapir treats the 'inferential' evidential, “used primarily to indicate that the action is not directly known through personal experience”, as one of six tense-mode categories. Sapir describes a system where there is a choice between different competing forms: “the inferential form *waik’anda* is used in preference to the matter-of-fact aorist *wayānt e da*”. A link is established between these forms and speech genre, notably “mythical narration” (1921: 115).

Referring to Wintu, Lee (1938) describes a set of verbal suffixes denoting ‘source of information’ (ibid, p. 102). In addition to tense and person information, *is good in the salmon is good* “has to contain one of the following implications: I see, I taste (or know through some sense other than sight), I infer, I judge, I am told” (ibid, p. 90). The suffix *-ke* is used for hearsay as in *tsoyilake ni*, ‘(I hear) they tell me I am drunk’ and “exclusively in the narration of myths” (ibid). “Visual evidence is expressed by means of three different suffixes”, one for each person. The visual suffix occurs “in purely exclamatory, non-informative phrases”, i.e. visual and unexpected information are marked in a similar way. Sensory experience other than visual is equally expressed by three suffixes (one for each person), whereas the suffix *-re* is used with all three persons in the case of inference. The suffix *-el* is used instead when the speaker’s statement “is based on conclusions derived from systematic thinking alone, or on judgement” (ibid), that is, when an assumption is made. Wintu therefore has a five-choice evidential system.

Lee casts light on a set of distinct suffixes in declaratives and interrogatives denoting “the attitude of the grammatical subject toward a contemplated participation” and “the position of the speaker toward his own statement” (ibid, p. 94), i.e. subjective evidence. In some cases (known facts), these suffixes are optional. Below is the evidential paradigm for *Harry is chopping wood*:

Wintu

Harry kupake, if I know this by hearsay;

Harry kupabe, if I see or have seen Harry chopping (visual);

Harry kupante, if I hear him, or if a chip flies off and hits me (sensory other than visual);

Harry kupare, if I have gone to his cabin to find him absent and his axe gone (inference);

Harry kupael, if I know Harry has a job chopping wood every day at this hour, that he is a dependable employee, and, perhaps, that he is not in his cabin (assumption). Lee (1938: 92)

What these first accounts tell us about evidentiality – although the term is not yet in use – is instructive. All three linguists ascertain the existence of a variety of forms, some of which denote source of information, some others attitude towards the same. Each has its own set of suffixes, but this does not mean they are treated separately. On the contrary, Boas and Lee take all of them to be part of a macro-grammatical-epistemic category like no other, characterized by a clear relationship between the speaker's mind and the event she describes. In other words, they do not consider these forms as part of a category in which the distributional rules are fixed in stone, but a category deeply rooted in subjectivity. In fact, subjective assessment is the overarching category for Boas, hence the close connection postulated, not only by him, but by Sapir as well, with (epistemic) modality.

Suffixes denoting source of information exhibit semantic extensions: the visual covers surprise (Lee), the inferential as well (Sapir). Based on Sapir's observation that the Takelma inferential competes with a factual suffix, we gain an awareness of the pragmatic nature of these forms. We also understand from these three foundational journeys into evidentiality that the verbal markers bear a close relationship with person (notably in Wintu), tense and speech genre, all restricting to some extent the unfolding of a subjectivity.

2.1.2 Evidentiality from mid-20th century to 1986

From the mid-20th century to the middle of the 1980s, Eastern Europe, Eurasia and South-East Asia gradually became playing grounds for the investigation of evidentiality, on equal footing with the Americas. Evidentiality emerges with Jakobson (1957) as a more versatile verbal category in its mode of expression than what is inferable from the early 20th century descriptions. At the exact same time, 'le médiatif' ignites discussions that are still raging today: internal organization (direct vs. indirect source of information), source of

information vs. epistemic reading, etc. There is also a growing tendency to posit a close relationship between evidentiality and modality.

In her description of Tunica, Haas (1941: 117) contends that “all statements made on hearsay [...] are indicated by the presence of *-a’ni*, as in *pi’tahkʔuna’ni* (‘he was walking along, it is said’)”. The form is part of a set of 15 tense and modal postfixes. The term ‘evidential’ appears for the very first time in Halperin (1946: 286) describing Yuma, where it refers to a specific verbal suffix, *-ʔaš*, one of five “nonthematic” types of suffix categories identified (ibid, p. 281) and “modal in meaning” (ibid, p. 286). Modal suffixes like *-ʔaš* consistently occur after aspectual and tense-modal suffixes. Hoijer (1954c: 10) identifies ten features which are specific to North American Indian languages, one of them being “the technique [...] whereby statements are classed as known from the speaker’s experience, from hearsay, or from cultural tradition [localized knowledge]”.

Referring to Tajik, Lazard (1956: 148-9) introduces the notion of ‘inference’ to characterize the series *karde-ast*, *mikarde-ast*, and *karde bude-ast*, previously considered to be a special usage of perfect or past. Inference, hearsay and sudden realization (‘miratif’), all expressed by the same form, are referred to as ‘le médiatif’, a grammatical category found in Eurasian languages, where the system of opposition is “at the morphosyntactic level between forms indicating nothing about the source of information and forms referring to the source of the information without specifying it” (Lazard 2001: 362). Semantically, the category depicts situations in which speakers distance themselves from their own discourse, as their source of information is indirect. The imperfective in the first sentence below conveys first-hand acquired information. In the second one, the perfect continuous form conveys non-first-hand (indirect) reported information:

Tajik

Tuye xâne-yemân ke kâr mikard hamishe sher mixând

In house-PRON:1PL SUB work do:IMPF:3SG always poetry recite:IMPF:3SG

‘[The neighbor’s wife said] “When he worked at our place, he always recited poetry”’

Boland boland mixândeast

Loudly loudly recite:PERF.CONT:3SG

‘(according to her), he recited (poetry) very loudly’ Hadarcev (2001: 119)

In contrast with earlier accounts of North American Indian languages, Lazard contends 'le médiatif', as a 'form of indirect experience' (Harmann 1970), is not evidential, a stance that is not consensual.

Jakobson (1957 [1971]) takes note of a distinction in Bulgarian past tense verbal forms: *zaminala* ('it is claimed to have sailed') vs. *zamina* ('I bear witness, it sailed'). He further describes 'evidentials' as 'shifters'⁵³, "a class of grammatical units" the nature of which is "semiotic" and the general meaning of which "cannot be defined without a reference to the message" (1957: 42), i.e. is context dependent. Jakobson also underlines that evidential forms are not limited to suffixes, but include particles, like in Russian. Aronson (1967) reanalyzes the opposition observed in Bulgarian as one of 'confirmative' vs. 'nonconfirmative' – the latter expressing doubt, surprise, a non-firsthand information source and non-volitionality – rather than 'witnessed' vs. 'non-witnessed'. Comrie (1976) observes a correlation between the perfect and inferentials in Bulgarian, Estonian, and Georgian. Friedman (1979) takes the verbal forms found in Georgian and other non-Slavic languages of the former Soviet Union as markers of the speaker's subjective evaluation of an event, a grammatical category labelled 'status', consisting of evidentials (non-confirmative meanings), markers of degree of certainty and mirative forms.

Thompson (1979: 344) mentions a category that includes a few evidentials, 'hearsay information', 'observed situation', and 'presumably' in the Salishan language family. Evidentials are formally grouped under the heading 'modal categories' (ibid, p. 343), together with 'unintegrated' elements which "carry meanings like 'should, ought', 'may', 'want to, feel like'" (ibid, p. 344).

For Hardman (1981), "inflectional suffixes indicate tense and person, where tense is defined as any one of a mutually exclusive set of categories involving aspect, mode, time, data source, among other things" in Aymara. She (ibid, p. 11) claims that evidentiality is obligatory and provides a list of the different markers of a speaker's source of knowledge: "personal, reportive, hearsay, inferential, non-personal, or non-involved". The distinction between personal and non-personal is worth noting and echoes 'conjunct-disjunct' and 'egophoric' within Tibeto-Burman.

⁵³ The term is from Jespersen (1923).

Givón (1982: 42) discusses “apriori-synthetic knowledge, the huge body of generic knowledge shared within the culture, most commonly coded in language in the knowledge of the dictionary”. Givón’s category refers to localized common knowledge that is “not challengeable by the hearer” and requires “no evidentiary justification by the speaker” (ibid, p. 43).

Foley and Van Valin (1984: 218-20) assert any clause consists of periphery, core and nucleus layers. ‘Operators’, “usually marked morphologically as affixes or clitics to the nucleus” (ibid, p. 208) refer to one of the three layers. ‘Evidentials’, which “mark the truthfulness of the proposition in terms of the way the speaker has ascertained this”, is one of four ‘peripheral operators’, together with ‘tense’, ‘status’, and ‘illocutionary force’, to scope over the entire sentence. “The evidentials occur after the tense suffixes because they take tense within their scope” (ibid, p. 218). ‘Status’, which conveys a realis-irrealis (i.e. epistemic) distinction, is part of modality when ‘evidentials’ are not.

Bybee aligns herself with the forefathers – notably the superordinate epistemic category suggested by Boas – claiming that “evidentials may be generally defined as markers that *indicate something* [i.e. an attitude or a judgement] about the source of the information in the proposition” (1985: 184, emphasis added). As such, evidentiality is close to her definition of mood as “a marker on the verb that signals how the speaker chooses to put the proposition into the discourse context” (ibid, p. 165), which again emphasizes a subjective approach.

2.1.3 Chafe and Nichols (1986) and its aftermath

Entitled “The Linguistic Coding of Epistemology”, Chafe and Nichols’ (1986) volume of proceedings – the first crosslinguistic study of evidentiality – broadens the perspective dramatically. Evidentiality is expressed by various morphological means: affixes, predicates, and particles in Northern Iroquoian (Mithun 1986: 92-3); modals, adverbs, and idiomatic expressions in English (Chafe 1986: 261), phrases in Kashaya (Oswalt (1986: 43), i.e. also lexically.

In Sherpa, Woodbury (1986: 195) posits a close connection between evidentiality and tense: the same form, *-nok*, has an opposite meaning in the present and the past tense. In

the former, it is experiential whereas in the latter, it is not: “the value of *-nok* is skewed by tense”.

In most contributions (Chafe, Mithun, Oswald, Weber), the scope of evidentiality goes beyond source of information and includes the speaker’s attitude. Weber (1986: 146) also identifies a secondary function of evidentials in terms of information structure, from the context (topic, old information, and theme) to the “material which advances the communication” such as rheme and new information. For Mithun (1986: 89), “evidential markers qualify the reliability of information communicated in four primary ways [...] their degree of precision, their probability, and expectations concerning their probability”. An evidential may serve several of these functions “either simultaneously or with disambiguation from context” (ibid, p. 90). In Cayuga, the experiential particle *à:yę:’* (‘it seems’), which “indicates that a statement is based on appearance” (ibid), serves the purpose of both precision and certainty, as shown in (2) and (3):

Cayuga

- (1) *A:yę:’ katsihyó:t ho’tę’ ne’ onáta:’*
 it seems knob-stands kind the bread
 ‘These look like homemade biscuits.’
- (2) *A:yę:’ tekayehstq ne’ teyot’akęhny’akqh*
 it seems it-is-mixed the ash-is-cut-off
 ‘It is sort of mixed with grey.’
- (3) *Kwe:kq akatehsrqnih’s’q à:yę:’ ó:nęh*
 all I-am-ready it seems now
 ‘I guess I am about ready now.’ Mithun (1986: 91)

Oswald (1986: 43) takes evidentiality to be “at the top of a continuing hierarchy of modals expressing increasing uncertainty on part of the speaker” that is, as epistemic modality.

In Balkan Slavic, Friedman (1986: 169) argues that “evidentiality is a meaning, whether contextual or invariant, expressed by the generic grammatical category which indicates the speaker’s attitude toward the narrated event”. The category remains nonetheless unlabeled.

According to Anderson (1986: 273), “evidentials express the kinds of evidence a person has for making factual claims”. Considering evidentiality as both a semantic and a ‘special grammatical phenomenon’, Anderson is concerned about delimiting its scope through the definition of a set of criteria (ibid, p. 274-5) meant to identify ‘archetypal evidentials’.

Similarly to Chafe, Anderson includes lexical means in his definition. However, an evidential “does not simply include anything one might consider to have an evidential function” (ibid, p. 274). Criterion 3b (“evidentials are not themselves the main predication of the clause, but are rather a specification added to a factual claim about something else”) implies that verbs of perception, as part of the main predication of the clause, should not be considered to be expressions of evidentiality. The criterion also suggests that evidentials provide a specification to a factual claim about the propositional content of the utterance: circumstantial inference, as in *John [must have] arrived* (because I see his coat on the chair), and hearsay, as in *[I hear] Mary won the prize* (someone told me), where the words inside brackets are the evidentials.

A range of typological studies (Willet 1988; Frawley 1992; de Haan 1998, 2001, 2005; Johanson and Utas 2000; Plungian 2001, 2010; Aikhenvald 2004) the central concern of which is the internal organization of evidentiality and its relationship with epistemic modality followed Chafe and Nichol’s proceedings. However refined, these studies have not resolved disagreements, rather the opposite.

Willet’s, Frawley’s and de Haan’s contributions are further discussed in §2.2.1. Brief mention should be made here of de Haan’s observation that evidential forms are optional in most languages, a phenomenon which “can best be seen as either the absence of evidence or a choice on the part of the speaker not to express his/her evidence for the action described” (2001: 197). The latter case suggests that pragmatic considerations play a defining role.

Matlock (1989: 222) adopts a broad definition: “[...] when the speaker uses an evidential, her intention is to inform the hearer of the certainty of her knowledge”. In addition to being expressed “explicitly” (grammatically), evidentiality is conveyed “implicitly” (lexically) in a number of languages (ibid, p. 216).

Izvorski's (1997) identifies a "perfect of evidentiality (PE)" in various languages (Turkish, Bulgarian, Norwegian), a category that "indicates the availability of indirect evidence for the truth of a proposition". Evidentiality "is a linguistic category encoding speaker-oriented qualifications of propositions along two dimensions in terms of the evidence they are based on [direct and indirect] and with respect to the speaker's commitment to their truth [such as PE]" (ibid, p. 224). These two dimensions display a close relationship, where each "epistemic reasoning" corresponds to one type of evidence.

On evidentiality vs. epistemic modality, Plungian (2001: 354) is halfway across a ford: "while an evidential supplement can always be seen in an epistemic marker, the opposite does not always hold". One could argue that the less direct the information is, the more doubtful it is likely to be.

Palmer (2001) treats modality as a grammatical category that refers to the status of a proposition describing an event. He also distinguishes two different kinds of modality: 'propositional modality' and 'event modality'. Evidentiality, which denotes the factual status of a proposition, belongs to the former, together with epistemic modality, which denotes the speaker's judgement about the factual status of a proposition⁵⁴. Palmer posits a division of evidentiality into two broad categories, namely sensory and reported, the former including seeing and hearing and the latter different subcategories such as hearsay, quotative, and deductive. Each type of modality is expressed by i) suffixes, clitics, and particles; ii) modal verbs; and iii) inflection.

Ifantidou (2001) investigates the pragmatics of evidentiality through the lens of Relevance Theory. Evidentiality marks the source of information and the speaker's degree of certainty. Her reliance on Relevance Theory suggests that Grice's Maxim of Quality (each speaker says what is true) does not apply to evidentiality. Rather, evidentials provide information about higher level explicatures⁵⁵ (Sperber and Wilson 1986), which are direct or explicit speech acts that make no contribution to truth conditions – but involve the speaker's attitude to the proposition expressed).

Applying de Haan's (2001: 193) statement ("inferential evidential has certain elements in common with [...] sensory evidentials") to Kashaya, Faller (2002) argues for a more subtle

⁵⁴ In his first edition of *Mood and Modality* (1986: 51), Palmer treated evidentiality as a subcategory of epistemic modality.

⁵⁵ To be distinguished from implicatures, which refer to what is suggested in an utterance (see Grice 1989 [1975]).

classification of evidentials across the world's languages according to the concept of gradience. Referring to a range of studies (Barnes 1984, Oswald 1986, de Haan 1998, Willett 1988), Faller (2002: 261) contends that her classification proposal accounts for the assumptions that direct evidentials are preferred to indirect ones ('relation of preference'), and that the use of a more indirect evidential implies the absence of evidence of a more direct type ('negative implicature'). Faller's "reasoning from evidence" cline has the merit of placing inference at the core of the evidential system, but any idea of preference is bound to give a poor account of the pragmatics of evidentials.

2.1.4 Evidentiality according to Aikhenvald (2004)

In what is by far the most comprehensive cross-linguistic study to date, Aikhenvald (2004: 3) defines evidentiality as a linguistic category "whose primary meaning [a reference to Anderson's (1986) criteria 3c mentioned earlier] is source of information". Her contribution is an attempt to establish evidentiality as "a grammatical category in its own right" (Narrog 2005: 380), that is, distinct from tense, aspect, mood, modality, person, etc. Aikhenvald (2004: 4) argues that "all evidentiality does is supply the information source. The ways in which information is acquired – by seeing, hearing, or any other way – is its core meaning", hence she (ibid, p. 105) makes a distinction between 'proper' evidentials and 'evidential strategies', "categories and forms which acquire secondary meanings somehow related to information source". In its "narrow sense" (Chafe 1986: 262), evidentiality is circumscribed to only one fourth of the world's languages.

Aikhenvald provides a typology of evidential systems worldwide. The more elaborate system (D1) distinguishes between visual, non-visual, inferred, assumed and reported. Based on a tripartite distinction, her taxonomy is in line with Willett (1988): direct/firsthand, inferred/non-firsthand, and reported/non-firsthand⁵⁶. Aikhenvald (2004: 63) identifies six "recurrent semantic parameters": visual, non-visual sensory, inference, assumption, hearsay and quotative.

According to Narrog (2005: 383), "when it comes to accuracy in detail [...] this book may be somewhat controversial". Aikhenvald's treatment of Tibeto-Burman languages is inconsistent. She only mentions four Tibeto-Burman languages (out of 250-300), source of

⁵⁶ As noted by Plungian (2010: 36), endophoric values are missing in Aikhenvald's taxonomy.

contradictory statements. Aikhenvald conflates a Newar evidential system that she describes as bearing at least three distinctions (2004: 191) with conjunct-disjunct (person) marking (ibid, p. 204, 2012: 471), when the latter “is not evidential in nature” (2004: 127, 2015: 257). Aikhenvald also treats Lhasa Tibetan *hdug* as both a “disjunct-copula” (2004: 127), that is, as person marking, and a marker of “actual visual knowledge” (ibid, p. 284).

From a historical perspective, her narrow definition is very peculiar, standing in sharp contrast with a long tradition (Boas, Chafe and Nichols, Bybee, Matlock, Izvorsky, Palmer) where evidence and epistemic considerations go hand in hand. Moreover, Aikhenvald’s discovery of evidentiality as a grammatical category would have stayed unnoticed for more than two millennia.

2.1.5 Evidentiality since 2004: the great divide

Aikhenvald’s work has notably contributed to the polarization of the debate around grammatical-only vs. an approach where lexical and possibly “all linguistic representations that serve as cues for evidentiality in context” (Lampert and Lampert 2010: 319) are taken into consideration. Although many linguists today adhere to the definition of evidentiality as a grammatical category, a range of studies focusing on language in interaction (Mushin 2001, 2012, 2013; Nuckolls and Michael 2014; Sidnell 2012; Bergqvist 2012, 2015a, b) take it to be a semantic-functional concept.

As McCready (2015: 150) argues, “the typological literature leaves the nature of evidential meaning quite inexplicit: it is difficult to see, except on a very abstract level, what evidentiality *is* or *does*”. There is no consensus on even an ontological definition: a ‘notional category’ (de Haan 2001: 36), a ‘propositional modality’ (Palmer 2001: 8), a ‘grammatical category’ (Aikhenvald (2004: 1), a ‘propositional’ deictic category (de Haan 2005: 379, 394), etc.

2.2 Main points of contention

Evidentiality is the source of many disagreements among linguists. I only address the main points of contention in the following sub-sections.

2.2.1 Internal organization

The internal organization of evidentiality, the primary typological distinction expressed by evidential markers, is still in debate.

Crosslinguistically, Willett (1988: 57) identifies two main semantic parameters based on type of evidence: 'direct' (visual, auditory, and other sensory perceptions) and 'indirect'. He subdivides the latter into 'reported' (secondhand, thirdhand, and general hearsay) and 'inferred', which in turn consists of 'results' (the observable outcomes of an event by the speaker), and 'reasoning' – the inference of the situation described based on experience, logic, or intuition.

In contrast, Frawley's (1992: 413) classificational proposal makes source of evidence the basic organizational principle, which is deictic: it is either internal (the self) or external (someone else). From this perspective, inference is an internal source of evidence, rather than an indirect one.

Referring to Tuyuca, English, Patwin, Kashaya Pomo, and Hualapai, De Haan (2005: 387) adopts an intermediate stance, arguing that the inferential is "a hybrid of direct/indirect evidential category". Languages can be classified according to whether they give precedence to the 'deictic' or to the 'witnessing' component (De Haan 2001: 218), a dichotomy underlined by Floyd in Quechuan Wanka (1997). Plungian (2010: 37) also acknowledges the ambiguous nature of inference in a typology where he classifies inferential and presumptive markers as both 'indirect' and 'personal'.

However, few years before that, de Haan (1998: 27), had taken a less balanced approach, proposing, based on a set of thirty languages, a hierarchy of evidentials to illustrate the fact that "evidentiality is a notional category which directly reflects the degree of the speaker's involvement (or lack thereof) in the action he or she describes" (2001: 36). Evidentiality is a ('propositional') deictic category: "the basic meaning is to mark the relation between the speaker and the action s/he is describing". De Haan (2005: 394) contends that the relationship between an evidential and a proposition is similar to that of a demonstrative and a noun phrase.

Precedence given to direct vs. indirect over internal vs. external eventually may be determined according to whether a crossover between visual and inferential forms is observed in the language under study. Tibetan gives rise to contradictory statements. DeLancey (2012: 540) claims that “direct vs. indirect evidence is the fundamental evidential distinction”, a stance consistent with his description of mirativity as a distinct grammatical category from evidentiality, since “mirative constructions can occur in both direct [inference] and indirect [hearsay] evidential contexts” (ibid). However, referring to Sherpa, Duna, Oksapmin, Bogaia and ‘Lhasa’ Tibetan, Hill (2017: 131-159) establishes the existence of a crossover between direct perception and inference in perfect constructions.

2.2.2 Evidentiality and (epistemic) modality

The relationship between evidentiality and modality is probably the most controversial issue of all. Most early works emphasized that evidentiality belongs to modality (Sapir 1922; Haas (1941: 117); Halperin (1946: 286); Palmer (2001: 24), etc).

Jakobson (1957) [1971] describes evidentiality as a verbal category, like mood. However, mood “characterizes the relation between the narrated event and its participants with reference to the participants of the speech event” (ibid, p. 46) whilst evidentiality, a “tentative label”, involves three events: “a narrated event, a speech event, and a narrated speech event”.

De Haan (2005: 379, 394) considers evidentiality to be a (‘propositional’) deictic category, observing that historically, visual evidentials stem from deictic sources (tense and spatial deictic morphemes). De Haan also observes (ibid, p. 389), “the grouping of any kind of direct evidence with inferentials is hard to reconcile with the theory that evidentiality is a modal category”. An additional argument is that an evidential, contrary to a modal, is outside the scope of negation. Hansson (2003: 249) finds an exception in Akha, however.

The nature of the relationship between evidentiality and epistemic modality, “the status of the proposition in terms of the speaker’s commitment to it” (Palmer, 1986: 54-5), is equally disputed. A strict distinction is drawn by Aikhenvald (2004: 186) on the grounds that “evidential markers may indicate a speaker’s attitude towards the validity of certain

information (but do not have to)". In other words, "every evidential has its core meaning" which is distinguishable from secondary ones (ibid, p. 331).

A number of scholars (Anderson 1986; de Haan 1999, 2005; Plungian 2001; Boye 2010) support the idea that evidentiality is devoid of any sort of epistemic judgment. De Haan (2005: 380) distinguishes evidentiality from epistemic modality (1999, 2005: 380) since "evidentiality *asserts* the evidence, while epistemic modality *evaluates* the evidence". According to De Haan, "epistemic modality is part of the basic meaning of evidentiality but it can be added as a pragmatic feature" (2005: 394). For those languages where the distinction is not as straightforward as in Dutch, de Haan (1998) refers to Anderson's (1986: 274-5) criteria. Arguably, it boils down to what criterion is given precedence. In the example below, an evidential reading is possible based on the criterion (a) "evidentials show the kind of justification for a factual claim which is available to the person making that claim", but the conclusion is different based on the criterion (c): "evidentials have the indication of evidence (...) as their primary meaning, not only as a pragmatic inference":

Danish and German

Peter skal være en dårlig forsker

Peter must.3SG.PRS be.INF a poor researcher

'Peter is said to be a poor researcher'.

Er soll steinreich sein

He must.3SG.PRS stone.rich be.INF

'He is said to be extremely rich'. Palmer 1986: 12 (in de Haan 1997)

From a semantic point of view, Palmer (1986: 70) insists on the futility of separating evidence and judgement since "speaker's judgements are naturally often related to the evidence they have". Similarly, the definition of evidentiality as "the representation of source and access to information according to the speaker's perspective and strategy" (Tournadre and LaPolla 2014: 241) suggests a very close relationship with epistemic modality.

2.2.3 Mirative forms

The treatment of mirative values is another contentious issue. In Plungian's taxonomy (2001: 41), binary systems of the 'Balkan type' constitute one – the most basic – of the three major types of evidential systems observed crosslinguistically. In fact, the issue is of utmost importance: in case 'le médiatif' is deemed to be a type of evidential, it then overlaps with "passé distancié" (the perfect in Tajik), which in turn implies that evidentiality may in some situations be conveyed by forms whose central meaning is of a different nature than source of information. Further, a distinction between source of information and attitude toward the same becomes artificial in that hearsay and inference include judgements on the validity of the speaker's knowledge (Perry 2000: 251), or convey a meaning of 'epistemic distance' (Plungian 2010: 32).

Introduced as a distinct category from evidentiality by DeLancey (1997) when referring to Turkish, Hare, Sunwar, Lhasa Tibetan, Korean, and Kalasha, mirativity would mark "both statements based on inference and statements based on direct experience for which the speaker has no psychological preparation, and in some languages hearsay data as well" (1997: 35)⁵⁷. In DeLancey's view, mirativity is part of the 'new' vs. 'old' knowledge pattern he identified in previous papers (1990a, b). In the same vein, Aikhenvald (2004: 20) claims that the independent status of mirativity as a grammatical category is "beyond doubts".

DeLancey's analysis raises a range of issues. First, his definition of mirativity is strangely similar to 'le médiatif' (Lazard 1956), even if "the relative novelty of the information" (1997: 37), rather than indirect evidence, is made the common denominator to inference, surprise and hearsay. 'Le médiatif' can be taken to be a specific category which "introduit le contraire de l'évidence" (Guentchéva 1994: 9), but also as part of the most basic system of evidential oppositions – binary systems of the 'Balkan-type' in Plungian (2001: 41). Mirativity as an independent category is fiercely contested by Hill (2012, 2015): the suffix -*lõ* in Hare, the copula verb /'baak-/ in Sunwar, the morpheme -*kun* in Korean, the past tense marker -*mş* in Turkish, and the form -*la'* in Kalasha, mark sensory evidence. DeLancey (2012: 554) admits that the Tibetan copula *hdug* is evidential, and "not a pure

⁵⁷ The term 'mirative' (Jacobsen 1964) and 'admirative' (Dozon 1879, Friedman 1986) had been previously used in reference to Washo and Albanian, but these terms diverge from 'mirativity'. In Dozon, 'admirative' refers to the larger concept of emotional evaluation; in Friedman (1986: 180), in addition to surprise, it also denotes "irony, doubt, reportedness, etc." and is subsequently described (2003: 190) as "non-confirmative".

mirative”, but he remains adamant mirativity is found in the previously mentioned languages.

2.2.4 ‘Egophoricity’

The term ‘egophoricity’ was coined by Post (2013: 107) in reference to ‘person-sensitive TAME marking’ in Galo. Floyd and al. (2018: 2) define it as “the grammaticalized encoding of the personal or privileged knowledge or involvement of a potential speaker (the primary knower) in a represented event or situation”. The term is the source of a lot of confusion. For reasons of clarity, it must be distinguished from two somewhat related concepts, the conjunct-disjunct (Hale 1980) and the evidential category denoting the speaker’s own knowledge state: ‘egophoric’ (Tournadre 1991), ‘participant specific’ (Agha 1993), ‘personal knowledge’ (van Driem 1998), ‘personal experience’ (DeLancey 1990a), ‘self-person’ (Sun 1993), or ‘personal’ (Hill 2012).

The term ‘egophore’ (or ‘egophorique’) was introduced by Hagège (1982: 100-1), the suffix -phorique meaning ‘which refers to’, as a general category of pronouns which are coreferential with “le producteur du discours” (ibid, p. 100) and include logophoric ones, addressed in a previous publication (1974: 287).

Hale (1980) introduced the conjunct-disjunct in his description of Newar, usually understood as a pattern of distribution of copulas and/or finite verb forms whereby first person declaratives and second person interrogatives are marked the same way, in contrast to first person interrogatives and second person declaratives and all third person forms. In Hale’s definition, it also intersects with indirect quote frames: “If the actor of the quote refers to the same individual as the actor of the quote frame, the verb of the quote is conjunct in form” (1980: 97).

Newar

<i>Ji ana wanā</i>	I went there (conjunct)
<i>Cha ana wana</i>	You went there (disjunct)
<i>Wa ana wana</i>	He went there (disjunct)
<i>Cha ana wanā lā</i>	Did you go there? (conjunct)
<i>Wq̄q wa ana wanā dhakāā dhāla</i>	He said that he went there (himself) (conjunct)

Wq̄q wa ana wana dhakāā dhāla He said that he went there (someone else) (disjunct)
Hale (1980: 95 and 97; wane: ‘to go’)

Hale observes a close relationship between the conjunct-disjunct and volitionality (ibid, p. 96): “Finite conjunct forms are appropriate only where the actor of the clause is portrayed as a true instigator, one responsible for an intentional act”. Consequently, some Newar verbs (‘to cut’, ‘to get up’) may take a conjunct or a disjunct form, while some impersonal verbs (‘to hear’, ‘to come to know’, etc.) never take a conjunct form. Bendix (1974) suggests that additional factors such as ‘experience’, ‘circumstantial evidence’, ‘hearsay’ and ‘observation’ determine the choice. Bendix refers to the opposition conjunct vs. disjunct as ‘internal experience’ vs. ‘disjunction’ and, in a later paper (1993), as ‘internal’ vs. ‘external’.

DeLancey (1990a) claimed for a while that the conjunct-disjunct was a feature of Lhasa Tibetan, where it was consistent, as a binary system, with the pattern of ‘new’ vs. ‘old knowledge’ on which is based mirativity⁵⁸. Aikhenvald (2004: 127, 146) confusingly denies any evidential status to the conjunct-disjunct on the grounds that it has to do with person-marking, although she refers to Newar (2004: 291) as having an evidential system of three or more choices. Hargreaves (2005) provides numerous examples of violations of the pattern in Newar. Hill and Gawne (2017: 15-6) observe similar violations in Lhasa Tibetan. Tournadre (2008) replaces the binary opposition found in the conjunct-disjunct pattern (‘egophoric’ vs. ‘allophoric’, or ‘congruent’ vs. ‘non-congruent’) by a ternary one (ego, direct, and indirect) in which only the first category receives the term ‘egophoric’.

The term ‘egophoric’ is to be preferred to ‘egophoricity’ as in Tournadre’s (2017: 116) view the former refers to a specific evidential category, and not to a (binary) system. As a result, “those whom Tournadre convinced to drop ‘conjunct-disjunct’ should abstain from putting -ity on the egophoric” (Hill and Gawne 2017: 19) since it implies a distinction with evidentiality.

The close relationship observed between the ‘egophoric’ and volitionality is important to consider since it implies that the use of egophoric evidentiality relies on access (not source) to information. Access is precisely another argument used by Aikhenvald (2018: 24) to

⁵⁸ The evidential system in Tibetan rests on a ternary opposition, however.

justify a clear separation between ‘egophoric’ and evidentiality, a stance which perhaps conveniently does not require any refinement to the recurrent semantic parameters she identified in 2004.

‘Egophoric’ marking is not an areal feature. Among the languages that exhibit this type of marking, its scope appears to vary greatly. Outside the Tibetic-Bodic area, Rule (1977) uses the term ‘participatory’ when referring to Papua New Guinea (PNG), which includes ‘factual’ (San Roque and Loughnane 2012), a type of evidence based on the speaker’s experience, or ‘performative’ in Kashaya:

Kashaya

mi-li ʔa me-ʔe-l phakum-mela

there-VISUAL I your-father-OBJ kill-PERFORM

‘Right there I killed your father’. Oswald (1986: 35)

Both the ‘participatory’ and ‘performative’ denote knowledge derived from performing the action described and their usage is limited to first person. In contrast, in Standard Tibetan, ‘egophoric’ can be divided into a variety of subcategories (‘intentional’, ‘receptive’, ‘habitual’, ‘experiential’ and ‘allocentric’), some limited to first person, and some others used to describe actions of a restricted circle of people gravitating around the speaker. The relative looseness observed in the relationship between ‘egophoric’ and first person makes Garrett (2001) and Tournadre (2008) introduce a two-level model where ‘egophoric’ has either a ‘narrow’ or a ‘wide’ scope. Consequently, semantic heterogeneity motivates the various denominations found in the literature, from ‘participant-specific’ (Agha 1993), ‘focus on speaker’s involvement’ (Hein 2001: 35) to ‘personal self-evident’ (Zeisler 2011).

Strangely, epistemic considerations are rarely part of the analysis. When Hajime (1977: 25-7) associates the experiential with what is “psycholinguistically remote from the speaker”, the egophoric with what is “psycholinguistically nearer to the speaker”, and the factual as “generally known facts”, it is difficult not to notice a hierarchy of certainty. Similarly, the use of epistemic adjectives to describe evidential distinctions – for example Tournadre’s (1992: 207) ‘assertif’ and Shao’s (2014: 49-50) ‘assertive-factual’ to characterize factual evidentiality – are exceptions.

2.2.5 'Epistemicity'

The term 'epistemic', like the term 'evidential', originated within linguistics in connection with modality, where it was initially used to refer to some subcategories ('epistemic necessity', 'epistemic possibility'). As such, 'epistemic' was in most cases related to knowledge and belief. Palmer (1986) broadens its scope by adding to these two types of modality any modal system that would indicate the speaker's degree of certainty and commitment to the proposition. In Bybee and al. (1994: 176-181), epistemic modality is one of four subcategories of modality. Chafe (1986: 262-3) does not restrict evidentiality to evidence: in English, evidentiality includes a "range of epistemological considerations that are linguistically coded": 'source of knowledge' (evidence, language, and hypothesis), 'mode of knowing' (belief, induction, hearsay, and deduction), 'reliability of knowledge', and 'matching of knowledge'.

The term 'epistemicity' first appeared in Shinzato (1991: 25), where it is defined as the "degree of integration of acquired information into one's consciousness". The opposition between 'integrated' and 'non-integrated information' is the link that connects the opposition 'direct vs. indirect experience' (evidentiality) with that of 'instantaneous vs. durative aspect' (ibid, p. 26).

Leirbukt (1997: 49) refers to 'epistemicity' when investigating the pragmatics of conditionals in English, German, and Norwegian, where the degree of 'probability' and the degree of 'certainty or confidence' constitute two "separate dimensions of epistemicity in conditionals" (ibid, p. 70).

Considering the role of epistemic considerations in an interactive context, Hill and Irvine (1992) investigate how providing evidence is part of building notions such as 'epistemic authority' and 'epistemic responsibility'. Building on Goffman's (1971) eight "territories of the self", one of which, 'information preserve' (ibid, p. 38), defined as "the set of facts about himself to which an individual expects to control access while in the presence of others", Kamio (1997) discusses the territorial dimension of language use. She observes that some information can belong to one individual to a greater extent than his/her interlocutor.

Mushin's (2001: 52-3) 'epistemological stance' refers to "independent linguistic forms" that may also be expressed by "lexical or paraphrastic means". Mushin introduces a typology of five stances covering source of information (evidentiality), but also attitude toward knowledge (ibid, p. 58-79): 'personal experience', 'inferential', 'reportive', 'factual', and 'imaginative'. 'Epistemological stance' is, together, with other notional concepts such as deixis or inference, taken to be part of a macro-domain, namely "the expression of subjectivity in language" (2001: 1), which is pragmatic in nature.

Relying on conversation analysis, Heritage and Raymond (2005) and Heritage (2012) discuss the role played by 'epistemic authority', defined as "the primary right to evaluate the matter assessed" (2005: 16), or 'epistemic status', "a key element of the background knowledge (Garfinkel 1967) that is continually invocable and massively invoked as a means of grasping the actions executed in turns at talk" (2012: 25). These notions, deeply rooted in social relationships, shape the interaction together with 'epistemic stance', "the moment-by-moment expression of these relationships" (2012: 6), and do not necessarily reflect the participants' level of knowledge. Evidentiality is one linguistic resource by which participants claim and negotiate their 'socioepistemic rights' (2005: 19).

Stivers and al. (2011: 9) associate the category of epistemicity with "dimensions of knowledge in conversation", identifying three different types of epistemic categories in an attempt to uncover asymmetries governed by social norms: 'epistemic access', 'epistemic primacy', and 'epistemic responsibility'. 'Epistemic access' relates to notions such as 'knowing vs. not knowing', 'degree of certainty', 'knowledge source' and 'directness of knowledge' (ibid). 'Epistemic primacy' refers to rights and 'relative authority of knowledge' (ibid), which is "sometimes derivable from social categories" (ibid, p. 16). Finally, based on Pomerantz's (1980) 'type 1 knowables', Stivers and al. define 'epistemic responsibility' as "rights and obligations to know" certain kinds of information.

Referring to Aijmer ("expressions which say something about the speaker's evidence and degree of certainty will be called epistemic qualifiers (EQs)" (1980: 11), Boye (2012) contends that epistemicity includes 'epistemic support' (degree of certainty, belief, epistemic possibility and epistemic necessity), and 'epistemic justification' (justification and evidence, i.e. source of information). Evidentiality and epistemic modality are distinct,

but both are part of the macro-category epistemicity, in line with the use of the term ‘epistemology’ within philosophy.

Bergqvist’s (2015b) concept of ‘epistemic perspective domain’ as a functional domain encompasses a set of different dimensions: ‘epistemic modality’, ‘information source’ (evidentiality), speaker involvement (‘egophoricity’), ‘speaker-hearer links’ (‘illocutionary modality’), and ‘knowledge (a)symmetry’, arranged on a scale of increasing intersubjectivity. “Some languages express the intersubjective positioning of knowledge through grammatical means” (Bergqvist 2015b: 18). In Mamaindê, the general knowledge marker *-nta* only occurs in declaratives, having a value that “extends beyond the perspective of the speaker to include others, including the addressee” (ibid, p. 7). In Qiang, one optionally uses the suffix *-u* in questions, when making a guess about the addressee’s source of information:

Mamaindê

ta-tukwinʔni-tu ʔaik-tu tau-∅-nta-wa

PS1-father.in.law-FNS field-FNS chop-S3-GKN-DECL

‘My father-in-law is clearing a field.’ (Everyone knows this because he has been doing this every day now for a month) Eberhard (2009: 463) in Bergqvist (2015b: 3)

Qiang

the: ha-qe-u ngua

3S OR-go-VIS Q

‘Did he go? {you saw}’ LaPolla (2003: 73) in Bergqvist (2015b: 7)

In the most recent and influential works on epistemicity (Boye 2012, Bergqvist 2015a and 2015b), evidentiality is seen as one epistemic category among many others. Consequently, evidentials are increasingly reanalyzed as markers of alternative epistemic categories (Grzech 2016, Schultze-Berndt 2017), a puzzling trend when one realizes that the previously mentioned concepts are inclined to take pragmatic considerations as a starting point instead of syntax and semantics.

One may argue the ‘gesamtbedeutung’ of the Qiang marker *-u* is still source of information (visual). As for the suffix *-nta* in Mamaindê, some languages have a specific evidential to mark general knowledge, by definition intersubjective.

‘Epistemicity’ highlights a growing interest for the pragmatic dimension of evidentiality, a defining characteristic precisely because of the (inter)subjectivity involved. As shown in the brief literature review presented in this section, the term refers to various realities. ‘Epistemicity’ is not substitutable with evidentiality. It is about cobbling morphosyntactic categories with semantic ones, and then, and only then, investigating variation based on pragmatic factors.

2.3 One salient gap in the literature

Although already emphasized by Boas (1911: 443) and Lee (1938: 92), subjectivity is downplayed in more resounding studies. However, what are perception, the ‘egophoric’, testimony and inference – a cognitive process largely related to personal experience and memory – but subjective parameters that distinguish ‘the self vs. the other’ (Frawley 1992: 412-3)? In Aikhenvald (2004), subjectivity is pervasive, but never fully acknowledged. The ‘first person effect’ (2004: 237, 377) provides nonetheless a clear illustration of unusual evidential choices operated on a subjective basis.

In case we consider the various epistemic categories identified in the literature to be pragmatic expressions of evidentiality, one cannot overlook their subjective dimension. Epistemic modality is entirely subjective. Goffman’s (1971) concept of ‘territories of the self’ and the related notions of ‘epistemic authority’ and ‘epistemic responsibility’ are in a similar way anchored to the individual. One central point in Hill and Irvine (1993) is the relationship between knowledge and agency.

Subjectivity does not unfold itself in a vacuum, however. According to Mushin (2001: 102), “there is plenty of evidence that the relationship between evidential categories and speaker commitment is not fixed, at least with respect to some evidential categories”. *Barbara told me that John was cheating on his wife* (ibid, p. 22) can only be assessed based on the relationship between the participants to the speech event and what they know about the reported speaker.

The “speaker’s perspective and strategy” (Tournadre and LaPolla 2014) is inevitably influenced by the overall context, and notably by other participants. Due to the scarcity of data on evidentiality in interaction, we still poorly understand how the selection of a form from a set of alternatives (the so-called paradigmatic constraints, or ‘rules of alteration’, Ervin-Tripp 1972) operates. How a speaker uses evidentiality as a ‘deictic category’ (de Haan 2005), an instrument of ‘social deixis’ (Nuckolls and Michael 2014: 16), and a linguistic resource to take the addressee (or a third party) into account waits further research. The same applies to how the choice of an evidential may provide some clues as to the nature of the relationship between participants.

2.4 Theoretical framework of the present study

Those linguists who take evidentiality to be a grammatical category often do so without providing any methodological justification. While I do not make this definition mine, I nevertheless feel obliged to present my own views as thoroughly as possible, this is why I begin in §2.4.1 with a discussion of evidentiality as a grammatical category. In §2.4.2, I provide an alternative definition.

2.4.1 Evidentiality as a grammatical category

Aikhenvald’s (2004: 1) describes evidentiality as a “grammatical category, whose primary meaning is information source”. She never discusses the term ‘grammatical category’. Boas appears not once but twice on the very first page of her crosslinguistic study. Ironically, the high degree of variation observed in the world’s languages based on *the man is sick* (Boas [1911: 43], in Hymes (1964: 122), (1920: 320)), which illustrates one of his most central tenets, namely that grammatically specified categories remain crosslinguistically elusive since languages differ from one another in their structures (see also Sapir’s [1924] (1958: 157) *the stone falls*), is overtly ignored. Instead, Aikhenvald (2004: 12) refers to *the man is sick* to designate Boas as the father of ‘obligatory information source’ when he actually was the father of a larger epistemic category (see §2.2.1).

Aikhenvald equally overlooks other early structuralist contributions, notably from Bloomfield (1933) and Harris (1951). Bloomfield asserts that a “tagmeme” takes its meaning from the system of oppositions to which it belongs. Harris advocates a

distributional methodology that gives special attention to substitution tests. In their view, a “tagmeme” identified as a visual evidential in a language that exhibits, based on Aikhenvald’s taxonomy, a B2 system, found for example in Washo (Jacobsen 1964), is intrinsically different from a visual evidential found in a D1 system like in Tariana (Aikhenvald 2003). Crosslinguistic comparisons, and *in fine* the validity of Aikhenvald’s claim that evidentiality is a grammatical category, are therefore at odds with an early structuralist approach.

From a Jakobsonian perspective, a defining principle when considering grammatical meaning is that of semantic opposition. The meaning of a “gram” derives from its relation to other members of the opposition. The boundaries between the identified members of a category are thus clear-cut, and each “gram” has an invariant meaning⁵⁹. Aikhenvald’s study and her observation (2004: 23) that “evidentiality systems vary in terms of the number of information sources encoded and in terms of how these are marked” are grounded in the same methodological approach. For each language, the boundaries between information sources are delimited, and one attributes an invariant meaning to all the “grams”.

However, a first observation is that Jakobson excluded non-obligatory grammatical items such as auxiliary constructions, particles and derivational affixes from any attempt to identify a grammatical category. Aikhenvald (2004: 16) addresses one of these non-obligatory items, namely derivational affixes. She however never discusses the inclusion of the other two items. Applying Jakobson’s criteria, the number of languages in which one can describe evidentiality as a ‘grammatical category’ is reduced significantly.

A second objection precisely has to do with the number of elements involved. Discussing mood, Bybee (1985: 191) investigates what it would mean for a set of inflections to constitute a grammatical category within a language: “the basic idea is that sets of conceptually-related morphemes contrast with one another, in the sense that the presence of one excludes the presence of another. Further, these conceptually-related morphemes will ordinarily be expressed in a parallel fashion; that is, they will occur in the same affix position”.

⁵⁹ Jakobson acknowledges variations in meaning. They do not stem from the binary semantic opposition mentioned previously, but from context, i.e. outside of grammar itself.

The combination of two evidentials, as shown in early accounts of evidentiality (Boas 1911), in Cuzco Quechua (see the example provided in §2.4.2), and also in Qiang (LaPolla 2003: 70), contradicts the ‘contrast with one another’ condition. As for Bybee’s second argument, linguists rarely question how evidentiality is marked (affixes, clitics, particles, special verb forms). From Bybee’s perspective, however, evidentiality is not a grammatical category since it is not necessarily expressed “in a parallel fashion” in a given language: suffixes may go along with particles, copulas, etc.

Instead, evidentiality displays intriguing similarities with irrealis, to which Bybee et al. (1994), Bybee (1998: 264) deny the status of grammatical category on the grounds that there is no universal gram-type to express the notion. If there is no universal gram-type, it is because the term is too wide, covering a maelstrom of categories such as potential, subjunctive, future tense, conditional, interrogative, negative, etc., i.e. categories operating at different levels of the grammar and, more importantly, at the verbal, adverbial and nominal level. The logical conclusion is that irrealis is a semantic domain (see also Bugenhagen 1993), and so is evidentiality.

Aikhenvald herself admits that a scattered encoding indicates that evidentiality is not a unitary grammatical category in some of the languages (Japanese, West Greenlandic) mentioned in her study. Disconcertingly, a scattered encoding is described as “somewhat problematic and thus only marginally relevant” (2004: 81), when it is in fact a widespread phenomenon, notably in Tibeto-Burman languages (Willis 2007: 110 on Darma; Gawne 2013: 78 on Lamjung Yolmo; Hyslop 2014a: 207 on Kurtöp; Widmer 2014: 538 on Bunan).

Referring to Haspelmath’s (2010: 664) “nonaprioristic approach” according to which the foundations of grammatical typology cannot rest on the assumption that grammatical categories are comparable crosslinguistically, it does not take a lot of deduction to conclude that Aikhenvald puts the cart before the horse. Since each language has its own ‘descriptive categories’, one has to start with identifying these based on a thorough analysis of each and every language – a phronetic approach respectful of individual cases – before attempting any comparison. According to Haspelmath, one conducts such comparison via ‘comparative concepts’ defined by typologists, concepts which are conceptual-semantic in nature, universally applicable, and “must not contain language-particular components” (ibid, p. 670).

By claiming that evidentiality is a grammatical category, Aikhenvald compels herself to draw a distinction between grammar and lexicon. Where do the boundaries of grammar lie? No satisfactory answer is provided, though it is implied (2004: 12, 333), referring to Boas's observations (1911: 43, 1938: 132), that obligatoriness is a suitable compass. However, optionality, much more widespread (de Haan 2001: 197) than Aikhenvald is willing to admit⁶⁰, undermines the validity of this approach.

The status of evidentiality as a grammatical category is therefore highly questionable. Aikhenvald's methodological approach does not rest on an identifiable methodological ground. Since it includes an analysis of both form and function, it is neither formalist, nor early structuralist. Aikhenvald does not align herself with Jakobson's later structuralism either.

Aikhenvald gives very little credence to functional considerations. Entitled *What are evidentials used for?*, Chapter 11 is inspiring but remains purely tentative due to a definition that is too restrictive.

As Boye (2012: 9) reminds us, a cross-linguistic descriptive category is no more than a "notional generalization". One does not have to claim that evidentiality constitutes a grammatical category. What is relevant is the investigation of how different structures in the world's languages are used to convey source of information (or any alternative notional definition).

2.4.2 An alternative definition and two major claims

If evidentiality is not a grammatical category, as most scholars take it to be, a coherent alternative approach must emerge. §2.4.2.1 provides a definition which I supplement by two central theoretical considerations, namely that morpho-syntactic epistemic forms are treated as part of the realm of evidentiality (§2.4.2.2), and that its investigation in interaction is the most promising approach when attempting to reach solid conclusions (§2.4.2.3).

⁶⁰ According to Aikhenvald (2004: 6, 78), "only in some systems can an evidential be omitted if recoverable from the context".

2.4.2.1 Evidentiality as a functional domain

I contend that evidentiality is a “functional-conceptual substance domain” (Boye and Harder 2009: 9), alternatively a “semantic-functional domain” (Diewald and Smirnova 2010: 1). I also take evidentiality in the broader sense of ‘knowledge management’, a notion encompassing parallel conceptual sub-domains: information source, information evaluation, and information access. Evidentiality and modality are distinct functional-conceptual domains with the exception of epistemic modality, a sub-domain shared by both.

Information source indicates where the speaker obtained her information (perception, hearsay, inference, etc.). As for information access, it refers to ‘egophoric’ marking discussed in §2.2.4. I take information evaluation to be a wider semantic domain than epistemic modality whereby epistemics are ‘clausal-scope indicators of a speaker’s commitment to the truth of a proposition (Bybee and Fleischman 1995: 6). Evaluation encompasses the speaker’s commitment or stance concerning the truth of a proposition, which may include, depending on the language, domains not clearly distinguished from epistemic judgments, notably emphasis.

I define evidentiality as a semantic domain denoting knowledge management, expressed lexically and morphosyntactically (by any means, overtly or not), on highly subjective and pragmatic grounds. Its morphosyntactic means of expression is realized at the nominal, adjectival, adverbial⁶¹ and verbal level.

My definition has the advantage to stand close to what Haspelmath (2010: 663) calls a ‘comparative concept’, which are “universally applicable and defined on the basis of other universally applicable concepts”, notably “universal conceptual-semantic concepts” (ibid, p. 665). To give an illustration of a ‘comparative concept’, Haspelmath refers to an adjective as ‘a lexeme that denotes a descriptive property and that can be used to narrow the reference of a noun’ (ibid, p. 670). It is possible to reach a similar universal definition for the other sub-concepts – noun, adverb, verb – mentioned in my definition. Admittedly, an adverb is a bit of a catch-all category, but linguists usually ascribe an element to this category when it fails to meet the criteria of the other most common parts of speech.

⁶¹ Adverbs modify the epistemic modality of auxiliaries.

The term ‘knowledge’ is to be preferred to ‘information’ for two main reasons. First, knowledge is made up of information, but also of a set of beliefs (i.e. is epistemic), and second “‘knowledge’ is...a social phenomenon, an aspect of the social relations between people” (Hill and Irvine 1993: 17). Le Guin (2004: 187) is on the same page when she warns, “human communication cannot be reduced to information”. Only knowledge, not information, is contextualized and becomes relevant in interaction. Evidentiality as denoting ‘source of information’ misses the point in that it debases language as essentially monologic when it is in reality polyphonic.

In line with Chafe’s definition, evidentiality includes source of knowledge, but also ‘the speaker’s attitude towards knowledge, i.e. ‘a range of epistemic considerations’ (1986: 262). Even when evidentiality (as information source) is marked independently from epistemic modality, there is no impediment to the analysis of knowledge management.

I argue below in favor of an irreducible relationship between source of information and evaluation of the same. In fact, the claim is far from being new. “Implicit occurrent beliefs” (Matilal 1990: 7) was already held in high esteem by the *Nyāya* School⁶², among others.

2.4.2.2 Evidentiality and epistemic modality are two sides of the same coin

According to Aikhenvald (2004: 177): “[a reported evidential] may have epistemic overtones”, which means the opposite is equally true. ‘A prime example of this’ (ibid, p. 179) is said to be found in the reportative particle *dī* in Kham (Watters 2002: 296-300), where it is invariably associated with hearsay in folktales. A closer look at Watter’s data leads to a different conclusion, however. As Watters puts it himself (ibid, p. 300), “the speaker makes no claims about the truth of the statement. The apprehension of truths leading up to the conclusion is made by someone else, and the speaker disclaims responsibility for them”. Disclaiming responsibility is not epistemically neutral when one considers the adjective epistemic not just as an expression of the speaker’s beliefs but also of his or her general attitude towards the content of the proposition. Further, the speaker may be barred from making any judgement by the specificities of genre or by the shackles of tradition, but as Watters points out, someone did assess – we may just not know who and when – the reliability of what is said. If only the speaker at the time of the reported

⁶² Still according to Matilal (2001: 65): “a simple non-committal attitude of only understanding the meaning or sense of a statement, without believing or disbelieving it, is not available in *Nyāya* vocabulary”.

speech is considered, the chain of interaction is broken; one misses the view of language as fundamentally dialogic.

A similar line of argument applies to the following example from de Haan. The Dutch verb *moeten* is used to denote indirect (or ‘unconfirmed’ according to Friedman 1986) information. According to de Haan, the speaker can only express her attitude towards the content of the statement by adding a clause to it:

Dutch

Het moet een goede film zijn, en ik ben daar zeker van
It must a good movie be and I am there sure of
‘It is said to be a good film, and I am convinced of it’. De Haan (1999: 16)

Only in the absence of contextual information (about the speaker, the movie, the interlocutor, etc.⁶³) the utterance ‘it is said to be a good film’ is epistemically neutral. In other words, the epistemic neutral judgement reading refers to the default setting, when one objectifies language and dryly looks at it as the product of a single consciousness or a single-voiced phenomenon. When the contextual background in which this utterance is considered, possibly including such clues as gesture or the speaker’s facial expression, then it inevitably acquires an epistemic flavour, which makes the second part of the utterance redundant.

Claiming that a reportative evidential can be devoid of epistemic marking stems from an old-fashioned conception of language that ignores the context in which the utterance unfolds itself. Epistemically neutral reported speech, if ever found, is an anomaly, not the norm. The same reported utterance may have different epistemic connotations depending on who is involved in the conversation, the context surrounding the utterance, the type of intonation, etc.

Notwithstanding reported speech, one may still posit a distinctive marking of evidential forms and epistemic modality in some languages. Considering the following example from Cuzco Quechua (Faller 2002: 84), the observation is undeniably correct: the enclitic *puni* (‘certainly’) can combine with any of three evidentials *-n*, *-s*, and *-cha*:

⁶³ Prosody and intonation (paralanguage, see Trager 1958) and kinesics (Birdwhistell 1952) as well.

Cuzco Quechua

a. *T'anta-ta-puni irqi-ta-ka qu-rqa-n*
bread-ACC-puni child-ACC-to give-PST1-3
p'(S)he certainly gave bread to the child'

b. *T'anta-ta-puni-n/-s/-cha irqi-ta-ka qu-rqa-n*
bread-ACC-puni/-mi/-si/-cha child-ACC-to give-PST1-3
p'(S)he certainly gave bread to the child'

EV= speaker has direct/reportative/conjectural evidence for *p*. Faller (2002: 84)

From the previous example, we may also infer that classic evidential forms are optional. When *puni* occurs alone, it “carries an implicature of direct evidence” (ibid): *puni* is not evidentially neutral. Adding a direct, reportative, or conjectural evidential to *puni* allows for the fine-tuning of the speaker’s attitude towards what is conveyed the same way an epistemic marker would allow for the fine-tuning of an evidential. Following Palmer (1986: 70), what Cuzco Quechua exhibits is a system where epistemic considerations are more central – since ‘classic’ evidential forms are optional. In both systems, optionality and a range of pragmatic considerations provide evidential and epistemic forms with their full range of semantic nuances.

One cannot help but notice the recurring fashion by which linguists reinterpret evidential forms as epistemic and vice-versa. An illustration is ‘le médiatif’. Since it may suggest a distancing process, rather than an assertion of evidence, ‘le médiatif’ has been treated as a distinct category from evidentiality (Haarmann 1970) and/or as a form of epistemic marking (Perry 2000) – based on the observation that hearsay and inference forms include judgements on the validity of the speaker’s knowledge. However, one can also treat mediative forms as evidential forms denoting “unwitnessed” events. The absence of any clearly expressed source of information here is not an issue as “unwitnessed” events are part of a system where they contrast with witnessed ones.

The opposite tendency is conspicuous in Grzech’s (2016) description of Tena Kichwa. The polysemous nature of the enclitic =*mi*, which encodes not only direct, but also reportative and conjectural source of information, leads to its reanalysis as a marker of the origo’s epistemic primacy. As such, =*mi* is said to be devoid of any evidential value, which

contradicts earlier accounts (Weber 1986; Floyd 1997). However, since the enclitic =*mi* occurs when speakers “anticipate a potential challenge and want to claim authority over the information conveyed” (Grzech 2016: 341), or when speakers want to convey certainty (León 1950: 13, Orr and Wrisley 1965: 162, Nuckolls 1993: 237), another reading is possible. =*mi* is ‘egophoric’ . Parker (1969: 94) holds a somewhat similar stance. This stance is also consistent with Hardman’s (1981) findings on another South-American language, Aymara (see §2.1.2) – the opposition personal vs. non-personal.

The pendulum swing between forms claimed to denote source of information and subsequently reinterpreted as epistemic (and vice-versa) is an indication of the futility of disentangling them. “Evidence, whether in law, in natural or social science, or in belief systems, is about establishing certainty” (Eckert 2016). One may rightly wonder why linguistics would be the only discipline resisting such a common sense observation?

2.4.2.3 Language is only fully understood in interaction, i.e. in context

Context is not purely metalinguistic. Context is the key that makes linguistic descriptions more encompassing, more concrete, and more attuned to the subtleties of the language under study. Circumstantial information strengthens reliability. In fact, it is never possible to ignore completely the context: mirative values can only be uncovered either by eliciting explicit utterances or by resorting to external tools (stimuli tasks). With regard to elicitation, the absence of any contextual information may result in misleadingly judging proposals as non-grammatical. The admonition comes from van Driem (2007) in the case of Dzongkha.

A number of linguists emphasized the social and communicative dimension of language already in the 19th century (Weil 1844; Paul 1886; Von Der Gabelentz 1891; Whitney 1897). It was also one of the core concerns of structuralists from the Prague School (Mathesius, Jakobson, Trubetskoy), during the 1920s. I posit that language is primarily a system whose sum of patterns is only identifiable in its entirety in reference to interaction. ‘Parole’ (Saussure 1916) subsumes ‘langue’, ‘process’ subsumes ‘pattern’ (Whitehead 1929), ‘communicative competence’ (Hymes 1972a) subsumes ‘linguistic competence’ (Chomsky 1965). Using terms such as “semantic layers” (1992: 279), “semantic nuances” (ibid, p. 293), “contextual overtones” (ibid), opposing “neutral signification” and “actual meaning” (ibid,

p. 281), and emphasizing the role played by the listener, Bakhtin outlines the importance of context (ibid, p. 401):

When we seek to understand a word, what matters is not the direct meaning the word gives to objects and emotions – this is the false front of the word; what matters is rather the actual and always self-interested use to which this meaning is put and the way it is expressed by the speaker, a use determined by the speaker's position (profession, social class, etc.) and by the concrete situation. Who speaks and under what conditions he speaks: this is what determines the word's actual meaning

Aikhenvald (2004) admirably captured the fact that the speaker's choice of an evidential cannot always be explained by the type of evidence she has for making a statement. One can only provide an explanation by following a tryptic formal-semantic-functional approach. This unified account of structure, use and function is reflected in Danish Functional Linguistics (DFL): "Der er ikke nogen indbygget modsætning imellem at interessere sig for funktion og struktur ['there is no built-up contradiction in being interested in function and structure']" (Engberg-Pedersen and al. 2005: 4). On the contrary, DFL claims that one cannot refer to function outside a structured reality. The opposite is equally true: as pointed out by Müller and Klinge (2008: 4), "without the basic linguistic functions, there would be nothing that linguistic structure could be the structure of". The description of structure comes first, but function gives it its final shape.

The tryptic formal-semantics-pragmatics only appeared later as a reaction to Chomskyan linguistics. The distinction between semantics and pragmatics, acknowledged by modern functionalists, is not devoid of methodological issues. However, as long as pragmatics relates to such notions as context-dependent meaning and speakers' strategies (i.e. factors that are not purely linguistic), a distinction with semantics is operable in most situations. As pointed out by Carnap (1942: 9):

If in an investigation explicit reference is made to the speaker, or, to put it in more general terms, to the user of a language, then we assign it to the field of pragmatics. [...] If we abstract from the user of the language

and analyze only the expressions and their designata, we are in the field of semantics.

Contextual factors relate to the ‘socio-cultural order’ (Hymes 1972b: 70), to participants (their social identities and the “speech economy” (Hymes 1989), i.e. the set of relationships and prior experience between them) in the speech event, and to the type or genre of the speech event itself. According to Gumperz and Hymes (1972: 17), the latter “is to the analysis of verbal interaction what the sentence is to grammar”. The social setting becomes central in the analysis.

2.5 Methods

In the following sections, I provide an outline in terms of methods, starting with an overview of the documentary corpus (§2.5.1), the different types of data I collected (§2.5.2), a brief description of the non-linguistic variables I paid attention to (§2.5.3) and some observations about reproducible research (§2.5.4). The section ends with a brief outline of the limits of the present thesis in §2.5.5.

2.5.1 Data collection

I collected the data used in this thesis over a two-year period during two separate field trips to India which amounted to almost a year in total (mid-June-mid-July 2017, September 2018-June 2019). Time on the first field trip was spent collecting data – elicitation sessions exclusively – on the structure of the noun phrase. The second field trip had a threefold purpose: to build a documentary corpus of Chhitkul-Rākchham language, to collect data on evidentiality, and to collect data for the linguistic description.

The documentary corpus consists of 70 video recordings (total duration: 7.5 hours) with about 60 speakers between the ages of 20-85, of whom roughly half are quoted in this thesis. Challenging weather conditions (heavy snowfall) made the route from my main base, Reckong Peo, to both villages impassable for two months, which explains why I recorded less than initially planned. Audio-recorded elicitation sessions were conducted with a few speakers, including my main consultant. I provide their initials below (see Appendix 3 for a full list of participants):

Table 3: List of consultants

Name	Gender	Age	Village
DSN	Male	60	Chhitkul (main residence: Reckong Peo) Main consultant
AS	Male	67	Chhitkul
BSN2	Male	58	Rākchham
SD1	Female	33	Rākchham
MK	Female	35	Rākchham
RKN	Male	41	Chhitkul
RK	Male	46	Chhitkul
ST	Male	32	Rākchham
TB	Male	34	Chhitkul (main residence: Reckong Peo)

The entire documentary corpus was video recorded on the Panasonic HC-V770 HD camcorder. I recorded elicitation sessions with a Marantz PMD661 MKIII audio recorder (44.1 kHz, 16-bit stereo).

With regard to ethics, I did not make any recording without prior informed consent. A written agreement with the leadership of Rākchham village stipulated that a copy of all recordings, transcribed, translated into English and Hindi (via ELAN), a large deal of them annotated (via FLEx), would subsequently be deposited at the Panchāyat. I will honour this arrangement during my next visit. In addition to ELAR, the recordings have been deposited at Bhāshā Research and Publication Centre (based in Vadodara), my local partner in India. Coming collaborative work with the community includes an illustrated trilingual (Chhitkul-Rākchham-Hindi-English) dictionary (thematic, with special attention to cultural and local ecological knowledge, borrowings, derivation and compounding, and including illustrative examples), based on a current 2,000-word FLEx list and focused on the needs of the community⁶⁴, and digital storybooks for children (based on the IPA, or any other alternative, in consort with the local community).

⁶⁴ See for example the 'relational lexicography' project, led by Mark Turin, at the University of British Columbia: <https://dictionaries.arts.ubc.ca>

2.5.2 Types of data

I use the term ‘corpus-based’ in the title of this thesis, a term distinct from ‘corpus-driven’ (Tognini-Bonelli 2001) in that ‘corpus based’ assumes the existence of pre-defined linguistic features – evidentiality as a conceptual-functional domain in this case – and aims at analyzing its patterns of use and variation. In terms of corpus design, size and composition are two crucial parameters. The corpus includes both ‘monologic’ (topics, autobiographical, narratives and a picture-based task) and dialogic discourse (everyday conversations on debatable or non-debatable topics).

The study of evidentiality in its communicative dimension demands eclectic methods. One can only deal with the range of discourse-pragmatic factors that may influence the use of evidentials by conducting data-driven research primarily based on naturally occurring speech. Evidentiality is notoriously arduous to elicit (Silverstein 1979: 234; Mithun 2001: 45-47; Aikhenvald 2004: 18; Chelliah and de Reuse 2011: 391; Nuckolls and Michael 2014: 13) and native speakers may have a hard time describing its use in ‘meta-pragmatic’ discourse (Silverstein 1981: 383), two obvious reasons why I give a lot of attention to spontaneous data.

Direct elicitation cannot and should not be discarded, however, as it has the potential to provide insights in a very straightforward way. To make elicitation more reliable, the ‘reverse translation elicitation’ (Samarin 1967: 114-5) of utterances was accompanied, whenever needed, by contextual information. Targeted elicitation consisted of a tailored questionnaire based on my own readings.

Finally, I also collected stimulus-elicited data from one source, namely *Jackal and Crow* (Kelly and Gawne 2011), a short tale, which has equivalents worldwide, with some variations (one of the Jātakas poems, and one of Aesop’s fables, rewritten by La Fontaine in 1668).

Jackal and Crow has the advantage of being well known. Some of the participants were conversant with it and described the nine pictures it consists of with great confidence. The first step of the task is to describe the nine pictures one by one. Then the participant tells the whole story from scratch. Finally, the participant tells the whole story from the

perspective of either the jackal or the crow. I recorded ten speakers individually, which amounts to one hour of recording. I selected this task because it is easy to implement and not too burdensome. *Jackal and the Crow* also provides some useful comparative data.

Hymes (1974a: 81) laments the fact that participants' interpretations are usually not part of linguistic descriptions. Tools such as the so-called 'playback interview' (Gumperz 1982) are available, however. In addition to the tryptic of spontaneous, elicited and semi-elicited data, I also rely upon reflected data. Due to practical (time constraints) reasons, felicity judgements are limited to my main consultant from Reckong Peo. Striking a balance between introspective judgements and corpus-based data is not always straightforward, consequently I turn to Labov (1975: 31, 40), notably the 'consensus principle'⁶⁵, and the 'validity principle'⁶⁶.

I made the recording of speech events as unstaged as possible. In most cases, however, the settings were inevitably contrived to the extent that I had to suggest a content of discussion by convening gatherings and introducing a topic or a debate theme. The participants had a limited amount of time to reflect over what they were going to say. I did not disclose the aim of the research – my main consultant being an exception – so as not to make the participants overly conscious of their language use. The recording process took place over the course of seven trips to Chhitkul and Rākchham from my main base in Reckong Peo. I also made a few recordings of my main consultant in Reckong Peo. Both communities are usually very busy before and after winter. Consequently, a convenience sampling of participants was the most practical option.

From a functionalist perspective, the collection of rich metadata sets is of crucial importance. As argued by Nuckolls (2014: 3), "ultimately, the further one pursues the topic of evidentiality as it is embedded in ordinary language use, the more the study has to rely upon ethnography". Metadata as understood in this thesis covers both the socio-cultural dimension and circumstantial information about the speaker(s) surrounding each recording. I attended to the former via participant observation and a few (informal) interviews with special attention given to social order. The latter refers to a basic set of questions asked to each recorded participant.

⁶⁵ "If there is no reason to think otherwise, assume that the judgements of any native speaker are characteristic of all speakers of the language".

⁶⁶ "When the use of language is shown to be more consistent than introspective judgements, a valid description of the language will agree with that use rather than introspections".

Social order is of particular relevance in closely knitted and hierarchical communities like Chhitkul and Rākchham, where ritual events punctuate everyone's life. Knowledge management is constantly learned, constrained, maintained, reproduced, reshaped, or possibly challenged in the context of interaction. The concept of agency is therefore important to consider.

2.5.3 Register and 'non-linguistic' variables

Drawing from the documentary corpus, I only briefly address the effect of register on the use of evidential forms and the role of 'non-linguistic' variables such as gender, social status and the relationship between the participants in this thesis, because the linguistic description must be in place first. 'Monologic' discourse is autobiographical, procedural, problem-task solving (*Jackal and the Crow*), or based on a variety of topics. Dialogic discourse consists of everyday conversations on both debatable and non-debatable topics involving two speakers.

2.5.4 Open data and reproducible research

As stated under the acknowledgements heading, the present thesis was partially funded by a small grant from ELDP. The agreement stipulated that the documentary corpus, which consists exclusively of video recordings, would be transcribed, translated, annotated, accompanied with metadata and archived at ELAR, following a strict open access policy. All the relevant data are accessible on the following link: <https://www.elararchive.org/dk0544>, a decisive step towards reproducible research, which "provides access to the original data for independent analysis" (Berez-Kroeke and al 2018: 4).

Bird and Simons (2003) list citation, discovery, access, and preservation as four defining domains supporting reproducible research. In terms of citation, all the glossing examples provided in the present thesis are duly accompanied with information as to their exact provenance within the documentary corpus. A label like TRD_cik07-MSN-2019-03-09-9 provides the following information: the glossed example is from a recording the genre of which is traditional⁶⁷, it is the 7th recording of the type, the speaker's initials are MSN, the

⁶⁷ 'Monologues' are either classified as TRD (traditional), TOP (topic), or AUT (autobiographical). Conversations are either DEB (debatable topics) or NDEB (non-debatable topics). JAC refers to *Jackal and the Crow*.

recording date is 9th of March 2019 and it refers to ‘segment’ 9 of the recording (as it appears on the final ELAN file).

With regard to glossing examples derived from audio-recorded elicitation sessions, the initial abbreviation is EL (for ‘elicited’), and 24:20 in EL_cik02-TB-2018-10-25-24:20 is the time-code of the starting point of the utterance. Alternatively, when the example stems from my main consultant, I only provide the initials (DSN). All these recordings are sharable on demand as the audio files of elicitation sessions are not part of the ELDP documentary corpus.

I attend to the discovery domain by referring to the previous link whenever possible (presentations, publications, networking), having also deposited the video recordings at Bhāshā, my local partner in India. The relevant materials are stored with long lasting formats (MP4, MTS, and WAV).

Releasing the data improves the prospects for reproducible research, but ultimately, by doing so, the fieldworker is sending a very important message: no publication would have been possible without the community from which the data was obtained – the language certainly does not belong to the researcher – and personal ambitions, however natural, do not preclude new insights and the further advancement of knowledge.

The outputs of language documentation are ideally multipurpose for multiple users, including community members, one reason why a translation of the documentary corpus is also available in Hindi.

2.5.5 Limits

My initial goal was to record a limited pool of speakers (around 20) and ask them to talk about various topics. In most cases, this strategy turned out to be too difficult to implement – community members have busy lives – in comparison with a convenient sample of participants. Consequently, the number of recorded speakers may be significant, but a representativeness bias is inevitable. Women represent only 15% of the sum of all recorded participants. Women were less available for recordings due to their workload. In addition to domestic duties, women in rural areas are engaged in additional activities

(farming, production of primary goods for home consumption like animal husbandry). These activities fail to find an official recognition – female labour force participation is even declining in rural India (Joshi and al. 2019) – but they do have an influence on availability to be recorded. Another explanation is the influence of the patriarchal context: women have less authority on linguistic matters. The proportion of youngsters is even lower because they usually do not see themselves as good speakers.

Recording everyday conversations was acceptable whereas ritualized and highly formal discourse was not. A comparison between divinely inspired words as spoken by oracles and interpreters and profane discourse would have provided additional insights. ‘Monologic’ and dialogic discourse with traditional content is part of the documentary corpus, but there are few narratives and tales are staggeringly absent from it. In the digital age, tales and other narratives fail to capture the attention of children. Consequently, tales are falling into oblivion.

Participant observation raises the question of the adequate level of involvement of the linguist. Again, the circumstances dictated that what Spradley (1980: 58) coined ‘moderate participation’ – the observation of the community’s social life with a limited degree of involvement – was most appropriate for reasons having to do with discretion and living conditions, which are far too challenging for a foreigner during winter. ‘Moderate participation’ has the drawback that one may miss valuable ethnographic insights compared to a more active form of involvement. Based on ‘moderate participation’, the ‘strong ties’ (Milroy 1980) cannot reveal themselves completely either.

I put the emphasis on context, the investigation of which, both at the micro (metadata on the recorded participants) and macro (the overall cultural framework) level is endless and can never amount to full scientific accuracy. As Steiner (1991: 110) astutely observes, “aucune formalisation n’est adéquate à la masse sémantique d’une culture et à son mouvement”. The integration of morphosyntactic, semantic and pragmatic considerations into an approach based on function where key insights of the structural tradition are preserved, but also where structural features are not looked upon in isolation (what Müller and Klinge (2008: 4) coin ‘function-based structure’), is only something one can strive after. Finally, if I do possess some knowledge of Hindi, I have not yet reached the level from which one can benefit from unmediated access to the consciousness of community

members. My main consultants are almost all conversant with English, which made the whole communicative process relatively easy.

Chapter 3: a basic outline of the Chhitkul-Rākchham verb

Before addressing the copula system *per se*, I provide a basic outline of the Chhitkul-Rākchham verb, starting with a description of finite verb inflection (§3.1), which includes the morphological template of the Chhitkul-Rākchham verb, a description of non-finite verb inflection (§3.2), a brief account of negation (§3.3), a comparison with Bailey and Sharmā's accounts (§3.4), and some elements of comparison within the so-called 'West-Himalayish' subgroup (§3.5).

Chhitkul-Rākchham is a clause chaining language in the sense of Longacre's (1985: 263-265, 299) definition, the most salient point of which is that "one clause, typically the final clause, is distinguished from the other clauses, typically medial clauses, by a difference of verb morphology" (see appendix 1, §1.6.5).

Verbs in the "sentence nuclei" (Longacre 1985: 235-6), that is, light and finite verbs, have a more complex morphology than medial or non-finite verbs in that they can take aspect, mood and subject agreement markers – although not all simultaneously.

Derivative morphology may follow the bare root of the verb: middle voice *-f* and transitive *-tf*, see appendix 1, §1.5.2.

Chhitkul-Rākchham expresses present and past tenses by means of aspectual distinctions only: the progressive *-a*, the perfective *-i*, *-fi*, and *-ti*, the imperfective *-e*, *-te* and *-de*, and the habitual *-ts*. Hortative mood is also marked by one type of aspectual suffixes, namely imperfective *-e*, *-te* and *-de*, following the imperative verbal form, *pa-tf* 'let's'. Other mood suffixes include the irrealis *-no* (dubitative), the conditional *-na*, and the imperative *-ĩ* (second person singular honorific), *=ẽ* (second person singular extra-honorific, attaching to *-ĩ*) and *-tf* (first and second person plural), see §3.1.3.2.

However sporadic, object marking is also a feature of Chhitkul-Rākchham. I address it in appendix 1, §1.5.3. Whenever it is realized by means of a suffix, object marking occurs right after the verb root and before TAM markers.

3.1 Finite verb inflection – TAM and subject agreement

TAM is exclusively marked by means of verbal suffixes, and so is subject agreement. I provide a list of subject agreement markers in §3.1.4 and I address subject agreement in more detail in appendix 1, §1.5.5. The distribution of TAM markers is phonologically conditioned, see appendix 1, §1.5.4 for a detailed description. Table 4 provides an overview of TAM suffixes:

Table 4: TAM suffixes in *Chhitkul-Rākchham*

	Suffixes
Perfective	<i>-i, -fi, and -ti</i>
Imperfective	<i>-e, -te, and -de</i>
Progressive	<i>-a</i>
Habitual	<i>-ts</i>
Irrealis-dubitative	<i>-no</i>

TAM morphology gives rise to various phonological processes depending on the verb stem and the type of infinitive marker: *-ŋ*, *-aŋ* and *-saŋ*, see appendix 1, §1.3.3.2. These processes include consonant insertion (*/ŋ/*, */g/* and */j/* and */s/*), vowel insertion (*/a/* and */i/*), vowel lowering (from */e/* to */i/* and from */a/* to */e/*), raising (from */i/* to */e/* and from */e/* to */a/*), nasality transfer from preliquid nasalized consonant cluster (*/kr/*), nasalization (of */a/* after */ŋ/*; of the perfective *-i* after monosyllabic verb stems ending in the back rounded vowels */o/* and */u/*). Finally, imperative mood gives rise to ablauts, see appendix 1, §1.5.1 and §1.5.5.

Similarly, a verb stem ending in */n/* may result in phonological processes not attested in other environments: *jyn-aŋ* ‘to walk’ → *jyn-a* (PROG), *jyn-no* (IRR.DUB), but *jyan-i* (PFV), see appendix 1, §1.5.4.1.1 for an explanation. Another example is *funi-saŋ* ‘to shout’ → *funi-a* (PROG), and not *fune-a* based on other verb stem where an alveolar consonant precedes */i/*, as in *suari-saŋ* ‘to repair’ → *suare-a*; *banzi-saŋ* ‘to smell – TR’ → *banze-a*; *ali-saŋ* ‘to call, invite’ → *ale-a*, etc.

The morphological template of a Chhitkul-Rākchham verb form has five slots, one preceding the verb root (the negative prefix *ma-* and the prohibitive prefix *t^ha-*), and four following it. Object marking concerns a limited set of verbs; it is not exclusively realized by means of suffixes (see appendix 1, §1.5.3). The categories mentioned in slot 4 can only follow an imperfective or an irrealis marker. The table below provides an overview of the morphological slots:

*Table 5: The morphological template of a Chhitkul-Rākchham finite verb (excluding the negative and prohibitive prefixes *ma-* and *t^ha-* and non-productive derivational morphology)*

Root	Slot 1	Slot 2	Slot 3	Slot 4
	Transitivity markers	Inflectional suffixes		
	Middle class (reflexive <i>-f</i>) Transitive (<i>-tʃ</i>) Occurring on a limited set of verbs	Object Agreement	Aspect: <i>-a</i> (PROG) <i>-ts</i> (HAB.ASS) <i>-i, -fi, -ti</i> (PFV) <i>-e, -te</i> and <i>-de</i> (IMPV) Mood: <i>-∅</i> (or ablaut), <i>-ĩ, -ĩ=ẽ, -tʃ</i> (IMP) <i>-e, -te</i> and <i>-de</i> following <i>patʃ</i> (HORT) <i>-no</i> (IRR.DUB)	Subject agreement (person and number) – exclusively after IMPV and IRR.DUB: <i>-k</i> (1SG), <i>-ĩ</i> (2SGHON), <i>-n</i> (2SGNHON), <i>-∅</i> (3), <i>-tʃ</i> (1-2PL)

3.1.1 Tense

Chhitkul-Rākchham expresses present and past tense exclusively by means of aspectual markers. Future tense is expressed via aspect, the habitual (assertive) *-ts*, and mood, the dubitative irrealis *-no*.

3.1.1.1 Present tense

Chhitkul-Rākchham expresses present tense by means of three different types of constructions, all involving an aspectual marker:

1. The first type consists of a main verb inflected for the progressive and optionally followed by an auxiliary (*to*-1SG) unmarked for tense, thus *ga: kamaŋ latf-a tɔ-k* (1SG work do-PROG AUX-1SG) ‘I am working’;
2. The second type occurs with perfective and imperfective aspectual distinctions in a limited number of cases. Perfective with a limited set of stance, position, or posture verbs such as *ɔs-aŋ* ‘to sit’, *nɔn-aŋ* ‘to sleep’, or *gerifaŋ* ‘to surround’. Again, what conveys the meaning of present time is the tense unmarked auxiliary. We are dealing with an on-going state with a durative reading, thus *eme kjim-o u: ɔs-i ta/to-∅* (3SG.HON house sit-PFV AUX-3) ‘(s)he is sitting inside the house’, and *pahartfaŋtʃi tʃʰul gerif-i to-∅/ta* (mountains surround-PFV AUX-3) ‘mountains are surrounding Chhitkul’⁶⁸. Imperfective with on-going actions that are incomplete: *ga: rɔ-dɛ-k*⁶⁹ (‘I am going’);
3. The third type involves a main verb inflected for the habitual *-ts*, denoting the habitual property of things, like in *satʰar ɔfa ɔfa tʰun-ts* (snow leopard fast run-HAB) ‘snow leopards run fast’.

3.1.1.2 Past tense

Chhitkul-Rākchham expresses imperfective and perfective aspectual distinctions within past tense. Imperfective aspect describes actions performed (relatively) recently. Perfective aspect describes a completed action in both recent and remote contexts. In recent contexts, there is therefore an overlap, which suggests we have to treat imperfective and perfective as either aspectual or temporal, but not differently. (15) illustrates the difference in terms of temporality (distant past vs. more recent past in comparison) between imperfective and perfective.

⁶⁸ In *eme eme kamra du nɔn-i to-∅/ta*, only a present reading is possible because the auxiliary is not marked for the imperfective *-te* (*tɔte*) or *-se* (*tase*). The ambiguity between a progressive and non-progressive reading may be solved by some additional information.

⁶⁹ The suffix *-k* refers to the 1SG subject agreement marker. Note that /e/ undergoes laxing and surfaces as /ɛ/ before nasals, voiceless plosives, voiceless fricatives, and voiceless affricates.

3.1.1.3 Future tense

Future tense is expressed by means of the habitual-assertive *-ts* and the dubitative irrealis (mood) *-no*.

3.1.2 Aspect

Chhitkul-Rākchham has four aspectual distinctions: imperfective, perfective, progressive, and habitual (habitual-assertive in future tense constructions). I define as aspectual a marker occurring in slot 3 that is usually not followed by subject agreement – imperfective being the only exception – and not isomorphous with one of the subject agreement markers from slot 4.

3.1.2.1 The imperfective *-e*, *-te*, and *-de*

Imperfective aspect describe actions performed (relatively) recently and present actions (or states) which are incomplete: *ga: rɔ-de-k* ('I am going'); *ga: hagɔ-de-k* ('I understand, I see').

Table 6: imperfective paradigm for the verb *hun-aŋ* 'to live, stay'

	Imperfective
1SG	hun-de-k
2SGHON	hun-de-ĩ
2SGNHON	hun-de-n
1 and 2PL	hun-de-tʃ
3	hun-de-∅

Table 7: imperfective paradigm for the verb *pɔs-aŋ* 'to sit'

	Imperfective
1SG	pɔs-ε-k
2SGHON	pɔs-e-ĩ
2SGNHON	pɔs-ε-n

1 and 2PL	pɔs-ɛ-tʃ
3	pɔs-e-∅

Table 8: imperfective paradigm for the verb *tsum-aŋ* ‘to catch’

	Imperfective
1SG	tsum-dɛ-k
2SGHON	tsum-de-ĩ
2SGNHON	tsum-dɛ-n
1 and 2PL	tsum-dɛ-tʃ
3	tsum-de-∅

Table 9: imperfective paradigm for the verb *suntse-aŋ* ‘to think’

	Imperfective
1SG	sunts-i-tɛ-k
2SGHON	sunts-i-te-ĩ
2SGNHON	sunts-i-tɛ-n
1 and 2PL	sunts-i-tɛ-tʃ
3	sunts-i-te-∅

3.1.2.2 The perfective *-i*, *-fi*, and *-ti*

Perfective aspect describes a completed action (in both recent and remote past). It has a durative reading in present time (with a few stative verbs), as seen in §3.1.1.1.

3.1.2.3 The progressive *-a*

I use the term ‘progressive’ and not ‘continuous’ to characterize the suffix *-a*, although it can also be used with stative predicates, that is, is more general than the progressive, which describes ongoing actions. By doing so, I take heed of Bybee and al.’s (1994: 127, 139) observation that there is no cross-linguistic gram-type ‘continuous’. The progressive -

a occurs in frequentative⁷⁰ constructions with the sense of ‘frequently’, ‘often’ and ‘always’⁷¹. It is progressively replacing *-ts* in its habitual functions (see §5.12).

3.1.2.4 The habitual *-ts*

As mentioned in §3.1.1.1, *-ts* in a present tense construction denotes the habitual property of things; it occurs in general statements based on common knowledge, but also in a few rhetorical questions such as *su: ts^hats* ‘who knows?’.

We shall see in §5.12 that *-ts*, is turning into a realis-assertive marker, contrasting with the future-dubitative (irrealis) *-no* in future tense constructions. The suffixes *-no* and *-ts* contrast with each other based on their epistemic flavour.

Like all other aspectual markers, *-ts* always occupy the last slot of the verb and no subject agreement marker can follow.

3.1.3 Mood

The same way aspectual distinctions encode tense, mood distinctions do. Future tense is expressed by means of the dubitative irrealis *-no*. Present tense commands or requests are expressed by means of the imperative *-ĩ* (second person singular honorific), *=ẽ* (second person singular extra-honorific, attaching to *-ĩ*) and *-tj* (first and second person plural). Finally, situations signalling the speaker’s encouragement (non-completed, or on-going actions) are expressed by means of hortative mood, which consists of the verbal root *pa-* and the imperative second person plural marker *-tj* followed by a verb inflected for the imperfective.

3.1.3.1 The irrealis-dubitative *-no*

The marker *-no* is a special case: it exclusively attach to a main verb in a future tense context, with a dubitative value that contrasts with the habitual (assertive) *-ts*⁷².

⁷⁰ Bybee and al. (1994: 165) suggest frequentative meanings originate from adverbs such as ‘often’, which is plausible considering the Chhitkul-Rakchham adverb *ina ina*, the meaning of which spans from ‘sometimes’ to ‘often’.

⁷¹ In the latter case, the borrowed Hindi adverb *hamefa* co-occurs.

⁷² When present tense temporality on main verbs is expressed by means of *-ts* (see §3.1.1.1), the latter suffix does not contrast with *-no*, reason why I claim in this context *-ts* is plainly habitual.

As auxiliary, *ano* may occur in constructions with a present, past and future tense value⁷³, reason why I gloss *-no* as irrealis- dubitative. The suffix *-no* is a portmanteau morpheme; an additional function is that of simultaneous aspect marker.

As mentioned in 3.1.1, tense is expressed by aspectual distinctions. In this regard, *-no* is an exception, and stands out from imperative and hortative, the marking of which refers to subject agreement and imperfective respectively. We may therefore surmise *-no* is a recent innovation.

A phonological variant is *-na*, but only with 1SG, when the subject agreement marker *-k* follows (*-na* is otherwise the conditional suffix). Chhitkul-Rākchham associates ‘future tense’ with dubitative mood, i.e. a kind of irrealis also found in the copula and auxiliary *ano* (see §4.1.3 and §5.3).

Tables 10, 11, 12 and 13 provide the irrealis paradigm for *hun-aŋ* ‘to live, stay’, *ɔsaŋ* ‘to sit’, *tsumaŋ* ‘to catch, hold’, and *suntsean* ‘to think’.

Table 10: irrealis paradigm for the verb *hun-aŋ* ‘to live, stay’

	Irrealis (dubitative)
1SG	hun-nɔ-k ⁷⁴
2SGHON	hun-no-ĩ
2SGNHON	hun-nɔ-n
1 and 2PL	hun-nɔ-tʃ
3	hun-no-∅

⁷³ The correlation between future tense and irrealis is widespread from a cross-linguistic perspective (Chung and Timberlake 1985: 256).

⁷⁴ Note that /o/ undergoes laxing and surfaces as /ɔ/ before nasals, voiceless plosives, voiceless fricatives, and voiceless affricates.

Table 11: irrealis paradigm for the verb *ɸɔs-aŋ* ‘to sit’

	Irrealis (dubitative)
1SG	ɸɔs-i-nɔ-k
2SGHON	ɸɔs-i-no-ĩ
2SGNHON	ɸɔs-i-nɔ-n
1 and 2PL	ɸɔs-i-nɔ-tʃ
3	ɸɔs-i-no-∅

Table 12: irrealis paradigm for the verb *tsum-aŋ* ‘to catch’

	Irrealis (dubitative)
1SG	tsum-nɔ-k
2SGHON	tsum-no-ĩ
2SGNHON	tsum-nɔ-n
1 and 2PL	tsum-nɔ-tʃ
3	tsum-no-∅

Table 13: irrealis paradigm for the verb *suntse-aŋ* ‘to think’

	Irrealis (dubitative)
1SG	suntsi-nɔ-k
2SGHON	suntsi-no-ĩ
2SGNHON	suntsi-nɔ-n
1 and 2PL	suntsi-nɔ-tʃ
3	suntsi-no-∅

3.1.3.2 The imperative

The imperative exhibits a four-fold distinction: second person singular non-honorific, second person singular honorific, second person singular extra-honorific⁷⁵, and first and second person plural. Only one auxiliary (*ta*, which does not inflect for tense) may follow an imperative form. Table 14 provides a few examples that include the four distinctions.

⁷⁵ The extra-honorific =ẽ denotes heightened politeness, irrespective of the interlocutor’s wealth or social position.

The second person singular non-honorific imperative is in most cases identical to the verb stem, and thus not overtly marked (-∅). I discuss irregular forms, some of which involving ablauts, in appendix 1, §1.3.3.2, §1.5.1, and §1.5.5.1.

The second person singular honorific imperative marker is *-ĩ*, identical to the subject agreement marker (see §3.1.4).

The first and second person plural imperative is *-tʃ*, which is identical to the subject agreement marker as well.

Finally, there is a second person singular extra-honorific form, namely *=ẽ*, exclusively occurring in the imperative. Either *-ĩẽ* is a suffix denoting heightened politeness or *ẽ* is an alternative syntactic category conveying the same meaning. Observing that *ĩẽ* subsumes *-ĩ*, I give precedence to the second hypothesis, treating *=ẽ* as a clitic for reasons that have to do with simplicity of analysis. I further discuss heightened politeness expressed by means of a clitic or particle in appendix 1, §1.5.5.

I address consultative mood, formed by means of the second person singular honorific imperative in appendix 1, §1.5.5.4.

Table 14: imperative marking in Chhitkul-Rākchham

	2SGNHON	2SGHON	2SGEHON	2PL
hunaŋ ('to stay, to live')	hun	hunĩ	hunĩ=ẽ	hunitʃ
roŋ ('to go')	ro	roĩ	roĩ=ẽ	roʃ
uraŋ ('to wash')	ur	urĩ	urĩ=ẽ	uritʃ
pɔsaŋ ('to sit down')	pɔs	pɔsĩ	pɔsĩ=ẽ	pɔsitʃ
taŋ ('to put, to keep')	tau	taĩ	taĩ=ẽ	tatʃitʃ
suarisaŋ ('to repair')	swariu	swarĩ	swarĩ=ẽ	swaritʃ
suntseŋ ('to think')	suntsiu	suntsĩ	suntsĩ=ẽ	suntsitʃ
tɔŋ ('to come')	deja	deĩ	deĩ=ẽ	detʃ
asaŋ ('to become, to happen')	ass	asĩ	asĩ=ẽ	asitʃ

3.1.3.3 The hortative *patf* followed by a verb inflected for *-e*, *-te* and *-de*

Hortatives involve a verb inflected for the imperfective *-e*, *-te* and *-de* mentioned earlier preceded by *patf*, equivalent of Hindi *tʃalo* ('let's'), as in (11), used to make suggestions. *Patf* consists of the verbal root *pa* and the first and second plural subject agreement marker *-tf*. Imperative and hortative speech acts result in the following structures: V-(OBJ)-AGR, as in (9), or V-(OBJ)-AGR AUX, as in (10), and V-(OBJ)-MOOD, as in (11).

3.1.4 Subject agreement

I deal with subject agreement in more detail in appendix 1, §1.5.4. Subject agreement is realized by means of suffixes occurring on the last slot of the verbal form, with any type of finite verb: transitive, intransitive and middle class, light verbs and copulas⁷⁶. Subject agreement markers may only attach to main verbs inflected for *-no* (dubitative irrealis), and *-e*, *-te*, and *-de* (imperfective). A main verb marked for subject agreement invariably consists of either V-IRR.DUB-AGR or V-IMPV-AGR. In that case, no auxiliary follows.

Whenever subject agreement is marked on auxiliaries, it does so after irrealis and imperfective, or directly attach to the auxiliary base with a resulting present tense reading.

Subject agreement also occurs in the imperative mood, where the second person singular honorific marker *-ĩ* directly follows the stem (the non-honorific form remaining unmarked) and where the first and second person plural marker *-tf* follows the stem and the epenthetic vowel /i/. Subject agreement is marked in the fashion described in table 15:

Table 15: Verbal agreement (AGR) configurations

V-IMPV-AGR

V-(OBJ)-ASP (AUX-(IMPV)-AGR)

V-(OBJ)-IRR.DUB-(AGR)

Imperative⁷⁷: VERB-(OBJ)-AGR (AUX)

⁷⁶ The occurrence of the ergative case in some transitive constructions does not impair the use of agreement markers as it is the case in Bunan, Manchad and Tinan (Sharmā 1996: 95).

⁷⁷ The occurrence of subject agreement suffixes in the imperative is also a feature of Kinnauri (Konow 1905: 124).

As shown in table 16, a verbal form is not overtly marked for subject agreement with third person. The distinction is thus between ‘locuphoric’ (local persons, or the interlocutors), overtly marked, and ‘aliophoric’ (non-local or third person), not overtly marked. There is a bit variation regarding third person plural: *-tʃ* occurs in a few elicited examples, but my main consultant is adamant there is no marker in that case. Besides, *-tʃ* as a third person plural marker is not part of the documentary corpus. Based on Labov’s (1975: 31, 40) ‘validity principle’, I take $-\emptyset$ to be the correct third person plural marker.

Table 16: Subject agreement suffixes in Chhitkul-Rākchham

	SG	DU-PL
1	-k	-tʃ
2HON	-ĩ	
2NHON	-n	
3	-∅	

In future tense constructions, there is a contrast between the dubitative irrealis *-no* and the habitual-assertive *-ts*. A subject agreement marker may only attach to the former.

3.1.5 The many guises of the Chhitkul-Rākchham main verb

In a finite clause the main verb may occur in different guises. A main verb may be marked for aspect and subject agreement, as in (1): V-ASP-AGR; be inflected for aspect only, as in (2): V-PFV, and (3): V-PROG. Further, a verb may be marked for aspect with an auxiliary carrying subject agreement only, as in (4): V-ASP AUX-AGR, or with an auxiliary carrying both imperfective and subject agreement, as in (5): V-ASP AUX-ASP-AGR; yet another configuration is a main verb inflected for aspect with an auxiliary inflected for aspect, as in (6): V-ASP AUX-ASP (with PFV as aspect marker on the main verb) and (7): V-ASP AUX-ASP (with PROG as aspect marker on the main verb). (8) is an example of a serial verb construction (V₁-ASP V₂-ASP), a point I address in §4.6. Note that an auxiliary may follow a V₁ V₂ construction. A verb may also inflect for subject agreement (imperative mood), as in (9): V-AGR; be marked for subject agreement (imperative) with an auxiliary, invariably *ta*, which remains uninflected, as in (10): V-AGR AUX. A last possibility is a main verb inflected for mood only, as in (11):

(1) ʃeli=e nim-i nim-i gos-a:=du p^has-i-ti
fox=GEN sweet-MODIF sweet-MODIF talk-MASC.SG=LOC enrapture-E-PFV
p^hus-i-ti t^han ga:=∅ ai a:-r=o=tʃi kuɔn=∅ lo ga:=∅
REDUP-E-PFV today 1SG=ABS 1SG.POSS mouth-E=LOC=ABL food=ABS also 1SG=ABS

p^hikʃ-i-dɛ-k
drop-E-IMPV-1SG

‘Today I dropped food from my mouth, enraptured by the sweet talk of the fox’

JAC_cik05-YS-2019-03-07-24

(2) dum^haniŋ=∅ tu-ti dum^haniŋ=∅ ɛme
Dumthaning=ABS come-PFV Dumthaning=ABS 3SG.POSS.HON
b^hanz-a:=∅ ta-ʃi
nephew-MASC.SG=ABS put-PFV

‘(She - Mata Devī) came to Rākchham (Dumthaning) and appointed her nephew’

TRD_cik03-JL-2018-11-25-20

(3) kjaŋ kat=tij ma-kɔʃ-a ma-kɔʃ-a te
1PL.POSS.INCL language=COM NEG-speak-PROG NEG-speak-PROG then

he as-a no
like happen-PROG PTCL.ASS

‘It turns out that we are not conversing in our language’

DEB_cik04-CRN-YS-2018-11-22-16

(4) at-tʃaŋ huʃ-aŋ tʃ^hɛtiŋ dəs dʒama do skul=∅ tʃ^hul=∅ lo
child-PL study-INF POST.PURP ten plus two school=ABS Tchhitkul=ABS also

k^huli-ti to-∅
open-PFV AUX.PEEX-AGR

‘Now, a ten plus two school has opened in Chhitkul for children to study’

TOP_cik10-DSN-2018-12-14-30

(5) tʃʰu-mi:=e pʰɔga=∅ pɔn-aŋ tʃʰɛtiŋ saŋla: mɔna:=tʃi
 Chhitkul-people=GEN clothe(s)=ABS sew-INF POST.PURP Sanglā Monā=ABL
 suĩ-tʃaŋ=∅ to-a tɔ-te-∅
 tailor-PL=ABS come-PROG AUX.PEEX-IMPV-3

‘Tailors from Sanglā and Monā used to come to sew clothes for people of Chhitkul’

TOP_cik10-DSN-2018-12-14-16

(6) teotʃ=o unnis-so siksti naɪn bɔre ɛ:k sipai baɾt-i:=∅
 before=LOC nineteen-hundred sixty nine when one soldier recruit-FEM.SG=ABS
 as-i tɔ-ts
 become-PFV COP.PEEX-HAB

‘I was recruited as a soldier in 1969’

AUT_cik03-RLN-2018-10-12-2

(7) niŋ-sa: taɪm=o lo hɔja=tʃi pʰul=∅ gas=∅ likʃ-i
 1.PL.EXCL-PL time=LOC also here=ABL eatables=ABS clothes=ABS carry-PFV
 saŋla: skul=o ro-a tɔ-ts hɔda huʃ-aŋ
 Sanglā school=LOC go-PROG AUX.PEEX-HAB.ASS there study-INF

‘In our days we used to carry eatables and clothes from here to go to school in Sanglā and to study there’

TOP_cik03-AS-2018-10-12-51

(8) ǎ hojo kɔʃ-a hun-ts
 INTERJ 3.NHON speak-PROG keep-HAB.ASS

‘Yes, they will keep speaking (the language)’

DEB_cik08-RKKF-SS3-2019-05-27-74

(9) za-ĩ
 eat-(IMP)2SGHON

‘Eat!’ – DSN

(10) tʰan-tʃaŋ tse lɔttʃ-a ne kʰe at-tʃaŋ=∅ tse dau sukul=o
 today-PL all forget-PROG PTCL.ASS what child-PL=ABS all outside school=LOC

ɦuʃ-i-tʂ bəs ɦojo neotʃ=o mā bol-i:=∅ ta
 study-E-HAB.ASS INTERJ DEM.DIST after=LOC REFL language-FEM=ABS COP.PE

tse kʰatam ʃja-ĩ =ta
 all finished look-(IMP)2SG.HON =AUX.PE

‘Nowadays, everyone forgets, because all the children are studying at school out (of the village), after that our own language is condemned, look!’⁷⁸

DEB_cik08-RKKF-SS3-2019-05-27-3

(11) pa-tʃ ʃatrandʒ=∅ ɦetʃ-e
 CVB-1PL chess=ABS play-IMPV.HORT

‘Let's go and play chess!’ – DSN

Chhitkul-Rākchham also exhibits alternative periphrastic constructions.

A first type consists of the infinitive form of the verb followed by the second verb *lisəŋ* (‘to be able to’) inflected for *-ts*. The verb *tsʰasaŋ* (‘to know’)⁷⁹ inflected for the progressive *-a* (*tsʰa:*) is an alternative. Both constructions denote an ability to perform a task. Ability then provides one additional type of construction: V-INF V-ASP.

(12) ga:=∅ aŋgrezi=o kɔlf-aŋ li-tʂ / tsʰa:
 1SG=ABS English=LOC speak-INF be able-HAB know.PROG

‘I can speak (in) English’ – DSN

A second type of periphrastic construction has to do with deontic modality and consists of the infinitive form of the verb, followed by either the nominalizing particle *=seə* (advice and moral obligation) or the inflected form (for habitual-assertive aspect) of the second verb *ginəŋ* (‘to need’), namely *gints* (external obligation). An auxiliary may follow *=seə* and

⁷⁸ There are instances from my corpus where *ʃeta* occurs as a contraction of *ʃaĩ ta*, which suggests *ta* is cliticized to the imperative form of the main verb in this type of construction.

⁷⁹ *Tsʰa* is a Tibetan borrowing.

gints. An alternative construction in both cases is the infinitive form of the verb followed by an auxiliary. I provide below an example (13) with *gints*:

(13) *ga:=∅ boseriη=∅ rɔ-η gin-ts / rɔ-η to*
 1SG=ABS Batseri=ABS go-INF need-HAB.ASS go-INF AUX.PEEX

‘I have to go to Batseri’ – DSN

The following examples involve the nominalizing particle =*sea* and a construction consisting of V-INF AUX with the resulting meaning of ‘should learn Hindi’ (with all persons):

ga:-∅ hindi huf-aη=sea (to) (1SG-ABS hindi learn-INF=NOMI (AUX), or *ga:-∅ hindi-∅ huf-aη to* (1SG-ABS hindi-ABS learn-INF AUX) ‘I should learn Hindi’

ki-n-∅ hindi-∅ huf-aη=sea (ta) (2SG.HON-2SG-ABS hindi-ABS learn-INF=NOMI (AUX), or *ki-n-∅ hindi-∅ huf-aη ta* 2SG.HON-2SG-ABS hindi-ABS learn-INF AUX) ‘you should learn Hindi’

eme-∅ hindi-∅ huf-aη=sea (ta) (3SG.HON-ABS hindi-ABS learn-INF=NOMI (AUX), or *eme-∅ hindi-∅ huf-aη ta* 3SG.HON-ABS hindi-ABS learn-INF AUX) ‘he or she should learn Hindi’

niη-sa:-∅ hindi-∅ huf-aη=sea (to) (1PL.EXCL-PL-ABS hindi-ABS learn-INF=NOMI (AUX), or *niη-sa:-∅ hindi-∅ huf-aη to* 1PL.EXCL-PL-ABS hindi-ABS learn-INF AUX) ‘we should learn Hindi’

kin-sa:-∅ hindi-∅ huf-aη=sea (ta) (2PL.HON-PL-ABS hindi-ABS learn-INF=NOMI (AUX), or *kin-sa:-∅ hindi-∅ huf-aη ta* 2PL.HON-PL-ABS hindi-ABS-learn-INF AUX) ‘you-PL should learn Hindi’

eme-sa:-∅ hindi-∅ huf-aη=sea (ta) 3PL.HON-PL-ABS hindi-ABS learn-INF=NOMI (AUX), or *eme-sa:-∅ hindi-∅ huf-aη ta* 3PL.HON-PL-ABS hindi-ABS learn-INF AUX (‘they should learn Hindi’)

Whenever an auxiliary occurs, it inflects for tense, but not for subject agreement. As shown in §5.6.2, the choice of auxiliary is not limited to *ta* and *to*. Deontic modality provides another type of construction: V-INF AUX-(ASP).

Finally, as shown in appendix 1, §1.5.3, object agreement is expressed by means of different types of constructions, one of which being the bare root of the verb, followed by the second verb *tɔŋ* ('to come') inflected for aspect, and by an auxiliary inflected for subject agreement: V_{ROOT} V-ASP AUX-AGR, as shown in (14):

(14) *εme=∅ ga:=∅ hul to-a to-∅*
 3SG.HON=ABS 1SG=ABS push come-PROG AUX.PEEX-3

'He (or she) is pushing me' – DSN

'He (or she) is pushing him (or her)' results in an unmarked object construction with the more regular structure V-ASP AUX-AGR: *εme εme hula to*.

3.2 Non-finite verb inflection

Non-finite verbs take a more limited – and most of the time clearly distinct - set of TAM markers. Non-finite verbs do not take any subject agreement suffixes. The perfective markers *-i*, *-fi*, and *-ti*⁸⁰ typically occur in dependent clauses sequentially distinguished from main ones. In that case, the non-finite verb may undergo reduplication. In the following example, the verb *latfaŋ* ('to do') takes the perfective suffix *-i*:

(15) *ga:=∅ ŋã bɔfaŋ teotf=o=tʃi mã mã mɛhnat latf-i lutf-i*
 1SG=ABS five year after=LOC=ABL INT hard do-PFV do.REDUP-PFV
te sahu:kar as-ε-k
 then rich become-IMPV-1SG

'I became rich after working very hard for the past five years' – DSN

Non-finite verbs take additional aspectual suffixes: the prospective *-so* and the simultaneous irrealis *-no*. Both are usually occurring right after the verb root. With regard to monosyllabic verbs the stem of which ends in a vowel, these markers follow the infinitive form of the verb, as in (14). The epenthetic vowel /i/ may occur between the verb stem and these markers. The occurrence of /i/ is phonologically conditioned in the exact same way as mentioned earlier.

⁸⁰ The vowel /i/ is sometimes deleted: *lat luti* ('after doing').

(16) is an example, with a finite verb inflected for *-so*:

(16) ga:=∅ εme=∅ ta:η-so kita:b=∅ da-nɔ-k
1SG=ABS 3SG.HON=ABS see-PROSP book=ABS give-IRR.DUB-1SG

‘I will give him the book as soon as I see him’ – DSN

In (17) the suffix *-no* attaches to the non-finite verb, thus conveying the semantic of an action simultaneous to the event expressed in the main clause:

(17) at-tʃaη=∅ kuɔn=∅ za-no bɔr-e TV=∅ ma-fja-saη=sea
child-PL=ABS food=ABS eat-SIMUL.IRR CVB-IMPV TV=ABS NEG-watch-INF=NOMI

‘Children should not watch TV while eating (food)’ – DSN

Non-finite verbs may also take the conditional suffix *-na*. Again, the epenthetic vowel /i/ may occur between the verb stem and the conditional suffix. A root augment, invariably *-n*, is also part of the conditional construction with monosyllabic verbs the stem of which ends in a short vowel: *rɔη* (‘to go’) → *rɔnna*; *laη* (‘to do’) → *lanna*. Finally, a finite verb form may take one of the perfective markers followed by the converb *hɛn*, which then inflects for the conditional *-na*, as in (18) – table 56 in §5.8.3 introduces an alternative inflection on the finite verb:

(18) ga:=∅ ki-n=∅ madad=∅ ma-da-fi hɛn-na
1SG=ABS 2SG.HON-2SG=ABS help=ABS NEG-give-PFV CVB-COND
ki-n=∅ imtihan=∅ pas ma-la-η tɔ-ts
2SGHON-2SG=ABS exam=ABS pass NEG-do-INF COP.PEEX-HAB.ASS

‘If I don’t help you, you will not pass (your) exam(s)’ – DSN

An interesting property of non-finite verb forms is that they can be followed by an auxiliary, either *ta* or *tɔts* (see §5.8.3):

(19) he=o ta man=ta t^han-tjaŋ hojo-tjaŋ=∅ zaruri:
 like=FOC COP.PE CVB.NEG.EMPH=COP.PE today-PL 3.NHON-PL=ABS necessary
 ta ne hojo kjaŋ kat-tjaŋ=∅ lupt
 COP.PE PTCL.ASS DEM.DIST 1PL.POSS.INCL language-PL=ABS lost/vanished
 ma-as-aŋ kamaŋ=∅ lan-na ta
 NEG-become-INF work=ABS do-COND AUX.PE

‘That’s it, isn’t it? Nowadays, it is important, if they do some work (on them), our languages will not become extinct’

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A last type of inflection is infinitive (-ŋ, -aŋ and -saŋ), which I address in appendix 1, §1.3.3.2.

3.3 Negation

The morpheme *ma-*, prefixed to the verb stem, marks negation in Chhitkul-Rākchham. The prefix is restricted to verbal forms, but it occurs with a few adjectives in my data – for example those exhibiting a gender distinction: *mafare* (‘not beautiful’, FEM) and *mafaro* (MASC).

A second prefix, *t^ha-*, (→ *t^ha pɔs* ‘don’t sit’ - 2SGNHON) marks prohibitive commands with the four types of imperative forms described in §3.1.3.2.

In periphrastic constructions, the marker *ma-* may occur on two different slots: as a prefix to the verb stem or as a prefix to the auxiliary:

ga:-∅ ma-nɔn-i (1SG-ABS NEG-sleep-PFV) or *ga:-∅ nɔn-i ma-tɔ-k* (1SG-ABS sleep-PFV NEG-AUX-1SG) ‘I did not sleep’

eme-∅ ma-tu-ti ta (3SG.HON-ABS NEG-come-PFV AUX) or *eme-∅ tu-ti ma-ta* (3SG.HON-ABS come-PFV NEG-AUX) ‘he/she did not come’

ga:-∅ ma-ts^ha-fi tɔ-tɛ-k (1SG-ABS NEG-know-PFV AUX-IMPV-1SG) or *ga:-∅ ts^ha-fi ma-tɔ-tɛ-k* (1SG-ABS know-PFV NEG-AUX-IMPV-1SG) ‘I did not know’

The negative *man* and *mat ti*, which are part of the copula system, are discussed in §4.4.2. *Manna* (with *-na* as the conditional marker) has the meaning of ‘if not’/‘otherwise’.

There are no lexicalized negative indefinite pronouns in Chhitkul-Rākchham. These pronouns convey a negative meaning so long they occur with verbal forms that are negated: *k^hetso* (‘something’) → *k^hetso mat ti* (‘nothing’); *su:o hamefa zinda mahunts* (‘no one lives forever’; *su:* → ‘everyone’ and ‘no one’; but *su:lo:* anyone). The adverb ‘never’ is expressed by means of the Hindi equivalent *kaṭai* or the native *i:ro* (‘once’), the verb form is invariably negated with *ma-*:

(20) *ga:=∅ nɔn-aŋ jjana teotf=o i:-r=o=o ka:fi:=∅*
 1SG=ABS sleep-INF.NOMI COMP before=LOC one-E=LOC=FOC coffee=ABS

ma-tuŋ-a
 NEG-drink-PROG

‘I never drink coffee before going to sleep’ – DSN

3.4 Bailey and Sharmā on Chhitkul-Rākchham verbs

Bailey’s (1920: 78-86) account of verbal forms is very limited and does not deal with non-finite verbs. In comparison, Sharmā (1992: 258-288) provides a much more substantial description of both finite and non-finite verbs.

3.4.1 Bailey’s account of finite verbs

With regard to tense inflection, Bailey observes (ibid, p. 81) that the verb substantive “seems to be indeclinable in the present tense” and only makes mention of the future *-no* and the past tense suffixes *-ī*, *-e*, *-te* and *-de*. Judging by the few examples he provides (ibid, p. 82-3), the bare root of the verb, followed by *-ā*, a marker he does not address in his description, expresses the future. Bailey does not deal with aspectual distinctions whatsoever. In terms of mood, Bailey only mentions the imperative (ibid, p. 79): “the

imperative singular is the root as in so many other Indian languages”. However, one example from his list, *zaū* (‘eat!’), also part of my data (the verb stem being *za-*) contradicts his statement.

In Bailey’s description, subject agreement is a feature of both finite verbs taking the past tense suffixes *-te* and *-de* and of the auxiliary *to*. Conversely, subject agreement does not occur with verbs inflected with *-ī*, which is consistent with my own account.

Considering the full list of subject agreement, our description differs in some important respects, however, see appendix 1, §1.5.5.

3.4.2 Sharmā’s account of finite and non-finite verbs

Sharmā makes the introductory claim (1992: 258) that “a verb is inflected for the grammatical categories of person, number, tense, mood and aspect”. In addition to subject agreement, “sporadic” cases of object agreement are also mentioned (ibid, p. 260), for example in *taṅ-c-i* (‘I saw you’, *-c* being the object suffix, and *-i*, a past tense marker). I address object marking in more detail in appendix 1, §1.5.3. I also deal with Sharmā’s treatment of verb substantives in §3.5.2.

“Various forms of the present indefinite are obtained by suffixing respective present tense number-person forms of the verb substantive /to/ to the verb root in question” (ibid, p. 263). Although he does not use the term, Sharmā claims here that auxiliaries follow main verbs, making mention of one, *to*. Consequently, he translates *toa to* (ibid, p. 264) by ‘is coming’, but he never formally identifies *-a* as an aspectual marker. However, Sharmā is well aware of the fact that the periphrastic construction has a progressive reading that extends to some habitual contexts. The progressive-habitual, or general imperfective, is according to him also used in present indefinite contexts. Sharmā (1992: 262-3) refers to it with the term “continuous” and claims it “denotes habitual action or an action of universal character”. While my data confirms the first part of his claim, I posit (see §3.1.1.1) that “an action of universal character” takes the habitual-assertive marker *-ts*.

What Sharmā describes as ‘present perfect’ (ibid, p. 264) is formed by adding a copula form to the past participial base of the verb (the stem and the suffix *-i*, alternatively *-ci*, or

ši, see p. 267). One example, *paŋ niŋ i pāco posi-to* ('a bird is seated on the tree') gives a clue about the existence of a distinct marker *-i*, typically occurring with posture verbs, a marker I describe as perfective tense. Sharmā observes (ibid, p. 264) that "in a non-formal speech, the copula is, however, dropped".

Sharmā (ibid. p. 265) also contends that the suffixes *-ce*, *-se*, *-te* (with stems ending in a vowel), *-de* (with stems ending in a nasal consonant) mark the past indefinite, which "denotes an action in progress or completed in the immediate past". My own list differs slightly, but we agree about the category expressed by these suffixes.

In addition to 'immediate past', Sharmā (ibid. p. 265-6) mentions "an indeclinable form obtained by suffixing *-i* to the verb roots", the same suffix found in his account of present perfect. Sharmā's claim that forms inflected for *-i* "freely occur with declinable forms" is consistent with my claim that the perfective markers always occupy the last slot of the main verb.

The past continuous is obtained by adding the past tense copula form *to* to the present participle base of the verb, as in *toa tase* ('was coming', ibid, p. 266). This applies to the habitual past, for example *roa tuteč* ('we used to go', ibid, p. 267), which confirms that the marker *-a* is an aspect marker with both a continuous and habitual reading.

The future tense is formed by suffixing */no/* (third person), */non/* (alternatively */nən/*) and */noč/* for second person singular and plural, and */non/* (alternatively */nək/*), and */noč/* for first person singular and first person plural respectively, to the verb stem. The phonological variation is also part of my own description (*-nək* vs. *-nak*). Whereas Sharma treats *-no* as temporal, I take it to be modal.

Sharmā (1992: 255, 280) missed the honorific subtleties of the imperative altogether. He only mentions the second person singular honorific marker *-ĩ* (ibid, p. 271), alternatively *-ŋi*, added to the verb root. The former corresponds to the second person singular honorific subject agreement suffix mentioned in §3.1.4. Sharmā does notice the occurrence of alternative (irregular) forms such as *dau* ('give!').

I find Sharmā's (ibid, p. 282) grouping of "mental states and attitudes of the speaker, such as wish, hope, requirement, possibility, probability, presumption, compulsion, permission (1st person), inquiry, certainty, necessity, advice, suggestion, obligation, benediction, condition etc" under the term 'subjunctive mood' problematic. The main reason is that both finite and non-finite forms may convey these notions. What he describes as 'potential' mood I take to be irrealis-dubitative.

3.5 A Comparative perspective on verbs within 'West-Himalayish'

Providing a comparative perspective on the entire verbal system found in 'West-Himalayish' is too daunting a task, reason why I limit myself to the most salient points, especially those with relevance to the subject of this thesis, following the order of the Chhitkul-Rākchham verb template presented in table 4 (see §3.1).

3.5.1 A comment on object agreement

In addition to TAM and subject agreement, I contend in §3.1 that object agreement is also a feature of Chhitkul-Rākchham. As seen in appendix 1, §1.5.3, object agreement is an under-researched area within the so-called West-Himalayish subgroup and my data reveals some surprising characteristics, see appendix 1, §1.5.3.

3.5.2 A comparative perspective on tense

With regard to tense, the use of suffixes to express temporal distinctions is a feature present in all the subgroup (Takahashi 2009: 30-4).

3.5.2.1 'Remote' vs. 'recent' past tense

The occurrence of two different past tenses is part of Widmer's (2014: 652) description of Bunan, where the 'remote' past tense, described as "generic", typically refers to events that took place in the distant past but may occur in any kind of past constructions, whereas the use of 'recent' past is restricted to relatively recent events. There are situations where the use of both past tense markers is perfectly acceptable. Widmer (2014: 550) contends the real contrast is evidential: "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".

Sharmā (1988: 140-2) describes a "reported past", expressed by means of *-gyo*, with an alternative semantic interpretation compared to an "observed past" expressed by means of *-na* in Kinnauri. The former denotes "an action of which the speaker has only a second hand knowledge, i.e. it is mostly used to refer to actions that took place in the distant or hoary past and of which the speaker has only a secondary information" whereas the latter "is indicative of an action that has taken place before the present time".

The distant past marker *-gyo*, alternatively realized as *-kyo*, is also part of Saxena's (1995: 265; 2000: 472, 480; 2002: 180) account of verbal morphology in Kinnauri. According to Saxena (2000: 481), "the distant past tense marker *gyo* occurs only in the indirect free speech of narratives, where it always occurs with *du* [as *du-gyo*, see Saxena (2002: 187) for an example] and never with *to* (...) the distribution of *to*, *du* and the distant past tense marker (*-gyo*) seems to be correlated with the differences in the level of involvement of the narrator". In other words, the distinction between 'distant' or 'narrative' past and 'recent' past seems to be more clear-cut than what we can infer from Sharmā's account, where we are lead to believe that 'distant' past may also occur in recent past contexts.

The situation is more intricate in Shumcho (Huber, personal communication) due to the interplay between aspectual and temporal considerations. The perfective aspect marker *-u* typically occurs in narrations, but exhibits a similar all-pervasive quality, occurring in both distant and recent past contexts, like in Bunan⁸¹. An alternative form, *-re*, followed by subject agreement suffixes, marks past tense and occurs less often. Huber contends the difference between these two is of epistemic (evidential) nature, *-u* denoting certainty (but only when the subject is marked with the ergative) and *-re* less certainty by comparison. In addition, Huber mentions the suffix *-riu*, which indicates some kind of present perfect, i.e. refers to relatively recent events.

To complicate things further, Huber (2013: 226-7) claims that the same form as in Kinnauri, *-gyo*, is present in Shumcho as a "past/non-future irrealis" (i.e. not 'narrative' past) marker.

⁸¹ Within West-Himalayish, the presence of two distinct past tenses seems to be limited to Bunan, Shumcho, Kinnauri and Chhitkul-Rākchham.

The suffix occurs in interrogatives “if the speaker is speculating or wondering about some state of affairs or potential options, with *-gyo* apparently indicating insufficient external evidence or information, or insufficient personal knowledge on the speaker’s part”. In declaratives, *-gyo* “indicates a possibility, option or conclusion for which there is some evidence, or an informed guess”. Past tense constructions thus bear a clear relationship with evidence.

In all the previously mentioned languages, an auxiliary may follow a main verb only, and only if the latter is marked for ‘distant’ past, or perfective. There is, therefore, an alternative between ‘recent’ past (imperfective), where evidentiality does not arise, and ‘remote’ past (perfective), where the speaker views the event in its totality, and expresses evidential distinctions.

The full range of epistemic judgements the speaker is authorized to make remains an open question. I show in §5.5.2 that in the main clauses where the perfective markers *-i*, *-fi*, and *-ti* occur, the (optional) auxiliary in Chhitkul-Rākchham bears more evidential distinctions than seems to be the case in Kinnauri. I also argue against Saxena’s (2002: 165) claim of a “neutral mechanism of narrating events” since *du* may occur in the context of indirect free speech.

3.5.2.2 Future tense

A widespread feature within ‘West-Himalayish’ is the presence of a multiplicity of suffixes to express future tense. In Bunan, Widmer (2014: 630-1) mentions a set of “simple future tense endings, which exclusively occur in the transitive conjugation” and a set of “assertive future endings, which are attested in all three [transitive, intransitive and middle] conjugations”. Of special interest is the counterpart of the all-pervasive ‘remote’ past tense marker in future tense constructions.

Darma (Willis 2007: 109-110) is the only other language of the subgroup where transitivity is a defining factor in the distribution of the three allomorphs of the future marker */-aŋ/*, namely *[-aŋ]*, *[-jaŋ]*, and *[-ŋ]*. The other factor is phonology, also central in Shumcho (Huber 2013: 226). In Kinnauri, yet another factor at play is subject agreement.

In comparison, Chhitkul-Rākchham (see appendix 1, §1.5.5) also exhibits subject agreement suffixes. However, the dubitative (irrealis) *-no* exhibits a very limited phonological variation – vowel tensing (*-no*) before the first person singular marker *-k* and the first and second plural *-tʃ*, and the variation *-no* vs. *-na* observed with first person singular. Within the subgroup, only Byangsi (Sharmā 2001a: 55-6) and Rongpo (Sharmā 2001b: 227-8) display a similar straightforward ‘future tense’ marking.

Future tense markers are never epistemically neutral. According to Sharmā (2001a: 56), “the Byangsi future expresses an uncertain future. A definite future is more aptly expressed in Byangsi by means of the present or present progressive”. In Rongpo (Sharmā, personal communication), future tense also conveys a dubitative meaning. In Shumcho, Huber (2013: 235) contends subject agreement suffixes, which occur right after future tense markers, determine the epistemic reading: “if agreement markers are used, the speaker is rather certain that the event denoted by the verb will take place, in forms without agreement the speaker merely considers the possibility”. In Bunan, Widmer refers to a set of assertive future endings applying to all types of finite verbs: “as the label “assertive” implies, these endings express the speaker’s firm belief that a certain event will occur” (2014: 631). In contrast, Bailey (1909), Sharmā (1988) and Saxena (1995, 2000, 2002, 2017, 2019) never ascribe any epistemic meaning to the future tense markers found in Kinnauri.

Finally, in some languages of the subgroup, there is a conflation between copula verbs and future tense markers. Takahashi (2009: 33) observes it is the case in Tinan, Patani, Kanashi and Kinnauri. With regard to the latter, the copula verb *to* functions as future tense marker (Saxena 1995). Bunan seems to exhibit a similar conflation. According to Widmer (2014: 632-3), “assertive future tense markers might be reflexes of the existential copula *ni-*”. Further, “the future tense endings that are attested in the transitive conjugation (...) look like reflexes of the possessive copula *ta-*”.

3.5.2.3 Subject agreement

Kinnauri and Patni (with a fully-fledged system) put aside, “as a whole, the person marking pattern of West Himalayan is based on SAP or the deictic center, that is, the members of SAP are marked on a verb, and in particular first person singular is differentiated from

other person and numbers” (Takahashi 2009: 30). Table 16 (see §3.1.4) shows that such is the case in Chhitkul-Rākchham too.

While the interaction between TAM markers results in some degree of variation in terms of verb complex morphological structure, the situation is more straightforward when considering subject agreement. First, whenever subject agreement is marked on the main verb, no auxiliary ever follows. Further, no verbal complex may ever include two subject agreement markers. Finally, only subject agreement may follow tense (Willis (2007a: 328); Saxena (1995: 263); Widmer (2014), but not obligatorily: in Shumcho, Huber (2013: 235) mentions one type of future tense devoid of person agreement marking. The third pattern does not apply to Chhitkul-Rākchham if we take *-no* to denote mood, and not tense.

Chapter 4: the expression of evidentiality by means of copulas

In Tibeto-Burman languages, evidentiality is notoriously expressed by means of copulas and auxiliaries (DeLancey 2001). The following subsections provide an outline of the basic features of the copula system found in Chhitkul-Rākchham, which includes an inventory of the copulas (§4.1), an overview of their basic syntactic function (§4.2), semantic properties (§4.3), distribution in negative (§4.4) and interrogative (§4.5) clauses, and a discussion on their optionality (§4.6). The section ends with some concluding remarks (§4.7), providing a description of the epistemic scheme to which the copula verbs contribute and some elements of comparison with Kinnauri.

4.1 An inventory of the Chhitkul-Rākchham copulas

I introduce the term copula in §4.1.1, looking at it through syntactic and semantic lenses. I then discuss a list of twelve copula-like elements, providing their morphological template, identifying five underlying copulas, the remaining seven forms fulfilling a function of syntactic allomorphs (§4.1.2). I then provide an example of each of the twelve copula-like elements (§4.1.3) and the inflectional paradigms (§4.1.4). I then discuss the description of the Chhitkul-Rākchham copulas found in Bailey and Sharmā (§4.1.5) before addressing cognates within ‘West-Himalayish’ (§4.1.6) and copulas in Kinnauri based on Bailey, Sharmā and Saxena (§4.1.7). Finally, I provide some introductory observations on diachrony (§4.1.8).

4.1.1 A definition of the copula and syntactic vs. semantic approach

Copula verbs exhibit a high level of diversity from a cross-linguistic perspective, reason why most scholars, whether dealing with copulas directly or indirectly, refrain from providing any definition.

According to Pustet (2003: 5), a copular verb “is a linguistic element which co-occurs with certain lexemes in certain languages when they function as predicate nucleus. A copula does not add any semantic content to the predicate phrase it is contained in”. At the clausal level, Dixon (2009: 159) characterizes a copula clause as a distinct type from transitive and intransitive ones, a clause that “has as predicate a copula verb, taking two

core arguments, Copula Subject (CS) and Copula Complement (CC)". He further observes that contrary to a predicate in transitive and intransitive clauses, "a copula verb as predicate is different in that it has relational rather than referential meaning", i.e. its syntactic function outweighs its semantic role.

A copula clause thus typically includes a copula verb – although it may be omitted – connecting two noun phrases. NP-NP copular clauses are somewhat similar to transitive ones in that they have two arguments. However, as pointed out by Pustet (2003: 7), "copulas are typically intransitive".

Reviewing the three commonly acknowledged syntactic functions of copulas, Pustet (2003: 2-5) concludes that none is entirely satisfactory. "The function of a 'linker' between subject and predicate" does not account for languages devoid of copulas. "The function of a syntactic 'hitching post' to which verbal inflectional categories can be attached" does not explain why some copulas like the Mandarin *shì* never carry verbal inflectional categories. Finally, "the function of a predicator (...) which is added to lexemes that do not form predicates on their own" does not provide an adequate answer to why 'tall' requires the insertion of a copula when functioning as predicate nucleus in English, but not in Mandarin.

Copular clauses are the object of various taxonomies. Higgins (1973, 1979) divides copular clauses into predicational, equative, specificational, and identificational. Other scholars (Heycock and Kroch 1999; den Dikken 2006) merge specificational and equative, Mikkelsen (2005) disputes the relevance of identificational clauses, Birner, Kaplan and Ward (2007) merge them with equatives, and Heller (2005: 198) sees only two types: predicational and equative.

Based on Pustet and Dixon's definitions, it would seem there is a consensus on the little semantic content of copula verbs. Some scholars (Hengeveld 1992; Stassen 1997, den Dikken 2006: 245) go even as far as claiming they have no meaning whatsoever.

A first argument against the 'semantically empty' (Hengeveld 1992: 32) view is the high number of relevant forms found in some languages, notably in Tibeto-Burman. LaPolla (2003:233) reports only one copula (but five existential verbs) in Qiang, Huber (2005: 98) mentions eight copulas in Kyirong. Gawne (2013: 152) lists nine distinct copula verbs in

Lamjung Yolmo. Within ‘West-Himalayish’, Bunan exhibits four copula verbs (Widmer 2014: 577), Kinnauri has reportedly three (Bailey 1909), four (Sharmā 1988: 134) or five (Saxena (1995: 265, 2017: 768), Shumcho two (Huber 2013: 231), and Darma only one (Willis 2007: 333).

Distinct factors play a role in the occurrence of multi-copula systems: type of construction (for different taxonomies, see Higgins 1979 and Payne 1997), grammatical category of the pre-copular constituent, nature of the subject (animacy, honorificity), etc. LaPolla (1994: 74-5) lists “animate vs. inanimate”, “abstract vs. concrete”, “location within a container vs. location on a plane” as notorious important factors when considering the number of existential verbs, etc. The observed diversity – in terms of number, but also of type of verbs – seems irreconcilable with the semantic void hypothesis.

Another argument is the subject of the present thesis, namely evidentiality. If, in a simple sentence like ‘he is rich’, three or four different copulas compete with each other for the same slot, it is then obvious these copulas display semantic distinctions. According to Higgins (1979: 207), “the factor which seems to be important in copular sentences is more often a distinction between what is known and is familiar and what is not known and is unfamiliar”, an observation that clearly relates to information management. Regrettably, scholars almost exclusively refer to Higgins (1973, 1979) because of his taxonomy of copular clauses.

4.1.2 Copula allomorphy

As verbs, copulas typically occur in clause-final position. For reason of stylistic effects, subjects may nevertheless occur in clause-final position in narratives. The Chhitkul-Rākchham copulas have the following surface realizations:

Table 17: surface realization and template of the Chhitkul-Rākchham copulas

Surface realization	Template
<i>hɛn</i>	(NEG)V _{COP} .EMPH
<i>hun-no-∅</i>	(NEG)V _{COP} .MOOD-AGR
<i>hun-ts</i>	(NEG)V _{COP} -ASP
<i>a-no</i>	(NEG)V _{COP} .MOOD-(AGR)
<i>a:-no</i>	(NEG)V _{COP} .MOOD-(AGR)
<i>a:-ts</i>	(NEG)V _{COP} -ASP
<i>ta</i>	(NEG)V _{COP} -(IMPV)-(AGR)
<i>to-∅</i>	(NEG)V _{COP} -(IMPV)-AGR
<i>tɔ-ts</i>	V _{COP} -ASP
<i>tu-ts</i>	(NEG)V _{COP} -ASP
<i>man</i>	CVB.NEG.EMPH
<i>mat ti</i>	CVB.NEG V _{COP}

Crosslinguistically, copulas are often irregular compared to main verbs. Table 18 also shows that copula verbs (and syntactic allomorphs) are defective.

It would be tempting to gloss *tɔ-k* as COP-PRS-AGR with present tense not overtly marked - ∅, but this would entail copulas inflect for one category – present tense – entirely absent from main verbs, thus contradicting my statement that copulas are defective verbs. Further, I argue in §5.8.3 that the converb *hɛkso* consists of *hɛ* fused with 1SG and inflected for the prospective marker *-so*, with *hɛ* referring to an original demonstrative form which, combined with AGR (*-k*), used to contrast with the assertive *hɛn* and had *ma*-AGR (postverbal NEG-AGR) as antonym (see table 80 in §6.4). I thus conclude that *ta* exclusively inflect for one type of tense, namely imperfective (*-se*), and *to* for imperfective (*-te*) or habitual (assertive) *-ts*.

Another noteworthy difference between copulas and main verbs is that some of the surface realizations of the former category are not compatible with all types of subjects.

Copula verbs and auxiliaries inflect for the grammatical categories of negation, tense, aspect, mood, person, and number, although not simultaneously. The table below lists the inflectional affixes that the set of five copulas I identify below can take.

Table 18: Grammatical categories Chhitkul-Rākchham copula verbs inflect for:

Grammatical category	Affix
Imperfective	-se or -te
Irrealis (dubitative)	-no
Habitual-assertive	-ts
Person and number (following IMPV or IRR.DUB only)	-k (1SG) -ĩ (2SGHON) -n (2SGNHON) -∅ (3) -tj (1PL and 2PL)
Negative polarity	ma-

Person and number markers can only follow *-no* (irrealis), *-se* and *-te* (imperfective). Main verbs, copulas and auxiliaries have the marker *-te* in common. The marker *-se* is restricted to copulas (and auxiliaries) while *-de* is restricted to main verbs.

Looking at table 17, we may infer the real number of copulas is lower because some of them have the same base, namely *hun* (*hunno* and *hunts*) and *a*: (*a:no* and *a:ts*). What distinguishes *hunno* from *hunts* and *a:no* from *a:ts* is the type of inflection taken by *hun* and *a*: respectively. The inflection is *-no* + AGR in the case of *hunno* and *a:no*, and *-ts* in the case of *hunts* and *a:ts*.

As we shall see in §4.2, the pair *hunno* and *hunts* occur in the same environments in locational future tense constructions, exhibiting a different epistemic meaning (dubitative vs. assertive) depending on the type of inflection (*-no* vs. *-ts*).

The pairs *hunts* and *a:ts* on the one hand and *hunno* and *ano* (or *a:no*) on the other may all occur in future tense locational constructions (see table 32 in §4.2.5). In table 32, *hunno* and *hunts* exclusively occur with animate subjects. However, *ano* (alternatively *a:no*) may

also do so, which means, *hunno* and *ano* (or *a:no*) are not in complementary distribution in this precise environment.

The copula *a* in *a:-ts* has no equivalent in **ats*. *Ano* and *a:no* are in free variation in future tense identity and possessional constructions (see table 30 and 31 in §4.2.3 and §4.2.4). In other words, *ano* and *a:no* do not contrast. We are thus dealing with one underlying syntactic element. The copula *a* having the widest distribution, I argue *a* is the underlying copula form whereas *a:* is a syntactic allomorph. The copula *a* invariably takes the suffix *-no* (and AGR in all instances but possessional constructions). The copulas *a* and *a:* being phonologically close, we are here dealing with a case of weak allomorphy – further, *a* ‘be’ and *a:* ‘become’ are also very close from an etymological point of view.

A:ts as a syntactic allomorph occurs in present and future tense constructions. Because *hunno* and *hunts* exclusively occur in future tense locational constructions, I claim they are syntactic allomorphs of *hɛn*, which has a wider distribution, and stands phonologically close to *hun*. Like *a* and *a:*, *hɛn* and *hun* cover both present and future tense constructions. I provide further evidence for the treatment of *hɛn* and *hun* as a single element in §4.4.6.

Whereas in *a* vs. *a:* allomorphy is conditioned by their similar inflectional properties (both *a* and *a:* take the suffix *-no*), *hɛn* vs. *hun* is different because *hɛn* can only take the negative prefix *ma-*. In §4.4.6, I nevertheless emphasize that *hɛn* and *hun* combined have the same distributional properties as the Mandarin Chinese pair *hěn* 很 and *shì* 是.

Whereas in *a* vs. *a:* we are dealing with a case of weak allomorphy, the situation is more complex in the case of *hɛn* and *hun*. We may treat them as a case of both weak and suppletive (see Halle and Marantz 1993 and Myler 2018). Weak because both forms are phonologically close, suppletive because their meaning – *hɛn* stems from *ɛnaŋ* ‘to hear’ (see §6.4) and *hun* from *hunaŋ* ‘to stay, live’ – differ greatly from a synchronic perspective.

To, *tɔts* and *tuts* exhibit yet another type of allomorphy. These three forms share the same origin, namely the motion verb *tɔŋ* ‘to come’. The contrast between *to* and *tɔts* is in terms of aspect (imperfective *-te*) + AGR vs. aspect (habitual-assertive). The TAM marker is also the habitual *-ts* in *tuts*, but *tu* is the lexical base of *tɔŋ*, found in *tu-ti* (perfective), *tu-te* (imperfective), *tu-no* (irrealis), and *tu-ts* (habitual). The difference between *tɔts* and *tuts* is

in terms of ‘regular’ vs. ‘irregular’ (stem alternation) form of *tɔŋ* inflected for *-ts*. What is different from the pairs *hunno* and *hunts* and *a:no* and *a:ts* is that *to* and *tɔts* do not contrast in future tense constructions, but in present and past tense ones. What is nevertheless common to these three cases is that *hunts*, *a:ts* and *tuts* are the only forms occurring in present tense constructions (as seen in §3.1.1.1 present temporality is expressed by means of an aspectual marker), where they are identical to the lexical verb form.

Tuts exclusively occurs in generic locational constructions like (69) – see §4.3.3 – with a place name as subject. In this context, *tuts* occurs in free variation with *tɔts*, but *matuts* is the only option in negative constructions, as *tɔts* cannot be negated. The very restricted occurrence of *tuts* is very similar to that of *hunts*. Both forms exclusively occur in locational constructions. I therefore argue we are again dealing with a case of allomorphy, but not suppletive, since *tuts* and *tɔts* have one unique underlying phonological form (*tɔ ~tu*) and semantic meaning.

I treat *a:ts* (or *a:no*), *hunts* (or *hunno*) and *tuts* as syntactic allomorphs, which is consistent with these being identical to the realization of the lexical verb they stem from (*asaŋ* ‘to become’, *hunaŋ* ‘to stay, live’ and *tɔŋ* ‘to come’) in both present and future tense contexts.

Now, only the question of how we have to treat *to* and *tɔts* remains. A first important observation to make is that these two have one underlying base, namely *to*. in the former case, *to* inflects for imperfective (*-te*) and subject agreement (alternatively only subject agreement), in the latter case, *to* inflects for the habitual (assertive) *-ts*. Since *to* and *tɔts* are the surface realizations of one underlying form, namely *to*, one may argue we are dealing with one unique copula.

However, table 28, 29, 30, 31, 32 and 33 (see §4.2) make it clear *to* and *tɔts* contrast with each other on distributional grounds – one exception being possessional constructions (see table 31 in §4.2.4). Further, the construction *to*-(IMPV)-AGR may be negated by means of the prefix *ma-* whereas *to*-HAB.ASS may not.

According to Harris (1951), if one wants to determine a contrast objectively – without making any assumptions – one has to observe the differences in the distribution of the

selected segments and ask a native speaker whether there is a difference of meaning between them when conducting a so-called *pair test*.

Referring to Harris, *to*-AGR and *to*-HAB are two "linguistically relevant" segmentations of utterances, i.e. *to*-∅ (with third person and with a present tense reading by default) and *tɔ*-*ts* are two distinct copulas. This conclusion takes heed of the correlation between form and meaning. *To* is the underlying form found in both cases, hence my characterization of both *to* and *tɔts* as personal 'egophoric' copulas, the difference being epistemic: *tɔts* is more assertive in comparison.

A last case of syntactic allomorphy is found in *man* and *mat ti*. I give an account of their distribution in §4.4.1 and §4.4.2 and I discuss both from a diachronic perspective in §4.4.6. *Man* and *mat ti* are peculiar in that they serve a copula-like function as converbs. In §4.4.6, I reach the conclusion that *man* and *mat ti* are syntactic allomorphs of *maħen*, the fundamental difference between *man* and *mat ti* being epistemic.

What *ano* and *a:no* on the one hand, and *to*, *tɔts* and *tuts* on the other, share is one specific instance where the distinctions between the surface realizations does not hold: *ano* and *a:no* in table 31 (§4.2.4), *tɔts* and *tuts* in present tense locational constructions where the subject is a generic place. The situation is different in the case of *ħen* vs. *ħunts* and *ħunno*: these are strictly separated by tense.

The reverse situation to *ano* and *a:no* and to *to*, *tɔts* and *tuts* is observed in *maħen*, *man* and *mat ti*. As shown in table 25 (§4.2), the distinctions between the surface realizations do not hold in most instances – in four types of copula constructions in the present tense. Like in the case of *matuts*, there are very specific contexts where only *man*, as in (81), or *mat ti* (location in the present tense) occur, and where *maħen* does not.

Based on the above discussion, I conclude that among the twelve previous forms, Chhitkul-Rākchham counts five distinct copulas (*a*, *ta*, *to*, *tɔts*, and *ħen*) and seven syntactic allomorphs (*a:no*, *a:ts*, *tuts*, *ħunno*, *ħunts*, *man* and *mat ti*).

4.1.3 Additional observations on the set of copulas and their surface realizations

Chhitkul-Rākchham has a set of five copula verbs. With five copulas, Chhitkul-Rākchham finds itself at a middle end from an areal perspective. Copulas function as predicate nominals (Payne 1997: 111) and involve distinctions in evidentiality as defined in §2.4.2. The copula subject invariably takes the absolutive case.

The full list of copulas is the following: *a*, *ta*, *to*, *tɔts*, and *hɛn*. I address the previous five copulas in the exact same order in the following sections, discussing all their surface realizations.

As the above list suggests, four of the relevant copulas (*a*, *ta*, *to* and *tɔts*) are compounds copulas, and only one three (*hɛn*) is a simple copula (and can only take *ma-*).

In §4.1.2, I claim *hun* is a syntactic suppletive allomorph of *hɛn*. I nevertheless provide an illustration of its surface realization in (21) and (22). In the former example, *hun* takes the suffix *-no* and the subject agreement marker \emptyset in a locational construction with an animate subject. The ending in *-no* conveys some doubt about the content of the proposition:

(21) ϵ me= \emptyset steɪfən=niŋ pã:tʃ bədʒe hun-no- \emptyset
3SG.HON=ABS station=LOC five o'clock COP-IRR.DUB-3

‘He will be at the station at 5 o'clock (maybe)’

cik02-TB-2018-10-25-24:20

In (22), the context is similar to (21). We are dealing with a locational copula clause with an animate subject: *hun* takes the suffix *-ts* instead of *-no* in case the speaker is more confident about what is going to happen in the future:

(22) ga:= \emptyset obi kjim=o hun-ts
1SG=ABS tomorrow home=LOC COP-HAB.ASS

‘I will be at home tomorrow’ – DSN

In (23), the form *ano* indicates that the speaker is not acquainted with Ram. Consequently, *ano* expresses some doubt as to Ram's physical appearance:

(23) ram=∅ ru-i a-no-∅
 Ram=ABS tall-MODIF COP-IRR.DUB-3
 'Ram is tall (maybe)'
 cik01-ST-2018-12-17-07:15

Example (24) is from a conversation on a debatable topic, the speaker is not entirely certain about the content of the proposal: *a*: takes the suffix *-no*. As long as the speaker is confident in his prediction, (s)he uses *a:ts* instead of *a:no*, that is, *a*: inflected for *-ts*:

(24) hojo tʃʰɛtiŋ te kʰe la: kjaŋ-sa:=∅ latʃ-aŋ=o=sea
 DEM.DIST POST.PURP then what do.PROG 1PL.INCL-PL=ABS do-INF=FOC=NOMI
 i: dear man-na ta bara muʃkil a:-no-∅ i: dear=∅
 one day CVB.EMPH-COND AUX.PE INT difficult COP-IRR.DUB-3 one day=ABS
 'This is why, what to do? We should do this otherwise one day it may become difficult'
 DEB_cik01-RK- BSN1-2018-10-15-75

In (25), the speaker describes the old measuring system found in Chhitkul and Rākchham villages. The forms *a:ts* denotes common procedural knowledge, a kind of knowledge that cannot be doubted (factual, or assertive), reason why *a*: takes the suffix *-ts*:

(25) hatao diŋ=tʃi te swalbɔŋ=∅ a:-ts
 hatao that=ABL then swalbong=ABS COP-HAB.ASS
 'After 'hatao' there is 'swalbong' (measuring units)
 TRD_cik07-MSN-2019-03-09-9

Example (26) is another illustration that *a:no* and *a:ts* are contrastive. A speaker may use *a:no* in case there is any doubt about how things will turn out in the future, *a:ts* if there is

any reason – for example his own resolution – that allows him to predict the future with absolute certainty:

(26) *halta=tʃi* *huju=∅* *he=o* *a:-no-∅* / *a:-ts*
right now=ABL DEM.PROX=ABS like=FOC COP-IRR.DUB-3 COP-HAB.ASS

‘From now on it will happen like this - maybe/certainly’ – DSN

Example (27) is an attributive construction, but since it includes an element of possession, the pattern of distribution is identical to possessional constructions (see §4.2.4), where *ta* typically occurs with second and third person subjects:

(27) *kĩ* *mastər=∅* *zo-i* *ta*
2SG.POSS.HON master=ABS good-MODIF COP.PE

‘Your teacher is good’

cik01-TB-2018-10-04-25:48

Example (28) illustrates the use of *to* with first person in possessional constructions. In this context, *to* is the only choice available to the speaker and it does not take the subject agreement *-k*:

(28) *ai* *mastər=∅* *zo-i* *to*
1SG.POSS master=ABS good-MODIF COP.PEEX

‘My teacher is good’

cik01-TB-2018-10-04-24:17

In (29), *to* takes the suffix *-ts* as his knowledge stems from personal experience: there is not a shred of doubt in his statement since he is a member of Rākchham’s community:

(29) *raktʃʰam* *def=o* *ŋã* *kʰandan=∅* *tɔ-ts*
Rākchham village=LOC five clan=ABS COP.PEEX-HAB.ASS

‘There are five khandan in Rākchham village’

cik01-ST-2018-12-17-08:56

Example (30) is the only kind of construction – the location of a city – where *tuts* occurs. As argued in §4.1.2, I take *tu* to be a syntactic allomorph of *to*:

(30) Lasa=∅ india=du ma-tu-ts
 Lhasa=ABS India=LOC NEG-COP.come-HAB.ASS
 ‘Lhasa is not in India’ – DSN

Example (31) displays a standard use of *hen* in a proper inclusion construction. *hen* can occur with all pronouns as subject:

(31) ram=∅ pala-tji=∅ hen
 Ram=ABS shepherd-AGT=ABS COP.EMPH
 ‘Ram is a shepherd’ cik01-ST-2018-12-17-3:03

Example (32) provides an illustration of the use of the negative form *mat ti*. In the past, its occurrence is restricted to locational and existential constructions:

(32) niŋ-sa:=∅ ətsə bɔr-e tʃʰul def=o səɖak=∅
 1.PL.EXCL-PL=ABS small CVB.SIM-IMPV Chhitkul village=LOC road=ABS
 mat ti
 CVB.NEG COP.PE
 ‘During our childhood, there was no road in Chhitkul village’
 AUT_cik01-RK-2018-10-08-4

Example (33) is an identificational construction with an element of possession. Consequently, like in (27) and (28), the pattern of distribution is identical to possessional constructions, where *man* may occur (also in the past):

(33) huju kjim=∅ roʃan=e man
 DEM.PROX house=ABS Roshan=GEN COP.NEG.EMPH
 ‘This is not Roshan's house’ – DSN

As syntactic allomorphs of *maħen*, *mat ti* and *man* serve a copula-like function: they comply to the definition of “a word that links a subject and a predicate” (Narahara 2002: 16). In §5.5.1, they also follow a main verb as negators, functioning as syntactic allomorphs of *ma-*. *Man* and *mat ti* are drifting somewhere between derivation and inflection.

4.1.4 Tabular paradigms for the copulas – including all their surface realizations

The allomorph *ħun* exclusively serves a copula-like function in locational constructions with a future tense reading: it is existential. Synchronically, *ħun* serves as root for the lexical verb *ħunaŋ* ‘to stay, live’. When *ħun* inflects for *-no*, the negative form is *maħunno* and when *ħun* inflects for *-ts*, it is *maħunts*. The pair *ħunno* and *ħunts* contrasts (dubitative vs. assertive) from an epistemic perspective, and *ħunts* is an alternative to *ħun-no-AGR* regardless of person as subject:

Table 19: inflectional paradigm for the suppletive allomorph *ħun*

Person	Singular	Plural
1	ħun-nɔ-k	ħun-nɔ-tʃ
2NHON	ħun-nɔ-n	
2HON	ħun-no-ĩ	
3	ħun-no	ħun-no

The copula *a* has the meaning of ‘to be’, although it has no infinitive form. The copula *a* cannot stand alone; the irrealis *-no* invariably attaches to it. As such, it is also marked for person. The negative form of *ano* is *maano*. In present tense constructions, *ano* only inflects for person and number in locational contexts:

Table 20: inflectional paradigm for the copula *a*

Person	Singular	Plural
1	a-nɔ-k	a-nɔ-tʃ
2NHON	a-nɔ-n	
2HON	a-no-ĩ	
3	a-no	a-no

A: originates from *asaŋ* ('to happen, to become'), the stem of which is *as-*. I discuss the process of deletion (of /s/) in appendix 1, §1.5.1. A: takes the suffix *-no* in future tense constructions, but it takes *-ts* in both present and future tense constructions. The negative forms of *a:no* and *a:ts* are *maa:no* and *ma:ats* respectively. Like in table 19, *a:ts* is an alternative to *a-no-AGR*, conveying a more assertive meaning in comparison:

Table 21: inflectional paradigm of the allomorph *a:*

Person	Singular	Plural
1	a:-nɔ-k	a:-nɔ-tʃ
2NHON	a:-nɔ-n	
2HON	a:-no-ĩ	
3	a:-no	a:-no

Ta, from *tasəŋ* 'to keep, put', is marked for imperfective (*-se*) and never occurs with a first person subject in a present tense context. *Ta* only inflects for subject agreement in the imperfective. The negative form of *ta* is *mata* and its imperfective equivalent is *matase* or *matas*:

Table 22: inflectional paradigm of the copula *ta* (imperfective)

Person	Singular	Plural
1	-	ta-sɛ-tʃ
2NHON	ta-sɛ-n	
2HON	ta-se-ĩ	
3	ta-se	ta-se

To is marked for the imperfective (*-te*). The copula is also marked for person in both present and past contexts. *To* is compatible with all subjects. The third person negative form of *to* is *mato* (present reading) and *matɔte* (imperfective, in a past context):

Table 23: inflectional paradigm of the copula *to* (present and past temporality)

Person	Present tense	Present tense	Imperfective	Imperfective
	Singular	plural	singular	plural
1	tɔ-k	tɔ-tʃ	tɔ-tɛ-k	tɔ-tɛ-tʃ
2NHON	tɔ-n		tɔ-tɛ-n	
2HON	tɔ-ĩ		tɔ-tɛ-ĩ	
3	to	to	tɔ-te	tɔ-te

Tɔts occurs in present and past tense constructions. With present tense, *tɔts* only occurs in locational, existential and possessional (inalienable) constructions, although never with first person in the latter case. In the past, *tɔts* occurs in all types of constructions and with second and third person (not first person) in possessional (inalienable) constructions. *Tɔts* cannot be negated: **matɔts*.

Tuts occurs in locational constructions in the present tense. Its use is always impersonal, i.e. as a copula, it can only take third person inanimate (places) subjects in locational constructions. The negative form of *tuts* is *matuts*.

The copula *hɛn* is not sensitive to TAM, person and number. As a copula, *hɛn* exclusively occurs in present tense proper inclusion, attributive and possessional constructions. It can always be replaced by another form (*to*, *ta*, or *ano*), depending on the type of construction. The copula *hɛn* can be negated (*mahɛn*).

Man and *mat ti* are negative forms. *Man* being the antonym of *hɛn*, it shares its emphatic meaning. In their copula function, *man* and *mat ti* do not inflect for aspect, person and number. I discuss the distributional properties of *man* and *mat ti* in §4.4.2.

Table 24: Morphosyntactic properties of the Chhitkul-Rākchham copulas – including all their surface realizations

	COP	AUX	IMPV	IRR	AGR	HAB.ASS	NEG	Subjects
<i>hunno</i>	-	-	-	X	X	-	X	All
<i>hunts</i>	-	-	-	-	-	X		All
<i>ano</i>	X	X	-	X	X	-	X	All
<i>a:no</i>	-	-	-	X	X	-	X	All
<i>a:ts</i>	-	-	-	-	-	X	X	Non-pronominal
<i>ta</i>	X	X	X	-	X	-	X	All but first person
<i>to</i>	X	X	X	-	X	X	X	All
<i>tɔts</i>	X	X	-	-	-	X	-	All
<i>tuts</i>	-	-	-	-	-	X	X	Generic places
<i>hɛn</i>	X	X	-	-	-	-	X	All
<i>man</i>	X	-	-	-	-	-	-	All
<i>mat ti</i>	X	-	-	-	-	-	-	All

4.1.5 Inventory of copulas in Chhitkul-Rākchham according to Bailey and Sharmā

The system of copula and auxiliary forms found in Chhitkul-Rākchham has a complexity that is certainly not inferable from Bailey and Sharmā's descriptions.

Bailey (1920: 81) makes mention of only three forms with an explicit copula function: *hɛn*, *tā*, and *tō*, "each of which means "am, is, are, art", doing duty for all persons and both numbers". Bailey only provides the past tense paradigm for *to*: *tōtɛk*, *tōtɛn*, *tōte*, *tōtɛk*, *tōtɛn*, and *tōte*.

Although Sharmā's description is more comprehensive than Bailey's, he only mentions "two roots", (1) *to*, *ta* and (2) *hun* in the first instance: "the former is used for the present and past tenses and the latter for the future tense" (1992: 261). With regard to *to* and *ta*, the paradigms he provides (ibid) suggest that *ta* is restricted to third person, which is not supported by my own data. Sharmā also claims (ibid, p. 262) that "the past tense form *təse*

is indeclinable”, which is consistent with his restricted use to third person in his description, but as shown in table 17, *ta* can inflect for person (1SG *-k* excepted) and number. The past tense paradigm actually describes the verb *təŋ* (‘to come’) from which *to* is derived, but *to* has a distinct form in the past: 1SG is *tətək*, not *tutək*, which means (‘I came’). While Sharmā claims that /*hun-*/ means ‘to become’, my data indicates that it is the root of the existential verb *hunəŋ*, ‘to live, stay’. Sharmā never mentions *hunts*. Neither Bailey nor Sharmā ever refer to a copula ending in *-ts*.

Interestingly, Sharmā adds (ibid) that “there seems to be a root like /*as-*/ or /*aš-*/ as well to convey the sense of ‘to be, to become’, as in /*əsi to/* (ord.), /*əsi toš/* (hon.) has become”, which can be linked to *a:ts* and *a:no* from my own data.

The form *ano* is also part of his description (1992: 283, 284, 296, 301), where it “denotes the possibility of occurrence of an action with reference to the present or past time (...) besides, the sense of probability and presumption, with inferred certainty, can also be expressed with the forms of this mood (...) it is expressed with future tense forms of the verb ‘to become’”. Sharmā does not provide any example of *ano* where it would occur as a copula, but the terms ‘probability’ and ‘inferred certainty’ betray its epistemic flavour.

4.1.6 Cognates of the Chhitkul-Rākchham copulas

The following sub-sections deal with cognates within the ‘West-Himalayish’ subgroup (§4.1.6.1), in Tibetan (§4.1.6.2) and in Mandarin Chinese (§4.1.6.3).

4.1.6.1 Cognates of the Chhitkul-Rākchham copulas in ‘West-Himalayish’

An obvious source for the copulas *hunno* and *hunts* is *hunəŋ* ‘to live, stay’, which has one identifiable cognate within West-Himalayish, namely *hum-pəŋ* (‘to stay, to sit’) in Rongpo (Sharmā 2001b: 220). Stem variants include *hunc-*, *hun-*, *hum-* (ibid, p. 266) with the meaning of ‘to sit, to live, to be’. Shumcho *waŋ-ma* (‘to happen, to become, to turn out to be’), which surfaces as *huŋ-ma* with speakers from Jangi and in Jangrami, is worth considering, although *pos-ma* has the meaning of ‘to live, to stay’ in addition to ‘to sit’ (Huber, personal communication)⁸².

⁸² Another cognate outside of West-Himalayish is Nepali *hunnu* ‘to be, become’ (Turnbull 1923 [1887]: 66).

However, I argue in §4.1.6, §4.7, §5.12 and §6.1.4 that /n/ in *hun* has the same emphatic meaning as in *hen* and *man*, which suggests the true origin of *hun* is the proximal demonstrative *hu-i* (DEM-MODIF).

In all the other neighbouring languages, the stem is different: *dzot-* in Bunan (Widmer 2014: 214), with the meaning of ‘to stay’, and which seems to have the additional meaning of ‘to live, to sit’; *ni-mo* (‘to live, to stay’) in Byangsi (Sharmā 2001a: 122); *taŋ-mu* (‘to live’) and *base-mu* (‘to stay’) in Darma (Willis 2007: 50, 151). Saxena provides two different stems for ‘to stay’ in Kinnauri: *ni-* (1995: 266) and *toš-* (ibid, p. 278), the latter also having the meaning of ‘to live’. Bailey (1909: 687) also mentions *toš-* with the meaning of ‘to sit, to stay’. ‘To live’ in Chaudangsi (Krishan 2001a: 442) is *ni-çi-mo*, distinct from *çoŋ-çi-mo* ‘to sit’ (ibid, p. 445).

Judging by Bailey’s (1909: 666) *māěts* and Sharmā’s *māě* (1988: 152-3), *a:* in *a:no* and *a:ts* seems to have a cognate in *ě* in Kinnauri (see §4.4.6).

The copula form *ta* has cognates in several West-Himalayish languages⁸³: *ta* in Manchad and Tinan (Francke 1909: 80, 89-90), *te* (which contrasts with *to*) in Shumcho (Huber 2013: 234-5), and *ta* in Bunan (Widmer 2014: 607). Widmer (ibid, p. 608) speculates on the possessive copula *ta* being derived from a lexical verb **ta-* meaning ‘to keep, to hold’. In fact, *tasarŋ* in Chhitkul-Rākchham (‘to keep’, ‘put’) has reflexes in nearly all the subgroup: *ta:-* in Rongpo (Zoller 1983: 284), *taj* in Darma (Willis 2007: 584), *tāmig* in Kinnauri (Bailey 1909: 681), *ta:mo* in Byangsi (Sharmā 2007: 137), *ta:-* in Rongpo (Sharmā 2001: 261), *tamo* in Chaudangsi (Krishan 2001a: 442), and *ta:ma* in Shumcho (Huber, personal communication). In Bunan, however, the root of ‘to keep’ is *jok-* (Widmer 2014: 861). An additional argument in support of Widmer’s proposal is the use of *tasarŋ* in serial verb constructions (with the meaning of ‘to keep + -ing in English), which is also observed in Shumcho (Huber, personal communication), but *hunarŋ* serves this function in Chhitkul-Rākchham. In addition, the Chhitkul-Rākchham syntactic allomorph *ti* is found in Patani and Tinan (Manchad), but based on Saxena’s account (1992: 58, 65, 78), it exclusively serves an auxiliary function with a remote past tense interpretation in the former case⁸⁴.

⁸³ Outside of ‘West-Himalayish’, similar forms are *ta* in Tamang (Poudel 2006: 136), Kham (Watters 2002: 219) and Chantyal (Noonan 2007: 1), *taʔ* in Caodeng rGyalrong (Sun 2001: 492).

⁸⁴ *Ta* is also part of the list of auxiliaries in these two languages.

Another possible origin for the copula *ta* would be the lexical verb *ta:ŋ* ('to see'). The verb has reflexes in nearly all the West-Himalayish subgroup⁸⁵: *taŋ-mig* 'to see, watch' (Saxena 1995: 273) in Kinnauri, *t^htaŋ-tɕ-um* in Bunan ('to see', Widmer 2014: 523), *taŋ-dz-i* in Manchad (Sharmā, personal communication), *ṭtaŋ-mu* in Darma (Willis 2007: 330), *taŋ-ma* in Shumcho⁸⁶. Interestingly, *taŋ-ma* also has the meaning of 'to feel, to experience' (Huber, personal communication). I argue against the *ta:ŋ* hypothesis in §5.9.

The copula *to* has cognates in Kinnauri (Bailey 1909: 676), Kanashi (Sharmā 1992: 364), and Shumcho (Huber 2013: 231). In Chhitkul-Rākchham and in Shumcho (Huber 2013: 221), *to* stems from the verb *tɔŋ*, 'to come'. The imperfective forms of the verb *tɔŋ* differ slightly: *tu-tɛ-k*, *tu-tɛĩ*, *tu-tɛn*, *tu-te*, etc. The situation is different in Kinnauri, based on Bailey's (1909: 670) mention of *būnnig*, also an irregular verb: we cannot link *to* to a lexical verb (see §5.12)⁸⁷.

The copula *hɛn* is intriguingly similar to the form *jen* found in Bunan (Widmer 2014: 578) and to the form *hwən* in Rongpo (Zoller 1983: 68), where it fulfils the same functions (see §4.3.3.1). According to Widmer, the Bunan form *jen-* refers to Tibetan *yin*, a cognate of which is found in Byangsi (Sharmā 2007: 147), and outside of West-Himalayish – for example the particle *in* found in Sherpa (see Thurgood (1982: 69) referring to Woodbury 1975), *wen* in Bumthang (Wyatt 2017: 39, 65) and Kurtöp (Hyslop 2011a: 464, 549-51), or *yin* in Tawang Monpa (Helgestad 2015). The suffix *-hɛn* is also a non-past verb ending on intransitive verbs occurring with 2SG and 1PL in Darma (Willis 2007: 353).

The negative prefix *ma-* is a widely attested reflex within the TB language family and stems from the Proto-Tibeto-Burman **ma* (Benedict 1972: 97; Matisoff 2003: 488). Post (2015: 432) claims the Proto-Tibeto-Burman is **ma(-C)*, where *-C* is usually a glide or a nasal, a description that fits *man*. The negative form *man* has a reflex in Kinnauri *māni* (Sharmā 1988: 152-3), a point that I address in more detail in §5.8.3 and §5.13⁸⁸.

⁸⁵ *Ogmo* in Chaudangsi (Krishan 2001a: 445) is clearly different.

⁸⁶ *Ta* also has a reflexe in Tibetan varieties, notably *tā* ('regarder') in Lhasa Tibetan (Tournadre and Dorje (2013: 159).

⁸⁷ Outside of 'West-Himalayish', *to* is attested in Harigaya Koch *to* (Kondakov 2020: 18) and Caodeng rGyalrong (Sun 2001: 495) *to?*.

⁸⁸ van der Auweren and Vossen (2017: 45) make mention of postverbal negatives in a few North-East Indian languages – Mising (Prasad 1991: 98-103), Galo (Post 2015) and Angami (Giridhar 1980: 79-83). Other examples include Duhumbi (Chugpa) *-baŋ* (Bodt 2020: 394), Kurtöp (Hyslop 2011: 463, 554) *min*, Brokpa (Funk 2020: 125) *min* and *man*, and Tawang Monpa (Helgestad 2015) *men* and *mon*.

4.1.6.2 Cognates of the Chhitkul-Rākchham copulas in Tibetan

As previously mentioned, *hɛn* has cognates in Bunan, where the equative *jen-* “cannot be inflected for tense and does not have a specific inherent temporal value” and “bears resemblance to the Written Tibetan copula *yin*” (Widmer 2014: 578-9). The copula *yin* ཡིན་ is found in Lhasa Tibetan (Tournadre 2017: 100), with cognates in many other Tibetic languages (Tournadre 2014: 112), including Sherpa (the particle *in*, see Thurgood (1982: 69), referring to Woodbury 1975).

We shall also see in §5.1 that *hɛn* has the functions of both copula verb and auxiliary. Further, as an equative copula, *yin* occurs in comparable syntactic environments as *hɛn*, both equating two noun phrases. As such, *yin* and *hɛn* are essential copulas.

One major difference, however, is that *yin* is restricted to first person in declaratives whereas *hɛn* occurs with all persons, just like *to* does. Another difference is in terms of semantics. In Old Tibetan, *yin* denotes some kind of internal knowledge (Takeuchi 1990, 2015: 410). In Middle Tibetan, Oisel (2013: 81) connects *yin* with “une information personnelle du locuteur”. In Modern Standard Tibetan, Tournadre and Dorje (2013: 75) use the term ‘égophorique’, denoting “une connaissance ou une intention personnelle du locuteur, souvent directement impliqué dans l’évènement qu’il décrit”, whereas *hɛn* is emphatic. Now, going back to Bunan, Widmer ascribes to *jen-*, an “inherent generic evidential value” which “indicates that the knowledge contained in a proposition is based on the speaker’s overall knowledge of the world” (Widmer 2014: 579).

Although Oisel, somewhat confusingly, ascribes “an assumptive value” to *yin*, it is clear that as denoting internal knowledge, it is more assertive than *hdug*, the same way *hɛn* is more assertive than *ta*, see (40). As shown in §4.1 and §4.2, the occurrence of *hɛn* is more restricted, but whenever *hɛn* occurs so does *to*, which concretely means the difference between these two is of semantic (epistemic) nature. This observation leads to the conclusion that the contrast between the two essential copulas *yin* and *red* རེད་ in Modern Standard Tibetan is also present in Chhitkul-Rākchham in the pair *hɛn* and *to*. One may argue, based on Widmer’s characterization of *jen-*, that *hɛn* and *to* exhibit a two-way ‘egophoric’ contrast, but the copula verb *tɔts* makes it clear the egophoric contrast is actually between *to* and *tɔts*.

There is therefore a clear semantic correspondence between *red – re’* in Lhasa Tibetan, which “exprime la nature ou bien une qualité essentielle du sujet” (Tournadre and Dorje 2013: 65) – and *hɛn*, and between *yin* and *to*.

As seen in §4.1.8, *to*, *tuts* and *tɔts* have a common origin in the motion verb *tɔŋ*. Both *to* and *tɔts* are ‘egophoric’, the difference being *to* is a plain ‘egophoric’ whereas *tɔts* is ‘egophoric-assertive’. Compared to Tibetan, the personal experience *to* exhibits a lesser degree of epistemic variation than *yin* (see Tournadre 2017: 101). We may draw a parallel between the Chhitkul-Rākchham ‘egophoric’ pair *to* and *tɔts* and the Tibetan pair *yin* and *yod*. One major difference is in term of scope: *yin* and *yod* are restricted to first person when *to* and *tɔts* may occur with first, second, and third. In addition, the distinction between *yin* and *yod* is that of essential vs. existential copula in Tibetan (Dugdak and Hill 2019: 185) whereas epistemic judgement (degree of assertiveness) is what separates *to* and *tɔts* in Chhitkul-Rākchham.

Simon (2021) identifies two egophoric copulas in Amdo Tibetan. She describes རྩོམ་པ། (*jən*) as ‘ego-participative’, showing ‘l’implication dans l’évènement’ [involvement in the event], and རྩོམ་པོ་རྩོམ་པ། (*jənnəre*) as ‘ego-authoritative’, denoting ‘l’accès privilégié à la connaissance et l’autorité épistémique’ [privileged access to knowledge and epistemic authority]. What distinguishes this pair of egophoric copulas is also a matter of certainty, ‘ego-authoritative’ exhibiting more certainty than ‘ego-participative’ the same way *tɔts* does compared to *to*⁸⁹. There is however more to the distinction between *jən* and *jənnəre* than epistemic judgement according to Simon. The former implies involvement whereas the latter implies more distance from the described event⁹⁰.

4.1.6.3 Cognates of the Chhitkul-Rākchham copulas in Mandarin Chinese

A glance at Mandarin Chinese is also useful. Judging by Zhan and Sun’s (2013: 755-759) examples, *hɛn* behaves very similarly to the equative copula *shì* 是 as nominal and non-nominal predicates may follow both copula verbs. Further, *hɛn* may occur in conditional clauses by taking, as a converb (see §5.8.3) the conditional suffix *-na*, as in (18), while *shì*

⁸⁹ Chhitkul-Rākchham *tɔts* is a compound copula whereas Amdo *jənnəre* is a simple copula.

⁹⁰ Simon’s distinction does not apply to the Chhitkul-Rākchham case. In (74), *to* occurs with no obvious involvement from part of the speaker. As discussed in §5.4 (see table 45), *tɔts* as auxiliary cannot occur without the speaker’s involvement in the past event. ‘Egophoric’ in Chhitkul-Rākchham goes beyond speaker’s involvement, hence the broader term ‘personal experience’.

occurs in concessive conditionals⁹¹ (Eifring 1995: 173). Both *hɛn* and *shì* (Paul 2015: 154) can be negated.

What sets *hɛn* and *shì* apart is that the latter, contrary to the former, cannot link a noun and an adjective, i.e. cannot occur in attributive constructions (ibid). The alternative in that case, is no other than *hě́n* 很 ‘very’. In other words, both *shì* and *hě́n* in Modern Chinese perform the functions of the Chhitkul-Rākchham *hɛn* and *hun*, with the latter exclusively occurring in locational constructions in Chhitkul-Rākchham. Both *hɛn* and *hun* are cognates of *hě́n*⁹², and stem allomorphy is restricted to Chhitkul-Rākchham.

4.1.7 Copula inventory in Kinnauri according to Bailey, Sharmā and Saxena

Bailey (1909: 676) lists two forms under the heading ‘auxiliary’: *to* and *dū*, both occurring in present and past and inflected for person and number. Commenting on the marker *-ts* (see §4.3.3.2 for a discussion), he also mentions a form, *māěts*, “is not, are not, there is not, from the negative *ma*”. Sharmā (1988: 135-6) and Saxena (1992: 32, 1995: 266-272, 2000: 472, 2017: 766-8) refer to four copulas: *du*, *to* (*tɔ*), *ni*, and *māni* (Sharmā) or *mani* and a ‘neutral’ form, which consists of NEG-AGR (Saxena 2017: 768). “*To* and *du* occur in non-future tenses” (Saxena 1995: 265), just like *to* and *ta* in Chhitkul-Rākchham. “*Ni*, on the other hand, occurs in all tenses” (ibid), just like *ano*.

Saxena also contends that “no inflectional endings are affixed to *ni* in non-future tenses” (ibid), which contradicts both Sharmā’s (1988: 162) claim that *nito* is used with present tense, as in *do (halam) hunaksoñ khau zao nito* (‘he may be taking meals at present/now’) and my own data, where the form *nits* occurs in the present tense. Both Bailey and Sharmā missed *ni* taking the suffix *-ts* and the same omission characterizes Saxena’s treatment of Kinnauri. In her description, the suffix *-ts* is “imperfective” (1995: 278), but it seems to attach to lexical verbs only. Further, *tɔts* occurs in my own data on Kinnauri when it is not part of Saxena’s. Two additional copulas, *hatfo* and *hatfid*, are part of my data in Kinnauri; these are consistent with Bailey’s (1909: 682) mention of *hacimig* (FUT: *hacög*) as ‘to be’ and ‘to become’.

⁹¹ *Shì* 是 should be carefully distinguished from *shǐ* 使 ‘if’, however (Eifring 1995: 157).

⁹² Although these two are similar in phonetic form only. There is no /n/ in Modern Mandarin Chinese.

4.1.8 Diachronic considerations

I discuss the copula *hɛn* in more detail in §4.7, §5.12 and §6.4. As seen in §4.1.2, *hun* and *hɛn* are syntactic allomorphs, notably sharing the same emphatic /n/. DeLancey (2008: 36) surmises that a cognate of *hɛn* found in Kurtöp, namely *wen*, described by Hyslop (2011a: 464) as an “affirmative equational copula”, partly originates in *way.

I argue in §8.2 that /n/ is also found in the emphatic particle *no*. While *no* is the result of the conflation of /n/ and the focus marker =o from a diachronic perspective, *man*, *hun* and *hɛn* similarly consist of *ma* and /n/, *hu* and /n/ and *he* and /n/ with *he* originating from the lexical verb *ɛnaŋ*, ‘to hear’, see §6.4. This suggests *hun* has been reanalysed from proximal demonstrative (*huj*, with *-i* as modifier) to the stem of *hunəŋ* ‘to live, stay’.

Another revealing connection is between Chinese *shì* 是 and the negative particle *fēi* 非⁹³, commonly described as antonyms (Yen 1986; Reding 2004: 193; Du 2015: 69). The copula *shì*, before acquiring a copula function, was originally an optional (Yen 1986: 232) particle of affirmation (emphatic?) and *fēi* used to negate it. The conjunctions *hɛnna* and *manna* (see §5.8.3) obey the same logic. However, as pointed out by Yen (1986: 233), at one point in time, *fēi* 非 was replaced by *bu shì*, the equivalent of which is *maɬɛn* in Chhitkul-Rākchham, a replacement that led to the reanalysis of *shì* 是 as a copula. “With this replacement, there no longer was any negative particle with which *shì* was contrasted. Moreover, it became more verb-like in that the negative *bu* could be placed before it”. Originally an affirmative particle, *hɛn* followed the same diachronic path, initially contrasting with *man* (as *hɛnna* vs. *manna* provides evidence for), then was negated – we may establish a correspondence between *bu* and *ma-* in this regard – with *man* acquiring the function of postverbal negator and the function of syntactic (suppletive) allomorph of *maɬɛn*.

Interestingly, whereas some scholars (Wang 1937, Feng 1993, Pulleyblank 1995, Shi and Li 2001) are adamant *shì* has its origin in the demonstrative pronoun in Old Chinese, others put the emphasis on its affirmative function, as an adjective (Hong 1958), or as a particle (Yen 1986: 227). Based on classical Chinese texts, Chang (2006: 132) observes that *shì* had

⁹³非 *pji* < **pji* originates from the fusion of 不 *pjuw* < **pə* and 唯 *jiw* < **wij* < **wuj*, see Jacques (2000).

a range of functions: determiner, affirmative particle, demonstrative pronoun⁹⁴ and non-copular verb, the last two of which not being part of Modern Chinese.

We may also establish a clear connection between *hɛn* and the Proto-Tibeto-Burman copula **way* (Benedict 1972, 1981, Thurgood 1982; Matisoff 1985, 2003). Thurgood's reconstruction notes (1982: 77) suggests **-way* has a cognate in the negative particle *fēi* 非 mentioned earlier, the origin of *fēi* being **bu* 'NEGATIVE' + **-way*. Thurgood further notes that **-way* "syntagmatically occurred clause-finally (...) semantically it seems to have been a largely unmarked copula (...) its use would naturally become associated with an assertive flavour". Thurgood (1982) provides a list of cognates with the palatal suffix *-j*, for example in a variant of Sherpa (ibid, p. 69). We stand now very close to the Bunan equative *-jen*, the Kurtöp copula *wen* (Hyslop 2011a: 464) and the Chhitkul-Rākchham *hɛn*.

Tournadre's (2017: 99) claim that "evidential and epistemic markers are derived from copula, existential and motion verbs and, to a lesser extent, modal verbs" is consistent with the meaning of the previously mentioned copulas. Referring to Aikhenvald (2004: 271), some of the copula verbs (*to*) and some syntactic allomorphs (*hun*) belong to the category 'verbs from other semantic groups (verbs of location and motion)', the third category after 'verbs of speech' and 'verbs of perception'.

Saxena (1997: 92) surmises at the existence of diachronic path where older West-Himalayish copulas gradually turned into tense markers. She also speculates on a subsequent reanalysis of the original subject marker as an object marker once this diachronic change has taken place. The form *to* found in Kinnauri and Kanashi (Grierson 1909) is both a copula and a future tense marker, and so is *du*⁹⁵. *Hɛn* functions as non-past tense marker in Darma.

In Chhitkul-Rākchham, the perfective marker *-ti* also functions as allomorph of the copula *ta* in *mat ti*, and so does the imperfective marker *-te* (see §7.3). I nevertheless put the emphasis on locational and temporal adverbs in §5.12, suggesting there are various grammaticalization pathways. The data on object agreement provided in appendix 1, §1.5.3 show a versatile and complex system distinct from subject agreement.

⁹⁴ Li and Thompson (1977) also argue *shi* functions as demonstrative in Archaic Chinese (6th-5th century B.C.).

⁹⁵ Takahashi (2009: 31, 46) claims the form *udu*, with *-u* as the genitive marker and *du* as a copula, is the present tense marker in Kinnauri.

4.2 Syntactic functions of the copulas

Now that the morphosyntactic properties of the copula forms have been established, we can turn to their syntactic function, referring to the different types of non-verbal predicate constructions listed in the literature, notably ‘identification’, ‘predication’, ‘specification’, and ‘equative’ in Higgins (1979: 204-293), or ‘identity’, ‘inclusion’, ‘attribution’, ‘possession’, ‘location’, and ‘existence’ in Payne (1997: 111-128). Aikhenvald (2015a: 226) ascribes two additional relational meanings to copular clauses, namely benefaction and change of state. One should not take these terms as face value as different languages exhibit different conflation combinations.

Tables 25, 26 and 27 provide an overview of the distribution of the twelve copulas based on the six types of constructions identified in Payne (1997)⁹⁶.

Table 25: Non-verbal predication in Chhitkul-Rākchham (present tense constructions) – surface realizations of the copulas according to type of construction

	ano	a:ts	ta	to	tɔts	tuts	hɛn	man	mat ti
EXT	X	X	X	X	X	-	-	-	-
LOC	X	-	X	X	X (anim.)	X (places)	-	-	X (places)
POSS	X	X (inal.)	X	X	X (inal.)	-	X (inal.)	X	X
PI	(X)	-	X	X	-	-	X	X	X
ID	X	-	X	X	-	-	X	X	X
ATT	(X)	X (no SUBJ pro.)	X	X	-	-	X (with SUBJ pro.)	X	X

⁹⁶ Payne distinguishes six basic types of non-verbal predicates: identity (‘he is my uncle’), inclusion (‘he is a blacksmith’), attribution (‘the grass is green’), location (‘the book is on the table’), existence (‘there are monkeys in Shimla’), and possession (‘I have three houses’).

Table 26: Non-verbal predication in Chhitkul-Rākchham (past tense constructions) – surface realizations of the copulas according to type of construction

	ano	tase	tote	tots	man	mat ti
Existence	X	X	X	X	-	(X)
Location	X	X	X	X	-	X (places)
Possession	-	X	X	X	-	-
Proper inclusion	X	X	X	X	-	-
Identity	X	X	X	X	-	-
Attribution	X	X	X	X	-	-

Table 27: Non-verbal predication in Chhitkul-Rākchham (future tense constructions) – surface realizations of the copulas according to type of construction

	hunno	hunts	ano	a:no	a:ts
Existence	-	-	X	-	X
Location	X	X	X	-	X
Possession	-	-	-	X	X
Proper inclusion	-	-	-	X	X
Identity	-	-	X	X	X
Attribution	-	-	-	X	X

Among the relevant set of copula verbs, only *a*, *ta* and *to* may occur in all types of constructions in both past and present tense.

The whole set of copulas occurs in the present tense, and four (*a*, *ta*, *to* and *tots*) in the past. In future tense constructions, two of the surface realizations, *hun* and *a:* are syntactic allomorphs of *a*, the underlying (unique) copula. Tense greatly restricts the choice of copula.

Most of the relevant copulas are not restricted to one specific type of construction. *To* and *ta* are attested in all of them, and in some cases, typically with third person, *to* and *ta* may occupy the same slot. In proper inclusion, identity and attributive present tense

constructions, *a*, *ta*, *to* and *hɛn* may occur, depending on person, animacy and epistemic considerations.

The distributional properties of *hɛn* are similar to the Bunan *jen* that Widmer (2014: 578) describes as “equative”. Both forms fulfil the predicative functions of proper inclusion, identity and attribution – *hɛn* may occur with inalienable possession in addition, reason why I choose the term ‘essential’ copula to characterize *hɛn*. Judging by its distribution, *man* complies with this characterization too.

What follows is a precise description of the distribution of the surface realizations according to type of construction, taking heed of factors such as tense, person, possession, and animacy.

4.2.1 The distribution of copulas in proper inclusion constructions

In proper inclusion constructions that equate two noun phrases (NP NP COP) such as ‘he is a shepherd’, *to* occurs in present and past tense with all persons. The copula *hɛn* also occurs with all persons, but exclusively with present tense. The occurrence of *ta* is restricted to third person in both present and past tense. In future tense constructions, the only possibility is *a*;, inflected for either *-no* or *-ts*. In present tense constructions, the occurrence of *a*, which takes both *-no* and a subject agreement suffix, is acceptable, although it would rarely be used in a conversation owing to its intrinsic dubitative meaning: one simply cannot be in doubt “when a specific entity is asserted to be among a class of items” (Payne 1997: 114), hence the use of brackets in table 28.

Table 28: Copula distribution (in all their surface realizations) in proper inclusion constructions according to person

	Present tense	Past tense	Future tense
1SG	tək, hɛn, (anok)	tətək, tɔts	a:nɔk, a:ts
2SGHON	toĩ, hɛn, (anoĩ)	tətəĩ, tɔts	a:noĩ, a:ts
2SGNHON	tɔn, hɛn, (anɔn)	tətɔn, tɔts	a:nɔn, a:ts
1-2PL	tɔtʃ, hɛn, (anɔtʃ)	tətɔtʃ, tɔts	a:nɔtʃ, a:ts
3	to, ta, hɛn, (ano)	tote, tase, tɔts	a:no, a:ts

Third person excepted, the contrast is between *to* inflected for the imperfective suffix *-te* (and for subject agreement) or *to* inflected for the habitual *-ts* in past tense contexts. Table 28 confirms the validity of the distinction I operate between *to* and *tɔts*, although both share the same base.

In present tense contexts, the contrast, third person excepted, is also between two forms: *to* and *hɛn*. Based on §3.4.3, *hɛn*, as an emphatic copula, is part a type of assertive evidentiality, which implies it is more assertive than *to* (and yet less assertive than *tɔts* – see table 31 in §4.2.5, where *hɛn* and *tɔts* contrast with each other).

With third person, three copulas compete for the same slot in both present and past tense constructions. *Ta-∅/ta-se* exhibits a different epistemic meaning compared to *to* and *hɛn* in the present tense and *tɔte* and *tɔts* in the past.

Table 28 suggests that there is an irreducible epistemic distinction between the aspectual (assertive) *-ts* and the irrealis *-no* in future tense constructions. In addition, three copulas competing for the same slot with third person subjects in the present and past tense clearly indicates the contrast between *to* and *ta*, both marked for imperfective (*-te* and *-se* respectively), is of semantic nature, the same applying to the indeclinable *hɛn* in present tense constructions.

4.2.2 The distribution of copulas in attributive constructions

Attributive constructions (NP AP COP) exhibit a similar pattern to proper inclusion constructions regardless of temporality, one difference being that in constructions denoting generic knowledge the subject of which, be it animate or inanimate, is impersonal ('some people are dangerous', 'cars are dangerous', etc.), *a:ts* is the only choice available in the present tense.

In future tense constructions, the only possibility is also *a:*, inflected for either *-no* or *-ts*. The occurrence of *a* in present tense constructions is acceptable, but not attested in conversations⁹⁷.

⁹⁷ Some 'adjectives' ending in the modifier *-i* are inflected like verbs. Compare *ga: jali aɔɔk* ('I may be tired') and *ga: jalɔɔk* ('I will be tired'); *ga: guɔrki aɔɔk* ('I may be late') and *ga: guɔrnɔk* ('I will be late'); *ga: nasi aɔɔk* ('I may be sick') and *ga: naaɔɔk*

Table 29: Copula distribution (in all their surface realizations) in attributive constructions according to person

	Present tense	Past tense	Future tense
1SG	tək, hɛn, (anək)	tətɛk, tɔts, anək	a:nək, a:ts
2SGHON	toĩ, hɛn, (anoĩ)	toteĩ, tɔts, anoĩ	a:noĩ, a:ts
2SGNHON	tɔn, hɛn, (anɔn)	tɔtɛn, tɔts, anɔn	a:nɔn, a:ts
1-2PL	tɔtʃ, hɛn, (anɔtʃ)	tɔtɛtʃ, tɔts, anɔtʃ	a:nɔtʃ, a:ts
3	to, ta, hɛn, (ano)	tɔte, tase, tɔts, ano	a:no, a:ts

Insights gained from table 29 are the same as table 28, the difference being *a* occurs in addition to *to* (inflected for either ASP-AGR or ASP) and *ta* (inflected for ASP) in the past.

4.2.3 The distribution of copulas in identity constructions

The distributional pattern of copula forms in identity constructions ('I am the author of the book') resembles the pattern found in proper inclusion and attributive constructions: *to* occurs with all persons in both past and present contexts, *ta* is still restricted to third person (past and present).

Table 30: Copula distribution (in all their surface realizations) in identity constructions according to person

	Present tense	Past tense	Future tense
1SG	tək, hɛn, anək	tətɛk, tɔts	anək, a:nək, a:ts
2SGHON	toĩ, hɛn, anoĩ	toteĩ, tɔts	anoĩ, a:noĩ, a:ts
2SGNHON	tɔn, hɛn, anɔn	tɔtɛn, tɔts	anɔn, a:nɔn, a:ts
1-2PL	tɔtʃ, hɛn, anɔtʃ	tɔtɛtʃ, tɔts	anɔtʃ, a:nɔtʃ, a:ts
3	to, ta, hɛn, ano	tase, tɔts	ano, a:no, a:ts

(I will be sick'). This phenomenon does not apply to adjectives ending in two consecutive vowels, nor to adjectives that do not end in *-i*.

There are however interesting differences. *A* inflected for *-no* and AGR is a possible choice in present tense. Both *a* and *a:* take the same suffixes (*-no* + AGR) in future tense constructions, with no change in meaning (with both contrasting with *a:ts*): *ano* and *a:no* are in free variation in future tense constructions. As tables 25, 26 and 27 show, *a:no* never occurs in other contexts than future, which means, it never contrasts with *ano*, an indication that *a* and *a:* refer to one unique form.

4.2.4 The distribution of copulas in possessional constructions

Possessional constructions exhibit a very distinctive pattern, being entirely devoid of subject agreement. *To* occurs in both past and present tense constructions, but whereas it takes the imperfective *-te* with first person, it may only take the habitual *-ts* with second and third. *Ta* occurs with third but also with second person. *A* exclusively occurs on present tense constructions, where it is not restricted by person. *A* inflected for *-no* is in free variation with *a:* inflected for the same in future tense constructions. The assertive *hɛn* can only occur with inalienable (kinship, body parts, name) possession. The same pattern is observed regardless of the type of possessional construction (absolutive possessive: *ga:-∅* [I.ABS] da [POST] NP COP, or genitive possessive: ai [I.GEN] NP COP).

Like in attributive constructions, with animate or inanimate subjects other than pronouns ('cows have four legs'), *a:ts* is the only available choice in the present tense, with inalienable possession (body parts, kinship, name, neighbours, etc.).

If an element of possession (possessive pronoun) occurs in existential, identity or identificational constructions, the pattern observed in possessional constructions prevails.

Table 31: Copula distribution (in all their surface realizations) in possessional constructions according to person

	Present tense	Past tense	Future tense
1SG	to, ano, hɛn	tɔte	ano, a:no, a:ts
1PL	to, ano, hɛn	tɔte	
2-3	ta, tɔts, ano, hɛn	tase, tɔts	

The main insight gained from table 31 is that *to* (*tote* in the past) and *tots* occur in complementary distribution in past and present tense contexts. However, this is a unique case. In all other types of construction, *to* and *tots* are contrastive.

4.2.5 The distribution of copulas in locational constructions

In locational constructions (NP NP(=LOC)/PP COP), *to* inflected for tense and subject agreement occurs with all persons in both past and present tense contexts. *Ta* may also occur in these contexts, but with third person exclusively. With third person animates ('she is in Tibet', 'Ram is in Tibet', 'the goats are in Tibet'), the choice is between *ta*, *to* and *tots*.

With inanimate subjects ('the book is on the table'), only the form *ta* occurs. Finally, when referring to places ('Lhasa is in Tibet'; both *tuts* (impersonal) and *tots* (personal) may occur in the present tense⁹⁸. However, only *matuts* may occur in (30) since *tots* cannot be negated.

Finally, in future tense constructions, *ano* and *hunno* may occur, and so do the two assertive *a:ts* and *hunts*. The pair *hunno* and *hunts* is restricted to animate subjects, with *hunno* also occurring in attributive contexts, where the quality described is of locational nature, for example in a sentence like *ga: horki hunnok* ('I will be far away').

Table 32: Copula distribution (in all their surface realizations) in locational constructions according to person

	Present tense	Past tense	Future tense
1SG	tok, anok	totek, tots, anok	anok, a:ts, hunnok, hunts
2SGHON	toĩ, anoĩ	taseĩ, toteĩ, tots, anoĩ	anoĩ, a:ts, hunnoĩ, hunts
2SGNHON	ton, anon	tasen, taten, tots, anon	anon, a:ts, hunnon, hunts
1-2PL	totf, anotf	tasetf, totetf, tots, anotf	anotf, a:ts, hunnotf, hunts
3	ta, to, tots, ano	tase, tote, tots, ano	ano, a:ts, hunno, hunts

⁹⁸ But *ram-∅ tibet=du to-ts / ta (*tuts)* Ram-ABS tibet=LOC COP.PEEX.ASS / COP.PE 'Ram is in Tibet'.

Again, *to* and *tɔts* contrast with each other in present tense (with a third person subject) and in past tense constructions – regardless of person. There are up to four forms competing for the same slot. The copula *hɛn* never occurs in locational constructions.

Based on all the previous tables, *hɛn* may compete with *to* for the same slot, but never with *tɔts*. This is so because *hɛn* and *tɔts* both denote assertiveness.

4.2.6 The distribution of copulas (and allomorphs) in existential constructions

The so-called ‘existential’ “expresses a proposition about the existence or the presence of someone or something” (McNally 2011: 1830) in an implicit contextual domain. In Chhitkul-Rākchham, this type of construction, which may include a second locative or possessive NP, exhibits a copula form, just like the other types of constructions listed in Payne (1997), even though existential constructions do not have a canonical subject.

An existential construction has the form NP COP, or NP NP(=LOC)/PP COP. In the present tense there is a choice between *to*, *tɔts*, *ta*, *ano* and *a:ts*. When the construction involve possession, as in ‘there is a book in my bag’, the contrast between *to* and *ta* is the same as in possessional constructions, i.e. *to* (but not *tɔts*) is used with first person possession and *ta* otherwise.

This distinction is not always adhered to, however, *to* and *ta* often being interchangeable in these types of constructions. In a past context, again *tɔte* occurs as soon as the first person possessive pronoun is part of the construction, *tase* or *tɔts* with second and third possessive pronouns. In future tense constructions, *ano* and *a:ts* are the only two possibilities.

Table 33: Copula distribution in existential constructions

	Present tense	Past tense	Future tense
Non-canonical subject	<i>to</i> , <i>tɔts</i> , <i>ta</i> , <i>ano</i> , <i>a:ts</i>	<i>tɔte</i> , <i>tɔts</i> , <i>tase</i> , <i>ano</i>	<i>ano</i> , <i>a:ts</i>

Like in locational constructions, *ano*, not *a:no*, occurs in a future context whereas both may occur in possessional constructions. There is no other way but to treat *ano* and *a:no* as a case of (weak, since a ‘be’ and a ‘become’ are related etymologically) suppletion: there is one unique underlying copula.

4.2.7 The distribution of copulas in identificational constructions

Identificational clauses are characterized by a demonstrative pronoun (or demonstrative phrase) in subject position (NP=DEM, see Higgins 1979). There is a choice between *ta*, *to*, *hen*, and *ano* in instances such as ‘these people are shepherds’ or ‘this is good’, regardless of definite vs. indefinite or animate vs. inanimate. *A:ts* may occur as well, as in (57), but as the only available choice when describing the properties of an item. *Ano* and *a:ts* are the only two possible choices in future tense constructions. If the second NP includes an element of possession, identificational constructions follow the same pattern as described in §4.2.4.

4.2.8 The distribution of copulas according to Bailey and Sharmā

Bailey’s (1920: 82-3) description does not include any taxonomy and copula constructions are very few. *To* occurs with all subjects in locational constructions, which is consistent with my data: *gā dūā tōtěk* (‘I was there’); *kan dūā tōtēn* (‘you were there’); *yō dūā tōtē* (‘he was there’); *gā nishi mī dūā tōtěk* (‘we two men were there’). Bailey provides two examples of attributive constructions with the third person singular non-honorific form as subject: *yō mī māshrō tā* (‘this man bad is’) and *yō mī zoī tā* (‘this man good is’). The use of *ta* with third person is also attested in my data.

Sharmā’s (1992: 261-2) treatment of copula constructions is very succinct. The form used in *ga buṛa anok* (‘I shall become old’) only differs in terms of vowel length compared to the paradigm provided in §4.1.3. *Kinore seb zasaṇ nimi ac* (‘Kinnauri apple is sweet in eating’) is consistent with my description, where *a:ts* occurs in attributive constructions denoting general (impersonal) knowledge. Finally, Sharmā provides a handful of possessional constructions with 1SG as subject. *To* invariably occurs, which is again consistent with my own data.

4.2.9 Syntactic functions of the copulas in neighbouring languages

Referring to the paradigms provided in §4.1.3, most copula forms cannot be ascribed a specific predicative function, a feature that is at odds with most Tibeto-Burman languages, where a congruence between existential, locative, possessional and attributive constructions is often attested (van Driem 1993: 168; Caplow 2000: 7, Garrett 2001: 11), hence the acronym ELPA. The copula system does not lend itself to a binary treatment (see Lakshmi Bai 1986 for an example): there is no equational vs. existential distinction, and possessional constructions display a distinct pattern.

Based on Saxena's accounts, a similar situation is observed in Kinnauri, where *to*, *du*, and *ni* may occur in equative, existential and possessional constructions, with person and honorificity influencing their distribution.

Darma has only one form, which greatly simplifies the analysis. Widmer's (2014: 578) description clearly shows that the situation is more straightforward in Bunan, which exhibits four distinct types of copulas: the equative *jen-*, the existential *ni-*, the attributive *de-*, and the possessive *ta-*.

4.2.10 Some distributional rules

Now that we have given a precise account of the distribution of copula verbs according to type of constructions, a few rules emerge.

Person is an important factor when considering the contrast between *to* and *ta*. *To* and *tɔts* may occur with any person whereas *ta* is restricted to second and third – second and third in possessional constructions, third in all the other ones. *Tɔts* cannot occur with first person in any kind of construction (identity, possession, existential, locational) where the first person possessive pronoun is used. In these instances, only *to* is grammatically correct. With third person, *to* and *ta* can often (in proper inclusion, attributive, identity, locational, and existential constructions) occupy the same slot. Saxena describes a similar pattern in Kinnauri.

Table 34: distribution of *to* and *ta* according to person (past and present)

Person	Declaratives
1	<i>to</i> , <i>tɔts</i>
2	<i>to</i> , <i>tɔts</i> , <i>ta</i>
3	<i>to</i> , <i>tɔts</i> , <i>ta</i>

Further, *hɛn*, *ano* (and the syntactic allomorphs *a:no* and *a:ts*) occur with all persons. Existential and possessional constructions are entirely devoid of person indexing. Honoforicity does not play any role whatsoever.

Temporality is another salient category that interferes with the distribution of copulas. There are fewer distinctions in constructions with a past or a future tense reading. The copula *hɛn* is restricted to present tense, *ta* and *to* can only occur in present and past tense constructions⁹⁹. *Tɔts* may occur in a past tense context – although not in locational constructions – but much less frequently with present (possessional, locational, and existential constructions). As tables 25, 26 and 27 indicate, possession, and especially animacy, are much more peripheral factors and their influence on the distribution of copula forms is restricted to present tense.

While aspect, tense, person, animacy and possession impose various degrees of restriction on the choice of copulas, in most instances, a set of several forms remains available to the speaker. Semantic and pragmatic (rather than syntactic) factors govern the choice of copulas. Since, within the Tibeto-Burman family, copula and auxiliary forms also typically convey evidential distinctions, Chhitkul-Rākchham is a living proof – for those who were still in doubt – that evidentiality, as a semantic-conceptual domain, provides a breeding ground for the study of those many instances where a set of equally valid copulas compete with each other depending on context. The boundary between grammatical, seen as an “either-or question” (see Lakoff 1977: 73), vs. ungrammatical has never been so spurious (Sampson and al. 2014, Schütze 2016).

The distributional rules outlined here are already revealing from a semantic point of view. That *to* and *tɔts* occur in all types of constructions reflects the unfolding of a subjectivity

⁹⁹ *To* and *du* in Kinnauri, and *to* and *ta* in Shumcho (Huber 2015: 11) only occur in the past and the present as well.

and a connection between the content of the utterance and the speaker. This subjectivity pervades the whole system and is expressed in the present and past tense by means of *to* and *tɔts*, regardless of subject.

4.3 Semantic properties

This section is an introduction to the basic semantic properties of the copula set outlined in §4.1.3. The copulas *a*, *ta*, *to* and *hen* (but not *tɔts*) take the negative prefix *ma-*. They have the same semantic properties as their affirmative counterparts.

Semantically, there are five different categories of copula verbs in Chhitkul-Rākchham: perceptual (PE), dubitative (DUB), assertive (ASS), personal experience (PEEX), and personal assertive (PEEX.ASS).

The taxonomy outlined here is peculiar from a comparative perspective: it is quinary, subsuming the ternary distinction (personal, experiential and factual) that Yukawa (1966), Kitamura (1977), Kretschmar (1986), Hongladarom (1993), Garrett (2001), Tournadre and Dorje (2009), and Hill (2012) claim to be distinctive of Tibetic languages.

The five semantic categories are observable in both present and past contexts. The situation is somewhat different in future tense constructions, where no personal experience copulas occur. The perceptual does occur, but only as auxiliary.

4.3.1 The perceptual *ta*

The perceptual (PE) copula form *ta* is used to indicate that the source of knowledge is sensory (sight, hearing, smell, taste and touch), or external. I hereby use the term ‘perceptual’ to imply an act of perception although similar copulas are sometimes referred to slightly differently in the literature: ‘testimonial’ (Tournadre and Dorje 2003: 110; Hill 2012: 392), ‘direct’ (Garrett 2001: 5), ‘sensory’ (Tournadre and Lapolla 2014: 242), ‘sensorial’ (Tournadre and Jiatso 2001: 78), or ‘experiential’ (Hongladarom 1993: 52).

Regardless of the terminology, *ta* typically occurs when the speaker is the direct witness of an event or a state. A description of *ta* as perceptual is consistent with its restricted

occurrence, at least as a copula, to present and past tense constructions: what will happen tomorrow is not perceivable by means of the five senses. *Ta* occurs with non-endopathic, i.e. sharable sensory observations whereas *to-k* (*to*-1SG) conveys endopathic or inner sensations.

As (34), (35), and (36) demonstrate, the perceptual *ta* also denotes aural, tactile and gustative perception:

(34) mɔriŋ=e kat=∅ ʃar-e ta
 woman=GEN voice=ABS beautiful-FEM COP.PE

‘The lady’s voice is beautiful’ (hearing her singing) – DSN

(35) huju ɡɔlband=∅ nur-i ta
 DEM.PROX scarf=ABS soft-MODIF COP.PE

‘This scarf is soft’ (touching the scarf) – DSN

(36) huju diʃ=∅ man man nim-i ta
 DEM.PROX dish=ABS INT tasty-MODIF COP.PE

‘This dish is very tasty’ (tasting the dish) – DSN

With olfactory perception, however, the perceptual *ta* occurs as auxiliary. In (37), the speaker cannot see the food burning but makes an inference based on olfactory perception¹⁰⁰.

(37) kuɔn=∅ dun-a ta
 food=ABS burn-PROG AUX.PE.INFR

‘The food is burning’ – DSN

The same way a speaker of Chhitkul-Rākchham may use a main verb inflected for the progressive *-a* to denote immediate future action the perceptual *ta* may serve to infer about immediate future. My main consultant uses *ta* in (38) when getting outdoors and

¹⁰⁰ Caplow (2000: 22) describes a similar pattern in Dokpa Tibetan.

evaluating the meteorological conditions. This is achievable through more than one sense, for example by assessing wind speed:

(38) tʰan mɔ:sam=∅ zo-i ta
 today weather=ABS good-MODIF COP.PE

‘Today the weather is/will be good’ – DSN

The perceptual *ta* denotes first and foremost direct evidence, but (37) and (38) also establish a link with inferentially perceived evidence.

An additional meaning of the perceptual *ta* emerges when considering its contrastive distribution with *to*. In (39), *ta* conveys the sense of an impersonal opinion, devoid of any speaker involvement. This meaning differs from common knowledge, as the propositional content remains open to debate. The use of *ta* here could indicate that the speaker is not well versed in what is being said. As I came to know about the speaker’s whereabouts during my many visits to Rākchham, I am fully aware that absence of knowledge of the matter at hand or indifference are not relevant in this precise instance. Rather, the choice of *ta* reflects a deliberate strategy from part of the speaker to background his own knowledge and put the emphasis on a reality that imposes itself to (almost) everyone:

(39) hojo=∅ lo batʃea-saŋ baɦut dʒaruri ta
 DEM.DIST=ABS also preserve-INF INT necessary COP.PE

‘To preserve that [Chhitkul-Rākchham language] is also absolutely necessary’

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In (39), a perfectly valid alternative to *ta* would be *to*, which in that case denotes that the speaker is somewhat conversant with the conversation topic or wishes to express a personal opinion.

The use of the perceptual *ta* is not obligatory when referring to knowledge acquired through the senses. This observation notably applies to identificational constructions involving a demonstrative as in (40), where one would typically expect the use of the perceptual. In (40), *ta* is an obvious choice, but the assertive *ɦen* is equally valid when one

wishes to convey that describing or pointing at something or someone in one's immediate field of vision leaves no place for doubt:

(40) huju paŋ=∅ ta / hɛn
 DEM.PROX tree=ABS COP.PE COP.EMPH

'This is a tree' – DSN

When asking a speaker to describe one by one the nine pictures from *Jackal and the Crow*, one would reasonably expect her to use of the perceptual *ta*. The speaker is nonetheless not obliged to do so. In (41), the participant uses *tɔts* from the very first picture, which indicates that he is fully conversant with the tale and perceives what the pictures depict with clarity and confidence. The speaker made it clear to me before the recording session that he knew this tale very well. The use of *tɔts* here indicates a personal relationship with the content of the proposal, which the speaker assesses as certain. The mode of discourse, description, is irrelevant: it is all about the task and about whether the speaker has a relationship or wishes to emphasize some kind of relationship with the narrated event. The use of *ta* in (41) is perfectly acceptable, a Chhitkul-Rākchham speaker would use it to indicate that she is not personally, other than sensorily, involved (or does not wish to be):

(41) i: ka:=∅ ka:=∅ tɔ-tsə
 one crow=ABS crow=ABS COP.PEEX-HAB.ASS

'There was a crow'

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The perceptual form *ta* would decidedly be ungrammatical in an identificational clause where first person possession is involved. As shown in (42), *to* is in that case the only possible form:

(42) huju=∅ ai pɛn=∅ to
 DEM.PROX=ABS 1SG.POSS pen=ABS COP.PEEX

'This is my pen' DSN

Another pragmatic sub-meaning to *ta* is newness of information. As such, it refers to some non-integrated knowledge that may or may not include an element of surprise. In (43), the speaker uses the perceptual *ta* to indicate she has just learned about the information conveyed in the proposition. What (43) reveals is that the speaker is in all likelihood not a member of the Chhitkul-Rākchham community. If it were the case, the use of *ta* would be highly unusual:

(43) tʃʰul deʃ=o gui kʰandan=∅ ta
 Chhitkul village=LOC nine clan=ABS COP.PE

‘There are nine khandan in Chhitkul village’ (said by a newcomer) - DSN

The semantics of unintentionality or non-volitionality, which play a salient role in some Tibeto-Burman languages, are irrelevant in Chhitkul-Rākchham. Knowledge acquired through the senses does not necessarily involve the use of *ta*, which means pragmatic considerations are of crucial importance. Since *ta* compete with *to*, but also with epistemic forms such as *hɛn* and *ano*, it cannot be epistemically neutral.

The brief outline of the perceptual provided in this section accounts for a form covering information acquired through all senses with multiple semantic extensions (inference, impersonal opinion, information that has yet to be integrated by the speaker). While we can link inference, newness of information with sensory perception straightforwardly, impersonal opinion is somewhat a different case, although the absence of any obvious connection is not new from a cross-linguistic perspective.

Finally, the copula *ta* follows two interchangeable semblative clitics, *=rukʃi* and *=rɔŋsea*, in present and past tense constructions. Both *=rukʃi* and *=rɔŋsea* have the meaning of ‘similar’.

In (44), *mata* follows *=rukʃi* as the speaker makes a judgement based on visual appearance. Example (45) illustrates the different shades of meaning available to the speaker. As in every locational construction with a 3SG subject, there is a choice between *ta* and *to*. In addition, the speaker may select *ano* – despite visual evidence – to express doubts. Finally, since there is a visual clue to make an inference, the speaker may select *=rukʃi ta*:

(44) hojo=∅ palatji=∅ =rukji ma-ta
 3SG.NHON=ABS shepherd=ABS =SML NEG-COP.PE.INFR

‘He does not seem to be a shepherd/he does not look like a shepherd’ – DSN

(45) εme=∅ dzua=o to-∅ / ta / a-no /
 3SG.HON=ABS here=LOC COP.PEEX-3 COP.PE COP-IRR.DUB

=rukji ta
 =SML COP.PE.INFR

‘He/she was right here (seeing footprints)’ – DSN

Note that in (45), the tense of the sentence is irrelevant. What matters is when the observation is made, namely in the present, hence the use of *to* (not *tote*), *ta* (not *tase*) or *=rukji ta* (not *=rukji tase*).

Whenever *ta* follows *=rukji* or *=rɔŋsea*, these two denote perceptual evidentiality that is inferential, based on the observation that *ta* on the one hand and *=rukji ta* and *=rɔŋsea ta* on the other occur in complementary distribution, *ta* alone as a perceptual copula verb and *ta* following *=rukji* and *=rɔŋsea* in inferential contexts. Perception as inference has not gone unnoticed (Comrie 1976: 110; Bronowski 1978: 22; Faller 2002), notably in Tibetic languages (Hill 2017: 131-60).

4.3.1.1 A comparative perspective on perceptual meanings

In the context of Tibetic languages, the use of *ta* to convey impersonal opinion – ‘non-commitment’ according to Zeisler (2018: 117) – departs from the notion of specificity outlined in Goldstein’s (1984: xvi) description of Lhasa Tibetan *hdug*. However, it seems to be a feature of at least one other so-called West-Himalayish language, namely Bunan, where the perceptual form includes all senses and only occurs in the past tense by means of two specific inflectional endings, *-dza* and *-ts^ha*. Widmer (2014: 542) claims that “there are pragmatic contexts in which the inflectional endings *-dza* and *-ts^ha* do not express direct evidence, but rather mark a statement as factual and neutral with regard to evidential construal”, a similar impersonal meaning as in (39). In Darma, Willis (2007b: 97) provides one instance where the perceptual form *ni-* conveys “factual information”.

Newness of information conveyed by means of the perceptual copula is also widely attested in Tibetic languages. Tibetan (Hongladarom 1997: 119), Kyirong (Huber 2002: 159), Dzongkha (van Driem 1998: 127), Lamjung Yolmo (Gawne 2013: 223), Bunan (Widmer 2014: 506), rGyalthang and Bathang (Ebihara 2017: 56), Denjongke (Yliniemi 2019: 259), to name a few, all exhibit a sub-meaning that must be carefully distinguished from the term ‘mirativity’, “the grammatical marking of unexpected information” (DeLancey 1997), which has no bearing in Chhitkul-Rākchham.

A comparison with Tibetan is relevant in the case of =*rukji* and =*rɔŋsea*. Simon and Hill (2015: 382) claim the form *ħdra* occurs in two structures, NP → NP.ħdra, with the meaning of ‘to be similar’, and as an adjective, *ħdra.po*, ‘similar’, found in two alternative forms: N → NP-GEN-*bzo-ħdra* (here *ħdra* is a “noun-phrase enclitic” (ibid, p. 383), and N → N-GEN-*bzo-ħdra-po* (here as a “postposition” (ibid), with *bzo* having the meaning of ‘to make’). Thus, *ħdra* does not function as a copula in Modern Tibetan. However, V-*bžag* does so as a perfect experiential (Yukawa 1971: 190; Hill 2017: 142).

In addition, there is a copula verb meaning “to be similar, to look like” in Middle Tibetan, based on the story of Milarepa, namely *drag* (Oisel 2018). Inference is conveyed by means of the compound auxiliary constructions *yin.par ħdug* and *yod.par ħdug*, with the following morphological structure from a diachronic perspective: COP-REL AUX (Oisel 2014). The situation in Chhitkul-Rākchham is different in that the adverbial *ħe* ‘like’ may precede =*rukji* and =*rɔŋsea*, which means these two forms are part of a distinct clause, but *ta* or *to* inevitably follow: *ħe =rukji* or *ħe =rɔŋsea* COP.

Vokurková (2008: 291-4) mentions two constructions V-pa :’i : bzo :’dug and V- pa :’i : bzo : mi :’dug, with *pa* as a nominalizer, *’i* as a genitive suffix, and *mi* as negative particle in Standard Tibetan. These two constructions “may be used with verbs of all verbal classes and in causative constructions both with the third and first person subjects” (ibid) expressing “possible past actions having some relation to the present and they have sensory connotations” (ibid). The semantics of these constructions are similar to that of =*rukji ta* and =*rɔŋsea ta*.

A possible cognate to the semblatives =*rukji* and =*rɔŋsea* is the clitic =*asti* in Bunan (Widmer 2014: 195), which “indicates that the marked referent is similar to the referent

that the speaker has in mind, but is not necessarily identical with it”, and which has the epistemic value of “not entirely certain”.

The situation seems to be more heterogeneous within ‘West-Himalayish’. A convergence exists with Shumcho (Huber 2015: 11), where the perceptual only occurs with third person, and “indicates that the knowledge about some state of affairs is (or was) freshly obtained by the speaker”. The perceptual is obviously a different matter in Darma. To start with, Willis (2007b: 95) surmises that “clauses that are unmarked for evidentiality have a default meaning of ‘visual’”. Besides, the perceptual forms contrast with inferential evidentiality.

4.3.1.2 The perceptual *du* in Kinnauri

Saxena’s (1995, 2000, 2017) semantic interpretations suggest a similar contrast in Kinnauri (between *to* and *du*) to that observed in Chhitkul-Rākchham between *to* and *ta*: “*du* is used in contexts where the subject does not belong to the speaker, and the speaker has no information or knowledge about the subject” (1995: 267; 2000: 473). There is a clear semantic correspondence between Chhitkul-Rākchham *ta* and Kinnauri *du*, but Saxena does not formally characterize *du* as perceptual.

4.3.2 The dubitative *ano*

The dubitative (DUB) *ano* occurs when the speaker has some doubt about the reliability of a proposition. As mentioned in §4.1.3, as a copula, *ano* may occur in all types of tense constructions whereas the occurrence of its allomorphs, *a:no* and especially *hunno*, is more restricted: the former is found in future tense constructions, albeit not in locational and existential ones, while the latter exclusively occurs in locational future tense constructions.

Three examples are provided below, one for each form. In (46) the speaker uses *ano* as she has no evidence to back up her proposition. *Ano* would be perfectly appropriate with both past and present tense. The absence of perceptual evidence (a register or an official document the speaker would be looking at) precludes the use of the perceptual *ta* and makes a conjecture out of the proposition, hence the use of *ano*. In (47), the speaker uses *a:no* to indicate there is no way to be entirely certain of what will happen in the future, in contrast with the form *a:ts* denoting complete certainty. Both *anɔk* and *hunnoɔk* occur in

(48). These two forms are in free variation with animate subjects, the use of *-no* conveying doubt, in contrast with the syntactic allomorphs *a:ts* and *hunts*:

(46) *huju deʃaŋ=e dʒansaŋkj-a:=∅ lagəbagə rea-ra:*
 DEM.PROX village=GEN population-MASC.SG=ABS about height-hundred
a-no-∅
 COP-IRR.DUB-3

‘The population of this village may be around 800’ – DSN (2017)

(47) *εme=∅ sa:hukar a:-no-∅*
 3SG.HON=ABS rich COP-IRR.DUB-3

‘He/she will possibly become rich’ – DSN

(48) *ga:=∅ obi kjim=o hun-nɔ-k /*
 1SG=ABS tomorrow home=LOC COP.live/stay-IRR.DUB-1SG
a-nɔ-k
 COP-IRR.DUB-1SG

‘I will possibly be at home tomorrow’ – DSN

From the above example it seems *ano* exclusively occurs when making assumptions, i.e. with propositions made without any clue as to their validity. When inference is based on perceptual evidence, *rukji ta* may be used instead, although only in past and present tense constructions.

As (49) and (50) show however, *ano* may also cover inference based on perception. In (49), the speaker, although she has a perceptual (visual) clue of the continuing presence of the person she is referring to, may use *ano* (instead of *=rukji ta* or *=rɔŋsea ta*), which indicates that a visual clue does not necessarily influence her epistemic assessment compared to a situation where there would be no clue. In comparison with *ano*, the use of *=rukji ta* or *=rɔŋsea ta* would indicate more certainty from part of the speaker, although not absolute. In other words, the difference between *ano* and *=rukji ta* or *=rɔŋsea ta* is in terms of degree of confidence towards the proposition. In (50), the speaker is having a look at an

item, but as for some reason or other she cannot be entirely sure of its exact nature, she may chose the form *ano* over *=rukji ta* or *=rɔŋsea ta* to convey stronger uncertainty:

(49) ɛme=∅ dɜua=o a-no-∅ / =rukji ta
 3SG.HON=ABS here=LOC COP-IRR.DUB-3 =SML AUX.PE.INFR

‘He/she may be here’/‘It looks like he/she is here’ (seeing his/her bag is still there) – DSN

(50) hɔju=∅ bak=∅ a-no-∅ / =rukji ta
 DEM.PROX=ABS mask=ABS COP-IRR.DUB-3 =SML AUX.PE.INFR

‘This may be a mask’ / ‘it seems it is a mask’ – DSN

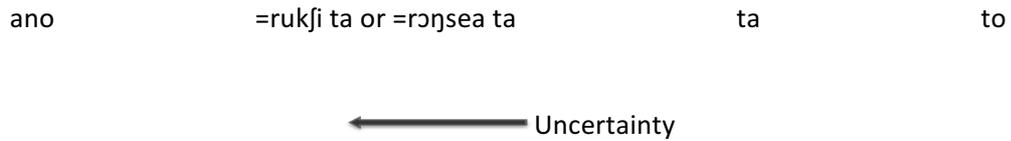
That *ano* denotes assumption in the absence of any evidence and inference based on perceptual clues reveals that the form is not sensitive to evidence. *Ano* has the epistemic meaning of lack of absolute certainty. Characterizing the marker *-no* as ‘assumptive’ would therefore be too restrictive. Dubitative as “indicating doubt” (Nida 1949: 169, Bybee 1985: 179) – rather than probability, is more appropriate. As such, I translate into English any utterance where *ano* occurs using ‘may’.

In (49) and (50), *=rukji ta* or *=rɔŋsea ta* may occur instead of *ano* provided the speaker has some kind of perceptual evidence. The use of *=rukji ta* is not enough to reach a state of absolute certainty, but indicates a change in the epistemic assessment: *ta* is not epistemically neutral. In fact, *ta* introduces a milder sense of uncertainty compared to *ano* since there is some kind of evidence to back up the proposition.

Consequently, *=rukji ta* is to be translated as ‘it seems, it looks like’. The plain form *ta* (not preceded by *=rukji* or *=rɔŋsea*) can be used as well in the previous examples, with the effect of reducing uncertainty further.

What (49) and (50) suggest is that *ta*, as a perceptual evidential, contributes to an epistemic scheme, the same applying to *du* in Kinnauri (see §4.7). Taking (45) into account, we can now provide the following epistemic hierarchy, having in mind that assumption and inference processes are always subject to some degree of uncertainty:

Diagram 1: an epistemic scale involving *ano*, *rukji ta*, *ta* and *to*



While *tɔk* refers to one's personal mental state and inner feelings, *ano* and *a:no* are obligatorily used to express an opinion about other people's psychological states. This particular use of *ano* and *a:no* is again consistent with their intrinsic dubitative value: one cannot presume to know other people's internal states. In (51), the speaker may have witnessed a situation that would make the person she is referring to angry, but as there is no way to know for sure, the speaker selects *ano*. *Ano* occurs in both past and present:

(51) ɛme=∅ naraz a-no-∅
 3SG.HON=ABS angry COP-IRR.DUB-3

'(S)he may be/may have been angry' – DSN

As mentioned in §4.2.1, there are constructions, typically proper inclusion, where doubt, that is, the use of *ano*, although grammatically acceptable, would be outlandish. If a speaker refers to someone she knows, a member of her family, a friend, or even a co-worker, she cannot be in doubt regarding the categories the referent belongs to.

Finally, an interesting feature of the form *ano* is its occurrence when a speaker anticipates that the addressee has some doubts regarding the content of an assertion, even in the case when this assertion reflects common knowledge, i.e. is usually not doubted. The speaker may choose to take the hearer's perspective when she has good reasons to believe there may be uncertainty from her part. In (52), *ano* occurs in a context where a speaker tells a small child that the grass is green. In most other contexts, the same speaker would have instead used the perceptual form *ta* or, most probably, the factual-assertive *a:ts*:

(52) tʃi:=∅ tĩ a-no-∅
 grass=ABS green COP-IRR.DUB-3

'The grass is green' – DSN

The case of *ano* is very instructive from a comparative perspective. As a dubitative copula, it is undoubtedly epistemic. As denoting a reasoning process, it has functions (assumption and inference) that are undeniably part of a knowledge management system. The difference between *ano*, *rukfi ta* and the plain form *ta* is a matter of epistemic judgement. What appears between the lines is an evidential system deeply rooted in epistemic considerations, with source of information – the perceptual *ta* – contributing epistemic nuances.

4.3.2.1 A comparative perspective on the dubitative

Chhitkul-Rākchham is not an isolated case in having dubitative copulas as part of its evidential system. Gawne (2013: 159) describes two very similar dubitative forms – *yindo* and *yèto* – in Lamjung Yolmo, with the marker *-to* having a cognate in Lhasa Tibetan (Denwood 1999: 131). Gawne contends these two forms convey “a lack of epistemic certainty” (ibid, p. 160), or “reduced certainty” (2014: 78), regardless of whether the speaker has some perceptual evidence or not.

There is no mention of any dubitative copula form in the neighbouring languages (Darma and Bunan) where a detailed description of evidentiality is available. However, Willis (2007a: 335) does mention that “the second function of *lee-* is as a verb meaning ‘be’, ‘become’ or ‘happen’”, adding that “this verb appears to be related to the copula *lee*”. Huber mentions the form *wen-me* ‘happen, become’ (2013: 231), which “often allows for an epistemic modal reading” in the case of Shumcho. Huber (2013: 235) also reports two types of future tense constructions: “if agreement markers are used, the speaker is rather certain that the event denoted by the verb will take place, in forms without agreement [with the plain future marker *-ro*] the speaker merely considers the possibility”.

What Huber describes in Shumcho is the exact opposite of Chhitkul-Rākchham, where agreement markers are used with *ano*, as shown in (46), with *-no* conveying doubt whereas the syntactic allomorph without agreement marker *a:ts* denotes certainty. Still according to Huber (personal communication), the marker *-no* found in Jangrami has a similar dubitative meaning than *-ro* in Shumcho.

Example (52), where the speaker anticipates the addressee’s knowledge, is reminiscent of Kurtöp, where Hyslop (2014: 206) identifies a category of “speaker expectation of interlocutor knowledge” that “entails an expectation that someone else also has direct knowledge of the event” marked by *-pala*, which otherwise encodes speaker certainty and direct evidence. The category is restricted to some specific contexts: perfective aspect, tags and questions.

4.3.2.2 The dubitative in Kinnauri

Based on Saxena’s accounts (1995, 2000, 2017), the situation seems to be different in Kinnauri, but this is only because her data are incomplete. I show in §4.7 that although the copulas differ between the two languages in most cases, their semantics is incredibly similar. In addition, the contrasting future tense constructions observed by Huber in Shumcho are also found in both Chhitkul-Rākchham and Kinnauri, the difference being there is only one assertive suffix (*-ts*) in the former whereas there are two (*-ts* and *-id*, occurring in complementary distribution) in the latter.

According to Saxena (1995: 263), *ni*, which I have described as the equivalent to Chhitkul-Rākchham *a*¹⁰¹ in §4.1.3, may take one of the following future tense markers (*-ta/-tl/-te/-to/-l/-o*), depending on person and phonological considerations. Saxena does not ascribe any dubitative meaning to *nito* (and neither does Sharmā), because she never fully acknowledges the contrastive assertive form *ni:ts*, which does occur in both my elicited materials and in the documentary corpus, exhibiting an assertive meaning. Consequently, *nito* necessarily has a (contrastive) dubitative reading.

Part of the confusion surrounding *ni* is of semantic nature. Saxena (*ibid*, p. 266) contends that *ni* “functions as a verb, meaning ‘to stay’” – ‘to remain’ in Sharmā’s account 1988: 135) – but she contradicts herself by mentioning *toš-* as a root which she glosses as ‘to stay’, and translates as both ‘to stay’ and ‘to live’ (*ibid*, p. 278). Bailey (1909: 681) mentions *nimig*, meaning ‘be’ and ‘become’. I posit in §4.7 that *ni* in *nito* has the meaning of ‘to be’, but it has the meaning of ‘to become’ in *ni:ts*, the counterpart of Chhitkul-Rākchham *a:ts*, which only occurs in present tense constructions. In future tense constructions, *hatfid* (see §4.3.3.2) is the appropriate form in Kinnauri.

¹⁰¹ *Ni* in Kinnauri can occur in all tenses (Saxena 1995: 265; 2017: 766), just like *a* does in Chhitkul-Rakchham.

Saxena (1995: 269) claims that *ni* may occur in a construction such as ‘there is a dog in my house’ as long as the speaker, irrespective of her knowledge state, assumes the hearer may be in doubt. *Ni* then contrasts with *to*, which “indicates that the dog either belongs to the speaker, or is with the speaker at that moment”, and *du*, which “indicates that the dog does not belong to the speaker, and he has no knowledge how he got in the house” (ibid). The pragmatic use of *ano* described in (52) is introduced as a regular feature in the case of *ni* in Kinnauri. From a cross-linguistic perspective, I am not aware of any evidential the use of which would be in most instances determined, when making an assertion, by the speaker’s anticipation of the addressee’s epistemic stance. What Saxena suggests, however, is that *nito* has a dubitative value; she does not take heed of the form *ni:ts*¹⁰² from her own data (2002: 182, 184).

4.3.3 The assertive *hɛn* and other assertive syntactic allomorphs

As argued by Wittgenstein (2008: 68) [1969], “the game of doubting itself presupposes certainty”. In contrast with the dubitative forms, assertive copulas indicate that the speaker is certain about the content of the proposition. I use the term ‘assertive’, rather than ‘factual’, because ‘assertive’ clearly contrasts with ‘dubitative’.

Among the set of copulas introduced earlier, I argue *hɛn* is assertive. The copula *hɛn* occurs in proper inclusion, attributive, identity, possessional and identificational constructions in the present tense - and may function as auxiliary in the past as well.

A:ts has a high frequency of use, occurring in proper inclusion, attributive, possessional, existential and identificational (in the latter case when there is an element of possession) constructions in the present tense and in all types of future tense constructions.

Tuts and *hunts* exclusively occur in locational constructions, the former when referring to the location of a place, the latter with animate subjects.

The main argument for ascribing *hɛn* and *a:ts* to the same semantic group is their complementary distribution. The copula *hɛn* is restricted to present tense, occurring in some constructions (possession, proper inclusion, identity and attribution) where *a:ts* does

¹⁰² *Nits* with a short vowel in Saxena (2002). There is no mention of *nits* in more recent publications (Saxena 2017, 2019).

not. In attributive constructions, *hɛn* occurs when a personal pronoun as subject and *a:ts* with other subjects, both inanimates, as in (54), or animates, as in (55). Referring to Searle's theory of Speech Acts (1969), there is no significant difference between assertiveness and emphasis from an epistemic perspective.

In (53), the speaker is without doubt with regard to which professional group the referred person belongs to. Thus, a speaker typically selects *hɛn* when making statements about one's relatives, or a person one is well acquainted with. *To* and *ta* are perfectly acceptable alternatives, but the two copulas would convey less certainty:

(53) $\epsilon me = \emptyset$ $pa lat ji = \emptyset$ $h \epsilon n$
 3SG.HON=ABS shepherd=ABS COP.EMPH

'He is a shepherd' – DSN

The copula *hɛn* does not reveal anything about the source of information and denotes some general knowledge about the world. The copula *hɛn* thus differs from *tɔts* in that the former is objective whereas the latter is subjective. Both forms have otherwise a similar wide scope, occurring with all persons as subject.

With present tense, *a:ts* refers to common or assertive knowledge, i.e. knowledge that is generally not doubted since it deals with the intrinsic properties of things, natural elements or animates, as in 'this battery is of 6 volts', 'the sun is warm', 'the sky is blue', 'cows have four legs'. The use of *a:ts* also refers to the recurrence of some events or states of affair, as in 'Diwali takes place once a year', 'it happens all the time', etc.

In (54), the speaker selects *a:ts* to insist on the fact that the type of voltage of the battery that is described is six volts, but since we are dealing with an identificational construction, there are alternatives:

(54) $hu ju$ $ba t \acute{a} ri = ni \eta$ $t u$ $vo lt = \emptyset$ $a : - ts$
 DEM.PROX battery=LOC six volt=ABS COP-HAB.ASS

'This battery is of six volts' – DSN

In (55), *a:ts* is the only choice available, because that cows have four legs is intangible:

(55) mura-tʃaŋ=e pə bɔŋ=∅ a:-ts
cow-PL=GEN four leg=ABS COP-HAB.ASS

‘Cows have four legs’ – DSN

In other words, the use of *a:ts* spans general facts that have to do with definiteness (by means of the use of a demonstrative in subject position) – in that case, *a:ts* is only one choice among many – and general facts of lasting validity with a lesser degree of definiteness – and in that case *a:ts* is the only possibility. This pattern is also reflected in (56) and (57). In the former case, we are dealing with a member of the referred category, taken individually, hence the occurrence of *a:ts* among other copulas. In the latter case, the speaker is generalizing about lemons, emphasizing their intrinsic sour property, *a:ts* is the only choice.

(56) fuju nimbu=∅ ʃur-i ta
PROX lemon=ABS sour-MODIF COP.PE

‘This lemon is sour’ – DSN

(57) nimbu=∅ ʃur-i a:-ts
lemon=ABS sour-MODIF COP-HAB.ASS

‘Lemons are sour’ – DSN

As (56) and (57) demonstrate, *a:ts* typically occurs when alluding to a feature or a property shared by all members of a given category. As soon as one follows the exact opposite path, referring to the property of one item at a time, other copulas, for example *ta* in (62), occur instead, unless the referred individual property is immutable.

The dichotomy individual vs. collective makes room for situations where a group, typically of people, is the center of attention. *A:ts* also occurs in that case, provided one purposely defines the group in vague terms. The result is a general, one may say superfluous and unquestionable statement. In (58), precisely because the proposition is vague, it can be

negated (*maa:ts*) and retain certainty. *A:ts* is the only possible choice when the proposition is an abstract generalization:

- (58) *k^hane mi:=∅ k^hatərnak a:-ts*
 QNT people=ABS dangerous COP-HAB.ASS
 ‘Some people are dangerous’ – DSN

A:ts is decidedly ungrammatical when describing someone’s psychological traits, like in ‘he is a good man’, a quality not only not shared by everyone, but fluttering too.

The habitual, durative or permanent characteristic of what is talked about is defining for the occurrence of *a:ts*. In (59), the speaker may select it, as coldness is an undisputable enduring feature associated to winter season in Chhitkul village. Some winters are of course less harsh than others, but the fundamental distinction between winter and summer in terms of temperature is, despite climate change, still valid. In contrast, in (60), a speaker of Chhitkul-Rākchham would not use *a:ts*, as the total number of Indian States can fluctuate - it has done so since India’s independence.

The same distinction between permanence and impermanence applies to language: in (61) *a:ts* is an obvious choice to express that ‘each language is different’, but it cannot occur in (62) as the number of official languages in India, although it is indeed twenty-two as of now, may evolve. The boundary between permanence and impermanence may sometimes appear fuzzy, which reflects that in the end, the choice of copula forms is inevitably subjective:

- (59) *gun=i t^hul=∅ k^hat-i a:-ts / tɔ-ts /*
 winter=LOC Chhitkul=ABS cold-MODIF COP-HAB.ASS COP.PEEX-HAB.ASS
 ta
 COP.PE
 ‘It is cold during winter in Chhitkul’ – DSN

- (60) *hindustan=o ni-za=o gui pradeʃ=∅ tɔ-ts / ta*
 India=LOC two-twenty=LOC nine states=ABS COP.PEEX-HAB.ASS COP.PE

‘There are twenty-nine States in India’ – DSN

(61) tse kat=∅ soso a:-ts / tɔ-ts / ta
QNT language=ABS different COP-HAB.ASS COP.PEEX-HAB.ASS COP.PE

‘Each language is different’ – DSN

(62) hindustan=o ni-za nij sərkar-i: kat=∅ tɔ-ts /
India=LOC two-twenty two official-FEM language=ABS COP.PEEX-HAB.ASS

ta
COP.PE

‘There are twenty-two official languages in India’ – DSN

In (59) and (61), *a:ts* may occur, as the matter at hand has an (objective) enduring feature. In (59), a speaker would select *tɔts* to convey the idea that, over the years, she has integrated the fact that winters in Chhitkul are cold, having experienced it herself, thus conveying personal factuality. She would select *ta* instead to indicate that the knowledge is new to her. The same applies to (61): *a:ts* conveys objective (factual) knowledge. *Tɔts* suggests the speaker has gained experience in issues related to languages, enough experience to express a personal and assertive judgement. *Ta* conveys information that yet has to be integrated, hence a reduced certainty compared to *a:ts*, in turn less assertive (because not personal) than *tɔts*.

Understandably, *a:ts* not only occurs in propositions denoting widely (universally) shared knowledge, but also in contexts where factual knowledge may be of a more localized nature. That ‘Indian food is spicy’ may already be known to the world, but that ‘Diwali takes place once a year’ not as much, and that ‘ālū gobhī is tasty’ even less. (63) is another example illustrating that what is considered to be a fact may be coloured by the advent of biased (group) subjectivity. In (63), the use of *a:ts* denotes that what one takes as a fact within a given group or community is not necessarily taken the same way by others. What matters is that *a:ts* occurs as members of Chhitkul-Rākchham ’s community usually take ālū gobhī to be tasty:

(63) a:lu: gob^hi:=∅ nim-i a:-ts
 aloo gobi=ABS tasty-MODIF COP-HAB.ASS

‘Ālū gobhī is tasty’ – DSN

An example like (63) is consistent with Latour’s (1987: 43) observation that “factual knowledge is socially produced”.

As denoting common knowledge and recurrent events or phenomena, the use of *a:ts* in statements of procedural nature should not come as a surprise. A Chhitkul-Rākchham speaker uses *a:ts* when explaining how an event concretely unfolds, how to cook a certain dish, how to use the local weighing system, etc. In (64), the speaker makes use of the assertive-factual form to denote that the community invariably holds the Flower Festival (*Usko*) for a certain number of days:

(64) homo djar=∅ a:-ts no usko=∅
 three day=ABS COP-HAB.ASS PTCL.EMPH Flower Festival=ABS

‘The Flower Festival lasts three days’

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The same way *ano* occurs when making an assumption or an inference subject to doubt, *a:ts* occurs when assuming or inferring with absolute certainty about the future. As such, it has a predictive value and denotes inference from generally known facts. In (65), since there have always been rituals at Chhitkul’s main temple, there is no reason to think it should be otherwise in the future: *omnia illa et ante fiebant, omnia illa et rursus fient*:

(65) tʃ^hul=∅ sant=o djar=o k^he k^he ka:rbar=∅ a:-ts
 Chhitkul=ABS temple=LOC day=LOC what what ritual=ABS COP-HAB.ASS

‘There will always be some kind of ritual at Chhitkul's temple’ – DSN

A link with the past is not at all compulsory, however, to trigger the use of *a:ts* when assuming or inferring about the future. The use of the assertive *a:ts* may indicate that something is going to happen to someone, as in (66), or it may convey resolution from part

of the speaker, as in (67). Since both *a:no* and *a:ts* may occur in (66) and (67), some kind of unspecified evidence determines which form is used:

(66) $\epsilon me = \emptyset$ *sa:hukar a-ts* / *a:-no-\emptyset*
 3SG.HON=ABS rich COP-HAB.ASS COP-IRR.DUB-3

‘He will get rich/he will maybe get rich’ – DSN

(67) *halta=tʃi* *huju=\emptyset* *he=o* *a:-ts* / *a:-no-\emptyset*
 right now=ABL DEM.PROX=ABS like=FOC COP-HAB.ASS COP-IRR.DUB-3

‘From now on, it will happen like this/from now on it may happen like this’ – DSN

Finally, a very important feature of *a:ts* is that the perceptual *ta* may follow when making inference about the future based on perceptual evidence available at the time of the utterance. In this case, *ta* occurs as an auxiliary. In (68), the speaker would use *a:ts* if he has reasons to believe – probably in light of the considerable progress in terms of living standards experienced by Chhitkul village since the 1980s – that it will keep going that way for the years to come. By using *a:ts ta*, he would be slightly less categorical – one may say less dogmatic; he would use *a:no* in case of doubt:

(68) *tsʰɔka bofaŋ neotʃ=o* *tʃʰul=e* *zindəgi-:=\emptyset* *zo-i=o*
 QNT year after=LOC Chhitkul=GEN life-FEM=ABS good-MODIF=COMP.FOC

a:no-\emptyset / *a:-ts* *ta* / *a:-ts*
 COP-IRR.DUB-3 COP-HAB.ASS AUX.PE.INFR COP-HAB.ASS

‘In a few years, Chhitkul's life will be easier’ – DSN

Tuts and *hunts* exclusively occur in locational constructions, the former when referring to places, the latter to animates. *Tuts* typically occur in utterances such as (69), when making a factual (impersonal) statement about the location of a specific place. In (70), the speaker may select *hunts* instead of *hunno*, thus indicating that she is entirely sure that the referred person will be at home tomorrow. Complete objective certainty about future events cannot exist, so in (70), like *a:ts* in (65) and (68), it is rather a matter of belief, even

though the speaker may rely on some kind of unspecified (personal) evidence – notably his own assessment of the trustworthiness of the referent:

(69) Lasa=∅ tibet=du tu-ts
Lhasa=ABS Tibet=LOC COP.come-HAB.ASS

‘Lhasa is in Tibet’ – DSN

(70) εme=∅ obi kjim=o fun-ts
3SG.HON=ABS tomorrow home=LOC COP.live/stay-HAB.ASS

‘He/she will be at home tomorrow’ – DSN

The description of assertive copulas bears witness of a system where epistemic considerations play a tremendous role. Among these four forms, *a:ts* denotes common – and possibly localized – knowledge, including procedural aspects. *A:ts* also occurs to make predictions in the future. As these predictions convey absolute certainty, we shall characterize this specific use of *a:ts* as mantic. As a copula, *a:ts* sometimes competes with the dubitative forms *ano* and *a:no*, which suggests some unspecified evidence is helpful in making a choice, and sometimes with both the perceptual *ta* and the personal experience *to*. That *ta*, which undeniably conveys source of information, tones down the assertiveness conveyed by *a:ts* indicates that *ta* is not epistemically neutral, and that both *a:ts* (and therefore *ano* and *a:no*) and *ta* are part of one indivisible evidential system.

4.3.3.1 A comparative perspective on assertive forms

As pointed out by Hill (2017), the factual emerged relatively recently in research papers on Tibetic languages, starting with Yukawa (1975). Its emergence stems from the gradual realization, based on the most central tenet of structuralism, that to three morphosyntactic groupings must necessarily correspond three distinctive semantic categories. Since Yukawa’s (1975: 4) observation that the factual “ある状態であるととを客観的に断定する objectively asserts a certain state”, the term has attained wide currency, albeit with an undeniable heterogeneity. Various accounts are available, both in terms of formal expression – what Agha (1993: 207) refers to as ‘localizability of expression’, ‘generic class of syntactic category’ and ‘obligatoriness of occurrence’ – and in

terms of semantic value: “generally known facts” (Hajime 1977: 27), “hearsay” (Chang and Chang 1984: 605), “assertif” (Tournadre 1992: 207), “indirect source of information” (Hongladarom 1993: 52), “indirect [hearsay, inference and impersonalization]” (Garrett 2001: 36-44).

The factual is part of the evidential system in Darma (Willis 2007) and Bunan (Widmer 2014). In Darma, the meaning of “general knowledge/indirect (assumed)” (Willis 2007b: 95) is expressed by means of the existential verb occurring in two distinct constructions: “first, an inflected existential verb, *lee-*, is preceded by a nominalised verb stem (VSTEM-*nu*); or second, an inflected existential is used alone”. In Bunan, Widmer (2014: 579) ascribes a ‘generic evidential value’ to the equative copula *jen*, like *hen* in Chhitkul-Rākchham. However, ‘generic’ meanings in Bunan “are expressed by a number of periphrastic constructions that consist of a non-finite verb form followed by the equative copula *jen*” (ibid, p. 548) whereas *hen* is not the only form involved in Chhitkul-Rākchham. Widmer also treats evidentiality and ‘epistemic marking’ (ibid, p. 501) in two separate sections.

Why very few scholars associate the factual with the term ‘assertive’ (“assertif” in Tournadre (1992); “attestative” in Agha (1993: 215); “断言/事实 assertive/factual” in Shao (2014: 49-50); “assertive” in Yliniemi (2017: 337)) and this is understandable: the resilience of the conjunct-disjunct overshadows the ternary distinction mentioned earlier and Aikhenvald’s narrow treatment of evidentiality is still in fashion. However, now that the factual gained its credentials in the description of ‘Tibetic’ languages, one may rightfully wonder why dubitative forms would be kept apart. In fact, in Gawne’s account of Lamjung Yolmo (2014: 77) a quaternary semantic distinction includes ‘dubitative’ and ‘general fact’ forms. In addition, the introduction of the factual raises the question as to whether it should be taken ‘objectively’ (Yukawa 1975) or subjectively, the examples provided in this section suggesting that what can be said ‘objectively’ by means of the assertive-factual forms is limited.

4.3.3.2 The marker -ts in Chhitkul-Rākchham and Kinnauri

Although a speaker has a choice between a verb form ending in *-no* (dubitative) and one ending in *-ts* (habitual-assertive) in future tense constructions, I take the latter to be an aspectual (habitual), not a mood marker *per se* for a number of reasons.

Person marking may follow a mood marker like *-no*, but this does not apply to *-ts*, which, like all aspectual suffixes, invariably occupies the verb last slot.

Tɔts is a very common form in past narratives, which is also consistent with a habitual reading.

As shown in §5.5.4, an auxiliary may follow a main verb inflected for *-ts* the same way it may follow a main verb inflected for any other aspectual marker whereas no auxiliary occurs after the following morphological structures: V-IMPV-AGR and V-IRR-AGR.

Finally, *-ts* contrasts with the habitual-progressive *-a*, and denotes a different kind of habituality. The former conveys common knowledge (applying to both properties and actions) and assertive predictions about the future. The latter conflates progressive and habitual meaning, and includes frequentative constructions giving the sense of ‘frequently’, ‘often’, ‘every day’ and even ‘always’. In the latter case, the borrowed Hindi term *hamefa* ‘always’ co-occurs. An alternative is precisely the use of *-ts*, which conveys a similar meaning of permanence. I further discuss *-ts* from a diachronic perspective in §5.12, arguing it is turning into a realis marker.

TAM morphemes are never fully one of the three distinct categories linguists conveniently ascribe to them. As pointed out by Tournadre (2017: 1), “within such an approach, the long standing debate over the status of the future which is considered either as a modality or as a tense becomes quite meaningless”.

With regard to Kinnauri, Bailey (1909: 666) makes brief mention of “an indeclinable present tense formed by adding *-ts* to the root (...), thus *lɔts*, they say, I say, from *lɔnmig*”. As mentioned in §4.4.6, he also reports a negative copula form marked with *-ts*, namely *māěts*: “is not, are not, there is not, from the negative *ma*” which stands close to Chitkul-Rākchham *maa:ts*. Sharmā (1988: 152-3) mentions a negative particle *māni*, the alternative of which, when /n/ is removed, is the same form as in Bailey, but unmarked for *-ts*, namely *māě*.

Sharmā’s observation also entails *ni* and *ě* have a similar meaning. *Ni:ts* occurs in my data on Kinnauri, and exhibits a morphosyntactic and semantic correspondence with Chitkul-

Rākchham *a:ts*. This suggests that a contrast between dubitative vs. assertive-factual is at play in both languages. It is likely one language borrowed *-ts* from the other.

In Kinnauri, Sharmā (1988: 147) describes the marker *-ts* as a “habitual” aspect suffix invariably attached to the copula form *ni*, like in *zao ni:ts* (‘we usually eat’). He also notes that *ni:ts* can be followed by *du*, just like *a:ts* can be followed by *ta* in Chhitkul-Rākchham, the difference being, *ni:ts du* occurs in present tense constructions in Kinnauri whereas *a:ts ta* does so in the future constructions in Chhitkul-Rākchham. Saxena (1995: 278) characterizes *-ts* as an ‘imperfective aspect marker’ occurring in complementary distribution with *-id*. Judging by the examples she provides, both have a habitual meaning, just like *-ts* in Chhitkul-Rākchham.

Both Sharmā and Saxena identified the future tense markers and the suffix *-ts*, but they never took a step further by connecting habituality and assertive meaning. Interestingly, Kinnauri *ni* has a cognate (existential form) in Bunan, where Widmer (2014: 595) posits it is “currently acquiring an epistemic function”: *tal lo^kj ni*: (‘he is sick’) would have both an epistemic neutral and an assertive meaning depending on context¹⁰³.

4.3.4 The personal experience *to*

The personal experience (PEEX) form *to* occurs when the speaker is relying on some internal knowledge. This type of copula is referred to under various denominations in the literature, in many cases by means of the adjective ‘egophoric’ (Tournadre 1991) or ‘personal’ (DeLancey 1990a; Van Driem 1998; Hill 2012).

As seen in §4.1, *to* is compatible with all persons in both past and present. We may argue, like Sandberg (1894: 46) does in the case of *yod* in his pedagogical grammar of Lhasa Tibetan, that *to* is “more commonly used with first person”, but this is not an absolute rule and explains why I take some distance from terms such as ‘egophoric’, or ‘ego’ (Garrett 2001; Gawne 2013) as these may suggest an exclusive relationship between *to* and first person.

¹⁰³ *Ni* is also attested in East-Bodish languages such as Kurtöp (as auxiliary, Hyslop 2011: 463), Tawang Monpa or Dakpa (as ‘existential testimonial’ copula, Helgestad Tombleson 2015, 2020), in Kuki-Chin Lushai (Thurgood 1982: 74), and in Methei (Chelliah 1997: 509).

The copula *to* has to be seen through semantic rather than syntactic lenses: it denotes the unfolding of a subjectivity that pervades the overwhelming majority of utterances. The occurrence of *to* with all persons – in contrast with *ta*, incompatible with first person – is an indication that *to* is more deeply ingrained in personal knowledge than the other copulas. Rather than source of information, access to the same is central.

A first common use of *to* is when the speaker refers to his own possession, as in (42), where *to* is the only available choice to the speaker. Consequently, ‘there is a dead snake in the garden’ triggers *ta* whereas ‘there is a big fireplace in my house’ requires *to*¹⁰⁴.

In proper inclusion and attributive constructions, the relationship between the speaker and what is being said determines which of the forms *ta* and *to* occur. In utterances such as ‘this man is a shepherd’ and ‘this man is tall’, the use of the demonstrative in subject position suggests that the speaker does not know the person she is referring to very well. *Ta* is the appropriate form in this context. Alternatively, the use of a proper name such as Ram in subject position implies some kind of relationship between the speaker and her, hence the use of *to*. With third person pronouns as subject, both may occur, depending on the kind of relationship between the speaker and the referred person.

The choice between *to* and *ta* may depend on what has been previously uttered by the speaker. In (71), the speaker, by using ‘my’ indicates there is a close relationship between him and the person he is talking about, and *to* occurs in the second clause:

(71) hojo mi:=∅ ai ate=∅ εme=∅ mã mã
 DEM.DIST man=ABS 1SG.POSS elder brother=ABS 3SG.HON=ABS INT
 ru-i to
 tall-MODIF COP.PEEX

‘This man is my elder brother, he is very tall’ – DSN

The pattern is similar in a past tense context. In a sentence like ‘he was the Oracle of the village’, *tote* is used in case the speaker had some kind of relationship with the Oracle, *tase* otherwise, while in a sentence like ‘life in Chhitkul was difficult’ the speaker would use *tots* or *tote* to make it clear he experienced the situation, *tase* otherwise.

¹⁰⁴ In Kinnauri, it seems both forms *to* and *du* may occur in the latter case (Saxena 1995: 269).

In (39) – see §4.3.1 – *to* contrasts with *ta* in terms of personal vs. impersonal opinion. There are actually three ways to approach an utterance like (39). The speaker may not feel personally involved in the discussion topic, and in that case she uses *ta*. Another possibility would be that the speaker does have a clear opinion about the content of the conversation, but for some reason deliberately renounces to make it clear to the addressee, still by using *ta*. Finally, the speaker may select *to*, as in (72). By doing so, she foregrounds her opinion, showing a kind of involvement in the discussion:

(72) hojo=∅ lo batʃea-saŋ baɦut dʒaruri: to-∅
 DEM.DIST=ABS also preserve-INF INT necessary COP.PEEX-3

‘To preserve that [C-R language] is also absolutely necessary’

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To occurs whenever the speaker can personally relate to the content of the discussion. Comparing (40) in §4.3.1 with (89) in §4.6, we observe that *to* cannot occur in the former unless the speaker claims possession of the tree. In all other cases, only *ta* and *ɦɛn* are available to him. Conversely, *to* may occur in (89), as Rākchham’s temple has a deeper imprint in his consciousness than a tree.

In examples (44) and (45), *=rukʃi ta* and *=rɔŋsea ta* have the semantic value of inference based on perceptual evidence (see §4.3.6). When *to* follows *=rukʃi* and *=rɔŋsea* it does not have an inferential value, but based on personal experience. As (73) and (74) show, *to* follows *=rukʃi* (or *=rɔŋsea*) in possessional constructions with 1SG as subject, and *toĩ* follows *=rukʃi* in attributive constructions with 2SGHON as subject¹⁰⁵:

(73) ga:=∅ da kjalak^ha taɪm=∅ =rɔŋsea to
 1SG=ABS POST enough time=ABS =SML.REL AUX.PEEX

‘It looks like I have enough time’ – DSN

(74) kin=∅ jel-i =rukʃi to-ĩ
 2SG.HON=ABS tired-MODIF =SML.REL AUX-2SGHON

¹⁰⁵ *Ta* may occur instead of *to* in (74). The former denotes immediate perception, based on visual evidence, the latter integrated knowledge. The occurrence of the egophoric *to* with 2SG in declaratives, also attested in Kinnauri (Saxena 1995: 266) and Shumcho (Huber 2015: 10), is a rarity from a comparative perspective.

‘You look tired (and I know it)’ – DSN

4.3.4.1 A comparative perspective on personal experience

‘Personal experience’ (DeLancey 1990a), ‘egophoric’ (Tournadre 1991), ‘participant specific’ (Agha 1993) is the source of profound dissensions, the implications of which I address in details in §5.11.4 and §5.11.5. Of central concern is whether it refers to the first part of the conjunct-disjunct (Hale 1980), and whether it marks first person, some scholars either accepting these two claims (Aikhenvald 2004, 2015), discarding both (Tournadre 1991, 2008), or just one, first person agreement (Sandberg 1894, Bendix 1974, Hargreaves 2005), prior to the introduction of the ‘conjunct’. Although coined within the Tibetic context, the ‘egophoric’ is very much relevant in other language families – see Gawne (2017) for a comparative perspective.

As part of a system, ‘personal experience’, like the perceptual and the factual, has a different scope from one language to another. Very often, it occurs for actions, events and states in which the speaker is in some way or other involved, as in Dokpa Tibetan (Caplow 2000: 25) and Kyirong (Huber 2005: 98-9). In some other cases, the speaker’s state of knowledge is more relevant, as in Denjongke (Yliniemi 2019). The contrast between old and new information, or between “assimilated” and “acquired” (van Driem 1998: 127), is also a recurrent parameter.

The relationship between ‘personal experience’ and first-person also varies greatly, from an all-embracing speaker’s knowledge compatible with all persons (Huber 2005) and the ‘broad scope’ (Tournadre 2008) observed in Standard Tibetan, to a strictly adhered restriction to first person (‘narrow scope’), including intermediary situations where ‘personal experience’ is compatible with some persons but not others (van Driem 1998).

In her account of Kyirong, Huber (2005) conflates ‘generic knowledge’ with ‘personal experience’, in contrast to the ‘new knowledge’ category. A similar conflation seems to characterize Darma (Willis 2007b) and Bunan (Widmer 2014), where a ternary distinction is observed between “direct/visual”, “general knowledge/indirect (assumed)”, and “inferred”. There is no copula conveying the meaning of ‘personal experience’ in these two ‘West-Himalayish’ languages. However, *to* is also part of the copula system in Shumcho, where it

“indicates that the utterance is based on the speaker's internally established knowledge about some state of affairs obtaining at the time of speech (or at the respective time in the past)” (Huber 2015: 10).

4.3.4.2 Personal experience in Kinnauri

Bailey (1909) and Sharmā (1988) do not deal with the semantic value of the copula verbs they mention – including *to*. However, Saxena (1995: 267) clearly describes a meaning close to ‘personal experience’ in Kinnauri: “*to* in such constructions [equational and existential] indicates that the subject is somehow related to the speaker”.

4.3.5 The personal assertive *tɔts*

To and *tɔts* have the same underlying base *to*, which denotes ‘personal’ evidentiality. The suffix *-ts* in *tɔts* is a clear indication that *tɔts* is also assertive, just like *a:ts*, *tuts* and *hunts*, reason why I ascribe the distinct semantic value of personal assertive to *tɔts*. When a speaker draws on her inner experience or inner knowledge state, there is a choice between *to* and *tɔts*, both reflecting an all-pervasive subjectivity, *tɔts* denoting a higher degree of certainty by comparison. The difference between *tɔts* and *a:ts* (and *hen*) is one of personal vs. impersonal certainty.

Tɔts typically occurs in past narratives. When reminiscing about past events in which she took part, a Chhitkul-Rākchham speaker typically alternates between *tase*, *tɔte* and *tɔts*. *Tase* occurs when describing things in a general way – without involvement from part of the speaker – whereas *tɔte* and *tɔts* occur to indicate that the speaker personally relates, emotionally or psychologically, to a particular sequence of the event. In (75), the speaker selects *tɔts* to combine both involvement and certainty:

(75) *dəsuĩ taŋ huʃ-aŋ tʃʰɛtiŋ=e piŋã skul=∅ saŋla: dʒua=tʃi*
 tenth POST study-INF POST=PURP near school=ABS Sanglā here=ABL
ni-za=o ŋã kilometər=∅ tɔ-ts
 two-twenty=LOC five kilometer=ABS COP.PEEX-HAB.ASS

‘To study up to tenth class, the nearest school, 25 kilometers from here, was in Sanglā’

In (76), my main consultant uses *tɔts* to indicate that the information is part of his own knowledge state and is beyond doubt. *A:ts* could occur instead, if he takes the number of *khandan* to be a permanent or durative feature of Chhitkul's social order. However, as seen in §1.2.4.2.1, this can change:

(76) tʃʰul=∅ def=o gui kʰandan=∅ tɔ-ts
 Chhitkul=ABS village=LOC nine clan=ABS COP.PEEX-HAB.ASS

'There are nine khandan in Chhitkul village' – DSN

In a similar way, a speaker may use *tɔts* in (69) to convey the idea that she is personally acquainted with the fact that Lhasa is in Tibet, having possibly read about this or even visited the place herself.

The existence of two forms – *to* and *tɔts* – to convey personal experience is noteworthy. As shown in §3.4, the repertoire of copula forms available to the speaker may include both forms in most contexts (in the past, but also in present locational and existential constructions).

Possessional constructions are the only type of constructions in the present tense where *tɔts* may occur with personal pronouns as subjects. That *tɔts* is incompatible with first person in this context denotes that certainty is redundant when referring to self-possession.

Tɔts clearly occurs more often in a past tense context. What is it the past has that the present does not? A durative quality that makes one in position to gain certainty is a hypothesis worth considering.

That *tɔts* has no negative counterpart makes it very distinctive compared to the assertive copulas discussed in §4.3.3: an omniscient subjectivity cannot be negated: **matɔts* would imply that the speaker is erasing herself from past events she has been involved in. In contrast, *maa:ts* is perfectly grammatical because it is impersonal.

In addition, *to* can be marked for person whereas *tɔts* cannot, which indicates that in some contexts personal evidentiality is entirely distinguishable from person indexation.

The pair *to* and *tɔts* is leading us to nuance Zeisler’s (2018: 87) claim that self-knowledge has to do with certainty. *To* conveys more certainty than *ta*, but conveys less certainty than *tɔts*. Latour and Woolgar’s (1979: 82) assertion that “a fact is nothing but a statement with no modality – M – and no trace of authorship” is not entirely accurate either: *tɔts* cannot occur if the speaker is not involved.

4.4 Copulas and negation in Chhitkul-Rākchham

In copula constructions, *ma-* is prefixed to the copula: *maano*, *maa:no*, *maa:ts*, *matuts*, *mahunno*, *mahunts*, *mahen*, *mata* and *mato*.

4.4.1 Copula distribution in negative constructions in Chhitkul-Rākchham

The tables below list all the negative forms found in Chhitkul-Rākchham. With regard to *ta*, *mata* is the only form available with present tense. *Mata* is not compatible with 1SG in both present and past. However, whereas *mata* is never inflected for person and number in the present tense, it can be in the past, but exclusively in locational constructions. As shown in (77), both *to* and *ta* inflected for negation, tense (imperfective) and person may occur in that type of construction.

(77)	kin=∅	rosoi=o	ma-tɔ-te-ĩ	/
	2SG.HON=ABS	kitchen=LOC	NEG-COP.PEEX-IMPV-2SG.HON	
	ma-ta-se-ĩ			
	NEG-COP.PE-IMPV-2SG.HON			
	‘You were not in the kitchen’ – DSN			

Maa:ts, *mahen*, *mahunts* and *matuts* do not inflect for person and number. Tables 35, 36, 37, 38 and 39 provide the whole paradigm of negative forms in present, past and future:

Table 35: inflectional paradigm of the copula *ta* (negation, past temporality; *man*: only in constructions with an element of possession)

Person	Singular	Plural
1	-	ma-ta-se-tʃ
2HON	ma-ta-se-ĩ	
2NHON	ma-ta-se-n	
3	ma-ta-se/man	

Table 36: inflectional paradigm of the copula *to* (negation, present and past temporality; *mat ti* and *man*: only in proper inclusion, attributive, possessional, and identity constructions)

Person	Present tense singular	Present tense plural	Imperfective singular	Imperfective plural
1	ma-tɔ-k/maʰɛn/mat ti/man	ma-tɔtʃ/maʰɛn/mat ti/man	ma-tɔ-tɛ-k	ma-tɔ-tɛ-tʃ
2HON	ma-to-ĩ/maʰɛn/mat ti/man		ma-tɔ-te-ĩ	
2NHON	ma-tɔ-n/maʰɛn/mat ti/man		ma-tɔ-te-n	
3	ma-to/maʰɛn/mat ti/man	ma-to/maʰɛn/mat ti/man	ma-tɔ-te	

Table 37: inflectional paradigm of *a* (negation and dubitative irrealis)

Person	Singular	Plural
1	ma-a-nɔ-k	ma-a-nɔ-tʃ
2HON	ma-a-no-ĩ	
2NHON	ma-a-nɔ-n	
3	ma-a-no	

Table 38: inflectional paradigm of the copula *a*: (negation, dubitative irrealis)

Person	Singular	Plural
1	ma-a:-nɔ-k	ma-a:-nɔ-tʃ
2HON	ma-a:-no-ĩ	
2NHON	ma-a:-nɔ-n	
3	ma-a:-no	

Table 39: inflectional paradigm of the copula *hun* (negation, dubitative irrealis)

Person	Singular	Plural
1	ma-hun-nɔ-k	ma-hun-nɔ-tʃ
2HON	ma-hun-no-ĩ	
2NHON	ma-hun-nɔ-n	
3	ma-hun-no	

In all those cases in past affirmative clauses where there is a choice between *tɔte*, *tase*, *ano* and *tɔts* – typically with third person subjects – *matase* (or *matas*¹⁰⁶) and *matɔte* can occur in their proper inclusion, attribution and locational negative equivalents, and only *matase* (or *matas*) in identity, possessional and existential ones:

(78) teotʃ=o tʃʰul=e zindəgi=∅ a:sa:n mat=ti /
 before=LOC Chhitkul=GEN life=ABS easy CVB.NEG=COP.PE
 ma-ta-s(e) / ma-tɔ-te
 NEG-COP.PE-IMPV NEG-COP.PEEX-IMPV

‘Life in Chhitkul was not easy before’ – DSN

(79) kĩ kjusu=∅=du kʰɛts=o ma-ta-s(e)
 2SG.POSS.HON pocket=ABS=LOC QNT=FOC.DEF NEG-COP.PE-IMPV

‘There was nothing in your pocket’ – DSN

¹⁰⁶ *Matase* may undergo a process of vowel deletion.

In the present tense, there are therefore more choices in negative copula clauses than in affirmative ones. We observe the same situation in the past, although the difference is less marked.

4.4.2 The two negative syntactic allomorphs *man* and *mat ti*

The two negators *man* and *mat ti* express two different attitudes towards the content of the proposal: emphatic (assertive) in the case of *man* and less assertive in the case of *mat ti*. Whereas the relationship between lexical verbs and negation is monolithic (the negative prefix *ma-* invariably precedes lexical verbs), up to four negative forms may occupy the same slot, as in (80). *Man* and *mat ti* only compete with *mato* in the present tense and *man* competes with *matas* (or *matase*) in a past context. *Man* is a syntactic allomorph of *mahɛn* and *mat ti* reflects a process of harmonisation of coda and onset in the same point of articulation, hence *mat ti* > *man ti*, with *ti* functioning as syntactic allomorph of *ta* – see §4.4.6:

(80) ga:-∅ pala=tʃi ma-tɔ-k / man /
 1SG-ABS shepherd=AGT NEG-COP.PEEX-1SG CVB.NEG.EMPH
 mat=ti / ma-hɛn
 CVB.NEG-COP.PE NEG-COP.EMPH
 ‘I am not a shepherd’ – DSN

(81) ɛme min=∅ ram=∅ ma-ta-s(e) / man
 3SG.HON.POSS name=ABS Ram=ABS NEG-COP.PE-IMPV CVB.NEG.EMPH
 ‘His name was not Ram’ – DSN

Referring to table 25, *mat ti* and *man* occur in all types of constructions but locational (unless with place names as subject) and existential in the present tense. *Man* only occurs in the past with third person constructions involving an element of possession and when one is contradicting a statement (see hereafter). The use of *mat ti* in the past is restricted to locational, existential, and impersonal constructions such as (78). There are a few instances in the documentary corpus of *mat ti* in past existential constructions.

When contradicting a past or present statement, *man* and *mat ti* occur in complementary distribution: the former in proper inclusion, attributive, identity, possessional and locational constructions, the latter in present tense existential constructions (*matase* – or *matas* – in the past):

kin-∅ palatji-∅ hɛn ɔoman-∅ man; 2SG.HON-ABS shepherd-ABS COP.EMPH blacksmith-ABS COP.NEG.EMPH ('you are a shepherd, not a blacksmith');

kin-∅ palatji-∅ tɔ-ts/tɔ-te-ĩ ɔoman-∅ man 2SG.HON-ABS shepherd-ABS COP.PEEX-HAB.ASS/COP.PEEX-IMPV-2SG.HON blacksmith-ABS COP.NEG.EMPH ('you were a shepherd, not a blacksmith');

kin-∅ sa:hukar hɛn olea man 2SG.HON-ABS rich COP.EMPH poor CVB.NEG.EMPH ('you are rich, not poor');

kin-∅ sa:hukar tɔ-ts/tɔ-te-ĩ olea man 2SG.HON-ABS rich COP.PEEX-HAB.ASS/COP.PEEX-IMPV-2SG.HON poor CVB.NEG.EMPH ('you were rich, not poor');

kin-∅ master-∅ hɛn ai au-∅ man 2SG.HON-ABS master-ABS COP.EMPH 1SG.POSS father-ABS CVB.NEG.EMPH ('you are my teacher, not my father');

kin-∅ master-∅ tɔ-ts/tɔ-te-ĩ ai au man 2SG.HON-ABS master-ABS COP.PEEX-HAB.ASS/COP.PEEX-IMPV-2SG.HON 1SG.POSS father-ABS CVB.NEG.EMPH ('you were my teacher, not my father');

ga:-∅ da ni-za la:-∅ to sea man 1SG-ABS POST two-ten goat-ABS COP.PEEX ten CVB.NEG.EMPH ('I have twenty goats, not ten');

ga:-∅ da ni-za la:-∅ tɔ-te sea man 1SG-ABS POST two-ten goat-ABS COP.PEEX-IMPV ten CVB.NEG.EMPH ('I had twenty goats, not ten');

eme-∅ dukan-o to sant-o man 3SG-ABS shop-LOC COP.PEEX temple-LOC CVB.NEG.EMPH ((s)he is at the shop, not at the temple');

eme-∅ dukan-o tɔ-te-∅/ta-se-∅ sant-o man 3SG-ABS shop-LOC COP.PEEX-IMPV-3/COP.PE-IMPV-3 temple-LOC CVB.NEG.EMPH ((s)he was at the shop, not at the temple');

hɔda ɔm-∅ tɔ-ts saq^hak-∅ mat ti (there path-ABS COP.PEEX-HAB.ASS road-ABS CVB.NEG=COP.PE ('there is a path, but no road');

hɔda ɔm-∅ tɔ-ts/ta-se saq^hak-∅ ma-ta-s(e) there path-ABS COP.PEEX-HAB.ASS/COP.PE-IMPV road-ABS NEG-COP.PE-IMPV ('there was a path, but no road').

The previous examples involve two copula clauses. The complementary distribution of *man* and *mat ti* in the second copula clause does not contradict the claim from §4.1.2 and §4.4.6 that *man* and *mat ti* are syntactic allomorphs of *mahen* in copula clauses.

4.4.3 Copulas and negation in Chhitkul-Rākchham according to Bailey and Sharmā

The form *mǎn* is also part of Bailey's (1920: 82) data. *Mǎn* serves a copula function in *gā khōshyǎ mǎn* ('I am not a Khanet') and otherwise follows a main verb in future tense constructions expressed by means of the root inflected with the aspectual *-a* (*gā zā mǎn*: 'I will not eat') and in past tense constructions (*gā kǔn zāi mǎn*: 'I did not eat bread'). *Mat ti* is not part of Bailey's description.

Sharmā (1992) does not discuss the negation of copulas, but his observation that "Chhitkuli does not attest the practice of having distinct negative system as is attested in some of the Tibeto-Himalayan languages in which the use of a negative particle brings about notable structured changes in verbal conjugations" (ibid, p. 274) is consistent with my account (§4.4.1). Sharmā does not formally identify *man* as a syntactic allomorph of *mahen* and, like Bailey, he makes no mention of *mat ti*.

4.4.4 Copulas and negation in neighbouring languages

The available data on copulas and negation is very limited within 'West-Himalayish'. In Darma, "the negative particle, *ma-*, is found preceding the verb stem" (Willis 2007: 369), which applies to the only copula form identified, namely *lee* → *malee* (ibid, p. 307). In Bunan, according to Widmer (2014: 579), "verb forms are negated with the morpheme *ma-*". Huber and Sharmā (2001a) do not address copula negation in Shumcho and Byangsi. According to Sharmā (2001b: 233), "the negative adverb [*mha-ma*] generally appears immediately before the verb in negative clauses" in Rongpo, but copulas are not part of the description. The same applies to Krishan's (2001a: 422) treatment of Chaudangsi, where the negative marker /*mə-*/ "occurs before the verb root".

With *ma-*, *man* and *mat ti*, Chhitkul-Rākchham exhibits a system of triple negation. Typological studies (Miestamo 2005; Dryer 2008, 2013; van der Auwera and Vossen 2017) conclude this feature is neatly circumscribed within the Tibeto-Burman language family. Although multiple negation within Sino-Tibetan is not restricted to Kiranti, it is at least typical for Kiranti” (van der Auwera and Vossen 2017: 43), and attested in languages spoken at the fringes of India, East Bodish (Hyslop (2011: 463) makes mention of two negative copulas, *min* and *mut*, in Kurtöp), Kuki-Chin Thadou (Haokip 2012), and Liangmai (Daimai and Singha 2020).

4.4.5 Copulas and negation in Kinnauri

With regard to negation, Bailey’s (1909: 667) contribution is limited to the claim that “for the imperative the negative is *tha*, for all other tenses *ma*”. Sharmā (1988: 152-3) mentions three particles, /*mə*/, /*tha*/ and /*terəni*/, “the contracted forms of the negative particle + verb substantive /*məni*/ [alternatively *məñ* when /*n*/ is removed] (...) used particularly to indicate disagreement with [a] statement”. Sharmā identifies a “negative sub-system, operative for future tense only [compare *gə zatog* ‘I will eat’ with *gəməzak*, ‘I will not eat’]. With other tenses, there is no structural change in the verb forms, except the verb-substantive”: *məñ kek* (‘I was not’, to be compared with the affirmative form *tokek*), *məñ keñ* (‘you were not’, to be compared with *tokeñ*).

Saxena (1995, 2000, 2017) does not provide the negative equivalents of the copula forms *du* and *to*. She reports a form, *ma=ni=ma*, with the meaning of ‘not if’ (1995: 266), *man-na* (NEG.EMPH-COND) in Chhitkul-Rākchham. The prefix *ma-* negates lexical verbs. Based on her paper from 2017, there are two negative copulas in the present tense: *ma-ni*, which has a contrastive interpretation, and NEG-AGR (e.g., *ma-k* [1SG]; *ma-tʃ* [2HON.PL]; *ma-du* [3NHON (animate, inanimate)]; *ma-f* [3HON.SG]), which has a “neutral negative interpretation”. In a past context, *mani* “occurs in situations where the speaker wants to correct the listener’s claim or assumption” (ibid) whereas *man* only does so in the present tense. Saxena describes *mani* as the future tense negative copula, consisting of NEG-COP-AGR. Thus, /*n*/ in *man* refers to the old copula *hen* in Chhitkul-Rākchham and *ni* in *məni* refers to the old copula *ni*, and both /*n*/ and *ni* have an emphatic meaning.

4.4.6 Diachronic considerations on *man* and *mat ti*

I have established in §4.4.2 that *man* and *mat ti* are syntactic allomorphs of *mahen*, with /n/ in *man* as a contraction of *hen*. In §4.3, I also report *man* and *mat ti* are postverbal negators. Van der Auweren and Vossen (2017: 45) mention cognates of *ma-* functioning as postverbal negators “mostly, so it seems, in North-East India, as in e.g. Mising (Prasad 1991: 98-103), or Galo (Post 2015), and perhaps Angami (Giridhar 1980: 79-83)”. Cognates of *ma-* do not serve this precise function in Kiranti, where “the most common forms are *-ni*, *-n*, *-nə -nən*, *-nin*, *-ina*, *-aina*”.

One surmise, referring to Ebert (1994: 40), is that the preverbal *ma-* and the previously mentioned suffixes both derive from *mVn, if one takes Post’s suggestion that the Proto-Tibeto-Burman form is not **ma-*, but **ma(-C)* to be true. From this perspective, Chhitkul-Rākchham *man* would stem from Proto-Tibeto-Burman **ma(-C)*. The previous surmise fails short however to provide an answer for the presence of *mat ti* in Chhitkul-Rākchham. In addition, Kinnauri *māni* does not exactly fit **ma(-C)*.

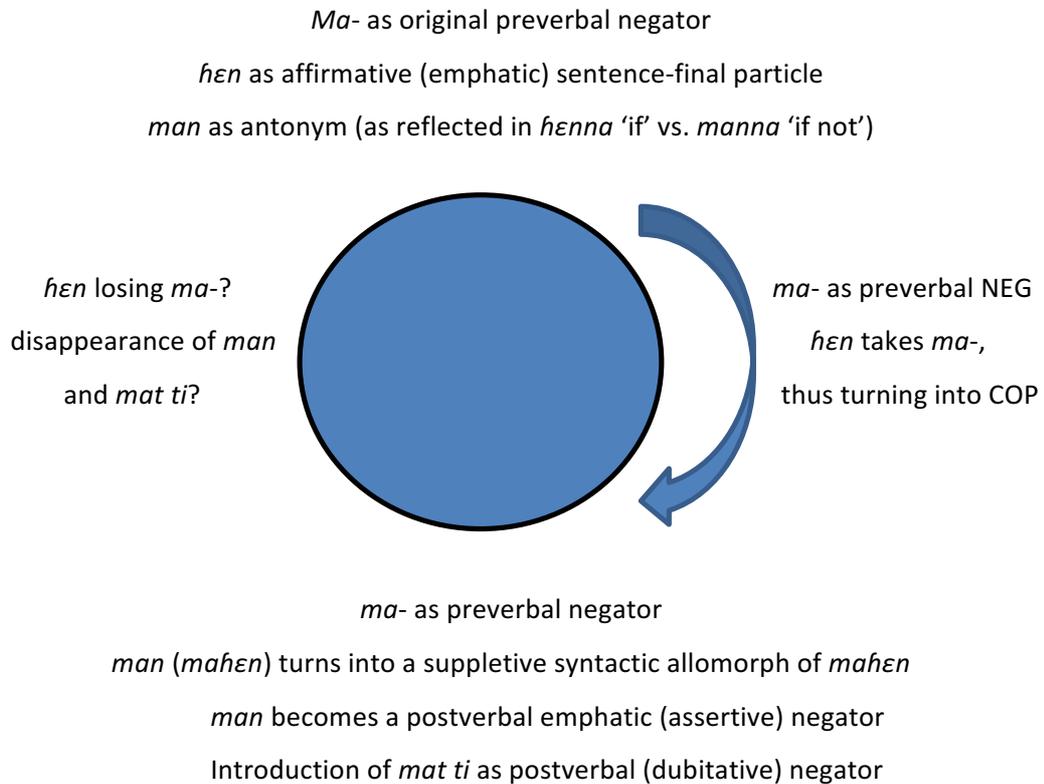
Another lead is that postverbal suffixes such as *-ni*, *-n*, *-nə -nən*, *-nin*, *-ina*, *-aina* “are old and go back to a Tibeto-Burman copula” (van der Auweren and Vossen 2017: 45). Kinnauri *māni* fits perfectly with this hypothesis, as *ni* is identified in the available literature as a copula verb. Note that /n/ is also part of the previous list: /n/ in *man* refers to the same old copula.

That *hen* as auxiliary cannot be negated (see §5.3) suggests that *man* as a contraction of *mahen* is a recent innovation. Cross-linguistically, a second negator is typically emphatic – see for example the French *pas* – but in Chhitkul-Rākchham /n/ is not restricted to being a negator and traces back to the old emphatic (or assertive) final sentence particle *hen*, which had *man* as antonym, and which turned into a copula at the exact same time it took the negative prefix *ma-* (see §4.7).

My observations on *man* are consistent with a typical Jespersen Cycle (1917: 4; see Dahl 1979): the preverbal *ma-* is the oldest negator (as Proto-Tibeto-Burman) and *man* is by comparison less old: “the original negative adverb is first weakened, then found insufficient and therefore strengthened, generally through some additional word, and this

in its turn may be felt as the negative proper and may then in course of time be subject to the same development as the original word”:

Diagram 2: Negation in Chhitkul-Rākchham: a Jespersen Cycle?



I also argue that /n/ was fused at a very early stage with *ma*, the same way /n/ was fused with the focus clitic =o, thus forming *no*, the emphatic particle (see §8.3), reason why I do not treat /n/ as a suffix. *Man* and *mat ti* serving as syntactic allomorphs of *mahen* from a synchronic perspective, they occur independently, i.e. I cannot treat them as affixes (like *ma-*). That *man* and *mat ti* serve as syntactic allomorphs of *mahen* suggests an harmonisation of coda and onset in the same point of articulation. Thus, *mat + ti* > *man ti*, and *het ta* > *hen ta*.

In table 35 (§4.4.1), *mahen*, *man* and *mat ti* occur in the same environments in the present tense. We have also established in table 28, 29, 30 and 31 (§4.2) that *hen* compete with *to* for the same slot. The copula *hen* having an emphatic (assertive) meaning, the contrast between *hen* and *to* is of epistemic nature. *Man* is a contraction of *mahen*, which means both *man* and *mahen* have the same epistemic value. Now, looking at (80) (§4.4.2), since

mat ti competes, as a syntactic allomorph of *maħen*, with *man*, there must be a difference of epistemic nature between *man* and *mat ti*. In (80), *maħen* and *man* have a more assertive reading than *matk*, which entails, by symmetry, that *mat ti* has a less assertive reading than *to*. In both *mat ti* and *ħet ta*, *ti* and *ta* dampen the assertiveness attached to *man* and *ħen*. (81) confirms the validity of my analysis: *man* contrasts with *matase*, and *mat ti* cannot occur because it includes *ti*, syntactic allomorph of *ta*.

4.5 Copulas and questions

The investigation of interrogatives is all the more relevant within Tibeto-Burman that it relates to concepts such as ‘conjunct-disjunct’ (Hale 1971, 1980) and ‘rule of anticipation’ (Tournadre and Dorje 1998), the frequent use of which in research papers does not necessarily rhyme with consensus.

While there is no denying that questions – provided we exclude self-directed ones – presuppose interaction, we may be wary of some generalizing statements from the literature. Bolinger (1957: 4) defines a question in a very submissive way: “an utterance that ‘craves’ a verbal or other semiotic response (e.g. a nod). The attitude is characterized by the speaker’s subordinating himself to his hearer”. De Villiers and al. (2009: 34) assert it results in a change of deictic center: “when an evidential is used in a question in Tibetan, there is a point of view shift from speaker to listener”. When one advocates a view of language as fundamentally dialogic, a clear-cut distinction between statements and questions is likely to be misleading (see (52) for an illustration), the same way a clear-cut distinction between direct and indirect speech is. Besides, there are different types of questions, some of which, by Western standards, we may reclassify as statements or imperatives, depending on context (Sinclair and Coulthard 1975, Coulthard 1985, 1992).

In Chhitkul-Rākchham, the set of copulas and syntactic allomorphs in interrogatives is identical to the set used in declaratives, including *ano*, *a:no*, *a:ts*, *ħen*, *tuts*, *ħunno* and *ħunts*. The whole set is invariably followed by the question particle *a*.

In proper inclusion and attributive constructions, *ħen a* and *ano a* occur with all persons. In fact, purely epistemic copulas are always available to the speaker in all contexts, which again points at the existence of the overall epistemic scheme sketched at the end of this

chapter. Copulas are optional in polar questions and as long as a question word is involved, just like in statements (see §4.6).

As outlined in §4.2.10, a fundamental opposition in Chhitkul-Rākchham is between *to* and *ta*, the two most frequently used copulas in the past and in the present tense. In statements, *to* occur with all persons whereas *ta* is typically (albeit not with possession) restricted to third person.

A similar pattern is observed in questions: *to* may occur with all persons – although not in all types of constructions – *ta* is restricted to third person. Below is the full paradigm (present tense) for a proper inclusion construction (NB: copulas are the same irrespective of honorificity):

ga:-∅ *pala-tji*-∅ *tɔ-k a* 1SG-ABS shepherd-AGT-ABS COP.PEEX-1SG QP ('Am I a shepherd?')
ki-n-∅ *pala-tji*-∅ *to-ĩ a* ('Are you (2SG.HON) a shepherd?')
eme-∅ *pala-tji*-∅ *ta a* ('Is he/she (3SG.HON) a shepherd?')
nin-sa:-∅ *pala-tfan* *tɔ-tf a* (1PL) ('Are we shepherds?')
kin-sa:-∅ *pala-tfan* *tɔ-tf a* ('Are you (2PL.HON) shepherds?')
eme-sa:-∅ *pala-tfan* *ta a* ('Are they (3PL.HON) shepherds?')

The form *ta* may invariably occur with third person interrogatives, regardless of construction type. (82) and (83) provide an example for attributive and possessional construction. The use of *to* in these two instances would be ungrammatical:

(82) *eme-sa*:=∅ *zo-i* *ta* *ã* / * *to*-∅ *ã*
 3SG.HON-PL=ABS good-MODIF COP.PE QP COP.PEEX-3 QP
 'Are they kind?' – DSN

(83) *eme*=∅ *da* *taim*=∅ *ta* *ã* / * *to* *ã*
 3SG.HON=ABS POST time=ABS COP.PE QP COP.PEEX QP
 'Does he/she have time?' – DSN

(84) kin=∅ da taim=∅ to-∅ ã / * ta ã
 2SG.HON=ABS POST time=ABS COP.PEEX-PRS QP COP.PE QP

‘Do you have time?’ – DSN

(85) εme=∅ kjim=o to-∅ ã / ta-∅ ã
 3SG.HON=ABS home=LOC COP.PEEX-3 QP COP.PE-3 QP

‘Is he/she at home?’ – DSN

The distributional pattern of *to* and *ta* in declaratives and interrogatives is provided below. *Tɔts* may occur on the same slot than *to* – first person possessional constructions excepted.

Table 40: distribution of to and ta according to person and type of sentence (past and present)

Person	Declaratives	Interrogatives
1	to, tɔts	to, tɔts
2	to, tɔts, ta	to, tɔts
3	to, tɔts, ta	to, tɔts, ta

In possessional constructions, there is a shift from *ta* in declaratives to *to* in interrogatives with second person whereas with third person only *ta* is grammatically correct, as shown in (83). Whereas both *to* and *ta* are compatible with third person in statements, only *ta* may occur in interrogative proper inclusion and attributive constructions, as in (82). However, both *to* and *ta* may occur in locational constructions, as in (85), which means *to* is compatible with third person in questions. Table 40 does not describe a person-marking system.

4.5.1 Copulas and questions in Chitkul-Rākchham according to Bailey and Sharmā

Bailey (1920: 83) provides only one example of interrogative that includes a copula, namely *yā yō mī sigě hěn* (‘who are all these men?’). Since *hěn* typically occurs in proper inclusion declaratives, its use in interrogatives makes sense in light of the symmetry postulated earlier. Further, in interrogatives including a question word, the copula is typically optional,

see (90). Sharmā (1992: 262) provides only one example of an interrogative that includes a copula: *kin-da hanəm rupyā to* ('how much money do you have?'), consistent with (84).

4.5.2 Copula and questions: a comparative perspective

Considering the pattern described in table 40, a concept such as the conjunct-disjunct (Hale 1980), whereby first person declaratives and second person interrogatives are marked the same way, in contrast to first person interrogatives and second person declaratives and all third person forms, is alien to Chhitkul-Rākchham. In addition, the choice is never limited to *ta* and *to* in interrogatives.

Considering questions such as *kin k^hrei toĩ a* ('are you hungry?'), or *kĩ au hale to* ('how is your father?'), where the speaker uses *to* as a prelude to the answers *ga: k^hrei tək* ('I am hungry') and *ai au zoi to* ('My father is well'), the concept of 'anticipation rule' by which the choice of evidential form "presupposes the addressee's information source and/or access and anticipates the use of the appropriate evidential marker in the question" (Tournadre 2017: 98), seems more adequate.

Tournadre connects the concept with 'pragmatic' notions such as 'empathy' (Kuno 1987) and 'perspective' (Tournadre and Lapolla 2014). These notions have the advantage of not questioning the speaker's agency compared to a term like 'origo shift' (Garrett 2001: 225). However, it is another matter entirely to claim that the use of *ano a* or *hən a* expresses anything else but the speaker's epistemic judgement. In case addressee-orientation is only observed with *to* and *ta*, the "speaker's imprint" (Finegan 1995: 1) is still much prevalent. One hypothesis worth considering is whether the 'anticipation rule' is only a circumstantial feature, just as addressee-orientation in declaratives is, as in (52).

The occurrence of epistemically marked forms in interrogatives sets Chhitkul-Rākchham apart from what is observed in Standard Tibetan (Vokurková 2008: 178) and stands in contrast with Tournadre's (2017: 97) claim that "most epistemic markers are not compatible with questions in the Tibetic languages".

In Lamjung Yolmo, the two dubitative *yinqo* and *yèto* are "used infrequently in questions" (Gawne 2016: 46), and a speaker typically "chooses between the perceptual and the

egophoric” (ibid), and attends to their “interlocutor’s knowledge state and modifying evidential values in question-asking to better reflect the specific interactional context” (ibid, p. 1). Instead of the term ‘anticipation rule’, I give more weight to Gawne’s more balanced approach in §5.11.4.

4.5.3 Copulas and questions in Kinnauri

Bailey (1909: 667) only refers to the question particle *a*, noting: “with the verb substantive we notice such forms as these, *tona, tona, to'a, toca, tosha*”. Sharmā (1988: 154) goes a step further, providing evidence for the occurrence of *to* (inflected for person) and *du* in interrogatives: *kin chañc ham to* (‘where is your son?’), *kin dāñ tetra ze toc* (‘how many sheep have you?’), and *do thəd namāñ du* (‘what is his name?’). These examples show a similar pattern to (84) and (85).

4.6 Zero copula in Chhitkul-Rākchham

Another defining feature of the Chhitkul-Rākchham copula system is optionality, also widely attested from a cross-linguistic perspective (De Haan 2001: 197).

Inference from context means we need an interlocutor. The optional use of copulas presupposes some kind of interaction. Copulas typically become optional when the speaker answers a question from the addressee. Hence, in a situation like in (86), the speaker is not obliged to use any copula as long as she is answering the question *kin hanəñ bəʃaŋe* (‘how old are you?’). Would the speaker introduce herself, she would have to choose between the personal experience *tək* and the emphatic *hɛn*:

(86) *ga:=∅ ni-za=o sea bəʃaŋ=e*
 1SG=ABS two-twenty=LOC ten year=GEN

‘I am thirty years old’ – DSN

The presence of a copula in a question is irrelevant. To the polar questions ‘are you his father?’ (*kin ɛme au toĩ a*), and ‘are they your friends?’ (*ɛmesa: kĩ ɔmetʃaŋ a*) – the latter being devoid of any copula, a Chhitkul-Rākchham speaker may reply without using any

copula as long as she gives an indication that the addressee is not mistaken, for example by means of the interjection *ã* ('yes' or 'indeed'), as in (87) and (88):

(87) *ã* *ga:=∅* *εme* *au=∅*
 INTERJ 1SG=ABS 3SG.HON.POSS father=ABS

'I am his father, indeed' – DSN

(88) *ã* *εme-sa:=∅* *ai* *ɔme-tʃaŋ=∅*
 INTERJ 3SG.HON-PL=ABS 1SG.POSS friend-PL=ABS

'They are indeed my friends' – DSN

A recording of my main consultant starts with *ai min dian sing* ('my name is Dhian Singh' TOP_cik10-DSN-2018-12-14-1), i.e. with no copula. When pointing to the fact that no question had been asked to him beforehand, he answered that being recorded implies a kind of dialogue, thus demonstrating that even in 'monologues' there is always an implicit 'Other' (Bakhtin 1984) listening and asking questions, an illustration of the fundamental dialogic essence of language.

However, copula verbs are always optional in possessional constructions, regardless of whether they follow a question or not: the use of a possessive pronoun provides sufficient information, in any kind of construction (identity, locational, identificational). In (55), however, due to the absence of any possessive pronoun, and to the fact that *a:ts* is the only choice, it is obligatory.

A similar flexibility characterizes identificational constructions. In (40), the perceptual *ta* and the assertive *hɛn* are redundant as soon as the interlocutors both stand in front of the tree at the center of their attention. In (42), the personal experience *to* is optional due to the presence of a possessive pronoun, but the pen being visible to the interlocutors is another reason why the copula may not occur. Interestingly, as soon as the description involves one or more adjectives, the copula is again obligatory:

(89) *huju=∅* *ra:ts^hum=e* *te-i* *tsoriŋ=∅* *ta* / *to* /
 DEM.PROX=ABS Rākchham=GEN big-MODIF temple=ABS COP.PE COP.PEEX

hɛn

COP.EMPH

‘This is Rākchham's big temple’ – DSN

Conversely, a NP cannot act as predicate in future tense constructions. In that case, a speaker simply cannot avoid making an epistemic judgement by using one of the following copulas: *a:ts*, *ano*, *a:no*, *hunno*, and *hunts*. This does not mean that all epistemic forms are always obligatory. Example (40) is a good illustration that the assertive *hɛn* is optional in some contexts, and to the question *lasa tibet du tuts* (or *tɔts*) *a* (‘is Lhasa in Tibet?’), a speaker may reply *lasa tibet du*, that is, without any copula.

There is a perfect symmetry between optionality in interrogatives and optionality in statements. Considering what triggered the answers provided in (87) and (88), polar questions do not require a copula. The same way copulas are optional in all types of constructions involving a possessive pronoun, they are optional in questions. Copulas are optional as long as the question includes a question word, as in (90). The question particle *a* does not occur in that case:

(90) *huju* *kita:b=∅* *su:=e*
DEM.PROX book=ABS someone=GEN

‘Whose book is this?’ – DSN

Zero copula is not motivated by a grammatical imperative, but by discourse in interaction. Whenever it is attested, absence of complexity (polar questions, presence of a question word) and specificity or focus (occurrence of possessive and demonstrative pronouns) are the main explanatory factors. By contrast, the use of copulas is obligatory as soon as knowledge management is more intricate.

4.6.1 Zero copula in Chhitkul-Rākchham according to Bailey and Sharmā

Bailey and Sharmā do not discuss optionality as such, but a few examples they provide are devoid of copulas. Bailey (1920: 82) implies copula verbs are optional in proper inclusion constructions: *gā Khōshyā* (‘I am a Kanet’). Based on my own data, zero copula is

acceptable here as long as the question ‘who are you?’ precedes the statement. Bailey (ibid, p. 83) also provides the following example: *yō āgē atē* (‘this is my brother’) which is consistent with my claim that zero copula is always optional in constructions involving an element of possession. Sharmā’s (1992: 242) examples of zero copula in interrogatives involving a question word finds an echo in my own description as well: *huyu khe* ‘what is this’; *yo khe min* ‘what (is) his name?’ *kin hu-šya kitab* ‘which one (is) your book?’.

4.6.2. Zero copula from a Tibeto-Burman perspective

Zero copula is a widely attested feature of Tibeto-Burman, in both declaratives and interrogatives, typically in interactional situations where it is inferable from context. Very little information is available for ‘West-Himalayish’ languages in this regard. In Darma, “the source of information on a clause is not obligatory” Willis (2007b: 109), but we do not know more. Gawne’s account of Lamjung Yolmo is very similar to the situation observed in Chhitkul-Rākchham: “as with binary questions, there is a tendency towards elision when such questions [with an interrogative pronoun] are asked and answered in naturalistic speech” (Gawne 2013: 284).

4.6.3 Zero copula in Kinnauri

Judging by a few examples from Sharmā’s (1988: 152) description (see §4.5.3), the presence of a question word does not make the set of copula verbs optional, or at least not automatically.

4.7 Conclusion on the copula system

The following concluding observations deal with the Chhitkul-Rākchham copula system (§4.7.1) before proposing a tentative comparison with that of Kinnauri (§4.7.2).

4.7.1 Insights from the Chhitkul-Rākchham copula system

Some copulas (*hēn*, *man*) consist of simple (indeclinable) forms. Compound forms such as *ano*, *ta*, *to* and *tots* are defective as they take a restricted set of inflectional suffixes compared to main verbs. The copula *hēn* is a special case as it retains some verbal

attributes, not only taking the negative prefix *ma-*, but also the conditional *-na* (as converb, see §5.8.3). Copulas and syntactic allomorphs are locative or existential (*hunno* and *hunts*), motion (*to*, *tɔts*, and *tuts*), change of state and action (*a:no* and *a:ts*) or even verbs of speech (*hɛn*), i.e. not always stative verbs (*ano*, *ta*).

From a semantic perspective, copulas convey five different kind of evidentiality: perceptual, dubitative, assertive, personal experience and personal assertive. The same set of copulas is used in interrogatives, where the distribution of *to* and *ta* differs slightly compared to declaratives.

The same set of copulas – with only a bit of variation – is available regardless of construction type. The syntactic function of these copulas has therefore a limited explanatory value. Factors such as temporality (non-future vs. future), possession, animacy, person (the incompatibility between the perceptual *ta* and first person, the use of *to* mostly – but not exclusively – with first person) do influence how the choice is made, but a set of competing forms remains available to the speaker in most cases, in both declaratives and interrogatives. Pragmatic considerations are so clearly discernible in the outline provided in this chapter that we cannot help but notice we stand incredibly aloof from the shackles of grammar.

The subjectivity implied by a set of alternative copulas transcends speech genre and type of event. A good illustration is comparison: in *hui bɔks ai huju fjana tei ta* ‘this box is bigger than that other one’, only *ta* may occur because we are dealing with direct perception. However, in *rekoŋ peo tʰul fjana tei zaga* ‘Reckong Peo is bigger than Chhitkul’, *ta* is not the only choice, depending on the speaker’s identity: *to* and *tɔts* signal integrated knowledge, and *ano* doubt.

Forms such as *hunno*, *ano*, *a:no*, *a:ts*, *tuts*, *man* and *mat ti* are purely epistemic, conveying either a dubitative or an assertive meaning. In a symmetrical way, *ta* and *to*, which denote perceptual and personal experience evidence, also express a judgement on the validity of the proposition. In other words, as part of a coherent system with simple (indeclinable) copulas, compound copulas also have an epistemic value. The inherent epistemic meaning of *ta* introduces a nuance with the dubitative, as seen in (49) and (50), and with the assertive as well (*a:ts* vs. *a:ts ta*) as shown in (68). Since *to* contrasts with copulas such as

tɔts and *hɛn* (see table 28, 29, 30 and 31 in §4.2), it is also epistemic. While *hɛn* refers to some ‘objective’ (factual) knowledge, *to* is subjective in essence. Consequently, *to*, which is not assertive, has an inherent epistemic flavour that stands in-between the dubitative and the emphatic (assertive) conveyed by *hɛn*. Some of my consultants made it clear that *to* denotes more certainty than *ta*. Huber (2015: 11) describes the exact opposite situation in Shumcho. In table 41, I claim *tɔts* is slightly more assertive than the assertive copulas. *Tɔts* is the only copula verb that has no negative counterpart, an indication of its epistemic primacy.

My treatment of *to*-(IMPV) and *tɔ-ts* as two distinct copulas, despite sharing the same underlying base, is of tremendous importance. It is in line with insights from Frege’s (1884) ‘Principle of Semantic Compositionality’, according to which the meaning of a whole is a function of the meanings of its parts and the manner they are combined, and with Harris’s observations (see §4.1.2). My approach is truthful to Boas’s account of evidentiality as a superordinate category expressed by morphological combinations. My account of V₁ AUX and V₁V₂AUX constructions in chapter 5, where the type of inflection taken by V₁ and V₂ determine which type of auxiliary may occur, follows the same fundamental logic.

Commenting on de Haan’s (1999) hackneyed claim that “[...] epistemic modality evaluates evidence” whereas “[...] an evidential asserts that there is evidence for the speaker’s utterance but refuses to interpret the evidence in any way”, Tournadre (2017: 96) astutely observes that “some epistemic markers do both operations: they assert a type of evidence, i.e logical or sensory inference, and evaluate this evidence”. As shown in this chapter, this is equally true in Chhitkul-Rākchham.

The copulas *ta* and *to*, which denote source of and access to information respectively, function as connectors between dubitative and assertive judgements, as illustrated in the diagram below.

Any attempt to sever the link between *to* and/or *ta* and the other copulas would be nonsensical. *Ta* and *to*, as part of a copula system, take their full meaning in relation with the other copulas. *Ano*, *a:no*, *a:ts*, *ta*, *hɛn*, *to* and *tɔts* more often than not compete with each other for the same slot. In some instances there is only one choice, be it *to*, *ta* or *a:ts*.

Since *a:ts* is the only choice available to the speaker when conveying common knowledge, as in (54), it must be placed on an equal footing with forms such as *ta* and *to*.

Table 41: The Chhitkul-Rākchham’s copula system arranged on an epistemic scale

Certainty
→

Dubitative	Perceptual	Personal experience	Assertive	Personal factual
(ma)hunno	(ma)ta	(ma)to	(ma)hunts	tots
(ma)ano			(ma)a:ts	
(ma)a:no			(ma)tuts	
			(ma)hen	
			man	
←		mat ti	→	

The arrangement described in table 41 is consistent with the view of language as fundamentally hierarchical (Pike 1967), a view I elaborate on in §5.1 and §5.14.

The data discussed in this chapter indicates that the term ‘epistemic extension of an evidential’ (Aikhenvald 2004), far from being alien to the realm of evidentiality, is at the heart of the Chhitkul-Rākchham system.

What a grammatical category is in one language may be a similar one with a dubitative meaning in another, without the dubitative being ‘an epistemic extension’, or a ‘second meaning’. Chhitkul-Rākchham *-no* is a dubitative irrealis marker for the simple reason it is contrastive with the habitual *-ts* in present tense constructions (with copulas) and in future tense constructions (with copulas and main verbs). The suffix *-ts* is thus gradually turning into an assertive realis marker. It is certainly no coincidence that the secondary meaning of a form Aikhenvald would consider as evidential is often epistemic. The exclusive reliance on the criterion of ‘primary meaning’ to ascribe an evidential value to a form is linguistically impoverishing.

The previous diagram and the five categories of copula verbs outlined in §4.3 provide an in-depth introduction to a system that is irreconcilable with Aikhenvald’s misguided claim that evidentiality “only marginally relates to truth values, reliability of information, speaker’s responsibility, and epistemic meanings” (2004: 365). The speaker’s subjective judgement and attitude are paramount¹⁰⁷. Evidentials as “[authorial] stancetaking markers” (Almeida 2012: 15) is the driving force behind evidentiality in Chhitkul-Rākchham. Evidentiality only marginally relates to “accuracy” (ibid, p. 344): subjectivity is necessarily biased.

Tournadre (2017: 99-101) also contends ‘evidential copulas’ and ‘epistemic copulas’, whether ‘simple’ or ‘compound’, “are made of the same verbs” (ibid, p. 100) in Tibetan, another indication that any distinction between ‘evidential’ and ‘epistemic’ forms is vacuous. By introducing the term “Evidential/Epistemic systems” – E/E systems, 2017: 95), Tournadre suggests a relationship between these two that is closer than what had been hitherto postulated, but he is late in taking full account of his own observations. The ‘evidential’ and ‘epistemic’ copulas he presents (ibid, p. 101) are also part of a unitary scheme.

The co-occurrence of copulas with the dubitative irrealis *-no* and the habitual-assertive *-ts* is not a “strong argument against grouping evidentiality under the umbrella term of ‘modality’, or referring to it as ‘epistemic’, or linking it to varied ‘degrees of certainty’” (Aikhenvald 2004: 257), an argumentation which rests upon a serious distortion of Boas’s heritage (see §2.1.1).

4.7.2 A tentative comparison between Chhitkul-Rākchham and Kinnauri

Table 42 is a tentative comparison of the copula system found in Chhitkul-Rākchham and Kinnauri. Regarding the latter, I rely on my own elicited data, which suggests the relevant set of Kinnauri copulas – including syntactic allomorphs – consists of at least nine forms. The number of Kinnauri copulas and syntactic allomorphs serving a copula-like function is higher than in the available descriptions of Kinnauri. In §5.13 I claim that the number of auxiliaries (five) and resulting evidential distinctions is the similar in both languages. The

¹⁰⁷ Zeisler (2018: 120-3) makes the same observation in the case of Tibetic languages.

relevant forms often differ, but there are cases of morphological correspondence. Language contact also explains why both languages have *to* and *tɔts*.

A straightforward case of morphological correspondence is Chhitkul-Rākchham *ta* vs. Kinnauri *du*. There is no doubt both forms share a perceptual meaning. Kinnauri *ni:ts* and *hatfid* occur in complementary distribution, like *hɛn* and *a:ts*. In addition, the Kinnauri pair *hatfo* and *hatfid* is morphologically and semantically close to *a:no* and *a:ts*. The Kinnauri pair *nito* and *ni:ts* resemble *ano* and *a:ts*. Consequently, we may make the deduction that Kinnauri *ni* plays similar functions to *ano*, *hɛn* and *a:ts* combined¹⁰⁸. Judging by table 42, *hatfo* and *hatfid* seem to be syntactic allomorphs of *ni* – not *ni:* since *ni:ts* and *hatfid* occur in complementary distribution.

Chhitkul-Rākchham *hunno* and *hunts* do not have any equivalent in Kinnauri, but this is consistent with my observation (§5.13) that all ‘West-Himalayish’ languages count two emphatic affirmative copulas (or auxiliaries): *hun* and *hɛn* in Chhitkul-Rākchham, *nito* and *ni:ts* in Kinnauri.

Tuts is not part of the Kinnauri copula system, but like in Chhitkul-Rākchham, *tɔts* is a possibility if the construction is affirmative. The alternative is *bəts*, from *bǔnnig ~bömig* ‘to come’ (Bailey 1909: 670-682). Like in Chhitkul-Rākchham, there is only one possible form with negation, namely *mabəts*, as *tɔts* in Kinnauri cannot be negated either. We may therefore surmise *bəts* is a syntactic allomorph of *tɔts* in Kinnauri, the same way *tuts* is in Chhitkul-Rākchham.

The table below is an attempt to establish morphological and semantic correspondences between the copula system found in Chhitkul-Rākchham and Kinnauri. Note that one should take the copulas in blue as one group.

¹⁰⁸ This is consistent with our claim that *hɛn* has cognates in Lhasa Tibetan *yin* དུག (Tournadre 2017: 100), which in turn has cognates in *in*, found in Sherpa (see Thurgood (1982: 69), referring to Woodbury 1975) among other languages.

Table 42: A tentative comparison of Chhitkul-Rākchham and Kinnauri copula systems

Chhitkul-Rākchham		Kinnauri	
Form	Meaning	Form	Meaning
hunno	'to live, stay'	nito	'to be'
hunts	'to live, stay'	ni:ts	'to be'
ano	'to be'	nito	'to be'
a:no	'to become, happen'	hatfo	'to become'
a:ts	'to become, happen'	ni:ts (PRS) and hatfid (FUT)	'to be' (PRS) and 'to become' (FUT)
ta (rukji ta)	'to keep, put'	du (des du)	EX?
to	'to come'	to	'to sit, stay'?
tōts	'to come'	tōts	'to sit, stay'?
tuts	'to come'	tōts or bāts	'to sit, stay'?'/'to come'
hɛn	'to hear'	ni:	'to be'
man	COP.NEG.EMPH	māni	COP.NEG.EMPH
mat ti	COP.NEG		
		ma-k; ma-tʃ, etc.	COP-AGR
-	-	māḗ	-

Table 42 leaves only one enigma, namely *māḗts*, part of Bailey's (1909: 666) description. The copula *māḗts* stands close to Chhitkul-Rākchham *maa:ts*. Sharmā (1988: 152-3) only mentions *māḗ*. Neither *māḗts* nor *māḗ* are part of my own data, which suggests this form may have become obsolete very recently. Sharmā's *māḗ* also suggests a correspondence between *ḗ* and *ni* that we may extend to Chhitkul-Rākchham /a:/. One hypothesis is that the pair *hatfo* and *hatfid* is a recent innovation in fulfilling a copula function, and so is *ni:ts*. As table 42 indicates, the original equivalent of Chhitkul-Rākchham *hɛn* was *ni:*. An alternative to *māḗts* (and/or *māḗ*) is that the form still serves a copula function in some variants of Kinnauri, but this does not change the underlying hypothesis: in that case *hatfo* and *hatfid* were not originally copulas and Kinnauri *ni:* is the equivalent of Chhitkul-Rākchham *hɛn*.

Chapter 5: the expression of evidentiality by means of auxiliary constructions

The following sections provide a detailed account of the Chhitkul-Rākchham auxiliary system. As we shall see, some of the evidential distinctions expressed by auxiliary verbs are not comprehensible in isolation from the ‘verb complex’ (main verb, ‘second verb’ and auxiliary) structure.

5.1 The Chhitkul-Rākchham auxiliaries

In the following subsections, I provide an account of the Chhitkul-Rākchham auxiliary verbs, starting with some introductory remarks (§5.1.1) and theoretical considerations (§5.1.2). I locate the relevant set of auxiliaries within the ‘main verb complex’ (§5.2), I formally identify the relevant set of auxiliaries based on my own list of criteria (§5.3) before discussing their respective inflectional properties (§5.4). I investigate auxiliary distribution according to main verb inflection (§5.5), in V1-V2 constructions (§5.6) and in verb-converb constructions (§5.7). I proceed to a more in-depth investigation of the set of auxiliaries from a morpho-syntactic perspective, notably *vis-à-vis* the available typological literature and from the point of view of ‘optionality’ (§5.8), before dealing briefly with the set from a semantic point of view (§5.9) and how Bailey (1920) and Sharmā (1992) deal with auxiliaries in their descriptions of Chhitkul-Rākchham (§5.10). I provide a discussion about the relationship between evidentiality expressed at the verbal level and person (§5.11). I investigate auxiliaries from a diachronic perspective (§5.12) and I then provide elements of comparison within the ‘West-Himalayish’ subgroup (§5.13). The section ends with some concluding remarks (§5.14).

5.1.1 Introductory remarks on auxiliaries

‘Auxiliary’ is a linguistic term that is subject to some degree of variation in its definition from a comparative perspective. Limiting ourselves to a few Indo-European languages, valuable lessons emerge, casting light on auxiliaries in other language families, including Tibeto-Burman.

Looking at English grammar, Greenbaum and Quirk (1973) and Aarts and Aarts (1988) instruct us that auxiliaries are one of two major verb classes together with lexical verbs, one difference being in terms of open vs. closed class. Auxiliaries belong to the latter, their number and typology varying greatly from one European language to the other. Quirk and al. (1985: 129-143) distinguish between ‘primary’, ‘central’, and ‘marginal’ modal auxiliaries, identifying about thirty elements. Grevisse and Goosse (2008: 810-821) list only two auxiliaries *proprement dit* in French, and a handful of semi-auxiliaries. The lesson is clear: there is no proto-typical auxiliary and no single all-applicable criterion to identify them.

The available literature is also consistent in postulating that auxiliaries help form various tense, aspect, mood and voice distinctions together with lexical verbs, hence the term ‘helping verb’. To take one example, namely past tense, auxiliary verbs are involved in compound tense constructions such as French ‘passé-composé’ (*j’ai travaillé*, consisting of the present tense form of the auxiliary *avoir* and the past participle of the verb *travailler*), English ‘present perfect’ (*I have worked*), Danish ‘førnutid’ (*jeg har arbejdet*), Bosnian, Croatian, Montenegrin and Serbian ‘sadašnje svršeno vreme’ (*ja sam radio*, with male subjects, based on the present tense form of the auxiliary *biti*, ‘to be’), and Hindi ‘bhūt-kāl’ (मैं काम किया हूँ – *main kām kiyā hoon*, with male subjects).

In light of minimal differences, Ross (1969: 77) is adamant not to treat the relevant English auxiliaries as a distinct category from (main) verbs. Based on ‘ten arguments’, he contends that “auxiliaries and verbs are really both members of the same lexical category, verb”. In *Boris must have been being examined* by the captain, “each of the five underlined words must be the main verb of some underlying S”. Hudson’s examples (1976: 138) are also revealing: “the rule of gapping deletes material that must include the ‘verb’, where ‘the verb’ covers both main verbs and auxiliaries”: *Harry invited Mary and Bill (invited) Susan – Harry will sing and Bill (will) play the piano*. Ross’s contribution is useful in that the identification of the auxiliary component, realized through a series of tests which also include subject-verb inversion, negative placement, and VP deletion, among others¹⁰⁹, does not preclude its treatment as part of the same syntactic unit as the main verb.

¹⁰⁹ Pullum and Wilson (1977: 742-3) and McCawley (1988: 210) provide a list of distinctive features, notably: 1/ subject-auxiliary inversion; 2/ negative placement; 3/ VP deletion; 4/ tag formation; 5/ negative contraction; 6/ auxiliary reduction; and 7/ adverb placement.

In addition to their supportive function with respect to TAM, auxiliaries are involved in two major syntactic operations, namely negation and question. These two operations represent the most common ways to identify the relevant forms crosslinguistically.

Back to French *j'ai travaillé* (1SG AUX.PRS.1SG work-PST.PTCP, 'I have worked') there is only one way to negate the sentence, *je n'ai pas travaillé* (1SG NEG AUX.PRS.1SG work-PST.PTCP, 'I have not worked'). The first person present tense form of the verb *avoir* (*ai*) occurs between *n'* and *pas*, i.e. not on the lexical verb. Further, one way to ask a question is *ai-je travaillé?* ('have I worked?'). Here again, the subject in inversed position occurs after *ai*, not the lexical verb. Based on these two tests, we may conclude *ai* is an auxiliary, but with even more confidence, since the present tense interrogative is *travaillé-je?*, that *ai* is the finite verb. Now compare with *j'ai dû travailler* (1SG AUX.PRS.1SG MOD.PST.PRF work-INF, 'I had to work'). One can negate the proposition using *je n'ai pas dû travailler* ('I did not have to work') and put it in an interrogative context using *ai-je dû travailler?* ('did I have to work?'). Both negation and question treat *ai* and *dû travailler* differently, i.e. *dû* is a modal verb, not an auxiliary. Let us now compare 'passé composé' with the other French past tense, 'imparfait': *j'ai travaillé* vs. *je travaillais*, and *j'ai dû travailler* vs. *je devais travailler* (1SG MOD-PST.IPFV.1/2SG work-INF 'I had to work'). The combinations allow us to define 'compound tenses' and auxiliaries. We know we are dealing with auxiliaries when a slot in a paradigm is occupied by the concatenation of more than one element.

In English, the two constructions *I have not worked* and *have I worked?* lead to a similar conclusion as to the nature of *have*. *Not* can only occur as a postdependent of *have*, and *have* is also the only form involved in inversion. However, the modal equivalent, *I had to work*, when negated and put in an interrogative context, reveals yet another pattern. In *I did not have to work* and *did I have to work?*, the same description applies to *did*. Like *have*, *did* is an auxiliary verb. We are here dealing with a catena or chain of auxiliary verbs.

In Danish, *jeg har arbejdet* (1SG AUX.PRS work-PST.PRF 'I have worked') and its negation, *jeg har ikke arbejdet* (1SG AUX.PRS NEG work-PST.PRF) and question, *har jeg arbejdet?*, indicate *har* is an auxiliary. Like in English, the modal construction *jeg skulle arbejde* (1SG AUX.PST work-INF 'I had to work') and its negative and interrogative equivalents, *jeg skulle ikke arbejde* ('I did not have to work') and *skulle jeg arbejde?* ('did I have to work?') leads to the exact same conclusion, which means Danish differs from French in that the modal verb

denoting obligation is an auxiliary, and differs from English in that only one auxiliary is attested in such a construction.

Compound tense constructions are in no way restricted to past tense. In Bosnian, Croatian, Montenegrin and Serbian (Thomas and Osipov 2012: 339-343), one type of future tense (“future 1”) is formed with the present tense of the verb *ht[j]èti* (‘to want’) followed by the infinitive of the lexical verb. This pattern is found in case the sentence starts with a subject (alternatively an adverb, or a noun phrase), hence *jâ ću pisa-ti* (1SG AUX.FUT.1SG write-INF ‘I will write’), *pisa-ću* (write-FUT.1SG) otherwise. To negate both alternatives, one uses the negative form of the auxiliary: *ne-ću pisa-ti* (NEG-AUX.FUT.1SG write-INF ‘I will not write’). The interrogative form is *dà li ću pisati?*, which involves the interrogative particle *da li*, or *hòću li (jâ) pisati?*, based on the future tense form of *ht[j]èti* preceding the interrogative particle *li*. *Ću* or *hòću* is undoubtedly an auxiliary in that both negation and interrogation treat this form distinctively from the lexical verb. Now, a modal construction such as ‘I will have to write’, *mora-ću pisa-ti* (MOD-FUT.1SG write-INF) and its negative and interrogative equivalents, *neću morati pisati* and *dà li ću morati pisati?*, indicate we find ourselves in the same situation as in French: only *ću* is an auxiliary, whereas *morati* is a modal verb.

Another important point to make is that an auxiliary usually has a more limited inflectional paradigm compared to lexical verbs: English *can* and *could*, Danish *skal* (PRS) and *skulle* (PST) are good examples: there are no single future tense forms, whereas Serbian *ht[j]èti* fulfils an auxiliary function exclusively in future tense contexts.

Looking at one criterion only may lead to ambiguous results. We concluded earlier that *dû* in *j’ai dû travailler*, which refers to *devoir* (‘to have to’), is not an auxiliary. However, based on the inversion criterion, there are a few verbs in French, sometimes called semi-auxiliaries, which allow for subject inversion: *dois-je* (MOD.1/2 SG 1SG ‘do I have to’), *puis-je* (‘can or may I’), *vais-je* (‘do I go’), etc.

As for the negation criterion, the reality is also a bit more complex. Based on English and German, one of Ross’s (1969) ‘ten arguments’ is precisely ‘negative placement’ (ibid, p. 77): as a subset of main verbs, auxiliaries can be negated, but so may ‘second verbs’ in serial verb constructions. Auxiliary constructions, where negation is interchangeably marked on the main verb or the auxiliary, and serial verb constructions, where negation is marked

either on the main verb or on the ‘second verb’ – but only one of them – are not always distinguishable based on this criterion alone. In other words, only the reliance on a series of tests allows us to reach a definite conclusion.

Among Palmer’s (1974: 15) criteria – the so-called NICE (negation, inversion, code, and emphatic affirmation) properties in Huddleston (1976: 333) – ‘emphatic affirmation’ (‘he *will* be there’) is of particular interest. To start with, the very first cross-linguistic study on auxiliaries emphasizes its relevance, although by relying on a slightly different denomination: an auxiliary is “that part of the sentence which makes possible a judgement about its truth value” (Steele and al. 1981: 212). While negation and inversion are syntactic criteria, ‘emphatic affirmation’ and ‘judgment about truth value’ are based on semantic considerations.

Based on the previous considerations, I make three claims to orient our search for the Chhitkul-Rākchham auxiliaries. To start with, an auxiliary may have distinct morphosyntactic and semantic properties, but it is part of the ‘main verb complex’, which consists of the concatenation of up to three units: the main verb, the ‘second verb’ (or a converb, see §5.7), and the auxiliary verb. Further, since there is no proto-typical auxiliary and no single cross-linguistically applicable criterion to identify auxiliaries, one must rely on a set of criteria, the fulfilment of part of which is required to qualify as auxiliary. Finally, the list of criteria cannot be purely of syntactic nature, but also semantic: an auxiliary must express an evidential distinction.

5.1.2 Theoretical considerations

I introduce in the following sub-sections some theoretical considerations on main verbs, copulas, and serial verb vs. auxiliary verb constructions (§5.1.2.1), the semantic (evidential) content of auxiliaries (§5.1.2.2), the diachronic vs. synchronic perspective (§5.1.2.3) and the various types of syntactic constructions found in typological studies (§5.1.2.4). Finally, I describe my own approach on auxiliaries in (§5.1.2.5).

5.1.2.1 Main verbs and serial verb vs. auxiliary verb constructions

Like in the case of copulas (see §4.1.1), a definition of auxiliary verbs is elusive. There is no “canonical auxiliary” according to Heine (1993: 5). The various features ascribed to auxiliary verbs are sometimes contradictory, an issue that subsequent typological studies (Kuteva 2001, Anderson 2006, Harris and al. 2011) have failed to solve entirely.

As verbs in their own right (Steele 1978: 23), auxiliaries usually have a connection with lexical verbs, which is a common feature within the Tibeto-Burman context. As such, one may say auxiliaries help, accompany, or are “supportive” (Harris and al. 2011: 80) of the main verb.

An auxiliary verb typically expresses functional and grammatical categories, tense, aspect, modality, voice, person and number, among others¹¹⁰, but these vary greatly from one language to the other. I argue the most salient functional category within the Tibeto-Burman context is evidentiality.

From a language-to-language perspective, what is helpful in the identification of auxiliaries is their inflectional paradigm, usually more limited than main verbs: auxiliaries are defective verbs.

Sometimes their inflectional paradigm is even entirely different, hence SIL’s definition according to which an auxiliary “expresses grammatical distinctions not carried by the lexical verb” (Loos and al. 2003). This definition is far from universal and not consistently observed in Chhitkul-Rākchham.

The distinction between AVCs and serial verb constructions may appear less straightforward, but some reliable criteria exist. Observing that the term ‘serial verb construction’ has become a catch-all category cross-linguistically, Haspelmath (2016: 292) provides a narrow definition: “a monoclausal construction consisting of multiple independent verbs with no element linking them and with no predicate-argument relation between the verbs”. Haspelmath highlights five ‘key components’ (ibid, p. 296): 1/ ‘construction’ (“the meaning of a concrete construct can be determined on the basis

¹¹⁰ Oisel (2018) adds motion, register of language, and commitment.

of the meanings of its parts”); 2/ ‘monoclausal’ (“there is only one way to form the negation, usually with scope over all the verbs”); 3/ ‘independent verbs’ (“they must be able to occur on their own without another verb”); 4/ ‘no linking element’ (“absence of a coordinator or subordinator”); and 5/ ‘no predicate-argument relation between the verbs’. Ten ‘generalizations’, i.e. not linguistic universals *per se*, but tendencies, accompany his definition¹¹¹.

In the following example, *ɸɔsi hunna* is a serial verb construction based on Haspelmath’s five components:

(91) *kjaŋ-∅ tsutsina i: zag-o ɸɔs-i hun-na te kʰɛts=o*
 1PL.INCL-ABS silently one place-LOC sit-PTCP keep-COND then QNT=FOC.DEF
ma-a:-ts ta
 NEG-happen-HAB.ASS AUX.INFR.PE
 ‘If we keep sitting down silently in one place, then nothing will happen’
 DEB_cik01-RK-BSN1-2018-10-15- 44

The same reasoning applies to the following example, where the first verb inflects for the perfective *-i*, and the second verb for the irrealis *-no*:

(92) *de kjaŋ attjaŋ=∅ kʰɛts=o latf-i*
 then 1PL.POSS.INCL children=ABS QNT=FOC.DEF do-PTCP
ma-li-no
 NEG-be able-IRR.DUB
 ‘Then, our children won’t be able to be doing anything’
 DEB_cik01-RK-BSN1-2018-10-15-46

Latfi malino complies with Haspelmath’s five components. Another instance where *lisarj* (‘to be able’) occurs as ‘second verb’ is (96).

¹¹¹ One of the core characteristics of a serial verb construction according to Aikhenvald and Dixon (2006: 1), is that the sequence of verbs “have just one tense, aspect, and polarity value”, but tables 51 and 52 indicate that serial verbs in Chhitkul-Rakchham may express two different aspectual or tense values.

5.1.2.2 The evidential meanings of auxiliary verbs

Chapter 4 led to the conclusion that semantic factors play a more prominent role than syntactic ones in the distribution of copula verbs in Chhitkul-Rākchham. Since Chhitkul-Rākchham exhibits copular auxiliaries, there is no reason to posit the situation is different in this regard. Consequently, the claim that auxiliaries are devoid of any meaning (Hartmann and Stork 1972: 24; Lewandowski 1973: 259; Conrad 1988: 92-3), or even “semantically bleached” (Anderson 2006: 4-5) is misleading.

Anderson (*ibid*, p. 7) contends that auxiliary verbs “represent a cluster of syntactic, semantic and morphosyntactic features”. Surprisingly, he never mentions evidentiality, in contrast with previous studies on the subject (Steele and al. 1981: 146, 156, 159). We may ascribe Anderson’s omission to his bias towards African languages, where evidentiality is typically expressed lexically.

According to Steele and al., auxiliaries typically express, in addition to TAM distinctions, assertability conditions, negation, subject and object agreement, but also two important domains within the present thesis, emphasis and evidentiality – which I do not treat as distinct, see §2.4.2.

Steele and al. contend the Luiseño language provides evidence that auxiliaries bear evidential values. The so-called auxiliary in Luiseño consists of a cluster of clitics invariably occurring in second position in a sentence. These clitics typically have multiple exponence and obey co-occurrence restrictions. In the following examples, Steele and al. (*ibid*, p. 29) claim the combination of auxiliary particles, in position 1 (*Ṣu*) and 3 (*-po* and *-il*) denote ‘supposition from general knowledge’ and ‘supposition with external verification’ respectively:

Luiseño (SM= subject marker)

(20) a. *wunaalum Ṣu-m-po* *pomyo’* *qalwun*
They PTCL.MOD-SM-FUT their.mothers are
‘They must have mothers somewhere’

b. *ku’aalum Ṣu-m-il* *nowiiwiyk* *yuchiwun*

flies PTCL.MOD-SM-NFUT in.my.wiwiish sank
 'I see that flies sank in my wiwiish' Steele and al. (1981: 29)

Tibeto-Burman languages express evidential distinctions in various ways. Lamjung Yolmo (Gawne 2014: 77) has a subset of copulas serving an auxiliary function and expressing an evidential value: 'egophoric' in (9) and perceptual in (10):

Lamjung Yolmo

(9) *ŋà tó sà-teran yè*
 1SG rice.cooked eat-IPFV AUX.EGO
 'I am eating rice'

(10) *khé tó sà-ku dù*
 2SG rice.cooked eat-IPFV AUX.PE
 'You are eating rice' Gawne (2014: 82)

In Luiseño, Steele and al. (1981: 212) observe that an auxiliary is "that part of the sentence which makes possible a judgement about its truth value". Kuteva (2001: 19) points out that auxiliaries are not the locus of purely syntactic or morphological processes but reflect "general conceptualization capacities crucially involving imaginative, or rather *imaging*, aspects of human cognition". Referring to Benveniste (1974), since both the main verb and the auxiliary contribute to the actual meaning of the overall AVC, the auxiliary cannot be semantically blank.

Another major difference with Anderson's approach (2006: 276-289) is in terms of 'omission', reportedly attested only in some contexts. In Chhitkul-Rākchham, 'optionality' is widespread. (93) is part of an autobiographical narrative where the speaker could have used *tɔk* or *tɔts*, but uses none instead:

(93) *Jad-i ma-ro-i baja-tfan=e pal-i pul-i*
 married-PTCP NEG-go-PFV brother-PL=GEN take care-ACT take care-ACT
te-i latf-i ee zag=o=nin latf-i
 big-MODIF do-PFV 3PL.NHON.POSS place=LOC=MOT do-PFV

‘(I) did not get married, by taking care of (my) younger brothers, I made (them) grow up, I made (them) find their bearings’

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The expression of evidential distinctions by auxiliaries, especially when main verbs (or ‘second verbs’) do not provide any in the first place, is another argument against ascribing them a secondary function compared to main verbs. As shown in §5.6.2, constructions such as V-INF AUX, where the auxiliary has a modal function, suggest the opposite situation.

The auxiliary as “a linguistic item covering some range of uses along the verb-to-TAM chain” (Heine 2003: 70) allows for the inclusion of evidentiality and takes heed of the historical considerations discussed hereafter. Heine’s definition is however too vague, reason why I introduce my own criteria in §5.1.2.5.

5.1.2.3 Diachronic vs. synchronic perspective: auxiliaries vs. affixes

According to Anderson (2011: 2), an auxiliary verb refers to “a verbal element on a diachronic form-function continuum standing between a fully lexical verb and a bound grammatical affix”. Anderson’s definition leaves us with two ways to look at the issue, which Heine (1993: 87) sums up adequately:

the way auxiliation has been described in the past was determined to a large extent by the perspective adopted by the respective authors vis-à-vis Verb-to TAM chains. When viewed from the perspective of the starting point, auxiliaries tended to be described as decategorized or “defective” forms of verbs; when viewed from the perspective of the endpoint, however, auxiliaries were likely to be described as grammatical markers exhibiting some peculiar verbal properties

Thus, a linguist has no choice but to use the term ‘auxiliary’ from a synchronic perspective, whereas diachronically, an auxiliary is drifting somewhere between a full verb and an affix,

an inflection, or a verb ending. In this regard, Heine (1993: 87) provides four criteria¹¹² to help us determine whether an auxiliary is closer to the 'starting point' (an auxiliary) or to the 'endpoint' (an affix). Anderson (2006: 249-289) describes various cases which indicate one is dealing with affixes. I discuss the set of relevant forms in Chhitkul-Rākchham on the continuum auxiliary-affix in more detail in §5.8.1.

5.1.2.4 Types of syntactic constructions

Among the few available typological studies on auxiliary verbs, Anderson's (2006) is particularly useful in identifying the different types of syntactic constructions. To start with, Anderson (*ibid*, p. 18-27) lists three levels of headedness, the phrasal head, the semantic head and the inflectional head. The phrasal head, or syntactic head, is more often than not the auxiliary verb from a cross-linguistic perspective. However, Anderson (*ibid*, p. 23) points out that "in certain languages it is the lexical verb that determines the selection of a specific auxiliary verb used in the construction".

As shown in (90), the auxiliary in Chhitkul-Rākchham is more often than not omitted from the sentence, which means the main verb may stand alone, but this has no influence whatsoever on which of the main verb or the auxiliary function as phrasal head because auxiliaries are recoverable from context, see §5.8.4.

Referring to Benveniste (1974), the semantic head is invariably the main verb. As for the inflectional head, "the locus of inflection" (Anderson 2006: 23), the situation is more intricate. There are five different scenarios cross-linguistically (*ibid*, p. 39-248): A/ the auxiliary verb is the inflectional head (the so-called AUX-headed AVC pattern, where auxiliaries essentially inflect for TAM); B/ the lexical verb is the inflectional head (LEX-headed AVC pattern, where the main verb inflects for TAM); C/ the lexical verb and the auxiliary verb display a 'doubled inflection', being both inflected for TAM; D/ the lexical verb and the auxiliary are both inflected, but not for the same categories ('split pattern'); and E/ an intermediary situation between C/ and D/, where the lexical verb and the auxiliary verb share some inflections and also have distinct ones ('split/double pattern').

¹¹² 1/semantics: full verbal meaning vs. grammatical function; 2/ syntax: high degree of variability vs. fixed position; 3/ morphology: inflected for TAM, person, number, negation, etc as a 'free word' vs. invariable element; and 4/ phonology: full form vs. reduced (typically monosyllabic).

5.1.2.5 My list of criteria to identify the Chhitkul-Rākchham auxiliaries

Heine's (2003: 70) and Anderson's (2011: 2) views on auxiliaries are useful but too general because both scholars attempt at a definition that can stand the test of cross-linguistic comparison. The present thesis is free from such constraints.

As argued by Langacker (1978: 853), the glossing abbreviation AUX is "ad hoc, labelling but not explicating the notion of AUXILIARY". The term auxiliary is most appropriate from a diachronic perspective, but from a synchronic point of view, it remains elusive.

Starting from the cross-linguistic observation that an auxiliary is drifting along a continuum verb-affix, regardless whether it is closer to the starting point (a verb) or to the endpoint (an affix), a consensus emerges in an auxiliary being originally a verb¹¹³ that is part of a hierarchical arrangement consisting of three verbal units: the main verb, the 'second' verb and the auxiliary. The main verb is the head of the verb phrase, occurs obligatorily and exhibits a wide inflectional paradigm (TAM, negation, object agreement, subject agreement, evidentiality). The second verb also occurs obligatorily and meets the requirements listed by Haspelmath's (2016: 292) in §5.1.2.1.

An auxiliary is a defective verb, and as such includes SOME of the following elements, sentential in scope: TAM, subject agreement, object agreement, negation, and evidentiality, including evaluation of information and emphasis. Contrary to a main verb and a second verb, an auxiliary is omissible.

As part of a bipartite (V_1 AUX) or tripartite ($V_1 V_2$ AUX) structure, the auxiliary is in a subordinated relationship with the main verb. In other words, V_1 AUX and $V_1 V_2$ AUX are groups of verbs forming a unit. Lasnik (2000: 9) points out that "various tests have proved to be useful in determining what groups of words work together as units of structure, or constituents". Some tests are more relevant than others depending on language.

Negation ('negative placement') and question are highly relevant tests cross-linguistically. From a Tibeto-Burman perspective, deletion ('optionality', see §5.8.4) is also key (Kurabe 2018: 52 in Jinghpaw; Gawne 2014: 87-90 in Lamjung Yolmo; Saxena 1995: 262 in Kinnauri).

¹¹³ I oppose Saxena's claim (1992: 28) that auxiliaries in 'West-Himalayish' "do not function as verbs".

The 'optional' use of auxiliaries is the most salient difference with main and second verbs. From this perspective, a main verb is the part of the verb complex that can stand alone while the occurrence of auxiliaries is conditioned to the presence of a main verb in a sentence. There is a fixed order V_1 (and V_2) AUX. If the auxiliary occurs, it does so after the main verb, or after $V_1 V_2$ in the case of a serial verb construction.

Now, there is the question of evidentiality. While I fully concur with Steele and al.'s (1981: 212) observation that an auxiliary may express evidential distinctions, these are conditioned by the main verb.

Consequently, the expression of an evidential distinction – a semantic test – does not allow us to identify an auxiliary in a formal way, but an auxiliary being part of a hierarchical verb arrangement, it is nevertheless an absolute requirement, this is my fourth criterion.

The previous considerations are in accordance with Benveniste's (1974) approach on auxiliaries. The identification of an auxiliary construction relies on two criteria, one syntactic and one semantic. Syntactically, an auxiliary verb construction consists of two lexically independent parts. Semantically, what Benveniste calls (*ibid*, p. 184) the 'auxiliant' (auxiliary) has a flection function while the 'auxilié' (the main verb) has a denotation function. The main verb sets the tone in terms of semantics, which means there is some kind of hierarchy between them. My own approach is also consistent with the legacy of Pike's (1954-60) tagmemics discussed in the next section. A Chhitkul-Rākchham auxiliary is identifiable based on the following list of criteria:

1. An auxiliary is a defective verb that may inflect for verbal categories with sentential scope, notably TAM and subject agreement, but never the same categories simultaneously with the main verb or, if it is the same category, never the same type of marker;
2. As part of a concatenation of three verbal units, an auxiliary is a defective verb that occurs either in second position, after a main verb, or in third position, after $V_1 V_2$ in the case of a serial verb construction;
3. Taking part of a hierarchical arrangement consisting of up to three verbal units – an auxiliary obligatorily expresses at least one evidential distinction based on my own definition of evidentiality (§2.4.2);

4. In addition to the previous three criteria, an auxiliary passes at least two of the following three syntactic tests: negation, question and deletion.

We shall see in §4.6 that contrary to an auxiliary, a second verb may take the same TAM categories simultaneously with a main verb. A second verb is never marked for subject agreement. More importantly, second verbs do not pass the three syntactic tests mentioned earlier.

5.2 The Chhitkul-Rākchham auxiliaries within the ‘main verb complex’

As seen in §5.1.1, a comparison between French *passé-composé* and *imparfait* illustrates the occupation of a verbal slot, the ‘verb complex’, by the concatenation of two units, the main verb and the auxiliary. A concatenation of three units may occupy the ‘verb complex’ slot in Chhitkul-Rākchham: the main verb, the ‘second verb’, and the auxiliary.

We shall now formally identify the three units within the ‘verb complex’ and describe the distributional properties of the other aforementioned syntactic elements in order to provide a complete overview of the various slots the Chhitkul-Rākchham verb complex consists of. To this purpose, I shall refer to Pike’s (1954-60, 2nd edition 1967) tagmemics in so far as “its positing of a unit comprising both function (slot) and class of items (filler) performing that function seems to be most useful in dealing with languages in which a diversity of formally different classes may perform the same function” (Robins 1967: 212). Tagmemics is “most useful” (ibid) in that it makes the hierarchy in the expression of evidentiality very clear – see §5.6.

A ‘tagmeme’, a “unit-in-context” (Pike 1967), correlates a syntagmatic function (main verb, second verb, auxiliary) with paradigmatic ‘fillers’, the string of morphemes each tagmeme consists of. The ‘syntagmeme’ refers to the functional units at a higher level, the ‘verb complex’, which consist of a set of contrasting construction types. Each tagmeme thus occurs in a given ‘slot’, belongs to a ‘class’ (a type of unit), plays a semantic role (function), and relates to other units within the same syntagmeme (‘cohesion’).

I shall start with the main verb, providing a list of ‘fillers’, before running the previously mentioned tests in order to formally identify the set of auxiliaries. I will then turn to

tripartite constructions, where a second verb may occur between the main verb and the auxiliary. Finally, I will address the other syntactic units mentioned earlier.

5.2.1 The main verb's fillers

Within the verb complex, the main verb invariably occurs in the left-most position. As hinted at in §3.1, a main verb, invariably the part of the verb complex that can stand alone, consists of a verb root possibly preceded by the negative prefix *ma-* and possibly followed by an object marking suffix and some additional TAM morphology: (NEG)-V-(OBJ)-TAM.

Table 43 provides a non-exhaustive overview of the various morphological structures of the Chhitkul-Rākchham main verb (excluding derivative morphology and the negative prefix). Object agreement may be realized by the use of different verb stems altogether, see table 78 (§6.3) for an illustration. I otherwise provide an overview of object agreement in appendix 1, §1.5.3, some periphrastic constructions involving the bare stem of the verb and the second verb *tɔŋ* 'to come'. I deal with imperative forms in appendix 1, §1.5.4).

Table 43: Inflectional paradigm of the Chhitkul-Rākchham main verb:

Main verb structure	Examples
V _{ROOT}	lat (from <i>latfaŋ</i> , 'to do') lan (from <i>laŋ</i> 'to do') lat (from <i>laŋ</i> 'to do') la (from <i>laŋ</i> 'to do') sat (from <i>saŋ</i> 'to kill') ur (from <i>uraŋ</i> and <i>urtfaŋ</i> 'to wash') hu (from <i>hufaŋ</i> , 'to learn, study, read') ps (from <i>psaŋ</i> 'to sit') tsum (from <i>tsumaŋ</i> 'to catch') da (from <i>dasəŋ</i> 'to give') ro (from <i>roŋ</i> 'to go') tau (from <i>tasəŋ</i> 'to keep, put') riŋ (from <i>riŋ</i> 'to say, tell') tuŋ (from <i>tuaŋ</i> 'to drink')

V-INF	<i>pɔs-aŋ</i> 'to sit' <i>fja-saŋ</i> 'to look at, watch' <i>tʰure-ŋ</i> 'to run'
V-OBJ-AGR	<i>da-s-ĩ</i> 'give me'
V-OBJ-IMPV-AGR	<i>da-s-ε-k</i> 'I gave (you)'
V-IMPV-AGR	<i>hun-dε-∅</i> '(s)he stayed, lived' <i>tu-tε-k</i> 'I came' <i>tʰukf-ε-n</i> 'you (2SGNHON) met'
V.OBJ-IRR.DUB-AGR	<i>da:-nɔ-k</i> 'I will give you/him/her'
V-IRR.DUB-AGR	<i>hun-no-∅</i> '(s)he will live, stay'
V-E-IRR.DUB-AGR	<i>huf-i-nɔ-n</i> 'you (HON) will learn, read, study'
V-PROG	<i>latf-a</i> 'doing' <i>suntse-a</i> 'thinking' <i>mɔnea-∅</i> 'celebrating' (from <i>mɔneasaŋ</i> 'to celebrate')
V-OBJ-PROG	<i>da-s-a</i> 'giving (me)'
V-HAB.ASS	<i>hun-ts</i> 'will live, stay'
V-E-HAB.ASS	<i>latf-i-ts</i> 'will do'
V-PFV	<i>pɔs-i</i> 'sit, sat' <i>ta-fi</i> 'put, kept' <i>sɔmzi-ti</i> 'understood'
V-AGR	<i>da-ĩ</i> 'give him/her/them' <i>huni-tf</i> 'stay -2PL'
V-AGR=ě	<i>hun-ĩ=ě</i> 'stay - 2SG extra honorific'
V-COND	<i>hun-na</i> ('if living, staying')
V-OBJ-COND	<i>da-n-na</i> 'if giving'
V-E-COND	<i>latf-i-na</i> 'if doing'
V-IRR.SIM	<i>da-no</i> 'when giving'
V-E-IRR.SIM	<i>latf-i-no</i> 'when doing'
V-PROSP	<i>kraŋ-so</i> 'as soon as opened'
V-E-PROSP	<i>pʰikf-i-so</i> ('as soon as dropped')

Table 45 (see §5.4) provides an outline of the inflectional paradigm of main verbs, copulas and auxiliaries, and table 50 (see §5.6) compares main verbs, second verbs, and auxiliaries.

5.2.2 Main verb + AUX constructions

Before discussing the morpho-syntactic properties of the auxiliaries and their distribution in this type of construction, we shall first identify them formally.

5.3 The formal identification of the Chhitkul-Rākchham auxiliaries

I shall anchor the formal identification of the Chhitkul-Rākchham in the list of criteria provided in §5.1.2.5. Before doing so, I elaborate on the three syntactic criteria mentioned earlier: ‘negative placement’, question, and deletion.

By ‘negative placement’, I refer to the ability of an auxiliary to be negated, just like the main verb – but not simultaneously.

The subject-auxiliary inversion criterion is irrelevant in Chhitkul-Rākchham, but in the absence of a question word, the behaviour of the question particle *a* is telling.

By deletion (‘optionality’), I refer to the ability of an auxiliary to be omitted without affecting the grammaticality of the proposal.

The semantic criterion, the expression of an evidential value, relies on my own definition provided in §2.4.2. This criterion is an absolute requirement for a candidate to qualify as auxiliary.

In the example below, both *tafi* (and *k^hulifi*) and *anɔk* may take the negative *ma-*: *k^he: gɾɛt maɾtafi anɔk*, or *k^he: gɾɛt ɾtafi maanɔk* (*why did not I sing a song?*). In the absence of *k^he:* (‘why’), *did I sing a song?* would be conveyed by *gɾɛt ɾtafi a*, alternatively by *gɾɛt ɾtafi anɔk a*, which singles out *anɔk*. As the interrogatives suggest, *anɔk* is ‘optional’. *Anɔk* conveys a dubitative meaning – by means of the dubitative irrealis marker *-no*. In other words, *anɔk* fulfills the four criteria mentioned earlier.

As seen in §4.3.1, *ta* functions as copula, not auxiliary, when it is preceded by *=rukji* and *=rɔŋsea*. In (96), I argue that *=rukji* and *=rɔŋsea* follow a serial verb construction that consists of the main verb root and the ‘second verb’ *lisaŋ* (‘to be able’). This type of modal construction denotes ability. The copula function of *ta* is highlighted by conducting the negative placement test, where *ga: huju lat lits rukji mata* (or *ga: huju lat lits rɔŋsea mata*) is the only possibility:

(96) *ga:=∅ huju lat li-ts =rukji ta / =rɔŋsea ta*
 1SG=ABS DEM.PROX do be able-HAB.ASS =SML.REL COP.PE =SML.REL COP.PE

‘It looks like I can do it’ – DSN

The negative placement test gives the same results in (97): *kin p^haŋfi rukji mata*:

(97) *ki-n=∅ p^haŋfi-i =rukji ta / =rɔŋsea*
 2SGHON-2SG=ABS lose-PFV =SML.REL COP.PE.INFR =SML.REL
ta
 COP.PE.INFR

‘It looks like you lost’ – DSN

In both (96) and (97), the question test suggests *=rukji ta* and *=rɔŋsea ta* have to be taken as one unit: *ga: huju lat lits rukji ta a* and *kin p^haŋfi rukji ta a*. We find a confirmation in (98): *=rukji ta* and *=rɔŋsea ta* are actually part, as a single unit, of another clause, introduced by the optional adverb *he* (‘like’), which also serves as quotative particle, see §6.2. In (98), the ‘adjective’ *gɔrki* (‘late’), derived from the lexical verb *gɔrkaŋ* (‘to be late’), takes the dubitative irrealis *-no* followed by subject agreement. The second clause starts with *he =rukji ta* (or *he =rɔŋsea ta*), where only *ta* has an evidential meaning:

(98) *ki-n=∅ gɔrk-i-no-ĩ he =rukji*
 2SGHON-2SG=ABS late-MODIF-IRR.DUB-2SGHON like =SML.REL
ta / =rɔŋsea ta
 COP.PE.INFR =SML.REL COP.PE.INFR

‘It looks like you will be late’ – DSN

In (96), (97) and (98), *ta* has a perceptual evidential value and is part of a short additional clause that is optional. In all three examples, *ta* remains uninflected.

In (99), the negative prefix *ma-* can be placed on *latfi*, alternatively on *tɔk*. Thus, ‘I did not serve there’: *nokri malatfi tɔk* or *nokri latfi matɔk*. ‘Did I serve?’ would be *nokri latfi a*, or *nokri latfi tɔk a*, from which we can isolate the form *tɔk*, omissible without affecting the grammaticality of (99). *Tɔk* occurs right after the main verb, *latfi*, with the evidential meaning of ‘personal experience’. *To* is the auxiliary, and *-k* the first person singular subject agreement suffix. The auxiliary inflects for a different category than the main verb:

(99) *diŋ=tʃi* *bara bara* *dilli* *lo* *nokri=∅* *latʃ-i* *tɔ-k* *sea*
 that=ABL in-between Delhi also service=ABS do-PFV AUX.PEEX-1SG ten
bɔʃaŋ=∅ *dilli* *nokri=∅* *latʃ-i* *tɔ-k*
 year=ABS Delhi service=ABS do-PFV AUX.PEEX-1SG

‘After that, I also served in Delhi in-between, I served there for ten years’

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In (100), only *roa* can take the negative prefix *ma-*, but not *tɔts*. The negation results in *mi:tʃaŋ ban ban dur dur huʃaŋ maroa tɔts*. There is only one way to ask about the same: *mi:tʃaŋ ban ban dur dur huʃaŋ roa tɔts a*, where one cannot single out any auxiliary. *Tɔts* is perfectly omissible without affecting the grammaticality of the sentence. *Tɔts* has the evidential meaning of personal certainty. *Tɔts* thus only passes one of the three syntactic tests mentioned in §5.1.2.5:

(100) *praɪməri* *huʃ-i* *haʃ-i* *hojo* *neotʃ=o*
 primary study-ACT study.REDUP-ACT DEM.DIST after=LOC
niŋ-sa:=∅ *dʒon=o* *huʃ-i* *dʒua* *deʃ=o* *bare*
 1PL.EXCL-PL=ABS downhill=FOC study-PFV there village=LOC POST
mi:-tʃaŋ=∅ *ban ban dur dur* *huʃ-aŋ* *ro-a* *tɔ-ts*
 people-PL=ABS INT very far study-INF go-PROG AUX.PEEX-HAB.ASS

‘After studying at the primary school, we studied downhill, people from here in the village were going far away to study’

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However, it would be premature to disqualify *tɔts* as auxiliary at this point. First, *tɔts* as copula verb is the only form from the relevant set that cannot be negated. Second, there is only one way to ask a question in (100) as long as the main verb inflects for *-a*. In (100) *roa tɔts* has a past tense value, reason why one cannot ask *roa a*, which would have a present tense value by default. If we now replace *roa* by *roi*, there is then a choice between *mi:tfaŋ ban ban dur dur hufaŋ roi tɔts a* and *mi:tfaŋ ban ban dur dur hufaŋ roi a*, which singles out *tɔts*.

Consequently, *tɔts* passes two of the three syntactic tests. Further, *tɔts* occurs right after the main verb, be it *roa*, or *roi*. *Tɔts* consists of the auxiliary base *to* and the habitual-assertive *-ts*. That *tɔts* cannot be negated is not a hampering factor and can be explained for reasons that have to do with semantics (see §4.7).

In (101), only *ta:ŋfi* can take the negative prefix *ma-*, but not *hɛn*, thus *hojo niŋ mata:ŋfi hɛn*. In contrast, there are two ways to ask a question: *hojo niŋ ta:ŋfi a* and *hojo niŋ ta:ŋfi hɛn a*. The element *hɛn* is omissible without affecting the grammaticality of (101). In addition, *hɛn* has an evidential meaning: remove it from the construction and it becomes less emphatic.

In §5.12, I observe that *hɛn* is losing some of its verbal attributes, this is why it cannot be negated. In (101), the indeclinable *hɛn* occurs right after the main verb, *ta:ŋfi*, inflected for the perfective:

(101) *hojo niŋ ta:ŋ-fi hɛn dʒi hojo=∅ ta:-ĩ ta:-ĩ*
 3SG.NHON POST see-PFV AUX.EMPH HON 3SG.NHON=ABS see-ACT see-ACT

niŋ-sa:=∅ bʰag-i-ti
 1PL.EXCL-PL=ABS run away-E-PFV

‘(We) say him, Sir, and after seeing him, we ran away’

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In (102), we cannot conclude *hunts* is an auxiliary for three main reasons. First, there is only one possibility when negating ‘whatever they do not want to do, they will not’: *kʰe kʰe malatʃina te hojo malatʃits*. This means that *latʃa hunts* is actually equivalent to *latʃits*,

which finds its confirmation in the interrogative equivalent of (102), either *latfa hunts a*, or *latfits a* (but not *latfa a*). None of the previous interrogatives make *hunts* distinct. To convey the meaning of ‘keep doing’, the occurrence of *hunts* is obligatory. (102), regardless whether it is expressed by means of *latfa hunts* or *latfits*, denotes assertiveness. The element *hunts* has an evidential meaning, but it does not satisfy the other three conditions to qualify as auxiliary:

(102) te k^hane=∅ e mɔrzi=∅ hisa:b=tji k^he k^he latf-i-na
 then QNT=ABS 3PL.NHON.POSS liking=ABS account=ABL what what do-E-COND
 te hojo latf-a hun-ts
 then DEM.DIST do-PROG keep-HAB.ASS

‘Then some people work according to their liking, whatever they want to do, they will keep doing’

AUT_cik14-BSN2-2018-12-18-19

Latfa hunts in (102) has all the attributes of a serial verb construction: there is only one way to form negation, it is treated as one unit in interrogatives, both *latfa* and *hunts* can occur on their own, etc.

The form *hunno* could occur instead of *hunts* in (102), the difference being *latfa hunno* would be interchangeable with *latfino*.

In (103), *a:ts* is a ‘second verb’, which is consistent with my treatment of *a:ts ta* in §5.8.3, where only *ta* functions as auxiliary. Only *lan*, that is, the main verb *la* inflected for the infinitive *-ŋ*, can take the negative prefix *ma-* in (103). ‘We do not have to create (our) written literature’ is expressed by *hamare ko lɪtrətʃər malaŋ a:ts*. ‘Do we have to create our own literature?’ can only be conveyed by *hamare ko lɪtrətʃər lan a:ts a*, which treats *lan a:ts* as one unit. The combination $V_{\text{INF}} a:ts$ invariably has a modal meaning, where *a:ts* cannot be omitted. *A:ts* has an evidential (assertive) meaning, being part of a modal construction denoting an obligation that imposes itself to everyone¹¹⁴. Despite its evidential meaning, *a:ts* is not an auxiliary since it fails the three syntactic tests:

¹¹⁴ Only a first person plural subject can occur in a V-INF *a:ts* construction.

(103) hojo tʃʰɛtiŋ hamar-e ko lɪtrətʃər=∅ la-ŋ
 DEM.DIST POST.PURP 1PL.POSS-PL.MASC POST literature=ABS do-INF

a:-ts

happen/become-HAB.ASS

‘That is why we have to create our (written) literature’

DEB_cik04-CRN-YS1-2018-11-22-2

Although there is no example in the documentary corpus, the form *a:no* could occur instead of *a:ts* in (103), with a resulting dubitative meaning.

In (104), we are dealing with *man*, a postverbal negator and syntactic allomorph of *mahɛn* (see §4.4.6). The ‘negation placement’ test results in *mahɔa* and *hɔa man*, but there is a slight difference in meaning between these two, and so is the case in questions: *hɔa man a* and *mahɔa a*. *Man* is not optional as *hɔa man* puts more emphasis on negation than *mahɔa*. *Man* has an evidential (emphatic) value, but the syntactic tests are inconclusive.

Whereas *hɛn* has an auxiliary function, *man* does not. In (104), *man* is an emphatic negative suffix, the prefix *ma-* being the ‘neutral’ alternative:

(104) ni:-sa=o=∅ guza:ra=∅ ma-as-a ham=∅
 1PL.EXCL-PL=REFL=ABS subsistence=ABS NEG-happen/become-PROG 1PL=ABS

himatʃal=sea hɔ-a-man=nin

Himachal=ATT allow-PROG-NEG.EMPH=MOT

“‘We are ourselves unable to survive, we will not allow Himachalies to come”

TRD_cik10-SS1-2019-04-11-7

In (105), an alternative to *pʰeaŋ mat ti* is *mapʰeaŋ*, but there is a slight difference in meaning between these two, also in questions: *pʰeaŋ mat ti a* and *mapʰeaŋ a*. *Mat ti* is not optional as *pʰeaŋ mat ti* is more dubitative than *mapʰeaŋ*. Being part of a modal construction¹¹⁵, *mat ti* is not optional. Failing two syntactic tests, *mat ti* is not an auxiliary:

¹¹⁵ *Mat ti* occurs in this context with a first person subject.

(105) saŋla: griʃi kat=∅ rona dʒɔn griʃi kat=∅ lɔ-ts
 Sanglā Kinnauri language=ABS Rona downhill Kinnauri language=ABS tell-HAB

hoʒo griʃi kat=∅ p^he-aŋ-mat=ti
 DEM.DIST Kinnauri language=ABS send-INF-CVB.NEG=COP.PE

‘Sanglā Kinnauri language, Rona Kinnauri language, downhill, it is called Kinnauri, (we) did not have to speak Kinnauri’

DEB_cik07-RKKF-SS3-2019-05-27-41

The suffix *-man* attaches to V-INF, V-PFV and V-PROG templates, which means, it may occur in past (attaching to V-PFV), present (V-PROG), or future (V-PROG) tense constructions. V-PROG-*man* may have a present tense or a future tense reading the same way V-PROG *hɛn* can. *Man* cannot attach to a second verb. No auxiliary can be part of a construction where *-man* attaches to an inflected main verb.

Attaching to V-INF, the suffix *-mat=ti* has an exclusive past tense reading. *Man* and *mat=ti* are in complementary distribution, including in a V-INF construction, which does not have the same modal reading, according to whether *-man* (weak necessity) or *-mat ti* (internal necessity) occurs. The latter may occur after second verbs in constructions denoting internal necessity, i.e. after *a:ts* and *gints*.

Table 44 indicates which of the ten Chhitkul-Rākchham bases serving a copula function also have an auxiliary function. Five do so, the same set formally identified as underlying copulas in §4.1.2. The syntactic allomorphs listed in table 44 that do not have an auxiliary function are either second verbs (see in §5.6), or postverbal negators (*man* and *mat ti*).

Table 44: a comparative list of the Chhitkul-Rākchham copulas and auxiliaries

Copulas and syntactic allomorphs	Auxiliaries
<i>hun</i>	no
<i>hɛn</i>	yes
<i>a:</i>	no
<i>ano</i>	yes

<i>ta</i>	yes
<i>to</i>	yes
<i>tuts</i>	no
<i>tɔts</i>	yes
<i>man</i>	no
<i>mat ti</i>	no

5.4 Inflectional properties of the Chhitkul-Rākchham auxiliaries

The copulas *hɛn*, *ano*, *ta*, *to*, and *tɔts* have an auxiliary function. Their occurrence after the main verb (or after a ‘second verb’) is often ‘optional’. I introduce the set in the same order than copulas, starting with the verb of perception *hɛn*, the stative verb *ano*, the change of state and/or action *ta*, and the motion verbs *to* and *tɔts*. I introduce the semantics of the set of auxiliaries very briefly in this section.

The relevant auxiliary verbs have the following morphological template, identical to that of their copula equivalents described in §4.1.3.

hɛn → AUX.EMPH

ta → (NEG)V_{COP}-(IMPV)-(AGR)

a-no-∅ → (NEG)V_{COP}-IRR.DUB-AGR

to-∅ → (NEG)V_{COP}-(IMPV)-AGR

tɔ-ts → AUX-HAB.ASS

Among the five auxiliaries, four, namely *ano*, *ta*, *to*, and *tɔts*, are compound forms whereas *hɛn* is a simple auxiliary. *Ano*, *ta* and *to* are negated by means of the prefix *ma-*; *hɛn* and *tɔts* cannot be negated.

Table 45 sums up for which categories the Chhitkul-Rākchham main verbs, copulas and auxiliaries inflect. There are fewer inflectional possibilities for the last two categories. Copulas and auxiliaries inflect for the exact same categories, namely imperfective, subject agreement, and negation. Based on table 45, we may characterize copulas and auxiliaries as defective verbs.

Table 45: a comparison of inflectional paradigm for main verbs, copulas, and auxiliaries

Type of inflection	Main verbs	Copulas	Auxiliaries
Object marking: -s, vowel elongation, use of different verbs	X	-	-
Object marking: periphrastic constructions: the verb <i>təŋ</i>	-	-	-
-te (IMPV)	X	X	X
-de (IMPV)	X	-	-
-e (IMPV) ¹¹⁶	X	X	X
-no (IRR.DUB)	X	X	X
-ts (HAB.ASS)	X	X	-
-i (PFV)	X	-	-
-ji (PFV)	X	-	-
-ti (PFV)	X	-	-
-a (PROG)	X	-	-
-k (1SG)	X	X	X
-ĩ (2SGHON)	X	X	X
-n (2SGNHON)	X	X	X
-∅ (3)	X	X	X
-tj (1PL and 2PL)	X	X	X
-u (on a few verbs; 2SGNHON IMP)	X	-	-
-s ¹¹⁷	X	-	-
-ẽ (2SG extra HON IMP, following 2SGHON -ĩ)	X	-	-
ma- (NEG)	X	X	X

With regard to auxiliaries, the sequential distribution of the relevant markers obeys the same rules than main verbs and copulas. Subject agreement is marked on either the main verb or the auxiliary, but never on both at the same time. Alternatively to imperfective and irrealis mood, subject agreement attaches directly to the auxiliary stem in the case of *to*

¹¹⁶ Note that the imperfective form of *tasəŋ* as auxiliary (*tase*) differs from its imperfective form as main verb (*tade ~tatje*, see §3.1.1.2).

¹¹⁷ The imperative 2SGNHON form of *asəŋ* ('to happen, become') is *as-s*. In addition, there are a few irregular forms.

and *ta* with a resulting present tense reading. Subject agreement on auxiliaries exclusively occurs with *ano*, *ta* and *to*.

The morphological template of *ta*, and *to* implies these forms help locate the aspectual distinctions expressed by the main verb in time, by means of *-te* and *-se* (imperfective). Hence, *roa ta* ('is going') refers to present tense, *roa tase* ('was going', or 'used to go') to past tense. *Pɔsi ta* ('is sitting') has a present tense reading, *pɔsi tase* ('was sitting') a past tense one. *Latfi tɔk* ('I did') refers to a completed action, and *latfi tɔtek* ('I had done') one completed in a more distant past.

A main verb inflected for the progressive *-a* notably spans over present and immediate future. In this regard, the occurrence of *to* as auxiliary allows us to ascribe a present tense value to *ga: roa tɔk* ('I am going') whereas the absence of the same (*ga: roa*) indicates we are dealing with immediate future. *Ga: roa anɔk* 'I will be going' conveys an aspectual distinction (progressive) in the future.

The auxiliary *hɛn* is indeclinable and may occur in all types of tense constructions: present, after a main verb inflected for the progressive, intentional future, see (113) in §5.4, after a main verb inflected for the progressive, provisional future after a main verb inflected for *-ts* (see table 46 for an overview of future tense constructions), and past after a main verb inflected for the perfective, see (112).

Ano following a main verb inflected for aspect (but *-ts*) conveys a dubitative meaning to the proposal.

The auxiliary *tɔts* invariably has a past tense reading. The expression of personal evidentiality tainted with certainty is thus strictly restricted by tense in non-copula clauses.

If we now compare the distribution of *ano*, *ta* and *to* as copulas and *ano*, *ta* and *to* as auxiliaries, a few differences appear. As a copula, *ta* cannot occur in a construction with a future tense value whereas it may when functioning as auxiliary, as in (112) and (113), although in an indeclinable form. As a copula, *ano* occurs in present and future tense constructions, but as auxiliary, it may follow a main verb inflected with the perfective.

The auxiliary *hɛn* may occur after a main verb inflected for the progressive, the perfective and the habitual. (101) was an example in a past tense construction and (106) is a present tense one. In both cases, *hɛn* has an assertive meaning. In (106), *hɛn* indicates that Chhitkul children coming to study at Rākchham’s Secondary School is an on-going fact to members of the local community:

(106) baki niŋ-sa: tʃul=tʃi attʃaŋ=∅ lo dʒua to-a
 CONN 1.PL.EXCL-PL Chhitkul=ABL children=ABS also here come-PROG
 hɛn huʃ-aŋ tʃʰɛtiŋ
 AUX.EMPH study-INF POST.PURP

‘And our children from Chhitkul are also coming here to study’

AUT_cik08-CRN-2018-11-22-17

Some facts are locally circumscribed and shared by few community members, as in (106), while some others are part of the collective repository of knowledge. Not everyone knows that India became independent in 1947, but no one can argue against the veracity of the proposal, reason why *hɛn* occurs as auxiliary in (107):

(107) bʰa:rat=∅ unniŋ-so senta:li:s=o hozar as-i hɛn
 India=ABS nineteen-hundred forty-seven=LOC thousand become-PFV AUX.EMPH

‘India became independent in 1947’ – DSN

A main verb inflected for *-a* followed by *hɛn* may also have a future tense value¹¹⁸, along with a main verb inflected for *-no*, a main verb inflected for *-ts*, and a main verb inflected for the infinitive. These four different ways to form constructions with a future tense value result in two types of future, namely realis and irrealis. As mentioned earlier, *-ts* invariably has an assertive force and as such it belongs to the realis category. I characterize *V-a hɛn* constructions as a realis ‘intentional future’ that never occurs with second person. The marker *-no* is invariably irrealis, or dubitative. The factual future expressed by means of *-ts* is used with either second or third person (or both), never with first.

¹¹⁸ This is consistent with Tournadre’s observation (2017: 2) that “if ‘future tense’ exists in a given language, the future may be marked as well by other categories such as the ‘present tense’”.

In the following paradigm, the main verb is *ɾɔŋ* ('to go'). *V-a hɛn* only occurs with 3SG, *-ts* with 2PL, 3SG and 3PL. The infinitive form of the main verb *ɾɔŋ* only occurs with 1PL. The dubitative *-no* occurs with 1SG and 2SG. *Rots* denotes factuality whereas *roa hɛn* conveys intentionality, that is, a more dubitative meaning in comparison:

ga:-∅ obi tʃʰul ɾɔn-nɔ-k 1SG-ABS tomorrow Chhitkul go-IRR.DUB-1SG ('I will go to Chhitkul tomorrow – maybe')

kin-∅ obi tʃʰul ɾɔn-no-ĩ 2SG.HON-ABS tomorrow Chhitkul go-IRR.DUB-2SG.HON ('You will go to Chhitkul tomorrow – maybe')

eme-∅ obi tʃʰul ro-ts 3SG.HON-ABS tomorrow Chhitkul go-HAB.ASS ('(s)he will go to Chhitkul tomorrow')

eme-∅ obi tʃʰul ro-a hɛn 3SG.HON-ABS tomorrow Chhitkul go-PROG AUX.EMPH ('(s)he will go to Chhitkul tomorrow - intentional)

kjaŋsa:-∅ obi tʃʰul ɾɔ-ŋ 1PL-ABS tomorrow Chhitkul go-INF ('We will go to Chhitkul tomorrow')

kinsa:-∅ obi tʃʰul ro-ts 2PL-ABS tomorrow Chhitkul go-HAB.ASS ('You will go to Chhitkul tomorrow')

emesa:-∅ obi tʃʰul ro-ts 3SG.HON-ABS tomorrow Chhitkul go-HAB.ASS ('They will go to Chhitkul tomorrow')

With *kɔʃaŋ* ('to speak, talk'), *V-a hɛn* exclusively occurs with 1SG, *-ts* with 2SG, 3SG and 3PL, the infinitive form of the verb with 1PL, and *-no* with 1SG, 2SG and 3SG:

ga:-∅ obi-tʃi aŋgrezi-o kɔʃ-i-nɔ-k 1SG-ABS tomorrow-ABL English-LOC speak-E-IRR.DUB-1SG ('I will speak in English tomorrow – maybe')

ga:-∅ obi-tʃi kɔʃ-a hɛn 1SG-ABS tomorrow-ABL speak-PROG AUX.EMPH ('I will speak in English tomorrow')

kin-∅ obi aŋgrezi-o kɔʃ-i-no-ĩ 2SG.HON-ABS tomorrow English-LOC speak-E-IRR.DUB-2SG.HON ('You (2SG.HON) will speak in English tomorrow – maybe')

kin-∅ obi aŋgrezi-o kɔʃ-i-ts 2SG.HON-ABS tomorrow English speak-E-HAB.ASS ('You will speak in English tomorrow')

eme-∅ obi aŋgrezi-o kɔʃ-i-no-∅ 3SG.HON-ABS tomorrow English-LOC speak-E-IRR.DUB-3 ('(s)he will speak in English tomorrow – maybe')

eme-∅ obi angrezi-o kɔlf-i-ts 3SG.HON-ABS tomorrow English-LOC speak-E-HAB.ASS ('(s)he will speak in English tomorrow')

kjaŋsa:-∅ obi angrezi-o kɔlf-aŋ 1PL-ABS tomorrow English-LOC speak-INF ('We will speak in English tomorrow')

kinsa:-∅ obi angrezi-o kɔlf-i-tf 2PL-ABS tomorrow English-LOC speak-E-2PL.HON ('You will speak in English tomorrow')

emesa:-∅ obi angrezi-o kɔlf-i-ts 3PL.HON-ABS tomorrow English-LOC speak-E-HAB.ASS (They will speak in English tomorrow')

There is yet another pattern with *hun-aŋ*, 'to stay, live'. V-*a hɛn* exclusively occurs with 1SG, -*ts* with 3SG, 2PL and 3PL, the infinitive form of the verb with 1PL, and -*no* with 1SG, 2SG and 3SG:

ga:-∅ obi(tfi) kjim-o hun-no-k 1SG-ABS tomorrow home-LOC stay-IRR.DUB-1SG ('I will stay at home tomorrow – maybe')

ga:-∅ obi(tfi) kjim-o hun-a hɛn stay-PROG AUX.EMPH ('I will stay at home tomorrow')

kin-∅ obi(tfi) kjim-o hun-no-ĩ 2SG.HON tomorrow house-LOC stay-IRR.DUB-2SG.HON ('you will stay at home tomorrow')

eme-∅ obi(tfi) kjim-o hun-no-∅ 3SG.HON-ABS tomorrow house-LOC stay-IRR.DUB-3 ('(s)he will stay at home tomorrow - maybe')

eme-∅ obi(tfi) kjim-o hun-ts 3SG.HON-ABS tomorrow house-LOC stay-HAB.ASS ('(s)he will stay at home tomorrow')

kjaŋsa:-∅ obi kjim-o hun-aŋ 1PL-ABS tomorrow house-LOC stay-INF ('We will stay at home tomorrow')

kinsa:-∅ obi kjim-o hun-ts 2PL-ABS tomorrow house-LOC stay-HAB.ASS ('You will stay at home tomorrow')

emesa:-∅ obi kjim-o hun-ts 3PL.HON-ABS tomorrow house-LOC stay-HAB.ASS ('They will stay at home tomorrow')

V-*a hɛn* is found with all verbs, but restricted to either first or third person singular depending on controllable vs. not controllable verbs. In two of the previous three paradigms mentioned earlier, V-*a hɛn* occurs with 1SG: intentions of other people are not perceivable by the speaker. The exclusive occurrence of V-INF with 1PL – with all types of

verbs – indicates that we are dealing with a ‘programmatic’ future, “used to express that the action of the sentence is the subject’s plan” (Vokurkova 2008: 102).

Three other future tense constructions that include an auxiliary are *V-ts ta*, *V-ts to*, and *V-ts hɛn*. An example of the former, which is ‘inferential’, is provided in §5.5.4. *V-ts to* refers to ‘personal future’, see (133). An example of the latter, a ‘preventive’ future, denoting “a warning about a coming danger or risk” (Tournadre 2016: 638) is provided below. (113) is an example where all types of future but ‘programmatic’ discussed here may occur:

(108) ri:ti riwad₃=∅ lo kjaŋ no ma-kwai-ts hɛn
 customs=ABS either 1PL.POSS.INCL PTCL.EMPH NEG-spoil-HAB.ASS AUX.PREV
 nuŋ kwai-fi neot_f=o k^hɛts=o ma-a:-ts
 later spoil-PTCP after=LOC something=FOC.DEF NEG-COP-HAB.ASS
 no
 PTCL.EMPH

‘Our customs will not be spoiled either, after getting spoiled nothing will happen afterwards’

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Table 46 sums up the various types of future constructions found in Chhitkul-Rākchham. *V-a ano* has the same dubitative meaning that *V-no*, the difference being aspectual.

Table 46: The various types of constructions with a future tense value – based on person

Main verb complex	Type of future	Person
<i>V-no</i>	Dubitative	All
<i>V-ts</i>	Assertive	2 and 3
<i>V-a ano</i>	Dubitative	All
<i>V-ts ta</i>	Inferential	2 and 3
<i>V-ts to</i>	Personal	3
<i>V-a hɛn</i>	Intentional	1 (controllable) and 3
<i>V-ts hɛn</i>	Preventive	2 and 3
V-INF	Programmatic	1

Similarly to *hɛn*, *ano* may occur after a main verb inflected for tense – in (94), it is the perfective – and aspect, including *-ts* in the case of second verbs. *Ano* is compatible with all persons as subject. The same way *V-a hɛn* has both a present and future tense value, *V-a ano* does, the difference being in terms of evidentiality: *hɛn* is assertive, *ano* is dubitative:

(109) ga:=∅ kuɔn=∅ tʌtʃ-a a-nɔ-k
 1SG=ABS food=ABS cook-PROG AUX-IRR.DUB-1SG

‘I may be cooking food/I will be cooking food (maybe)’ – DSN

A speaker makes use of a *V-a ano* construction to make a guess about how things will unfold in the future. (110) stems from a conversation where a couple discusses the most important events that take place in Rākchham on a yearly basis, notably *Usko*, the Flower Festival. Although he is a member of the Rākchham community, the speaker uses *ano* because he plays the role of an interviewer – asking his wife for how many days the festival lasts:

(110) pə dear ā te mi:-tʃaŋ=∅ pʰasur=∅ tuŋ-a a-no-∅
 four day(s) INTERJ then people-PL=ABS alcohol=ABS drink-PROG AUX-IRR:DUB-3
 bā mā zo-i pʰoga-tʃaŋ laʃ-a a-no-∅
 INT good-MODIF clothes-PL wear-PROG AUX-IRR.DUB-3

attʃʰ-a: attʃʰ-a:
 good-MASC.SG good.MASC.SG

‘Four days, yes, then people will drink alcohol and wear very nice clothes (maybe), good, good’

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All auxiliaries may occur in questions, but *ano* is an obvious choice as one typically asks questions when there is some doubt as to what the answer can be. (94) is an interrogative with *ano* where the speaker – the crow in *Jackal and the Crow* – makes use of it in a self-directed question expressing (self) incomprehension and doubt about her clarity of mind.

Like with *ano* as a copula, alternatives to *ano* as auxiliary involve (=rukʃi or =rɔnsea) *ta*, provided there is some kind of perceptual evidence. *Ano* may occur in this context

regardless whether there is some evidence or not, i.e. *ano* is not sensitive to evidence. In (111), a first alternative to *ano*, based on perceptual evidence, for example if the referent has a machete in his hands, is a construction with *ta* as auxiliary. A second alternative, also based on perceptual evidence, is a construction devoid of any auxiliary where the clause (*he*) =*rukji* (or =*rɔŋsea*) *ta* is added. There is no semantic difference between *ta* as auxiliary and *ta* as copula, *satji ta* and *satji he =rukji* (or =*rɔŋsea*) *ta* being interchangeable:

(111) εme=tʃi la:=∅ satʃ-i a-no-∅ / ta / he
 3SG.HON=ABL goat=ABS kill-PFV AUX-IRR.DUB-3 AUX.PE like
 =rukʃi ta / he =rɔŋsea ta
 =SML.REL COP.PE like =SML.REL COP.PE

‘He may have killed the goat/he must have killed the goat/it looks like he killed the goat’ – DSN

The same example with a first person subject would refer to a situation where the speaker was not in full control of himself, *satji anɔk* or *satji =rukji ta* being the only two possibilities. *Ta* is not compatible with first person, and =*rukji ta* is perfectly grammatical because it belongs to a different clause with a different (impersonal) subject. Would the main verb inflect for imperfective (*sadek*), the subject agreement marker *-k* would preclude the occurrence of =*rukji ta*.

Kuɔn buna ta in (37) refers to an inferential use of the perceptual *ta*. A second illustration is found in future tense constructions where it invariably follows a main verb inflected for the habitual *-ts*. In this context, *ta* tones down the assertiveness of *-ts*. *Ta* as auxiliary denoting perceptual evidence participates in an epistemic scheme: there is no ‘primary meaning’ and no ‘epistemic extension’. The main verb inflected for *-ts* carries most of the semantic load in terms of evidentiality and *ta* brings a nuance. The evidential meaning of *ta* cannot be assessed in isolation from the main verb inflected for *-ts*. In (112), the participants are discussing what it will take to teach and thus possibly preserve Chitkul-Rākchham language. One proposal is to teach the language one hour daily at school. The use of *tuts ta* indicates that provided this condition is met, there are reasons to believe the language will not face extinction:

(112) hojo te kjaŋ i: g^hant̚-a:=∅ sukul=o agar
 DEM.DIST then 1PL.INCL.POSS one hour-MASC=ABS school=LOC CONJ
 kjaŋ buzuruk-tjaŋ=∅ de-a su:=∅ kjaŋ
 1PL.INCL.POSS elder-PL=ABS carry-PROG everyone=ABS 1PL.INCL.POSS
 læəkəl mastər-tjaŋ=∅ kjaŋ lo to-∅ ɛme-sa:
 local teacher-PL=ABS 1PL.INCL.POSS also COP.PEEX-3 3SG.HON-PL
 kjaŋ agar i: g^hant̚-a:=∅ pantfajat=e θru t̚^ha
 1PL.INCL.POSS CONJ one hour-MASC=ABS Panchayat=GEN POST now
 h̄e din tu-ts ta=e na
 like day(s) come-HAB.ASS AUX.INFR.PE=HSY PTCL.QUER

‘In this regard, if we rally our elders - and there are our local teachers too - if they (teach our language) one hour daily at school through the Panchayat, such days will come, will not they?’

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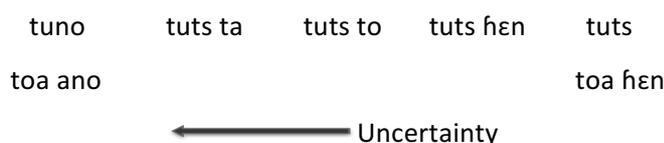
In (113), there is a choice between up to seven constructions, five of which involving an auxiliary. In the absence of auxiliary, the choice is between *tuno* (dubitative) and *tuts* (assertive). Compared to *tuno*, *toa ano* conveys a slight aspectual change (‘may be coming’) while retaining the same dubitative flavour. Compared to *tuts*, *tuts ta* is inferential and slightly less assertive. *Ta* can only occur if the speaker has some kind of perceptual evidence – for example after consulting a timetable. *Tuts h̄en* (‘preventive’) conveys a slightly less assertive meaning than *tuts*, and so does *tuts to*. Finally, a speaker may select *toa h̄en* (‘intentional’), which is more assertive than *toa ano*:

(113) ai b̄as=∅ t̚u baze tu-no-∅ / tu-ts /
 next bus=ABS six o'clock come-IRR.DUB-3 come-HAB.ASS
 to-a a-no-∅ / to-a h̄en /
 come-PROG AUX-IRR.DUB-3 come-PROG AUX.EMPH.INTEN
 tu-ts ta / tu-ts h̄en / tu-ts
 come-HAB.ASS AUX.INFR.PE come-HAB.ASS AUX.PREV come-HAB.ASS
 to
 AUX.PEEX

‘The next bus will come at 6 o'clock’ –DSN

Diagram 3 arranges the templates from table 46 on a scale of certainty. (113) indicates that the three auxiliaries *ano*, *ta* and *hɛn* are part of an epistemic scheme. We cannot analyze source of information in isolation from it. The nuance in meaning brought by *tuts ta*, *tuts to* and *tuts hɛn* compared with *tuts* is telling:

Diagram 3: a scale of uncertainty – future tense constructions



The incompatibility between *ta* (or *tuts ta*) and first person suggests the occurrence of *ta* indicates the absence of involvement (other than through the senses) from part of the speaker. In (114), the speaker discusses some varieties of morels found around Rākchham village, having made it clear earlier in the recording that she belongs to the group of people who collects them. Consequently, she uses *ta* as auxiliary in *ts^hɔŋã lo ta* to indicate she does not buy them as some other people do:

- (114) mi:-tʃaŋ=∅ auri nauri ʃjatʃ-a ʃɔrk-i ʃɔrk-i ro-a
 people-PL=ABS frenetically look-PROG far-MODIF far-MODIF go-PROG
- ʃjatʃ-a te and^had^hund as-a ta=e
 search-PROG then QNT happen/become-PROG AUX.PE=HSY
- ɦa: a dzã as-a na tutʃ-i-na raŋtʃ-a
 INTERJ QNT happen/become-PROG PTCL.QUER bring-E-COND sell-ROG
- ta:ŋ-ã la: mi:-tʃaŋ=∅ ts^hɔŋ-ã lo ta
 see-PROG do.PROG people-PL=ABS buy-PROG also AUX.PE

‘People are looking for them frenetically, going far away to look for them, (it is said) they are growing in abundance, if brought, they can be sold, and people are even buying them’

TOP_cik07-MK-2018-11-27-9

However, it would be wrong to conclude that the use of *ta* invariably implies that the speaker is only involved in what she describes through the senses only. In a description, a speaker may alternate between *ta* and *to* using the former to background her involvement and using the latter, by contrast, to highlight to what she attaches more importance. In (115) and (116), my main consultant gives an account of how it was to live in Chhitkul village in earlier times. He was personally involved in everything he is describing. He uses *tase* in (115), but *tote* in (116), to emphasize that this part of the description has a deeper emotional or psychological resonance in him. Pragmatic rather than syntactic considerations dictate the choice:

(115) zasaŋ=e tʃʰɛtiŋ alu=∅ bra=∅ ɔgli=∅
 eatables=GEN POST-PURP potato=ABS bitter buck=ABS sweet buck=ABS
 tʃa=∅ ʃa:=∅ tɛlaŋ=∅ ma:r-∅ bod-i bɔrtea-∅
 barley=ABS meat=ABS oil=ABS ghee=ABS QNT-MODIF use-PROG

 ta-se-∅
 AUX.PE-IMPV-3

‘Potatoes, bitter buck, sweet buck, barley, meat, oil and ghee were commonly used as eatables’

TOP_cik10-DSN-2018-12-14-18

(116) ɔtʃ=i mun=i tsʰaŋ=na la-ŋ tʃʰɛtiŋ metsaŋ=∅
 evening=LOC night=LOC morning=LOC do-INF POST.PURP wood=ABS
 tʃɔtʃ-a tɔ-te-∅
 light-PROG AUX.PEEX-IMPV-3

‘At night, (a special kind of wood) was (used) for lightning’

TOP_cik10-DSN-2018-12-14-22

Now, compare (117) and (118), where the exact same main verb inflects for the perfective. In (117), my main consultant selects *to*, although he is not personally involved in the relatively recent opening of a ‘ten plus two’ school in Chhitkul. He did not take part in its construction, he does not teach there, and none of his children is studying there either. What triggers *to* in this example is not personal involvement, but integrated knowledge. The use of *ta* in (118) conversely conveys a kind of information that has not yet been (fully)

integrated: my main consultant's main residence has been Reckong Peo since 1987, and whenever he goes back to Chhitkul, he has his own house, so he does not need to eat at the *dhabas*:

- (117) at-tʃaŋ=∅ huʃ-aŋ tʃʰɛtiŋ dəs dʒama do skuʃ=∅
 child-PL=ABS study-INF POST.PURP ten plus two school=ABS
 tʃʰul-∅ lo kʰuli-ti to-∅
 Chhitkul-ABS also open-PFV COP.PEEX-3

'A 'ten plus two' school has opened in Chhitkul for children to study'

TOP_cik10-DSN-2018-12-14-30

- (118) pə ŋã dukan-∅ sɔ-ŋã sɔ-ruk həʊtəl=∅ i: tɛntʰaʊs=∅ tsʰɔka=na
 four five shop-ABS ten-five ten-six hotel=ABS one tent house=ABS QNT=LOC
 dʰava-tʃaŋ=∅ lo kʰuli-ti ta-∅
 dhaba-PL=ABS also open-PFV AUX.PE-3

'Four-five shops, fifteen-sixteen hotels, one tent house and some dhabas have opened too'

TOP_cik10-DSN-2018-12-14-32

To as auxiliary is compatible with all persons as subject. From a morphological perspective, the difference with *ta* is that subject agreement markers occur in both present, as in (119), and past:

- (119) hojo man man baɖʰia gos-a:=∅ kin=∅ riŋ-ã
 DEM.DIST INT good conversation-MASC=ABS 2SG.HON=ABS say-PROG
 to-ĩ jaʃvir hojo he a:-na ta tse
 AUX.PEEX-2SG.HON Yashvir DEM.DIST like become-COND AUX.PE.INFR QNT
 baɖʰia no
 good PTCL.EMPH

'You are saying positive things, Yashvir, if it turns out like this, it is good'

DEB_cik04-CRN-YS1-2018-11-22-28

internal evidence, to the content of the proposal and its factual nature. In this case, the speaker could have used *tase* or *tɔte* instead, the former concealing any personal involvement, the latter having the exact opposite effect, but with less assertiveness than *tɔts*.

In (6), an autobiographical narrative, the speaker selects *tɔts* when reminiscing about his enrolment in the Indian army. The only possible alternative would be *tɔk*. As mentioned earlier, *tɔts* could occur with second and third person and, *toĩ*, *tɔn* and *to* would be perfectly grammatical alternatives. The difference between *tɔts* and *to*-AGR is in terms of assertiveness.

Tɔts does not occur in narratives only: this is consistent with a reading as an all-pervasive subjectivity. (121) deals with whether tourism is beneficial to Chhitkul village or not. The speaker expresses a strong view in response to the other participant, who is doubtful of the benefits. In (121), *tɔts* expresses a personal opinion and emphasizes how confident the speaker is in having this opinion, hence my characterization of *tɔts* as being both personal and assertive:

(121) *huju te he lɔ-ŋ tɔ-ts nodzoan-tʃaŋ=∅ tʃʰɛtiŋ*
 DEM.PROX then like tell-INF AUX.PEEX-HAB.ASS youngster-PL=ABS POST.PURP
rozgar=∅ ma-ta
 employment=ABS NEG-COP.PE
 ‘Then it has to be told this way: there is no employment for youngsters’
 DEB_cik01-RK-BSN1-2018-10-15-20

Tase, *tɔte* and *tɔts* all denote the speaker’s involvement in the narrated event. *Tase* is an indication of sensory access, and *tɔte* and *tɔts* of an internal knowledge, the difference between the last two being epistemic. Since all three auxiliaries require the speaker to be a witness of the narrated event, their occurrence is limited to a relatively recent past, which explains why an auxiliary only inflects for the imperfective, and not the perfective. In (107), *tɔts* is only grammatical if the speaker witnessed India’s independence in the course of her life. If not, *hɛn*, devoid of any speaker’s involvement (i.e. denoting impersonal factuality) is

the only possibility, and for those non-factual events that the speaker did not witness, *ano* is another.

Table 47: auxiliary distribution according to main verb inflection and recent vs. distant past

Main verb inflection	Recent past	Distant past
V-PROG	<i>tase, tɔte, tɔts</i>	-
V-PFV	<i>hɛn, ano, tase, tɔte, tɔts</i>	<i>hɛn, ano</i>
V-IMPV	-	-

The choice of auxiliaries is reduced when the speaker did not witness the narrated event, but regardless whether the speaker witnessed it or not, the auxiliary conveys an epistemic judgement.

5.5 The binary structures main verb + AUX

The occurrence of the set of auxiliaries discussed earlier is subordinated to the kind of inflection taken by the main verb. Four distinct patterns emerge.

5.5.1 Main verb inflected for the infinitive + AUX

A first pattern emerges when the main verb is in the infinitive form¹²⁰, invariably a modal construction denoting internal necessity, in contrast with weak necessity (V-INF=*sea*), and external necessity, conveyed by a serial verb construction involving an inflected form of *asaŋ* ('to become, happen'). V-INF AUX is a rare case where the auxiliary is obligatory. The choice is between the whole set mentioned previously except *ta* in its present tense form. The auxiliaries can only inflect for tense (imperfective), aspect (habitual-assertive), or mood (irrealis-dubitative), but not for subject agreement. This absence has to do with the semantics of the construction. Semantic factors also explain why only the imperfective form of *ta*, namely *tase*, may occur: one cannot presume what other people's internal obligations are in the present moment, only in the past, hence the use of *tase* (with second and third person) and *tɔte* (with first). These two forms are enough to distinguish between the speaker's own obligation in the past and that of other people: AGR is superfluous.

¹²⁰ See appendix 1, §1.3.3.2 for an outline on infinitive.

In (122), the auxiliary *ano* follows the infinitive form of ‘to go’, namely *rɔŋ*, which gives a dubitative meaning to the sense of obligation conveyed by the proposal:

(122) *ga:=∅* *bɔseriŋ=∅* *rɔ-ŋ* *a-no* / **a-nɔ-k*
 1SG=ABS Batseri=ABS go-INF AUX-IRR.DUB AUX-IRR.DUB-1SG

‘I will have to go to Batseri/I may have to go to Batseri’ – DSN

In V-INF AUX constructions, *ta* occurs with second and third person subjects, *to* otherwise. (123) involves *ta*, but it can only do so in its imperfective form uninflected for subject agreement, *tase*:

(123) *kin=∅* *huju* *latf-aŋ* *ta-se* / **ta-se-ĩ*
 2SG.HON=ABS DEM.PROX do-INF AUX.PE-IMPV AUX.PE-IMPV-2SG.HON

‘You had to do this’ – DSN

In (124), since subject agreement is ‘neutralized’, *tɔtɛk* is ungrammatical:

(124) *ga:=∅* *bɔseriŋ=∅* *rɔ-ŋ* *tɔ-te* / **tɔ-tɛ-k*
 1SG=ABS Batseri=ABS go-INF AUX.PEEX-IMPV AUX.PEEX-IMPV-1SG

‘I had to go to Batseri’ – DSN

Table 48: set of available auxiliaries after V-INF

	Choice of auxiliaries	Imperfective form	AGR	Person
V-INF	<i>hɛn</i>	-	-	1
	<i>ano</i>	-	-	All
	* <i>ta</i>	<i>tase</i>	-	2 and 3
	<i>to</i>	<i>tɔte</i>	-	1
	<i>tɔts</i>	-	-	All

In a modal construction with a present tense value, negation is marked on the main verb obligatorily followed by any auxiliary. V-INF *man* and V-INF *mat ti* denote weak necessity

and internal necessity respectively. In a V-INF=*sea* construction, only *to* (first person) and *ta* (second and third) may occur.

5.5.2 Main verb inflected for PROG or PFV + AUX

The second pattern refers to when the main verb inflects for either the progressive (-*a*) or the perfective -*i*, -*fi*, and -*ti*. In that case, the whole choice of auxiliaries is available and *ano*, *ta*¹²¹, and *to* may inflect for both imperfective and subject agreement.

(95) is an example where *tase* follows a main verb inflected for the progressive -*a*. Third person is marked with -∅. There is no auxiliary form such as **tasek* the same way there is no auxiliary form such as **tak*: with first person subjects, *tɔk* or *tɔtek* are grammatical. With second and third person, both *to* and *ta* are available. The following example is with *to* inflected for subject agreement:

- (125) kan=∅ man man zo-i gret=∅ ta-g-a
 2SG.NHON=ABS INT good-MODIF song=ABS keep/put-E-PROG
 tɔ-n
 AUX.PEEX-2SG.NHON
 ‘You are singing very good songs’
 JAC_cik05-YS1-2019-03-07-15

(100) illustrates the use of *tɔts* as auxiliary in a construction where the main verb inflects for the progressive -*a*.

In (113), the dubitative *ano* follows a main verb inflected for the progressive.

The pattern is the same when a main verb inflects for the perfective. (94) and (99) show that the auxiliaries *ano* and *to* inflect for subject agreement. In (126), the combination V-PFV AUX-IMPV refers to a completed action in a more distant past (English ‘pluperfect’) than V-PFV alone:

¹²¹ With a verb inflected for the perfective, only *tase* – not *ta* – may occur with 2SG.

(126) hojo tʰɛtiŋ hojo tʃakar=tʃi ga:=∅ hojo turizəm
 DEM.DIST POST.PURP DEM.DIST purpose=ABL 1SG=ABS DEM.DIST tourism
 ko dʒjada se dʒjada ʈa-ŋ tʰɛtiŋ te ga:=∅ suntsi-ti
 POST.OBJ QNT POST QNT build-INF POST.PURP then 1SG=ABS think-PFV
 tɔ-tɛ-k
 AUX.PEEX-IMPV-1SG

‘Therefore, to this purpose, I have thought of doing more for tourism’

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In (127), *ta* inflects for both imperfective and subject agreement. Compared to V-PFV *ta*, the occurrence of *tase* refers to a more distant past:

(127) ka:=∅ matʃʰ-a:=∅ tsum-i tsam-i jap-i i: paŋ=niŋ
 crow=ABS fish-MASC.SG=ABS catch-ACT catch-ACT fly-PFV one tree=LOC
 ro-de-∅ po i: ʃɛli-∅ lo ka:=∅ ʃjas-i ta-se-∅
 go-IMPV-3 down one fox-ABS also crow=ABS watch-PFV AUX.PE-IMPV-3

‘Having picked up the fish, the crow flew away and went to a tree; a fox had watched the crow from below’

JAC_cik08-JC-2019-03-09-3

The perfective *-i* typically occurs instead of the progressive *-a* with a few stance, position or posture intransitive verbs such as ‘to sit’, ‘to sleep’, or ‘to surround’. What follows in (128) is the auxiliary *to* inflected for the imperfective *-te* and subject agreement. Both *to* and *ta* may occur with second and third person subjects:

(128) te ga:=∅ paŋ=e kal ro-i ru-i pɔs-i
 then 1SG=ABS tree=GEN upper go-ACT go.REDUP-ACT sit-PFV
 tɔ-tɛ-k de ta ʃɛli=tʃi ga:=tiŋ ʃe
 AUX.PEEX-IMPV-1SG then COP.PE fox=ABL 1SG=DAT like
 gosa:=∅ riŋ-de-∅ ka-n=∅ ʃe
 conversation=ABS say-IMPV-3 2SGNHON-2SG=ABS like

tɔ-n ka-n=∅ he tɔ-n riŋ-de-∅
 COP.PEEX-2SGNHON 2SGNHON-2SG=ABS like COP.PEEX-2SGNHON say-IMPV-3

‘Then, having gone to the top of the tree, I had been sitting when the fox said these words to me: "you are like this, you are like that"’

JAC_cik05-YS1-2019-03-07-59

Both *ano* and *tɔts* are possible choices when the main verb inflects for the perfective. (129) is an example with the latter, occurring as part of a narrative – *Jackal and the Crow* – with an unspecified past. Based on the distributional properties of *tɔts* (see table 34), the speaker takes his description of the nine pictures as a not too distant past, one that allows for the occurrence of *tɔts*, which makes sense since the speaker is describing pictures:

(129) te matʰ-i:=∅ likʰ-i jo=∅ paŋ=niŋ pɔs-i
 then fish-FEM.SG=ABS carry-PRESP 3SG.NHON=ABS tree=LOC sit-PFV

tɔ-ts no
 AUX.PEEX-HAB.ASS PTCL.EMPH

‘Then the crow sat on the tree, carrying the fish’

JAC_cik09-MSN-2019-03-19-3

Table 49: set of available auxiliaries after V-ASP (but -ts)

	Auxiliaries	IMPV	AGR	Person (SUBJ)
	<i>hɛn</i>	-	-	1
	<i>ano</i>	-	<i>anɔk</i> (1SG) <i>anoĩ</i> (2SGHON) <i>anɔn</i> (2SGNHON) <i>ano</i> (3) <i>anɔtʃ</i> (1 and 2PL)	All
V-INF	<i>ta</i>	<i>tase</i>	- <i>taseĩ</i> (2SGHON) <i>tasɛn</i> (2SGNHON) <i>tase</i> (3)	2 and 3

			<i>tasetf</i> (1 and 2PL)	
	<i>to</i>	<i>tɔte</i>	<i>tɔk</i> and <i>tɔtek</i> (1SG) <i>toĩ</i> and <i>tɔteĩ</i> (2SGHON) <i>tɔn</i> and <i>tɔten</i> (2SGNHON) <i>to</i> and <i>tɔte</i> (3) <i>tɔtf</i> and <i>tɔtetf</i> (1 and 2PL)	All
	<i>tɔts</i>	-	-	All

5.5.3 Main verb inflected for IMPV-AGR or IRR-AGR

According to a third pattern, the main verb takes one of the imperfective markers (*e*, *-te*, or *-de*) and subject agreement, alternatively the irrealis *-no* and subject agreement. In that case, the combinations IMPV-AGR and IRR-AGR preclude auxiliiation, as shown in (130) and (131).

(130) te t^ha mɔ:sam=∅ garam as-a de ɔŋ-no-∅
then now weather=ABS warm become-PROG then rise-IRR.DUB-3
ba
PTCL.DEMEAN

‘Now the weather is getting warm, then it (the snow) will melt – maybe’
NDB_cik06-BS1-AD-2019-03-07-41

(131) t^ha=ninj dolo fɛŋ=∅ ta ɔja ɔŋ-de-∅
now=LOC nevertheless snow=ABS COP.PE quickly rise-IMPV-3

‘The snow nevertheless melted quickly this year’
NDB_cik06-BS1-AD-2019-03-07-14

We may characterize main verbs with a V-IRR-AGR or V-IMPV-AGR structure as finite verbs. The main verbs in (130) and (131) are finite because they are marked for mood, tense, and subject agreement, precisely the categories for which auxiliaries inflect. An auxiliary is therefore superfluous.

5.5.4 Main verb inflected for *-ts* + AUX

A main verb inflected for the habitual *-ts* results in two scenarios. In the first, we are dealing with a future tense construction. In this context, *-ts* is the assertive counterpart of the irrealis (dubitative) *-no*. The auxiliary *ta* may follow *-ts*, as shown in (132):

- (132) ra:ts^hum def=o ga:=∅ mi:-tʃaŋ=tiŋ hɛ: ʃurizəm=∅ ε:sa
 Rākchham village=LOC 1SG=ABS people-PL=DAT COP.3SG tourism=ABS like
 hɛ: tsali-ts ʃurizəm=∅ tsali-ts ta kjaŋ-sa:=∅
 COP.3SG go-HAB.ASS tourism=ABS go-HAB.ASS AUX.PE.INFR 1PL.INCL-PL=ABS
 biznəs=∅ tu-ts ta
 business=ABS come-HAB.ASS AUX.PE.INFR

‘I (said) to people in Rākchham village that tourism would come, that business would come’

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Ano cannot occur instead of *ta* in (132) since it would contradict the assertive meaning conveyed by *-ts*. The inferential *ta* tones down the assertive judgement expressed by the main verb. *Tuts ta*, as already seen in (113), is less assertive than *tuts*. An alternative to *ta* is *hɛn*, as in (105). The main verb inflected for *-ts* sets the tone in terms of evidentiality while the auxiliary adds nuances.

The auxiliary *to* is a third possibility after a main verb inflected for *-ts*. Again, *to* dampens the assertive judgement expressed by the main verb. In (133) *pɔrits mato* is more assertive than *pɔrits mata* (but less assertive than *V-ts*). In fact, the speaker in (133) speaks from experience: the segment is part of a recording where as a teacher he explains his own vision of education:

- (133) same:=∅ sadupjog=∅ ma-lan-na ta:ŋ-na koi b^hi
 time=ABS good use=ABS NEG-do-COND see-COND something INDF
 tʃi:z=∅ pɔri-ts ma-to no
 things=ABS get-HAB.ASS NEG-AUX.PEEX PTCL.EMPH

‘If one does not make a proper use of time, nothing can be achieved’

In a second scenario, the main verb inflects for *-ts*, but as part of a present tense construction conveying generic knowledge, i.e. a kind of knowledge that cannot be doubted, within a community or in the world at large, hence the absence of any auxiliary:

(134) *mata devī=∅ tse kat=∅ somzi-ts*
 Mata Devī=ABS QNT language=ABS understand-HAB

‘Mata Devī understands all languages’ – DSN

(135) *saṭʰər=∅ ɔʃa ɔʃa ʈʰuri-ts*
 snow leopard=ABS fast run-HAB

‘Snow leopards run fast’ – DSN

We shall see in the next section that by contrast, the whole set of auxiliaries is available with some second verbs inflected for *-ts*.

No auxiliary follows V-IRR-AGR or V-IMPV-AGR, but an auxiliary may follow V-*ts*, because there is no subject agreement. The choice, limited to *hen*, *ta* and *to*, is more restricted in the case of *-ts* in comparison with the progressive or the perfective, because *ano* provides a dubitative meaning that would contradict the assertiveness associated with *-ts*, and *tʰts* is redundant in terms of assertiveness. The occurrence of *hen* after a main verb inflected for *-ts*, as in (108), indicates that the emphatic *hen* has a slightly different meaning than assertive.

The type of inflection taken by the main verb restricts the choice of auxiliaries. We may distinguish between: 1/ categories that leave the whole set of auxiliaries available to the speaker: INF, PROG and PFV; 2/ categories that leave a reduced choice of auxiliaries: HAB (*hen*, *ta* and *to*) and some modal constructions other than V-INF AUX; 3/ categories that leave only one choice, *ta*, after IMP, IRR.SIM and PROSP.

5.6 The tripartite structures main verb, second verb and AUX

From the previous sections, it is clear a Chhitkul-Rākchham speaker usually expresses evidentiality by means of two types of constructions. In the first type, the main verb inflects for *-no* and *-ts* and, in the latter case, is possibly followed by *ta*, *to* or *hɛn*. In the absence of auxiliary, the main verb alone bears the whole evidential meaning, and in the presence of *ta*, *to* or *hɛn*, the main verb bears most of the evidential load, and *ta*, *to* or *hɛn* bring a nuance.

The second type of construction is when one auxiliary among the relevant set follows a main verb inflected for the infinitive, the perfective, and the progressive. The auxiliary then provides the whole evidential distinction.

A third type of construction is the object of the present section. V1 V2 AUX constructions are very rare in the corpus – see (137) for an example. Whenever a second verb occurs, it follows a main verb inflected for the infinitive, the progressive, and the perfective.

A second verb may inflect for tense, aspect and mood, but not for subject agreement. Compared to copulas and auxiliaries, second verbs express more temporal and aspectual distinctions, although not always the whole paradigm. For example, *gints* may occur, but not **ginno*, for a reason we shall explain in the following subsections. ‘Second verbs’, notwithstanding subject agreement, behave exactly like main verbs, i.e. are not defective verbs like auxiliaries:

Table 50: inflectional paradigm for second verbs in comparison to main verbs and AUX

Type of inflection	Main verbs	Second verbs	Auxiliaries
Object marking: <i>-s</i> , vowel elongation, use of different verbs	X	-	-
Object marking: periphrastic constructions: the verb <i>tɔŋ</i> (‘to come’)	-	X	-
<i>-te</i> (IMPV)	X	X	X
<i>-de</i> (IMPV)	X	X	-
<i>-e</i> (IMPV)	X	-	X

-no (IRR.DUB)	X	X	X
-ts (HAB.ASS)	X	X	-
-i (PFV)	X	X	-
-ji (PFV)	X	X	-
-ti (PFV)	X	X	-
-a (PROG)	X	X	-
-k (1SG)	X	-	X
-ĩ (2SGHON)	X	-	X
-n (2SGNHON)	X	-	X
-∅ (3)	X	-	X
-tj (1PL and 2PL)	X	-	X
-u (on a few verbs; 2SGNHON IMP)	X	-	-
-s	X	-	-
=ẽ (2SG extra HON IMP, following 2SGHON -ĩ)	X	-	
ma- (NEG)	X	X	X

Tables 51, 52, 53 and 54 include second verbs such as *asaŋ* ('to become, happen'), *ginaŋ* ('to need'), *hunaŋ* ('to keep + ING'), *lisaŋ* ('to be able to'), *ts^hasaŋ* ('to know'), and *tɔŋ* ('to come'). The list is not exhaustive.

5.6.1 Verb stem + inflected form of *tɔŋ* ('to come') or *lisaŋ* ('to be able') + AUX

Table 51 sums up the very few instances where a second verb and an auxiliary follow the bare root of the (main) verb. In that case, only *lisaŋ* ('to be able to') and *tɔŋ* ('to come') may occur as second verbs. *Tɔŋ* is involved in a few periphrastic constructions that have to do with ability and first and second person object marking:

eme-∅ ga:-∅ hul to-a to-∅ 3SG.HON-ABS 1SG-ABS V_{ROOT} come-PROG AUX.PEEX-3 ('(s)he is pushing me') – DSN

eme-∅ kin-∅ hul to-a to-∅ 3SG.HON-ABS 2SG.HON-ABS V_{ROOT} come-PROG AUX.PEEX-3 ('(s)he is pushing you') - DSN

eme-∅ eme-∅ hul-a to-∅ 3SG.HON-ABS 3SG.HON-ABS push-PROG AUX.PEEX-3 ('(s)he is pushing him/her') – DSN

Verb stem (not all verbs)	<i>tute</i>	-	Object marking
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Constructions where ability is expressed by means of the main verb root and *tuts* (or *tuno*) and *lits* (or *lino*) never involve any auxiliary, which is consistent with the observations made in §5.5.3 in the case of *-no*. The situation is different when the ‘second verb’ inflects for *-ts*, an indication that [V_{STEM} V-*ts*] does not have an assertive value, contrary to V-*ts*. Hence, an auxiliary (*ta* or *hɛn*) may follow V-*ts*, but not [V_{STEM} V-*ts*]. The next section will confirm that the assertive value of *-ts* in some V1 V2 constructions is ‘neutralized’; this is so because a ‘second verb’ is a subtype of main verb, and the meaning of a V1 V2 construction differs from that of V1 alone.

Periphrastic constructions that express object marking invariably involve the second verb *tɔŋ*, ‘to come’, and only deal with present and past. An auxiliary may only follow *tɔŋ* inflected for the progressive (*toa*), but not the perfective (*tuti*). The absence of auxiliary has to do with the fact that we are dealing with a completed action with two clearly identifiable participants, recognizable by the use of personal pronouns and object marking: there is no need to express any evidential distinction.

The whole set of auxiliaries but *ta* may follow *toa* because the described action is ongoing. *To* may occur but not *ta* because the order in which personal pronouns occur and the type of construction (object marking) make the usual distinction *to* first person vs. *ta* second person superfluous.

5.6.2 Main verb inflected for INF + inflected form of a second verb + AUX

A V-INF V2 AUX construction is invariably modal, expressing various shades of ability and necessity. In this specific type of construction, the whole set of second verbs mentioned previously may follow:

Table 52: set of available auxiliaries after V₁-INF + V₂

Inflection on main verb	Second verb	Auxiliaries	Semantics
-(s)ɑŋ and -ŋ	(kjaŋ) latjaŋ a:ts	hɛn, ano, ta, to and tɔts	External necessity

-(s)an̩ and -ŋ	<i>a:no</i>	-	External necessity
-(s)an̩ and -ŋ	<i>asa</i>	<i>hɛn, ano, ta, to and tɔts,</i> but no AGR	External necessity
-(s)an̩ and -ŋ	<i>ase</i>	-	External necessity
-(s)an̩ and -ŋ	<i>asi</i>	<i>hɛn, ano, ta, to and tɔts</i>	External necessity
-(s)an̩ and -ŋ	<i>gints</i>	<i>hɛn, ano, ta, to and tɔts</i>	Strong necessity
-(s)an̩ and -ŋ	<i>gina (or gini)</i>	<i>hɛn, ano, ta, to and tɔts;</i> inflected for IMPV and AGR	Strong necessity
-(s)an̩ and -ŋ	<i>ginde</i>	-	Strong necessity
-(s)an̩ and -ŋ	<i>huna</i>	-	Have to keep + ING
-(s)an̩ and -ŋ	<i>huni</i>	<i>hɛn, ano, ta, to and tɔts;</i> inflected for IMPV and AGR	Had to keep +ING
-(s)an̩ and -ŋ	<i>hunde</i>	-	Had to keep + ING
-(s)an̩ and -ŋ	<i>lits</i>	<i>ta and tɔts</i>	Ability (not <i>ta</i> with first person)
-(s)an̩ and -ŋ	<i>lino (lits + ano or lia + ano), inflected for AGR</i>	-	Ability
-(s)an̩ and -ŋ	<i>lia</i>	<i>hɛn, ano, ta, to and tɔts;</i> inflected for IMPV and AGR	Ability
-(s)an̩ and -ŋ	<i>ts^hats</i>	<i>hɛn, ano, ta, to and tɔts;</i> inflected for IMPV and AGR	Ability (cognitive)
-(s)an̩ and -ŋ	<i>ts^hano (ts^hats + ano or ts^hafi + ano) inflected for AGR</i>	-	Ability (cognitive)
-(s)an̩ and -ŋ	<i>ts^ha(ga)</i>	<i>hɛn, ano, ta, to and tɔts;</i> inflected for IMPV and AGR, but not <i>anɔk</i>	Ability (cognitive)
-(s)an̩ and -ŋ	<i>ts^hafi</i>	<i>hɛn, ano, ta, to and tɔts; inflected for IMPV</i>	Ability (cognitive)

		and AGR, but not <i>anɔk</i>	
-(s)anɲ and -ɲ	<i>ts^hade</i>	-	Ability (cognitive)
-(s)anɲ and -ɲ	<i>toa</i>	<i>hɛn, ano, ta, to, tɔts</i> ; inflected for IMPV and AGR	Ability
-(s)anɲ and -ɲ	<i>tuti</i>	-	Ability
-(s)anɲ and -ɲ	<i>tute</i>	-	Ability

While second verbs such as *asanɲ*, *ts^hasanɲ* and *tɔɲ* inflect for the same categories than main verbs, other second verbs display inflectional patterns that are more limited. Hence, *hunts* cannot follow a main verb inflected for the infinitive; *lisanɲ* has no imperfective and perfective forms, etc.

No auxiliary can ever follow a second verb when the latter inflects for imperfective aspect or irrealis mood, which is consistent with our observations from §5.5.3. V-INF V-IMPV-(AGR), just like V-IMPV-AGR, is evidentially neutral. However, there are also instances where V-INF V-ASP does not result in the same range of possibilities in terms of auxiliation than V-ASP, because as mentioned earlier, auxiliation is conditioned by the morphology of the whole V1 V2 structure, not just V2.

The whole set of auxiliaries may occur after V-INF V-PROG and V-INF V-PFV constructions the same way it does with V-PROG and V-PFV. The only exception is V-INF *tuti*, which behaves like V_{STEM} *tuti*.

After a V-INF V-*ts* construction, the whole set of auxiliary is available. Only *ta* and *tɔts* may follow *lits*, which we may surmise has to do with the semantics of *lisanɲ* ‘to be able’, typically used to convey physical ability. In comparison with cognitive ability, physical ability does not require the whole range of epistemic judgements. Only *ta*, *to*, or *hɛn* may follow a main verb inflected for the habitual assertive -*ts*, but a V-INF V-*ts* construction is different. *Ano* may follow *latfanɲ gints*, *latfanɲ ts^hats* and *latfanɲ a:ts* when **gints ano*, **ts^hats ano* and **a:ts ano* are ungrammatical, because V-INF V-*ts* does not possess any assertive value.

The incompatibility of *-ts* and *-no* is definite evidence that *-ts* indicates assertiveness and *-no* marks dubitativity: one cannot combine two opposites. That *latfaŋ ts^hats ano* is equivalent to *latfaŋ ts^hano* shows that what gives the whole construction its evidential value is the auxiliary, not the second verb, again because *-ts* in a V-INF V-*ts* construction no longer carries assertive meaning. Since *latfaŋ gints* has no assertive value, i.e. does not set the tone in terms of evidentiality, the whole set of auxiliaries is available to the speaker.

Table 51 shows that compared to a V-INF AUX template, which leaves the whole set of auxiliaries inflected for imperfective but not for subject agreement available (see §5.5.1), the presence of a second verb puts constraints on precisely the same categories.

The choice of auxiliary is more constrained by person in modal constructions, reason why subject agreement on auxiliaries does not always occur. With *latfaŋ gints*, the choice of auxiliary makes subject agreement redundant in comparison with *latfaŋ gina*. In the former case, *to* is restricted to first person whereas in the latter it may occur with all persons, hence the need for subject agreement. In two instances, *latfaŋ ts^hafi* and *latfaŋ ts^haga*, the auxiliary *ano* may follow, but it cannot be marked for subject agreement. This absence after second verb forms such as *a:ts*, *asa* and *asi* has to do with the fact that subject person conditions their occurrence: *latfaŋ a:ts* only occurs with first person plural, *asa* only occurs with first person and *asi* with second and third.

The auxiliaries *ta* and *to* do not inflect for the imperfective in V-INF *a:ts*, V-INF *asa*, V-INF *asi* and V-INF *gints*. This is because all these constructions have a clear temporal value: present in the first two cases, past in the third, and present and future in the fourth.

In a construction like V-INF V AUX, negation is realized by prefixing *ma-* to either one of the three units. The postverbal negator *mat ti* may only occur after the second verb forms *a:ts* and *gints*.

Finally, V-INF V2 AUX constructions convey different shades of necessity and ability. For example, *ɾɔŋ gints to* conveys strong necessity, whereas *ɾɔŋ asa to* (in present and future tense constructions) and *ɾɔŋ ase to* (in the past), conveys external necessity (social pressure, economic situation, etc.). The occurrence of *asa* is restricted to first person:

(137) *ga:=∅ obi rɔ-ŋ as-a to*
 1SG=ABS tomorrow go-INF happen/become-PROG AUX.PEEX

‘I have to leave tomorrow/I will have to leave tomorrow’ – DSN

There are also various kinds of ability. ‘I can speak Hindi’ may be conveyed by *ga: angrezio kɔl tuts*, *ga: angrezio kɔl lits*, *ga: angrezio kɔlfan lits* (possibly followed by *tɔts*), *ga: angrezio kɔlfan lia* (possibly followed by *tɔk*), and *ga: angrezio kɔlfan ts^ha*: (possibly followed by *tɔk*), all displaying semantic nuances.

5.6.3 Main verb inflected for PROG + second verb + AUX

Table 53 displays which second verbs from table 52 may follow a main verb inflected for progressive aspect, and which auxiliaries may occur in that type of construction:

Table 53: set of available auxiliaries after V_1 -PROG + V_2

Inflection on main verb	Second verb	Auxiliaries	Semantics
-a	<i>hunts</i> (<i>latfa hunts</i> = <i>latfits</i>)	<i>hen, ta, to</i> and <i>tɔts</i> , not <i>ano</i> ; inflected for IMPV and AGR	Keep + ING
-a	<i>hunno</i>	-	Keep + ING
-a	<i>huna</i>	<i>hen, ano, ta, to</i> and <i>tɔts</i> ; inflected for IMPV and AGR	Keep + ING
-a	<i>huni</i>	<i>hen, ano, ta, to</i> and <i>tɔts</i> ; inflected for IMPV and AGR	Keep + ING
-a	<i>hunde</i>	-	Keep + ING
-a	<i>toa</i>	<i>hen, ano, ta, to</i> and <i>tɔts</i> ; inflected for IMPV and AGR	
-a	<i>tuti</i>	<i>hen, ano, ta, to</i> and <i>tɔts</i> ; inflected for IMPV and AGR	SIM
-a	<i>tute</i>	-	SIM
-a	<i>tuts</i>	-	SIM
-a	<i>tuno</i>	-	SIM

No auxiliary may follow a V-PROG V-IMPV or a V-PROG V-IRR.DUB construction. As soon as a main verb inflects for the imperfective or for irrealis mood, or as soon as, regardless of the inflection on the main verb, the second verb does so, there is no auxiliation.

To take the example of *latfaŋ* ('to do') again, both *latfa a:ts* and *latfa hunts* may be shortened to *latfits*, an indication that a combination V-a V-ts has an assertive value. However, while only *hen* and *ta* may follow *latfits*, *hen*, *ta*, *to* and *tɔts* may follow *latfa hunts*, this is its *raison d'être*. The assertive meaning of *latfa hunts* is confirmed by the ungrammaticality of **latfa hunts ano*.

The difference between *latfa hunts* and *latfaŋ ts^hats* is therefore that the former combination has an assertive value whereas the latter does not. The dubitative counterpart of *latfa hunts* is *latfa hunno*, alternatively *latfa huna ano*, which means, V1-a V2-no has the same evidential value as V1-a V2-a ano. What *latfa huna ano* and *latfaŋ ts^hats ano* have in common is their dubitative value. In addition, these may be shortened to *latfa hunno* and *latfaŋ ts^hano* respectively, two constructions where the 'second verb' carries the dubitative flavour. In *latfa huna ano*, like in *latfaŋ ts^hats ano*, the auxiliary does not inflect for subject agreement because its shortened equivalent includes a second verb that is never marked for it.

When a main verb inflects for progressive aspect, the emphatic negative particle *man* may follow, with either a present tense or a future tense value. In that case, no auxiliary may follow.

5.6.4 Main verb inflected for PFV + second verb + AUX

As shown in table 54, only *hunaŋ* may occur as second verb after V-PFV:

Table 54: set of available auxiliaries after V₁-PFV + V₂

Inflection on main verb	Second verb	Auxiliaries	Semantics
-i, -fi, and -ti	<i>hunts</i>	<i>hen</i> , <i>ta</i> , <i>to</i> and <i>tɔts</i> , not <i>ano</i> ; inflected for IMPV and AGR	Keep + ING

<i>-i, -fi, and -ti</i>	<i>hunno</i>	-	Keep + ING
<i>-i, -fi, and -ti</i>	<i>huna</i>	<i>hen, ano, ta, to</i> and <i>tots</i> ; inflected for IMPV and AGR	Keep + ING
<i>-i, -fi, and -ti</i>	<i>huni</i>	<i>hen, ano, ta, to</i> and <i>tots</i> ; inflected for IMPV and AGR	Keep + ING
<i>-i, -fi, and -ti</i>	<i>hunde</i>	-	Keep + ING

As mentioned in §5.5.2, in the absence of a ‘second verb’, the whole set of auxiliaries is available to the speaker in a V-PFV AUX construction, and *ano, ta* and *to* inflect for both the imperfective and subject agreement. The whole set of auxiliaries is otherwise available to the speaker regardless of the inflection taken by the second verb. The only exception is *ano*, which cannot occur after *latfi hunts* because this construction has an assertive meaning.

A V-INF V-*ts* construction thus does not always have an assertive value. The choice of auxiliaries is conditioned by which second verb inflects for *-ts*. There is no such variation with *-no*. Table 55 sheds light on this difference based on the combination of the main verb *latfaŋ* and the ‘second verbs’ *hunaŋ* and *ginaŋ*:

Table 55: inflectional combinations with *latfaŋ* as V_1 and *hunaŋ* and *ginaŋ* as V_2

Type of <i>-no</i> construction	Verb inflected for <i>-no</i>	AUX
<i>latfino</i>	Main verb	-
* <i>latfaŋ hunno</i>	-	-
<i>latfa hunno</i>	Second verb	-
<i>latfa huna ano</i>	AUX	
<i>latfi hunno</i>	Second verb	-
<i>latfi huni ano</i>	AUX	

Type of <i>-ts</i> construction	Verb inflected for <i>-ts</i>	(AUX)
<i>latfits</i>	Main verb	<i>hen, ta</i>
* <i>latfaŋ hunts</i>	-	-

<i>latfa hunts</i>	Second verb	<i>hɛn, ta, to, and tɔts</i>
<i>latfi hunts</i>	Second verb	<i>hɛn, ta, to, and tɔts</i>

Type of -ts construction	Verb inflected for -ts	(AUX)
<i>latfits</i>	Main verb	<i>hɛn, ta</i>
<i>latfaŋ gints</i>	Second verb	<i>hɛn, ano, ta, to and tɔts</i>

We can now explain why some second verb forms are missing in tables 51 and 52. **Latfaŋ hunno* is not found because *latfa hunno* and *latfi hunno* are the shortened forms of *latfa huna ano* and *latfi huni ano* respectively. In comparison, there is no tripartite construction of which **latfaŋ hunno* would be the shortened version. Similarly, *latfits* is the shortened form of both *latfa hunts* and *latfi hunts*, but **latfaŋ hunts* has no shortened form to refer to. *Latfaŋ gints* is attested, but not **latfaŋ gino*. This is because *latfaŋ gints ano* indicates *latfaŋ gints* does not have an assertive value. The antonym of *latfaŋ gints* therefore cannot be **latfaŋ gino*.

Typological studies (Butt and Lahiri 2002, Butt 2009) emphasize the similarity in form between main verbs and second verbs. *Ƨɔŋ* 'to come' inflects the same way (*toa, tuti, tute*) as main and second verb. The auxiliary is slightly different: *tɔte* instead of *tute*, *tɔts* instead of *tuts*.

Not all constructions that include a second verb share a single aspectual value, but they do not have to (see for example in table 53: V-PROG *hunts*), as pointed out by Haspelmath (2016: 306).

We cannot help but notice the division of labour between main verbs, second verbs and auxiliaries in terms of evidentiality. Evidential distinctions are restricted to *-no* and *-ts* in the case of main and 'second' verbs. A V1 V2 construction is devoid of any evidential value when *-no* or *-ts* does not occur, and when they do, they do so on either the main verb, and in that case there is no second verb, or on the second verb. A serial verb construction consists of two tagmemes, but it has a single evidential value. When a main verb (or a second verb), is marked with *-ts* and *-no*, the auxiliary adds an evidential nuance.

5.7 The tripartite structures main verb, converb and AUX

The set of auxiliaries discussed earlier occurs in main clauses in a broader sense, which includes after the imperative form of the lexical verb. In that case, the only available choice is *ta*, as shown in (10).

An interesting feature of auxiliary constructions in Chhitkul-Rākchham is that they may also occur in subordinate clauses. The available choice of auxiliary verbs is nevertheless limited to *ta* and *tɔts*.

In conditional clauses (see appendix §1, 1.6.2), *ta* optionally occurs only if the non-finite verb inflects for the conditional *-na* in the first place, as in (138). In that case, *ta* inflects for the imperfective, but not subject agreement:

(138) *njaŋ tun-na ta bewəs tʰa bur-i: ha:l=∅ tʰa*
 again come-COND COP.PE unbearable now bad-FEM situation=ABS now

‘If more (snow) comes, it will be unbearable, the situation is bad now’

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An alternative construction to (138) involves *hɛn-na*, which either follows V-PFV, V-PROG, or V-*ts*, although there is not a single case of the latter in the corpus. In these constructions, *ta* may inflect for the imperfective¹²⁴:

(139) *ga:=∅ da ʃɛli=e gos-a:=∅ ma-runʃ-i*
 1SG=ABS POST.DAT fox=GEN conversation-MASC.SG=ABS NEG-listen-PFV

hɛn-na ta ga:=∅ a:ra:m=tʃi ai kuɔn=∅ za-saŋ
 CVB.EMPH-COND COP.PE 1SG=ABS ease=ABL 1SG.POSS food=ABS eat-INF

tɔ-ts

AUX.PEEX-HAB.ASS

‘Had I not listened to the fox's words, I would have eaten my food comfortably’

¹²⁴ There are two ways to negate (138), namely *matunna (ta:ŋna) ta* or *tunna manna ta*. Another way to negate (139) is *runʃi manna (ta:ŋna) ta*, where *ta* is optional.

In (140), the non-finite verb inflects for the simultaneous aspect marker *-no*. Again, the auxiliary *ta* follows the converb *bɔre*:

- (140) te ga:=∅ ʃɛli=∅ ta tʰure-a tʰure-a tʰure-a tʰure-a
 then 1SG=ABS fox=ABS COP.PE run-PROG run-PROG run-PROG run-PROG
- tʰure-a ʰojo ka:=∅ tu-no bɔr-e ta ga:=∅
 run-PROG DEM.DIST crow=ABS come-IRR.SIM CVB-IMPV AUX.PE 1SG=ABS
- ka:=e neotʃ=o=tʃi gale-a ro-i
 crow=GEN after=LOC=ABL chase-PROG go-PFV

‘Then, I, the fox, went running and (I) chased the crow as he was coming’

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When the main verb inflects for the prospective *-so*, there is also an alternative, as shown in (142). The main verb inflects for the perfective, followed by *ʰɛkso*:

- (141) matʃʰi:=∅ pʰikʃ-i-so ta ʃɛli=∅ kʰus ta:i ʃɛli=∅
 fish=ABS drop-E-PROSP AUX.PE fox=ABS happy feel-PFV fox=ABS
- a:-r=o de-i
 mouth-E=LOC -PFV

‘As soon as the fish fell (down), the fox rejoiced, the fox opened the mouth’

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- (142) ga:=∅ dʰokʰ-a:=∅ za-i zu-i matlab a:=∅
 1SG=ABS betrayal-MASC.SG=ABS eat-PFV eat.PFV meaning mouth=ABS
- a:-r=o=tʃi matʃʰi:-∅ pʰikʃ-i ʰɛk-so matʃʰi:=∅
 mouth-E=LOC=ABL fish-ABS drop-PFV CVB-PROSP fish=ABS
- pʰikʃ-i-so ʃɛli=∅ a:-r=o kʰap za-i ga:=∅
 drop-E-PROSP fox=ABS mouth-E=LOC quickly eat-PFV 1SG=ABS
- dʰokʰ-a:=∅ da-se-∅
 betrayal-MASC.SG=ABS give-IMPV-3

'I got cheated, meaning, I dropped the fish from (my) mouth, it went to the fox's mouth as soon as it fell down; he ate it quickly, he betrayed me'

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Table 56 sums up the various verb configurations found in subordinate clauses:

Table 56: The verb complex in subordinate clauses in Chhitkul-Rākchham

Non-finite and finite verb inflection	CVB	Additional morphology	(Syntactic doubling)	(Auxiliary)
-na	-	-	ta:ɲna	ta and tɔts (1. excepted)
-i, -fi, or -ti	hɛn	-na (COND)	ta:ɲna	ta and tɔts (1. excepted)
	man	-na	ta:ɲna	ta and tɔts (1. excepted)
	hɛk	-so (PROSP)	-	ta and tɔts (1. excepted)
-a or -∅	hɛn	-na	ta:ɲna	ta and tɔts (1. excepted)
	man	-na	ta:ɲna	ta and tɔts (1. excepted)
-ts	hɛn	-na	ta:ɲna	-
	man	-na	ta:ɲna	-
-no	bɔr	-e (IMPV)	-	ta (1. excepted)

Referring to table 56, I treat *hɛn*, *man*, *hɛk* and *bɔr* as converbs (and *ta:ɲna* as a syntactic doubling for *hɛnna* and *manna*) taking only one type of inflection, like non-finite verbs.

As a subordinator (see appendix 1, §1.4.3.2 for a list of additional forms), *hɛnna* has all the attributes of a converb based on Haspelmath's (1995: 3-4) observations: "a nonfinite verb form whose main function is to mark adverbial subordination".

(139) indicates *hɛnna* is involved in concessive subordination. Haspelmath does not retain non-finiteness as a "definitional criteria", although he observes that the vast majority of verb forms called converbs are non-finite, like *hɛn*. Haspelmath also notes (ibid, p. 9) that "a converb is usually marked by an affix that is attached to the verb stem", usually a suffix, sometimes a nonaffixal particle, which is the case of *hɛnna*. Haspelmath also claims (ibid, p.

10) "not uncommonly, converbs are additionally characterized by full reduplication of the converbal form". Partial reduplication is observable in the optional use of the syntactic doubling *ta:ɲna* 'if seen'. Arguably, *ɥenna* diverges from Haspelmath's claim that a converb does not take TAM inflection.

Back to table 56, conditional clauses display two patterns in Chhitkul-Rākchham. According to the first pattern, a non-finite verb inflects for the conditional *-na* and is possibly followed by *ta* or *tɔts*. The syntactic doubling (converb) *ta:ɲna* may occur in-between. The second pattern involves a finite verb inflected for the perfective followed by *ɥenna*, and possibly *ta:ɲna* and *ta* or *tɔts*: V-PFV *ɥenna* (*ta:ɲna*) (AUX). In both contexts, the converb, be it *ɥenna* or *ta:ɲna*, serves as a linker between the verb and the auxiliary: *ɥenna*, *manna*, *ɥekso* and *bɔre* fulfil a relator function (see §5.8.3).

The previous observations apply to *manna*, antonym of *ɥenna*. *Manna* may occur at the beginning of the clause, i.e. without any main verb preceding it – but the presence of a main verb is implied. In (143), *manna* refers to what the other participant just said before, namely 'yes, it will make a difference if you (can) sit and learn everywhere', and *ta* follows *manna*:

(143)	man-na	ta	kjaŋ	kat=∅		lupt
	CVB.EMPH-COND	AUX.PE	1PL.INCL.POSS	language=ABS		vanished
	a:-no=niŋ	te	ɛme=∅	lo	sã	lupt
	COP.FUT.DUB=MOT	then	3SG.HON=ABS	also	QNT	vanished
	a:-no=niŋ	wo	k ^h odʒ=∅	la:	ta	
	COP.IRR.DUB=MOT	DEM.DIST	research=ABS	do.PROG	AUX.PE	

'...Otherwise, our language will become extinct somehow, this is why he is doing research'

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(142) provides an illustration of the subordinating conjunction *ɥekso*, which, like *ɥenna* and *manna*, does not occur obligatorily. The form *ɥekso* either occurs after a finite verb inflected for the perfective: V-PFV *ɥekso* (*ta*), or it does not occur at all, and the non-finite verb takes *-so* instead the same way the non-finite verb takes *-na* in a conditional clause

from which *henna* is absent. The converb *hek* fulfils all of Haspelmath's converb criteria but one: it takes the aspectual *-so*.

Finally, *bore* also diverges from Haspelmath's definition in that it takes the imperfective suffix *-e*, which marks imperfective (not GEN) in light of the temporal function played by *bore*. Haspelmath irreducibly associates converbs with subordination. However, a clause that includes *bore* is a complement clause.

The link between converbs and the morphosyntactic expression of evidentiality is an interesting avenue for further research. We saw in §4.1.2 that *mat ti*, the concatenation of a converb and a copula (NEG.CVB COP.PE), serves a copula-like function with a dubitative meaning downplayed by the occurrence of *ti*, a syntactic allomorph of *ta*. The forms *henna*, *manna*, *ta:yna*, *bore* and *hekso* consist of CVB-COND, CVB-IMPV or CVB-PROSP.

A construction such as V-CVB-AUX is similar to $V_1 V_2$ AUX (see §5.6) in that the type of inflection taken by the main verb and the converb determines which auxiliary among the set identified in §5.3 may occur. A V-CVB-AUX construction differs from $V_1 V_2$ AUX, however, in that the converb takes only one type of inflection: *-na* in the case of *henna*, *manna*, and *ta:yna*, *-so* in the case of *hekso*. A converb is thus non-finite. While the whole set of auxiliaries may follow a $V_1 V_2$ construction, the set is limited to *ta* and *tots* in a V-CVB-AUX construction. As shown in table 58, only *ta* may occur after *hekso*. *Ta* and *tots* otherwise compete for the same slot following *henna* and *manna*.

The absence of *hen* as auxiliary in this context is understandable: *hen* already occurs as converb. The absence of *ano* is justifiable on semantic grounds: *henna*, *manna* and *ta:yna* are part of conditional clauses the *raison d'être* of which is dubitiveness.

Evidential distinctions in subordinate clauses are notoriously more limited – and sometimes even not expressed (Aikhenvald 2004: 253-6, 2015b: 254) compared to main clauses. In this context, there is no need on language-internal basis for a fine-grained distinction between *to* and *tots* in conditional clauses. Longacre and Hwang (2007: 255-60) arrange conditional clauses ('assumed', 'hypothetical', and 'counterfactuality') on a scale of decreasing certainty. In appendix 1, §1.6.2, V-PFV *henna* (AUX) occurs with 'assumed',

denoting certainty, and ‘counterfactuality’, an ‘imaginative conditional’, necessarily denoting less certainty in comparison: a choice between *tɔts* and *ta* makes sense.

Ta is never compatible with first person regardless of clause type, and *tɔts* is compatible with first person in main clauses, but not in subordinate ones. In subordinate clauses, the auxiliary *ta* is the only option in present tense constructions. In past tense constructions, the choice is between *ta*-IMPV-AGR and *tɔts*. The latter conveys retrospective personal factuality, while the former is more dubitative in comparison.

The previous arrangement of morphosyntactic applications sheds new light on some analyses conducted on the origins of converbs in the Tibeto-Burman language family. In Mongsen Ao, Coupe (2017: 6) mentions *tə-əʃ*, a “quotative marker [introduced in §6.5] suffixed by the sequential converb (...) a relic of a tail-head or summary-head linkage pattern (Thompson and Longacre 1985: 125) that has lost its verb root and is now reanalyzed as a type of conjunctive linker in narrative discourse”. On basis of language-internal evidence, I do not subscribe to the claim of a missing verbal root: in *henna*, *hɛn* is the converb, *hɛ* the verb root (of *ɛnaŋ*), and *-na* the conditional marker.

None of the forms I treat as converbs, namely *hɛn-na*, *man-na*, *ta:ŋ-na*, *hɛk-so*, *hɛt ta* and the causative converb *maŋ* (see appendix 1, §1.5.7) function as verbal nouns, which means the term ‘gerund’ would be confusing, especially in the case of North-East Indian languages as pointed out by Masica (1976). The Chhitkul-Rākchham converbs call for the refinement of Haspelmath’s definition: a converb may take a mood (*-na*) or an aspect (*-so*) suffix¹²⁵, and, as we shall see with *hɛt ta* (chapter 7), a converb does not necessarily occur in a subordinate clause, a point already made by a few scholars (Genetti 2005, Willis 2007c: 317).

5.8 The morpho-syntax of the Chhitkul-Rākchham auxiliaries

§5.8.1 discusses the above set on the continuum auxiliary vs. affix. §5.8.2 situates the auxiliaries within Anderson’s typology of syntactic constructions. §5.8.3 is an attempt to identify the Chhitkul-Rākchham’s ‘relators’, and §5.8.4 deals with optionality.

¹²⁵ A converb may take a tense suffix judging by Darma (Willis 2007) and Caodeng rGyalrong (Sun 2001).

5.8.1 The relevant auxiliary forms on the continuum auxiliary-affix

Starting with the first of Heine's (1993: 87) four criteria, namely 'semantics', all Chhitkul-Rākchham auxiliaries are at the 'starting point'; they have a full verbal meaning: *ta* stems from *tasaj* ('to put, keep'), *to* and *tɔts* from *tɔŋ* ('to come'), *ano* and *hɛn* have no infinitive form, but the meaning 'to be' and 'to hear' respectively.

Looking now at the 'syntax' criterion, all the relevant forms have a fixed position in the clause, as already discussed in §5.1.2.1. Auxiliaries invariably occur in the left-most position of the main verb complex and may occur in clause-final position, although this is not a fast rule. Auxiliary verbs are therefore closer to the 'endpoint' ('fixed position').

The 'morphology' criterion leads to a similar conclusion. *A*, *ta*, *to* and *tɔts* inflect for subject agreement, tense and mood: they are compound auxiliaries. By contrast, *hɛn* is a simple auxiliary. *A*, *ta*, *to* and *tɔts* are closer to the 'endpoint' ('affix'); *hɛn* is closer to the 'starting point' ('free word').

Finally, based on the 'phonology' criterion, we are closer to the 'starting point', a 'full form', 'typically monosyllabic', than a 'reduced form'. *A*, *ta*, *to*, *hɛn* and *tɔts* are all monosyllabic.

Taken together, Heine's four criteria give contradictory indications as to the position of the Chhitkul-Rākchham auxiliaries on the continuum auxiliary-affix.

Anderson's approach is more refined in that the same auxiliary form behaves more like a verb in some constructions, but more like an affix in some others.

5.8.2 The set of auxiliaries according to Anderson's typology

I discuss below the Chhitkul-Rākchham AVCs from the perspective of Anderson's (2006: 39-248) typology as summed up in Oisel (2013: 22-24). As mentioned in §5.1.2.4, among the three levels of headedness characteristic of an AVC, only the inflectional head exhibits some indeterminacy: it is either the main verb or the auxiliary depending on the type of construction.

Type A refers to “the most common pattern worldwide” (2006: 39), where the lexical verb has an invariable form, the so-called AUX-headed construction.

The first relevant subtype is A1, where the lexical verb is in the infinitive form. Anderson (ibid, p. 47) provides a few examples from Tibeto-Burman and the pattern he describes applies to Chhitkul-Rākchham, as in (144). Subject agreement is neutralized, see §5.6. With second and third person, both *ta* and *to* are grammatically correct:

(144) ga:=∅ obi rɔ-ŋ to
 1SG=ABS tomorrow go-INF AUX.PEEX

‘I have to leave tomorrow’ – DSN

A second relevant subtype is A4, where the lexical verb occurs in a participial form. Anderson (ibid. p. 73) contends some constructions in Kinnauri belong to this subtype, and such is the case in Chhitkul-Rākchham. In (145), the auxiliary *tɔtɛk* follows the participial form of the lexical verb, which encodes progressive aspect. This type of construction, limited to main clauses, is also AUX-headed:

(145) hɔda ai raɪɪŋ=∅ lo man man baq^hia ga:=∅ dja at-tʃaŋ
 there 1SG.POSS writing=ABS also INT good 1SG=ABS male child-PL
 kamaŋ=∅ latʃ-aŋ ma-reaʃ-a te ga:=∅ man man
 work=ABS do-INF NEG-interest-PTCP then 1SG=ABS INT

tʃea-g-a da-g-a tɔ-tɛ-k
 write-E-PTCP give-E-PTCP AUX.PEEX-IMPV-1SG

‘There (at school) my writing was also very good, boys were not interested in doing their (home)work, I was writing for them a lot’

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Anderson (2006: 116-142) characterizes type B as those constructions which include an “uninflecting or fixed form of an auxiliary verb” (p. 116), i.e. constructions that are lexically headed. Anderson adds (ibid) that ‘uninflecting or fixed’ forms are “often considered particles rather than verbs, but their verbal origin is clear in lexical origin, syntactic position, function, etc”. Type B refers to a situation with *hɛn* as auxiliary:

(146) bara bara nokri=∅ dɔra:n niŋ-sa:=∅ ɔ:l indja pəlis dju:ti
in-between service=ABS during 1PL.EXCL-PL=ABS all India police duty
mi:t=∅=du ga:=∅ æmbjələns=∅ ɔr fɛ:st eɪd dril
meet=ABS=LOC 1SG=ABS ambulance=ABS CONN first aid drill

kəmpetɪʃən=∅ lo dʒā hətʃ-i hən
competition=ABS also QNT play-PFV AUX.EMPH

‘In-between, during (my) service, we (took part in) ‘All India Police Duty Meet’, where I competed in ambulance and first aid drill’

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Anderson (2006: 144-182) identifies four subtypes of C constructions, where the lexical verb and the auxiliary inflect for the same categories, either 1/ subject agreement and/or object marking; 2/ TAM; 3/ subject agreement and TAM; and 4/ negation. In these types of constructions, the lexical verb and the auxiliary verb are inflectional co-heads. Subject agreement in Chhitkul-Rākchham is either marked on the lexical verb or on the auxiliary, never on both simultaneously, which rules out 1/ and 3/. Negation occurs on the lexical verb or the auxiliary, but never on both at the same time. Further, when a main verb inflects for PROG and the auxiliary for IMPV, a subject agreement marker invariably attaches to the imperfective marker, and when the subject agreement marker directly attaches to the auxiliary stem (*ta* or *to*) there is no imperfective marker, which means there are no instances of 2/ either.

Whenever *ta* (or *to*) inflects for the imperfective, it also does for subject agreement, which means (147) is not a C construction based on Anderson’s typology:

(147) kin=∅ rakeʃ=tiŋ ne=i hətʃ-a
2SG.HON=ABS Rakesh=COM yesterday=LOC play-PROG
ta-se-ĩ
AUX.PE-IMPV-2SG.HON

‘You were playing with Rakesh yesterday’ – DSN

Type D ('split patterns', see Anderson 2006: 183-214), where the lexical and the auxiliary verb inflect differently – in a complementary way – is also an unattested type in Chhitkul-Rākchham.

Type E ('split/doubled patterns'), where the lexical verb and the auxiliary verb are inflected for both identical and distinct categories (Anderson 2006: 215-248), is found in various configurations in Chhitkul-Rākchham. In (145) and (147), the main verb inflects for TAM and the auxiliary for TAM and subject agreement, a combination (subtype E1) also attested in (95), (115), (120), (127), and (128).

The following example calls for the addition of another sub-type under the E category. In (148), the main verb inflects for the object marking *-s* and the progressive *-a* while the auxiliary takes the first person subject agreement *-k* (V-OBJ-PROG AUX-AGR):

(148) *ga:=∅* *ki-n* *da* *tfit^h-i:=∅* *da-s-a*
 1SG=ABS 2SG.HON-2SG POST.DAT letter-FEM=ABS give-OBJ.1.2-PROG
 tɔ-k
 AUX.PEEX-1SG

'I am giving you a letter' – DSN (elicited)

The presence of a second verb is likely to change to which category we may ascribe a given construction. In (144), it is possible to insert *gints* between the main verb and the auxiliary, hence V1-INF V2-ASP AUX-ASP. This type of construction may suggest another type than A, namely E, where the lexical verb, taken together with the second verb, shares some inflections with the auxiliary (TAM), but also has distinct ones (infinitive), the so-called 'split/double pattern'.

5.8.3 The Chhitkul-Rākchham 'relators'

In Tibetic languages, Tournadre (2017: 99) alludes to a specific morphological element possibly part of the verbal complex: "auxiliaries may occur alone after the verb but are often accompanied by a relator, which corresponds either to a nominaliser or to a connective linking the auxiliary to the lexical verb. Synchronically, auxiliaries and relators are often fused together and one may analyse these forms as suffixes or verb endings".

The presence of a relator would provide compelling evidence that an auxiliary is an affix. In Literary Tibetan, Oisel (2013: 92) observes that a ‘relateur’ “désigne des morphèmes relationnels insérés entre le verbe lexical et l’auxiliaire. Cet élément joncteur entre le verbe et l’auxiliaire peut correspondre à trois types de morphèmes: nominalisateur, connecteur et cas”. Still according to Oisel (2013: 47), one type of relator, namely ‘le connecteur’ is involved in “deux types de relations syntaxiques fondamentales: la coordination et la subordination”. The Chhitkul-Rākchham form *a:* (‘and’) has a similar coordinative function, as shown in (149):

(149) de neotf=o t^ha=niŋ ta man man tu-te-∅ a: fuju
 then after=LOC this year COP.PE INT come-IMPV-3 CONN DEM.PROX
 neotf=o lo hanəŋ to-a to-∅ kja: pəta
 after=LOC also how much come-PROG COP.PEEX-3 what know

‘After that, a lot (of snow) has come this year, and how much comes after this, who knows?’

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Table 52 provides a list of second verbs, one of them being *asaŋ* (‘to become, happen’), which may surface as *a:ts* and *a:no* (the latter exclusively occurring after V-INF), two forms strangely similar to the connective *a:*. Thus, in a construction such as V *a:ts* *ta*, *a:* in *a:ts*, looks like a potential connector between the main verb and the auxiliary:

(150) hojo ta baq^hia ta ã turizəm=∅ hanəŋ
 DEM.DIST COP.PE good COP.PE INTERJ tourism=ABS how much/many
 baq^h-i-na kjaŋ def=o divelp a:-ts
 increase-E-COND 1PL.INCL.POSS village=LOC develop become-HAB.ASS
 ta
 AUX.PE.INFR

‘This is good, the more tourism increases, the more our village will develop’

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The previous assumption is incorrect. *Divelp asaŋ* is one of a few light verb constructions listed below where *asaŋ* (‘to happen, become’) typically follows a borrowed verb, be it

from Hindi, from English, or Kinnauri. As shown in table 57, light verbs in Chhitkul-Rākchham consist of a noun, a verb, or an adverb followed by a lexical verb. Their meaning can always be inferred in a straightforwardly manner. The number of verb forms involved is limited.

Table 57: a short list of light verbs in Chhitkul-Rākchham

Noun	Gloss	Verb	Gloss	Complex verb
<i>kamaŋ</i>	work	<i>latfaŋ, laŋ</i>	to do	to work
<i>pas</i>	to pass	<i>latfaŋ, laŋ</i>	to do	to pass (an exam)
<i>ja:d</i>	remembrance	<i>latfaŋ, laŋ</i>	to do	to remember
<i>tʃu:z</i>	to choose	<i>latfaŋ, laŋ</i>	to do	to choose
<i>ju:z</i>	to use	<i>latfaŋ, laŋ</i>	to do	to use
<i>trænsfɜ:r</i>	transfer	<i>asaŋ</i>	to happen, become	to get transferred
<i>furu</i>	(to) start	<i>asaŋ</i>	to happen, become	to start
<i>gret</i>	song	<i>tatfaŋ, tasan</i>	to keep	to sing
<i>kuɔn</i>	food	<i>ʈatfaŋ, ʈaŋ</i>	to make, build, cook	to cook
<i>wa:pas</i>	back	<i>tɔŋ</i>	to come	to return

In *divelɔp a:ts ta*, *ta* is optional. In addition, the appropriate way to negate (150) is *divelɔp a:ts mata*, which again singles out *ta*. *A:ts* can only be negated in the absence of *ta*. Since *divelɔp* cannot take the negative prefix *ma-*, *divelɔp a:ts* is one single verbal structure, then *ta* is the auxiliary.

Referring to Haspelmath's (2016: 292) list of criteria to identify serial verb constructions, the third, both verbs "must be able to occur on their own without another verb", emphasized in other contributions (Bowerman 2008), disqualifies *divelɔp a:ts* as a serial verb: *divelɔp* cannot occur alone, i.e. *divelɔp* is not an "independent" verb.

Based on Aikhenvald's (2006) typology, the conclusion would be different: *divelɔp a:ts* would belong to the category of asymmetrical serial verb construction, i.e. a construction where one of the two verbs comes from a closed class (motion, posture or 'change of state' verbs). Still according to Aikhenvald (ibid, p. 23), "asymmetrical serial verb constructions often express aspectual meanings".

While it is the case in (150), *asaŋ* in *diveɫp a:ts* may inflect for both the perfective and the imperfective, as shown in §5.6. More importantly, one configuration, touched upon in §4.3.3.2 and §4.7, involves *a:ts* and *ta*, typically used when the speaker makes an inference in the future. Example (150) provides evidence that *a:ts* may occur in light verb constructions in addition to having a copula-like function and a lexical (main) verb, but there is no relator in a construction that includes *a:ts*.

There are no reasons to treat the stative equivalent of *a:*, namely *a*, found in *ano*, as a relator. To start with, only the hearsay clitic *=e* or the motion particle *=niŋ* may follow *ano*. *Ta*, the common denominator in all the relator constructions discussed in this section, cannot follow *ano*. Further, I surmised in §4.1.3 that *a-* in *ano* has its origin in the question particle. A question particle as a relator does not make sense as it typically occurs in clause-final position, with no following auxiliary.

As seen in §5.2, an example such as (151) involves two clauses. In the first one, the main verb is *asi*. In the second one, *=rukji ta* and *=rɔŋsea ta* go hand in hand. Negation confirms the bi-clausality of (151). The negative prefix *ma-* may precede *asi*, with the meaning ‘it looks like there has been no party here’, or may precede *ta*, with the meaning ‘it does not look like there has been a party here’. Only *ta* in *=rukji ta* and *=rɔŋsea ta* is a copula, *rukji* and *=rɔŋsea* are semblative clitics:

(151) *ħɔja pa:rti=∅ as-i ħe =rukji ta /*
 here party=ABS happen-PFV like =SML.REL COP.PE.INFR
=rɔŋsea ta
 =SML.REL COP.PE.INFR

‘It looks like there has been a party here (seeing the room messy)’ – DSN

Oisel (2018) also mentions a copula verb with the meaning of “to be similar, to look like” in Middle Tibetan, based on the story of Milarepa. In his account of Middle Tibetan, Oisel (2014) further analyses the compound auxiliary constructions *yin.par ħdug* and *yod.par ħdug*, which convey inference based on perception, as COP-REL AUX. The structure is identical to that of (44), (45), (49), and (50).

The interchangeable nature of *=rukji* and *=rɔŋsea* is a clear indication that both forms have a common function. Postulating, like Oisel, that relators are morphemes, I contend that *=rukji* and *=rɔŋsea* have a relator function, namely that of linking the preceding clause with the copula *ta*.

Oisel (2013: 268) also emphasizes the polysemic nature of the relators, the use of which is no longer restricted to auxiliary constructions in Modern Tibetan. This is consistent with *=sea* in a modal construction such as (136), which plays a similar relator function to that of *=rɔŋsea*, /rɔŋ/ being deleted due to the preceding verbal (infinitive) form. I show in appendix 1, §1.6.3 that *=sea* fulfils a relativizing nominalizer function.

Treating *=sea* as a connector is again consistent with Oisel's (2013: 250) observation that in Modern Tibetan “ces connecteurs ont des fonctions temporelles, argumentatives et modales comme leurs homologues de la période classique”. In (151), the overall verbal structure is V-INF-FOC-CO-(AUX).

Since Oisel mentions subordination as a common function played by a connector, *henna* ‘if so’, *manna* ‘if not’, *hekso* ‘as soon as’, and *bore* ‘when’, are obvious candidates¹²⁶. The previous converbs fulfil a relator function on two main grounds. First, like *=rukji* (or *=rɔŋsea*), they do not obligatorily occur in subordinate clauses: an alternative construction is available. Second, a converb invariably takes the same inflection contrary to a second verb, a stability similar to *=rukji* (or *=rɔŋsea*) and consistent with a relator function.

Among the types mentioned by Oisel in the case of Literary Tibetan (connector, nominalizer, and case), only one, the second (*=sea*) is attested in Chhitkul-Rākchham. One difference is however in the free variation between *=rukji* and *=(rɔŋ)sea*, where *=sea* exclusively occurs in the latter case.

The number of auxiliaries involved in constructions that include a relator is limited to *ta*, *to* and *tɔts*. This is another argument for not treating second verb forms such as *a:ts* and *gints* as relators. As shown in table 52, both allow for the whole set of auxiliaries to follow.

¹²⁶ Bunan, *jen*, cognate of *hɛn*, functions as ‘discourse coordinator’: *jenəŋ* ‘however, anyway’ and *jende* ‘but’ (Widmer 2014: 796-7).

A relator may be part of constructions such as *he =rukfi ta* or *he =rɔŋsea ta*, linking the adverbial ‘like’, which sums up a preceding clause, to a copula (*ta* or *to*), resulting in the template: ADV-SML.REL-COP:

Table 58: the Chhitkul-Rākchham relators

Inflection on the verb (finite or non-finite)	Relator	Sub-type of relator	(AUX)	Type of clause	Semantics
-na (COND)	<i>hɛnna</i>	conditional CVB	<i>ta, tɔts</i>	Subordinate	‘to hear’
-a (PROG), -i, -ti or -fi (PFV), -ts (HAB)	<i>hɛnna</i>	conditional CVB	<i>ta, tɔts</i>	Subordinate	‘to hear’
-i, -ti or -fi (PFV)	<i>hɛkso</i>	prospective CVB	<i>ta</i>	temporal subordinate	‘to hear’
-no (IRR)	<i>bɔre</i>	simultaneous CVB	<i>ta</i>	Complement	?
-	<i>=rukfi</i>	clitic	<i>ta, to</i>	complement	<i>semblative</i>
-	<i>=(rɔŋ)sea</i>	clitic	<i>ta, to</i>	complement	<i>semblative</i>
-(s)an and -ŋ (INF)	<i>=sea</i>	attribution nominalization relativization	<i>ta, to</i>	main	modal

Auxiliary constructions in Chhitkul-Rākchham have one of the five following structures. Without relator: 1/ V (inflected) (AUX); and 2/ V1 (inflected) V2 (inflected) (AUX); with a relator: 3/ V-INF=NOMI.REL-(AUX) in modal constructions involving *=sea*; 4/ (ADV)-SML.REL COP in the case of *=rukfi* and *=rɔŋsea*, with the adverb (*he*) replacing an entire clause ending in V; 5/ V CVB-COND (AUX), V CVB-PROSP (AUX), or V CVB-IMPV (AUX).

In Tibetan, Oisel (2013: 268) observes, “l’une des différences fondamentales dans le fonctionnement des connecteurs réside dans le fait qu’ils ne sont plus employés dans les

constructions auxiliées, contrairement à l'époque classique". The situation is somewhat different in Chhitkul-Rākchham in that a limited set of auxiliaries may follow =rukfi and =rɔŋsea. However short the list is, it does not always go along with Oisel's initial assumption that relators are affixes since I treat =rukfi and =(rɔŋ)sea as clitics and hɛn in hɛnna, man in manna, hɛk in hɛkso and bɔr in bɔre as converbs.

5.8.4 'Optional' vs. obligatory vs. no auxiliation in Chhitkul-Rākchham

De Haan (2001: 197) notes that evidentials are often optional from a cross-linguistic perspective. The justification for optionality "can best be seen as either the absence of evidence or a choice on the part of the speaker not to express his/her evidence for the action described". In Chhitkul-Rākchham, the auxiliary is optional in most contexts, an indication of the deep pragmatic nature of evidentiality.

The first explanatory factor for optional auxiliation – the absence of evidence – is unconvincing: to which situations absence of evidence refers to is unclear. When a Chhitkul-Rākchham speaker alludes to some information for which she cannot provide any source, we are dealing with factual knowledge, i.e. with evidentiality: hɛn is not less or more optional than ta. Rather than absence of evidence, optionality is the result of an assessment from part of the speaker as to the recoverability of the non-compulsory form from context.

A Chhitkul-Rākchham auxiliary may encode categories such as mood and subject agreement. This means these two categories are also optional. There is no auxiliary in (152). Based on table 49, the whole set could occur, however:

(152) sjana-tjaŋ=∅ rampur=tʃi raʃan=∅ tutʃ-a
 elder-PL=ABS Rampur=ABL foodstuffs=ABS bring-PROG

'(The) elders were bringing foodstuffs from Rampur'

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We may however bring the relatively high number of remaining possibilities down to one based on inference from context, i.e. what was said just before, who the speaker is, and the speech genre we are dealing with. In (153), which refers to what the speaker said right

before (152), *tɔts* occurs as copula in an introductory sentence that includes ‘before’. We therefore understand the speaker narrates a past event with which he is somehow connected and which has the attributes of personal experience and certainty:

(153) *sadək matustaŋ=∅ teotf=o bara: b^ha:ri: muʃkilat tɔ-ts*
road facilities=ABS before=LOC INT difficult COP.PEEX-HAB.ASS
‘Before the road facilities, it was very difficult’
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The previous observations give weight to Goodman and Soni’s (2017) assertion that “the messages humans send are more like weighted coins than unweighted coins, because the symbols we use aren’t chosen at random, but depend in probabilistic ways on what preceded them”.

Since we are dealing with a past narrative, *hɛn* cannot occur in (152) because its assertive or factual meaning is only attested after a main verb inflected for PFV, or after a main verb inflected for PROG with a resulting present or future tense value. *Ano* cannot occur either in this context as *tutfa ano* has a present or future tense value. We are left with *tase*, *tɔte* and *tɔts*. *Tase* is grammatically correct, but its occurrence is less likely in a narrative where the speaker is committed to providing an account of how life was in Chhitkul before, and when she is not just involved through the senses. *Tɔte* is grammatically correct, but compared to *tɔts*, it does not convey the same degree of certainty. Going through the entire recording, we can notice that the speaker strives to reach a more ‘factual’ stance that is particularly well suited for *tɔts*. The surmise that *tɔts* is the more adequate auxiliary in (153) relies on syntactic and pragmatic considerations.

Referring to (152), a link between optional auxiliiation and (un)grammaticality is doubtful. Since (152) is part of a past narrative, *tutfa* alone does not appear to be grammatical in that it does not provide any clue as to whether we are dealing with a past, present, or future tense construction. However, the genre of the recording helps us recover this information: there is no clear relationship between optionality and (un)grammaticality, as posited in Matthews (2007: 279).

In (93), no auxiliary follows the main verb inflected for the perfective. Again, one may recover the missing auxiliary from context. The genre is an autobiographical account where the speaker is describing her own life in Rākchham village. In this context, *ano* is not an obvious choice, and neither is *hen* since we are not dealing with general facts. *Latfi ta* would be ungrammatical since the omitted subject is first person. This leaves us with either *tək* or *təts*. The genre being autobiographical – more than a general narrative – *tək* is the most likely candidate. In fact, later in the recording (segment 17), the speaker uses the exact same expression, ‘I made them find their bearings’, this time using *tək*.

In (152), *tase* is a perfectly acceptable choice as, and in (107), *hen* is optional, which means optional auxiliaries are not always underlyingly egophoric, as in Standard Tibetan (Garrett 2001: 113-4).

Optional auxiliaries are that part of ‘knowledge management’ that is not expressed because inferable. Evidentiality as a ‘semantic-functional domain’ relies largely on inferential processes¹²⁷.

McGregor (2013) discusses optionality in “grammar and language use”, dealing with “domains of grammar” such as complementizers, case markers, definiteness markers, etc. Although he excludes auxiliaries, his insights are particularly useful.

To characterize the type of relationship between the use and the non-use of a given element, McGregor refers to “an equipollent opposition, not a privative one” (ibid, p. 1160). Optionality is not devoid of semantic meaning, reason why terms such as “zero allomorph” or “zero morpheme” are deceptive. In a prior publication (2003: 113), McGregor proposes the term “gap” instead. The term has the advantage to apply to situations where optionality is syntactic, and to be in line with tagmemics. A tagmeme such as an auxiliary is part of a syntagmeme (the main verb complex, and, at a higher level, the verb complex), and the optionality of the former does not call into question the validity of the former.

The term ‘equipollent’ implies a relationship on equal par between the use and the non-use of a given element – in the sense that both have a semantic meaning, which must be

¹²⁷ As mentioned in §4.3.1.1, perception is also inferential in nature, reason why the evidential category ‘inferential’ is deeply misleading.

reflected in their roughly similar frequency of use (McGregor 2013: 1160) – this is the case in Chhitkul-Rākchham.

Optional auxiliation reveals a hierarchical arrangement. The only obligatory tagmeme within the syntagmeme ‘main verb complex’ is the main verb because it either carries the entire evidential load (when inflected for *-no*; or most of it when inflected for *-ts*) or allows, as a kind of ‘vector’, for the expression of the full range of evidential meanings when inflected for aspect (but *-ts*). My claim is consistent with McGregor’s (2013: 1152) definition of optionality as “presence or absence [that] does not affect the grammatical structure: the construction remains unchanged as a linguistic sign regardless of whether or not the element is present”.

That evidentiality is not a grammatical category is one explanation for why McGregor’s analysis and mine diverge on one important point (ibid, p. 1191-2):

What has been suggested in this paper is that operational zeros of omissions are also severely constrained semantically: the type of meaning they code is exclusively interpersonal, concerning joint attention. If these claims can be substantiated in a larger and more varied corpus of optional phenomena, this would imply that most zeros are quite restricted in terms of the meanings they can encode.

Optionality may encode any of the evidential meanings previously discussed in Chhitkul-Rākchham: *tok* is not interpersonal, but entirely subjective. Since the occurrence (or absence) of an auxiliary does not really matter, because both encode the same range of meanings, then optionality is a matter of pragmatics entirely. Chapter 4 led to the conclusion that semantic and pragmatic factors play a more important role than syntactic ones in how evidentiality is expressed in copula clauses. The conclusion is the same for non-copula clauses: part of the set of auxiliaries, if not the whole set, is available to the speaker in most instances. Optionality is another piece of evidence that evidentiality belongs more to the semantic-functional domain than to grammar.

Optional auxiliation is an epiphenomenon that stems from the “economy principle” (Whitney 1877: 345), or from the principle of “least effort” (Zipf 1949): V-PROG or V-PFV is

enough; evidentiality is recoverable from context. Optional auxiliation is attested when the auxiliary carries the whole evidential load.

The term ‘omission’ (Aikhenvald 2004: 78) is inadequate, giving rise to confusing statements such as “even if evidentiality is obligatory, the markers may sometimes be omitted if they can be recovered from the context” (ibid). The term ‘optional’ is equally misleading when understood as in antonymic or contrasting relationship with the obligatory main verb: ‘recoverable from context’ puts the emphasis on pragmatic considerations more clearly.

That one of the functions of auxiliaries in Tibeto-Burman languages is to express evidential meanings is part of Aikhenvald’s (2004: 69) monograph: “in numerous other Tibeto-Burman languages (such as Lhasa Tibetan and some other Tibetan dialects) evidentials are expressed with copulas and auxiliary verbs”. While Aikhenvald’s statement is undeniably correct, it is also an over-simplification. So long one takes main verbs and auxiliaries to be two distinct syntactic units – when in fact they occupy two slots of the same syntagmeme – one misses that both may express evidential distinctions, to stay truthful to Boas’s legacy, and one is out of position to comprehend the sort of relationship there is between use and non-use of the auxiliary.

In contrast with ‘optional’ auxiliation, there are a few instances where 1/ no auxiliary may ever occur after a main verb; and 2/ an auxiliary must occur after a main verb - but not after a second verb.

As discussed in §5.5.3, no auxiliary may occur after a main verb inflected for IMPF or IRR. In addition, what may help to distinguish between present and immediate future is the absence of any auxiliary in constructions conveying immediate future. Consequently, a statement such as *ga: obi santo roa* (‘I am going to the temple tomorrow’) indicates that we are dealing with immediate future. The absence of *tɔk* in this construction is consistent with the distributional pattern of *to*: it cannot occur in future tense constructions. *Ga: roa* remains ambiguous, but one can distinguish between the two tense references by means of the auxiliary.

Conversely, one case of obligatory auxiliation is found when the main verb inflects for the infinitive, that is, in one type of modal construction devoid of any ‘second verb’.

The other few cases of obligatory auxiliation need further research. The underlying factors seem to be person – ‘optional’ auxiliation is more frequent with first person – tense, aspect, and verb semantics.

The following three sentences illustrate the role of person in obligatory auxiliation in constructions with a past tense value:

ga: hɔda ro-i (tɔ-k): ‘I went there’; the auxiliary is optional
kin hɔda ro-i ta-se-ĩ: ‘You went there’; the auxiliary is obligatory
eme hɔda ro-i ta-se: ‘he/she went there’; the auxiliary is obligatory

The following pair indicates that depending on the type of aspectual distinction encoded by the suffix *-a*, the auxiliary may be obligatory. Whereas the auxiliary is ‘optional’ in constructions with a frequentative meaning, as in (154), it is obligatory in constructions denoting performative actions, as in (155):

(154) *ga:=∅ djar=o kamaŋ=∅ la:*
1SG=ABS day=LOC work=ABS do.PROG

‘I work everyday’ – DSN

(155) *ga:=∅ fuju duka:n=o kamaŋ=∅ la: tɔ-k*
1SG=ABS DEM.PROX shop=LOC work=ABS do.PROG AUX.PEEX-1SG

‘I am working in this shop’ – DSN

With verbs of cognition, the use of *tɔk* is optional in the present, as shown in (156), whereas it is obligatory in the past, as in (157):

(156) *ga:=∅ hindi=∅ zo-i sɔmze-a*
1SG=ABS hindi=ABS good-MODIF understand-PROG

‘I understand Hindi perfectly’ – DSN

(157) $\epsilon me = \emptyset$ $k^h e$ $ri\eta - \tilde{a}$ $ga : = \emptyset$ $zo - i$ $s\text{omzi} - ti$
 3SG.HON=ABS what say-PROG 1SG=ABS good-MODIF understand-PFV

$t\text{ɔ} - k$

AUX.PEEX-1SG

'I have understood what he said perfectly' – DSN

5.9 The semantics of the Chhitkul-Rākchham auxiliaries

According to Aikhenvald (1999, 2006), auxiliary verbs are a closed-class of verbs, usually motion and posture verbs, which is consistent with part of the set discussed in §5.2.

The set of auxiliaries available in a language touches upon a relatively wide set of lexical verb categories in the typological literature. Anderson (2006: 332-373) provides a list of five broad categories: 1/ position or posture; 2/ movement; 3/ change of state; 4/ action; and 5/ localisation.

Referring to Tibetan languages, Tournadre and Jiatso (2001: 81) observe that auxiliaries are derived from the following verbs: 'to be', 'to exist, have', 'to sit, be situated, have', 'to exist', 'to appear, be manifest', 'be situated, exist', 'to put', 'to need, want', 'to come', 'to stay', 'obtain, get, happen', 'to go', 'to taste', 'be planted', and 'to touch'. The same categories as in Anderson (2006) are therefore present in Tibetan varieties, but Tournadre and Jiatso's list includes 'to have' and some perception verbs. Oisel (2018) adds one category that I discuss below, namely similarity.

Table 59 displays the semantic categories of the Chhitkul-Rākchham auxiliaries. These categories are not peculiar from a cross-linguistic perspective. As discussed in §4.1.6, there are two possible interpretations with regard to which verb *ta* stems from: the action verb 'to keep, put', or the perception verb 'to see'. I posit *ta* refers to the former (*tasarŋ*) for three reasons. From a comparative and semantic perspective, I am not aware of any auxiliary verb with the meaning of 'to see'. Another strong argument is that the imperfective of *ta*, namely *tase*, differs from the imperfective form of *tasarŋ*, *tatfe~tade* the same way the imperfective of *to*, namely *tɔte*, differs from the imperfective form of *tɔŋ*,

tute. Finally, phonological considerations – in *ta:ŋ* ('to see'), the vowel is long, points in the same conclusion.

Table 59: Semantic categories of the Chhitkul-Rākchham auxiliaries

Auxiliary verb	Verb meaning	Semantic category
<i>hɛn</i>	'to hear'	verb of speech
<i>ano</i>	'to be'	'to be'
<i>ta</i>	'to keep, put'	action
<i>to</i>	'to come'	motion
<i>tɔts</i>	'to come'	motion

Although *tasəŋ* is clearly an action verb, *(he) =rukfi ta* or *(he) =rɔŋsea ta* is more readily translated as 'to seem', 'to appear', or 'to look like', a meaning close to that of the form *snang* found in many Tibetan languages (Suzuki 2006, 2012; Ebihara 2017).

Since *ta* is part of a type of construction introduced by the adverb 'like', we may say it denotes similarity, which refers to the semantic sub-category of analogy that encompasses *he =rukfi ta* (or *=rukfi to*), *he =rɔŋsea ta* (or *=rɔŋsea to*) and the quotative *he* in reported speech constructions. Comparison (*upamāna*) is a major source (*pramana*) of knowledge in epistemological traditions such as the *Nyāya* or the *Advaita Vedānta* schools.

Going back to Tournadre and Jiatso's (2001: 81) list of auxiliary verbs and their semantic meaning, second verbs or light verbs are very similar, a point that I discuss further in §5.12. Table 60 provides the semantic category of second verbs – the list is not exhaustive:

Table 60: semantic categories of the Chhitkul-Rākchham second verbs

TAM realizations PROG, PFV, IMPF, HAB, IRR	INF	Verb type	Verb meaning	Semantic category
<i>huna, huni, hunde, hunts,</i> <i>hunno</i>	<i>hunəŋ</i>	second verb	'to continue'	action
<i>asa, asi, ase, a:ts, a:no</i>	<i>asəŋ</i>	second verb	'to become, happen, take	change of state and action

			place'	
<i>gina, gini, gise, gints, gino, ginaŋ</i> (after V-PFV)	<i>ginaŋ</i>	second verb	'to need'	necessity
<i>toa, tuti, tute, tuts, tuno</i>	<i>tɔŋ</i>	second verb	'to come'	motion
<i>lia, lisi, lise, lits, lino</i>	<i>lisaŋ</i>	second verb	'to be able'	ability
<i>ts^ha, ts^hafi, ts^hade, t^hsats, ts^halino</i>	<i>ts^hasaŋ</i>	second verb	'to know'	cognition/ability

5.10 Auxiliaries in Chhitkul-Rākchham according to Bailey and Sharmā

Bailey (1920: 78-86) makes no mention of auxiliaries in his sketch of Chhitkul-Rākchham. The only form that occurs after a main verb in a few past and future tense constructions is *mǎn* (ibid, p. 82). His description of *mǎn* suggests a more pragmatic use of negation compared to the more 'regular' construction where negation is marked on the main verb. Bailey's description suggests *mǎn* is emphatic.

Sharmā (1992: 262) provides instance with *to* in auxiliary position: */laca-to/* ('is doing'). *To* is also part of constructions with the main verb inflected for the perfective *-i* (ibid): *paŋ-niŋ i pecā posi-to* ('a bird is seated on the tree') and *yo-či riŋde ga k^hre tuti to* ('he said: I am hungry').

Sharmā (ibid, p. 264) also provides one instance with *ta* in auxiliary position: *eme ta nasidu-cilo kamaŋ la-ta* ('he works even in sickness').

Sharmā (ibid) claims that past continuous "is a periphrastic construction and is obtained by adding the past tense form of the verb substantive to the present participle base the main verb, e.g., */toa tase/* 'was coming'.

Auxiliation is also part of causative constructions (ibid, p. 273): *hoyo əccəŋ dači kamaŋ lat-ma-to* ('he gets the work done by the child'), see my account of causatives in appendix 1, §1.5.7.

The distribution of *to* and *ta* (ibid, p. 272) would reflect a distinction between honorific (*hoyo toa-to*) and non-honorific (*hoyo toa-ta*), an observation that is inconsistent – in both

examples, the personal pronoun is non-honorific – and incorrect, evidentiality being the driving force, not honorificity.

In addition to *to* and *ta*, Sharmā provides a few examples (ibid, p. 268) where *ano* occurs in auxiliary position after a main verb inflected for the infinitive: *kin tunna ga lo toŋ ano* ('if you come, I will have to come'). The absence of subject agreement is in accordance with (122), (123), (124) and (144).

Sharmā sees a 'negative sub-system' (ibid, p. 274) in *ga roa mən* ('I will not go', 'I shall not go' p. 297) and *ga zai mən* ('I did not eat'), treating *mən* and *ma* as particles. Like Bailey, he makes no mention of *mat ti*.

Sharmā never seems aware of the semantic meaning of these forms. Studies in evidentiality had nevertheless only gained popularity (Chafe and Nichols' 1986) a few years before he published his second volume of *Tribal Languages of Himachal Pradesh* in 1992.

5.11 The interaction between evidentiality and person

Subject agreement markers attach to copulas, main verbs (inflected for IMPV or IRR) and auxiliaries when they do not do so on main verbs in the first place. Copulas and auxiliaries being characterized in the literature as the usual morphosyntactic devices by which evidentiality is expressed within the Tibeto-Burman language family, there is therefore a clear relationship with person.

5.11.1 The relationship between evidentiality and person in Chhitkul-Rākchham

The Chhitkul-Rākchham case is instructive in at least four main respects in terms of relationship between evidentiality and person.

First, its classification as 'West-Himalayish' remains doubtful and its status as Tibetic language rebutted by the present thesis. Chhitkul-Rākchham is therefore of typological interest.

Second, Chhitkul-Rākchham is one of the very few languages to exhibit a person indexation system distinct from ‘egophoric’. The system is symmetrical (Miestamo 2011, San Roque 2017): the same set of markers occurs in declaratives and interrogatives.

Third, the occurrence of two ‘egophoric’ auxiliaries, *to* and *tɔts*, the latter never marked for person agreement (the suffix *-k*), is peculiar.

Fourth, the scope of the egophoric differs greatly between *to* and *tɔts*, as shown in §4.2, the former form having ‘wide scope’¹²⁸, occurring with all persons in both present and past tense contexts as long as the speaker is personally involved in the situation. This is a major difference with a Tibeto-Burman language like Japhug (Jacques 2019), where the ‘egophoric’, as part of a ternary system that includes ‘Factual Non-Past’ and ‘Sensory Imperfective’, only occurs in the ‘Imperfective Present’.

The first person singular marker *-k* is restricted to first person, as illustrated by the following examples. (158) is an instance of direct speech, and since the first person singular *ga*: occurs as subject, *-k* attaches to the main verb. In case Ram refers to himself in a reported speech construction, the sentence is identical. In (159), Ram refers to another person: the main verb is marked with the third person agreement marker *-∅*:

(158) ram=tʃi riŋ-de-∅ ga:=∅ kamaŋ=∅ tse-ʃi (tɔ-k) /
 Ram=ERG say-IMPV-3 1SG=ABS work=ABS finish-PFV AUX.PEEX-1SG
 tse-dɛ-k
 finish-IMPV-1SG

‘Ram said: "I have finished the work"/Ram said that he (Ram) has finished the work’ – DSN

(159) ram=tʃi riŋ-de-∅ ɛme=∅ kamaŋ=∅ tse-de-∅
 Ram=ERG say-IMPV-3 3SG.HON=ABS work=ABS finish-IMPV-3

‘Ram said that he (someone else) has finished the work’ – DSN

¹²⁸ The more constrained distribution of *tɔts* is explainable by its factual or assertive nature.

(158) and (159) illustrate direct vs. indirect speech in Chhitkul-Rākchham. The ‘personal experience’ *to* may occur in direct speech or as long as the speaker refers to himself in ‘reported speech’, but it does not have to. Conversely, it cannot occur in constructions where the speaker refers to someone else. It is not the ‘personal experience’ auxiliary *to* that serves as a strategy to infer which grammatical person we are dealing with, but the use of a specific subject agreement marker.

‘Semi-indirect’ or ‘hybrid indirect speech’, a feature whereby a 1SG indexation marker is combined with a third person pronoun, found in Tibetic and Gyalrongic languages (Tournadre 2008, Jacques 2015) and in Kinnauri (Saxena 2000), is also attested in Chhitkul-Rākchham, as shown in (160):

(160) $\epsilon me-\emptyset$ $ri\eta-\tilde{a}$ $t\textcircled{v}-te-\emptyset$ $\epsilon me-\emptyset$ $\textcircled{v}ja$
 3SG.HON-ABS say-PROG AUX.PEEX-IMPV-3 3SG.HON-ABS soon
 $tu-n\textcircled{v}-k$ / $\epsilon me-\emptyset$ $\textcircled{v}ja$ $tu-n\textcircled{v}-k$ he
 come-IRR.DUB-1SG 3SG.HON-ABS soon come-IRR.DUB-1SG QUOT
 $\epsilon me-\emptyset$ $ri\eta-\tilde{a}$ $t\textcircled{v}-te-\emptyset$
 3SG.HON-ABS say-PROG AUX.PEEX-IMPV-3

‘He said he would come soon/’I will come soon’, so he said’ – DSN

The (optional) occurrence of *tɔk* in (158) is what San Roque and al. (2018: 64) refer to as ‘quotative faithfulness’: the speaker reproduces the inflection that would have been used by the original speaker”: this is only possible if, in an instance of ‘hybrid indirect speech’, the speaker refers to himself. (158) and (159) illustrate that ‘personal experience’ is clearly distinct from person marking.

The subject agreement marker *-k* does not always occur with a first person singular subject. There are a few instances where the copula surfaces as *to*, for example in possessional constructions. This is because *to* is restricted to first person in this context (*ta* occurring with second and third), which makes the first person subject agreement marker redundant. The same pattern applies to some modal constructions (§5.6.2). That *-k* cannot attach to a second verb reflects the fact that second verbs are a sub-class of main verbs.

Judging by table 80 (§6.4), there is a relationship, from a diachronic perspective, between person marking and an all but assertive epistemic judgement in Chhitkul-Rākchham. In addition, when a main verb takes a subject agreement marker, the epistemic reading is either dubitative (after *-no*) or neutral (after imperfective). When a copula (or an auxiliary) does so, the epistemic reading, based on table 76 (§5.14) is either dubitative (after *ano*), less dubitative (after *ta*), and even less dubitative – but not assertive – after *to*. The reason why *ta* does not take any subject agreement in present constructions when *to* does has to do with the fact that *ta*, since it is incompatible with first person singular subject, does not take *-k*. By extension, there is no subject agreement with other persons.

Subject agreement markers only attach in most instances to *to* and *ano* and in some instances to *ta* in a past tense context, but never to *hen* and *tɔts*, a distribution indicative of a rather loose relationship between person and evidentiality. It nevertheless remains Chhitkul-Rākchham has both person indexation and egophoric evidentiality, a rarity from a comparative perspective, also attested in Newar (Hargreaves 2005), Wādū Pūmī (Daudey 2014a and 2014b), Bunan (Widmer 2014), and Japhug (Jacques 2019).

As seen in §5.1.2, we may characterize main verbs with a V-IMPV-AGR or V-IRR-AGR structure as finite verbs in contrast with any other kind of template. In this context, a finite verb may express either an evidential distinction (*-no*) or be evidentially neutral in connection with recent past, which is different from saying it has no evidential value. As seen in §5.8.3, an auxiliary may follow a non-finite verb inflected for mood, which means there is no opposition finite vs. non-finite in terms of evidentiality. Rather, a fast rule is that subject agreement prevents auxiliation.

5.11.2 The relationship between evidentiality and person in the literature

The available literature leaves no doubt as to the very close relationship between evidentiality and person. Under the heading ‘Evidentials as implicit person markers’, Aikhenvald (2004: 235) makes the following observation, a clear illustration of a bias that pervades the entire typological literature:

In Eastern Pomo (McLendon 2003:113) all four evidential suffixes mark the speaker’s source of information, and imply first person involvement.

This is particularly obvious from the ways in which speakers translate sentences with evidentials into English. In 5.56, the perceiver is 'I'. There is no first person in view – but it is understood from the evidential choice. The English translation involves first person ('I smell the fish'). In the absence of any overt first person marking it is the non-visual sensory evidential (*ink'e*) that produces this effect. The unmarked recipient of information is first person.

In the *Oxford Handbook of Evidentiality*, Sun (2018: 39-40) provides an in-depth account of the relationship between evidentiality and person. The following concluding remarks (ibid, p. 39) are especially noteworthy:

Accumulated insights from the vast literature on evidentiality affirm that the essential person category for evidential marking is the 'speaking person' or 'evidential origo' "from whose perspective an evidential is evaluated" (Garrett 2001: 4). And this may be the first, second, or third person, depending on the construction type (...) an evidential indicating intimate personal knowledge (e.g. direct or non-visual evidential with verbs denoting internal states; egophoric evidential with verbs denoting controllable actions) signals the involvement of a speaking person in the assertion, yielding an implicit person-marking effect

What these two quotations share is person as the locus of attention when subjectivity is actually the core subject. Aikhenvald's term 'implied first person involvement' is not first person *per se*, but the unfolding of a consciousness. Sun's origo 'may be first, second, or third person'. Consequently, connecting speaking person and "implicit person-marking effect" misses the point.

If the Chhitkul-Rākchham 'personal experience' *to* is compatible with all persons, it is because it reflects an all-pervading subjectivity, regardless of which subject agreement marker follows.

The contrast between *to* and *tɔts*, based on an epistemic judgement from part of the speaker, indicates that subjectivity has more weight than person does.

Another interesting insight in terms of relationship between evidentiality and person is that the combinations IMPV-AGR and IRR-AGR block auxiliation. In the former case, the evidential distinction is neutral and in the latter case dubitative. However, an auxiliary – invariably *ta* – may follow a V-IRR CVB-IMPV construction (see (140) in §5.7). This is not enough to conclude that auxiliation is possible because there is no subject agreement marker: as shown in §5.6, second verbs never inflect for subject agreement, and they are not always followed by any auxiliary. Instead, *ta* may occur in a V-IRR CVB-IMPV construction because the type of irrealis expressed by the non-finite verb is simultaneous, not dubitative. *Ta* as auxiliary is consistent with the observation that regardless whether the first verb is finite or non-finite, auxiliation occurs whenever the verb, inflected for PROG, PFV, IMP, COND, PROSP, or SIM, does not express an evidential distinction in the first place.

5.11.3 A brief review of the ‘conjunct-disjunct’

Hill (2017) provides a very detailed account of the genesis and subsequent development of the term ‘conjunct-disjunct’ among Tibeto-Burmanists. Of particular interest is how Hill manages to cast light on a few untenable positions.

The phenomenon described by Hale is binary. Referring to Hargreaves’s (2005: 31) notion of “privileged access”, Widmer (2015: 2) sums it up adequately: “conjunct marking indicates that the relevant information is based on personal and internal knowledge that is only accessible to the speaker, while disjunct marking indicates that the information is based on common knowledge that is accessible to any other discourse participant as well”.

The conjunct-disjunct in Newar is otherwise syntactic in nature, but not only, owing to its close connection with ‘volitionality’ and ‘locus of knowledge’ (Watters 2006: 300), hence the view that the conjunct-disjunct expresses evidentiality.

Aikhenvald (2004, 2012, 2015, 2018) is adamant the conjunct-disjunct is a purely syntactic pattern that has to do with person marking. According to Aikhenvald, “conjunct-disjunct person-marking systems are not evidential in nature” (2004: 127), a view she repeats over the years: “conjunct-disjunct systems do not mark information source” (2015: 257).

Her arguments do not hold ground. She describes the evidential system found in Newar as of three or more terms (2004: 291), but how this description is reconcilable with the conjunct-disjunct we do not know. More confusingly, referring to Lhasa Tibetan, she takes *ḥdug* as “a disjunct copula” (2004: 127) and a marker of “actual visual knowledge” (ibid, p. 284), failing to notice the contradiction. When she finally does (2012: 467), her comments are utterly unconvincing: “the case for *ḥdug* as a marker of information source appears to be likely [...] However, to make it fully convincing, it needs to be placed within the context of a full grammar of a language”. Full grammars of Tibetan are available for everyone to see.

We may therefore characterize the conjunct-disjunct as person marking as a stance of convenience, the relinquishment of which starts a domino effect. If it is not person marking, then it is evidentiality, and evidentiality is not just source of information, but also access (Tournadre and LaPolla 2014). Thus, Aikhenvald’s definition is too restrictive, which in turn opens the question as to what extent it is so. Since Chhitkul-Rākchham *to* is indeed a marker of “privileged access”, that is, an ‘egophoric’ evidential marker, then *tɔts*, which introduces an epistemic nuance, serves the same function as well, and then suddenly evidentiality is no longer what we have been told it was in 2004.

In his review of Hill and Gawne’s *Evidentiality in the Tibetan Languages* (2017), Widmer (2017:13) observes that the conjunct-disjunct has been on the wane since the 1990s. One compelling underlying reason is the introduction of the ‘egophoric’ by Tournadre (1991), as a substitute for ‘conjunct’. Alternative terms to ‘disjunct’ – ‘allophoric’ (Tournadre 2008), ‘alterphoric’ (Post 2013) – gained currency.

Tournadre convincingly argues (2008, 2017: 115-8) against the use of the term ‘conjunct-disjunct’. Hill (2017: 15-6) provides examples in Tibetan leading to the conclusion that “person agreement or its adaptation as ‘conjunct-disjunct’ has no explanatory value”.

Whether a concept adequately captures a phenomenon ultimately has to do with statistics. A few deviations from a pattern are only natural – no concept, however refined, explains everything – but numerous violations are conversely a clear indication of its invalidity.

5.11.4 On the irrelevance of the ‘conjunct-disjunct’ in Chhitkul-Rākchham

I have provided evidence that the Chhitkul-Rākchham evidential system is not binary but quinary, the structural argument against the relevance of the ‘conjunct-disjunct’. *Ta* and *to* are the most recurrent forms, i.e. the most likely to adhere to the ‘conjunct-disjunct’ pattern. Since *ta* does not occur with first person, it seems the distributional pattern lends itself to such analysis. Nothing is farther from the truth, however, because of the deep pragmatic nature of the evidential system – the functional argument.

One cannot take the evidential system to be binary (*ta* vs. *to*) because alternative forms – for example *a:ts* (impersonal knowledge), are in some instances the only choice available to the speaker. Consequently, *ta* and *to* do not reflect a distinction self vs. other¹²⁹.

Based on the conjunct-disjunct, first person declaratives and second person interrogatives are marked the same way, which means, with *to*, since *ta* is not compatible with first person. Chhitkul-Rākchham follows this pattern, the only one invariably observed cross-linguistically (Knuchel 2015: 51). However, the ‘conjunct-disjunct’ predicts that the previous pattern will stand in contrast to first person interrogatives and second person declaratives and all third person forms, which should then be marked with *ta*.

A first issue arises with the first person interrogative, which consistently surfaces as *tək a* and the first person plural *tət f a*, as in *niŋsa: zoi tət f a* (‘are we kind?’). Further, with third person subjects (personal and impersonal) both *ta* and *to* are perfectly acceptable in most contexts (see table 40 in §4.5), which means third person indexing is not exclusively associated with disjunct marking.

In a locational copula clause like ‘he was right there’, as in (45), both *tase* and *təte* are available to the speaker, depending on whether the statement refers to perceptual evidence or personal knowledge.

¹²⁹ There is no distinction between ‘direct’ and ‘indirect’ based on the observed crossover between perception and inference (by means of *ta*), but there is a distinction between ‘self’ and ‘other’ in *təts* vs. *a:ts* (or *hən*). There are, however, situations, as in (59) and (61), where the difference between personal knowledge and social knowledge is very thin (Dewey 1927), because language is fundamentally dialogic.

Reported evidentiality exhibits some interesting patterns. ‘(S)he is saying’ in the present tense is invariably *eme riṅã to* – not *ta* as the conjunct-disjunct predicts – while ‘(s)he was saying in the past is less rigid: *eme riṅã tase* or *eme riṅã tote*:

(161) ramt=ji riṅ-ã ta-se-∅ / to-te-∅ kumar=∅
 Ram=ERG say-PROG AUX.PE-IMPV-3 AUX.PEEX-IMPV-3 Kumar=ABS
 hoḵiar ta / to-∅
 intelligent COP.PE COP.PEEX-3

‘Ram said that Kumar is intelligent’ – DSN

A second issue is that the ‘personal experience’ *to* is not restricted to first, and, as shown above, to third person, but is perfectly compatible with second. The conjunct-disjunct predicts *ta* would occur in a sentence like ‘you must learn Hindi’, but in fact, both *ta* and *to* are acceptable: *kin hindi huḵaṅ giṅts ta* and *kin hindi huḵaṅ giṅts to*. This observation applies to indirect quote frames. In Hale’s definition, “If the actor of the quote refers to the same individual as the actor of the quote frame, the verb of the quote is conjunct in form” (1980: 97), which means that if the actor of the quote refers to another individual, *ta* is to be expected. As (162) demonstrates, this is not the case, only *to* may occur in this context, with a second person agreement marker – instead of first:

(162) kin=∅ riṅ-ã to-ĩ kin=∅ k^huḵ
 2SG.HON=ABS say-PROG AUX.PEEX-2SGHON 2SG.HON=ABS happy
 to-k / to-ĩ
 AUX.PEEX-1SG AUX.PEEX-2SG.HON

‘You say you are happy (referring to yourself / referring to someone else)’ – DSN

(174) and (175) in §6.1.2 are instances of the same sentence as in (162) with a third person singular subject. In these two cases too, what allows a speaker to remove any ambiguity as to the identity of the actor of the quote frame is a different subject agreement marker added to *to*, not another copula altogether.

When Chhitkul-Rākchham does follow the conjunct-disjunct’ pattern, that is, very erratically, other alternatives are in most instances available to the speaker. To the

question ‘are you at home’, *kin kjimo toĩ a*, where the second person interrogative form, *to*, is identical to the first person declarative, another way to ask is with the dubitative *anoĩ*. *Ano* may actually occur with all persons in any interrogative.

The personal experience *to* has a ‘wide scope’ (Tournadre 2008: 296¹³⁰), and occurs with all persons in Chhitkul-Rākchham. In fact, it has so wide distributional properties that it makes any dichotomic view completely out of place.

The scope of the ‘personal experience’ copula indicates that the speaker’s involvement in any speech genre has virtually no limits, an observation already made by Bendix (1974: 49) half a century ago in Newar. How a deeply flawed concept has survived for so long in linguistic descriptions is puzzling. Pragmatics, not syntax, governs the choice between *ta* and *to*.

The only issue on which I do not concur with Tournadre’s analysis is the pattern of person marking in direct questions. What governs the pattern is a rule of anticipation (Tournadre 2001, 2003: 94-5, 2017: 98) which he connects, referring to Kuno (1987), with the notion of ‘empathy’, and, referring to Tournadre and Lapolla (2014), with ‘perspective’. As shown in table 39, the personal *to* (alternatively *tots*) may occur with all persons in interrogatives the same way it does in declaratives.

We may therefore argue that just like in declaratives, *to* has a wide scope in interrogatives. I agree with Tournadre that in interrogatives, which are the interactional clause type *par excellence*, both ‘empathy’ and ‘perspective’ – although regarding the latter term personal involvement seems to be suitable – are concepts that capture the inter-subjectivity of the situation. However, there is no need to posit any rule of anticipation. As the fictive character, William Forrester claims in *Finding Forrester* (34:48-34:53), “the object of a question is to obtain information that matters only to us, and to no one else”. The speaker may indeed display some empathy towards the addressee when asking a question, but there is no reason to surmise (s)he relinquishes her involvement altogether.

¹³⁰ Bickel (2008: 6) distinguishes between ‘epistemic proposition marking’, used to mark any kind of proposition as it is the case with *to*, and ‘epistemic argument marking’ when specific arguments or semantic roles determine the occurrence of the ‘egophoric’.

5.11.5 A comparative perspective on the conjunct-disjunct within West-Himalayish

Chhitkul-Rākchham is not the only Tibeto-Burman language where the ‘conjunct-disjunct’ has no bearing. All Tibetan languages, as long as they exhibit a ternary system of evidentiality à la Standard Tibetan, cannot comply with a rigid binary pattern which otherwise is too easily violated.

Although Lamjung Yolmo has a quaternary (ego, perceptual, dubitative and general fact) evidential distinction, Gawne (2013) leads an in-depth investigation of the pattern. One of Gawne’s (ibid, p. 370) concluding remarks is that “even when we only take into consideration the two most common copula types that occur in interaction, the perceptual evidentials and the ego evidentials, the system is still not as elegant as is predicted by a conjunct/disjunct system”. Later, she adds (ibid, p. 375) “the patterns that we see in Lamjung Yolmo are much more akin to the newer generation of ‘egophoric’ analyses”. I am not aware of any other thesis where copulas in interaction are the objects of such a thorough investigation.

As shown in the previous section, *ta* and *to* are not mutually exclusive in many contexts, which concretely means that most violations to the ‘conjunct-disjunct’ pattern found in other languages apply to Chhitkul-Rākchham too.

An example is (168), where a speaker may use *ta* to convey surprise in a syntactic environment – first person possession – that usually obligatorily triggers the occurrence of *to*. Tournadre (2008: 289) reports a similar violation in Tibetan, although the situation differs in that there is only one choice of copula in Tibetan in this specific context. The many situations in Chhitkul-Rākchham, where *ta* and *to* are two perfectly grammatical forms is a token of a system that is comparatively on the high end as to the extent it is driven by pragmatics.

Widmer (2015) claims the ‘conjunct-disjunct’ is relevant in Bunan. One issue is that the language exhibits a ternary evidential system with direct/perceptual, inferred, and generic/factual values. Widmer (2017: 16-7) claims “binary systems of the KN type and ternary systems of the LT type can coexist side by side in one language” because only past tense in Bunan exhibits a ternary distinction – whereas it is binary in the present tense.

However, this is again so because Widmer relies on Aikhenvald's definition of evidentiality. Based on my own definition, the system found in Bunan (see table 72) is quaternary.

Widmer mentions *ana*, intriguingly close to Chhitkul-Rākchham *ano*, although it is restricted to second person singular in interrogative contexts (ibid, p. 572). The person agreement system found in Bunan is disappearing fast, which suggests *ana* may have had a wider use at the time of Francke's (1909) description. Younger generations are no longer using *ana*, whereas *ano* does not seem to be in obsolescence in Chhitkul-Rākchham. Regardless of the frequency of use parameter, it is noteworthy that *ana* may occur in a question like *han k^ha liktɕana?* 'What are you doing?' (ibid, p. 567) in Bunan, a clear example of everyday speech where the 'conjunct-disjunct' pattern is out of the picture.

5.12 A diachronic approach to Chhitkul-Rākchham auxiliaries

The data from §5.6 indicate that the 'main verb complex' consists of three distinct units, or 'tagmemes'.

I have so far used the term second verbs to characterize those verbal forms that occupy the second slot. A closer look reveals 'light verbs', a term coined by Jespersen (1965, volume VI: 117), is a more precise denomination. Seiss (2009: 509), referring to Butt and Lahiri (2002) and Butt (2009), contends that "light verbs are always form identical to the corresponding main verb whereas auxiliaries are usually just form identical at the initial stage of reanalysis from verb to auxiliary". This is consistent with the data provided in table 50 (§5.6): subject agreement excepted, light verbs display the same inflectional properties than main verbs.

A light verb, contrary to an auxiliary, is not 'optional'. It has to do so because, as pointed out by Butt and Lahiri (2013: 23), "light verbs predicate a subset of lexical semantic information associated with the main verb as well as being able to add shades of meaning not necessarily immediately associated with the lexical semantics of the main verb". An auxiliary contributes in no way to the core meaning of a main verb. Table 61 sums up the properties of both:

Table 61: a comparison between Chhitkul-Rākchham light verbs and auxiliaries

	Light verb	Auxiliary
Position within the 'main verb complex'	Slot 2	Slot 3
Type of verb	Regular, but not marked for subject agreement	Defective, but marked for subject agreement
Main event predication	Modulating function: adds some shade of meaning Modal function (deontic and epistemic) Object marking function ¹³¹ when following a verb stem	Situating function: adds TAM and subject agreement information Modal function (epistemic)
Evidential function	Identical to main verb, expressed by means of <i>-no</i> and <i>-ts</i> – with the exception of some V-INF V- <i>ts</i> constructions	Carries the whole evidential load or adds a nuance hereof – if V1 or V1 V2 express an evidential distinction in the first place
Meaning	'to happen, become' 'to keep + ING' 'to need' 'to know' 'to be able to' 'to come'	'to hear' (<i>hɛn</i>) 'to be' (<i>ano</i>) 'to put, keep' (<i>ta</i>) 'to come' (<i>to</i> and <i>tɔts</i>)

From a synchronic perspective, the inflectional paradigm and the function of light verbs is neatly distinguishable from that of auxiliaries. It seems reasonable to posit they follow a distinct diachronic path.

¹³¹ In that case, the light verb is invariably *tɔŋ*, 'to come'. Object marking occurs on a limited number of verbs, see §5.6 for an example.

Butt and Lahiri (ibid, p. 15) provide evidence for a “diachronically inert” hypothesis based on Sanskrit, where light verbs exhibit a remarkable stability throughout time. In her comparative study, Bowern (2008: 174) reaches a similar conclusion: auxiliaries do not originate from light verbs. There are therefore good reasons to look at some ‘grammaticalization’ pathways or clines proposed in the literature, especially when they take light verbs as a stage on the diachronic development from main verbs to auxiliaries (Hook 1991, Hopper and Traugott 1993), with a critical eye.

The subordination of light verbs to main verbs highlighted earlier suggests an adequate way to express the relation between these two from a syntactic perspective is to posit a unique lexical entry for both, which is also consistent with the shared evidential function performed by light verbs and auxiliaries. Auxiliaries add an evidential nuance regardless whether it is the main verb or the light verb that is marked for *-no* or *-ts*.

As shown in table 64, ‘to come’ may serve as main verb, second verb, and auxiliary. Its inflectional properties – *tute* as imperfective form as main verb and second verb vs. *tote* as auxiliary – indicate the grouping of main verbs together with second verbs is correct. The semantics of second verbs and auxiliaries are sometimes relatively close, but there is always a small difference. The light verb *hunəŋ* has the meaning of ‘to keep + ING’ whereas the auxiliary *ta*, from *tasəŋ*, means ‘to put, keep’. *Asəŋ* (‘to happen, become’) as a second verb is slightly different from *a* ‘to be’.

Table 44 in §5.3 shows that the whole set of five auxiliaries stems from copula verbs. All these copulas except *hən* have an exclusive copula and auxiliary function based on their inflectional properties. There is no such exclusive relationship between light verbs and copulas. The syntactic allomorphs *hunno*, *hunts*, *a:no*, *a:ts*, and *tuts* refer to both main verb and light verb forms, but light verb realizations, *gints*, *huna*, *asi*, *ts^hade*, etc., are not identical to copulas, but to main verbs. Auxiliaries and light verbs both stem from main verbs, but auxiliaries are peculiar in that they do so from a specific subset hereof.

‘Copula auxiliarization’, “a process whereby a copula comes to be used as auxiliary” (Dik 2011: 58) implies the term ‘grammaticalization’, generally described as a continuous and unidirectional process whereby a lexical construction gradually gains a grammatical status and undergoes semantic bleaching (see Hopper and Traugott 1993, p. xv and Pagliuca 1994,

p. ix for definitions), actually refers to only one possible type of change among many others.

The term ‘grammaticalization’ has given rise to a large body of critical literature. Newmeyer (2001: 203-16) and Janda (2001: 291-4) contest the relevance of terms such as ‘semantic bleaching’ and ‘unidirectionality’ (Newmeyer 2001: 203-16; Janda 2001: 291-4), Campbell (2001: 108) reminds us of the imperative to take “a grammar’s as a whole”, and Norde (2001: 240) puts the emphasis on cases of “deflexion”, notably in Germanic languages.

A first observation that illustrates the inadequateness of the term ‘grammaticalization’ in its usual meaning is that “copula auxiliarization is more a matter of gradual *expansion* [emphasis added] into the domain of the verbal paradigm, than a categorical clear-cut acquisition of entirely new functions by the copula” (Dik 2011: 58). Copula auxiliarization reflects a process, i.e. a change, but there is no weakening of form, and no weakening of meaning. The Chhitkul-Rākchham auxiliaries are morphosyntactically identical to the copulas and there are only small nuances with regard to their evidential meaning.

The view that a copula, an auxiliary, or a clitic is “halfway between autonomous words and affixes (Hopper and Traugott 2003: 5) is based on the false assumption that these elements have to undergo some drastic changes when this is not necessarily the case. In fact, having both light verbs and auxiliaries resisting change is a logical way to make sure the barrier between these two remains hermetic from a diachronic perspective.

Referring to §5.8.1, it is no coincidence that Heine’s four criteria are unhelpful in locating the Chhitkul-Rākchham auxiliaries on the so-called ‘continuum auxiliary-affix’. The only unambiguous conclusion has to do with semantics: auxiliaries have a verbal meaning. They are closer to the ‘starting point’ because there is presumably no ‘end point’ (as affix) in the first place.

According to Dik (2011: 58), ‘copula auxiliarization’ “always originates in periphrastic constructions with an aspectual meaning, and only later potentially shifts to other uses”. A copula turns into an auxiliary that is part of a periphrastic construction with an aspectual meaning following two main paths, the ‘Localist channel’ and the ‘Property channel’.

The former (Hjelmslev 1935, Anderson 1973, Lyons 1977, Claudi and Heine 1985) refers to spatial or locative categories serving as vectors for the integration of copulas into the temporal and aspectual system of the verbal predicate. According to Lyons (1977: 719), “there are many languages in which the aspectual notions of progressivity or stativity (...) are expressed by means of constructions that are patently locative in origin”. A good illustration is the locative adverbs *piŋã* (‘near’), *hɔja* (‘here’), and *hɔda*, (‘there’), which are obviously related to the progressive marker *-a*.

The ‘Property channel’ does not refer to aspect in a perfective or imperfective sense, but to ‘phasal aspect’, the distinctions of which “serve to describe what is the case at some reference point on the temporal axis, in relation to the occurrence of some State of Affairs” (Dik 2011: 60), i.e. are property-assigning. Since copulas possess a property-assigning function in the first place, namely evidentiality, they are prone to expand this function over time.

Metaphorical extension is also useful in the investigation of the relationship between auxiliaries and tense. *To* in Kinnauri and in Shumcho (Huber 2013: 226) is also one of the future tense markers¹³². In Chhitkul-Rākchham, there is an obvious link between the perfective *-ti* and the syntactic allomorph of *ta* found in *mat ti* (and between the imperfective *-te* and the syntactic allomorph of *ta* found in *ne te*). We may also establish a link between temporal adverbs and *to* on the one hand, and the imperfective markers *-te* and *-de* on the other: in addition to serving as auxiliary, *to* has the meaning of ‘so’, *te* means ‘then’ and *de*, ‘again’.

Tournadre (2017: 4) mentions ‘to come’, from which the auxiliary *to* in both Chhitkul-Rākchham and Shumcho stem, and ‘to go’ as frequent sources for future tense from a cross-linguistic perspective. Table 60 evaluates the relevance of Tournadre’s claim in the triad Chhitkul-Rākchham, Kinnauri, and Shumcho – no connection seems positable in Darma and Bunan.

¹³² *To* is also found in *toro*, ‘today’ (Bailey 1909: 675).

Table 62: Infinitive and future tense (or irrealis) forms of ‘to come’ and ‘to go’ in Chhitkul-Rākchham, Kinnauri, and Shumcho

	Chhitkul-Rākchham		Kinnauri (Bailey 1909: 681-2; Takahashi 2011: 342)		Shumcho (Huber 2013: 233-5)	
‘to come’	tɔ-ŋ (INF)	tu-no-∅ (IRR-3)	bū-n-nig bö-mig	bū-tö-∅ (FUT-3NHON) bö-tö-∅ (FUT-3NHON)	tɔ-me	tɔ-rɔ-∅ (FUT-3NHON) tɔ-ro (FUT)
‘to go’	rɔ-ŋ (INF)	ro-no-∅ (IRR-3)	bi-mig	bi-to-∅ (FUT-3NHON)	dʒɛ-me	dʒɛ-rɔ-∅ (FUT-3NHON) dʒɛ-ro (FUT)

Referring to table 62, with regard to future tense (or irrealis), we are dealing with two different patterns: *-no* is the only marker in Chhitkul-Rākchham, when *-to* and *-ro* in Kinnauri and Shumcho are part of a set that includes bare vowels. One should therefore be wary of generalizing too much. Table 62 allows us to draw a connection between the vowel contained in the verb stem of ‘to come’ in all three languages, which may undergo laxing in some contexts, and /o/ contained in the future tense marker. The same connection is observable with ‘to go’, but only in Chhitkul-Rākchham.

Referring to Takahashi (2009: 31), it may be tempting to reanalyze the suffixes *-no*, *-to*, and *-ro* as consisting of an object marker (*-n* in Chhitkul-Rākchham, *-t* in Kinnauri, and *-r* in Shumcho) and a future tense (or irrealis) marker (*-o* in all three languages) from a synchronic perspective. Interestingly, *-n* serves as third person object marker in Chhitkul-Rākchham, but as an augment in some conditional clauses only. In other words, /n/ in *-no* does not function as object marker. As for the other two languages, “there is no suffix for third person object” (Takahashi 2011: 343) in Kinnauri, and “Shumcho has a single agreement marker *-s* for first and second person (direct or indirect) objects” (Huber 2013: 239). A connection between ‘to come’ and ‘to go’ on the one hand, and future tense on the other, is not conclusive.

The emergence of evidentiality as the result of the “grammaticalization of deixis” (Tournadre 1992, 2017: 99) has therefore a strong appeal, but locational and temporal adverbs play a more defining role than lexical verbs. The case of the emphatic particle *no* discussed in §8.3 is also telling: emphasis and focus are also driving forces behind the rise of evidentiality.

Meillet (1909, 1912, 1920) provides a convincing reason for why ‘copula auxiliarization’ is driven by aspectual considerations. From a diachronic perspective, aspectual markers turn into temporal ones. One may say Meillet’s observation carries even more weight within the Tibeto-Burman language family, where these distinctions are never entirely neat anyway. If an aspectual form gradually becomes temporal, then a need arises for a new aspectual marker, and this innovative form stems from a periphrastic construction involving an auxiliary.

The Chhitkul-Rākchham habitual marker *-ts* complies with the previously outlined scenario. It is aspectual, but judging by the fact that it is contrastive with *-no* in future tense constructions, *-ts* is on its way to be reanalyzed as an assertive realis marker. The ‘innovative’ form that stems from a periphrastic construction involving an auxiliary is the progressive marker *-a*, which is replacing *-ts* in its habitual function (see §4.3.3.2). An indication of the expansion of *-a* from a progressive to a more general habitual marker is its co-occurrence with the borrowed Hindi adverb *hamefa* (‘always’). Chhitkul-Rākchham currently finds itself at stage III. We may anticipate the next step. At the exact same time the marker *-ts* will develop into an assertive realis marker exclusively occurring in future tense constructions, *-a* will entirely replace *-ts* in its habitual function:

Table 63: a temporal reinterpretation of the originally aspectual suffix -ts in Chhitkul-Rākchham

Aspect	Tense	
<i>-ts</i>	-	Stage I
<i>-ts</i>	<i>-ts</i>	Stage II
<i>-a, -ts</i>	<i>-ts</i>	Stage III
<i>-a</i>	<i>-ts</i>	Stage IV

Harris and Campbell (1995) also explore the idea that 'grammaticalization' does not just follow one single track. They introduce (ibid, p. 50-1) some additional mechanisms of syntactic change, namely 'reanalysis' (Langacker 1977: 58), 'extension', and 'borrowing'.

The first mechanism "changes the underlying structure [constituency, hierarchical structure, category labels, grammatical relations, and cohesion] of a syntactic pattern and does not involve any immediate or intrinsic modification of its surface manifestation [morphological marking, word order]" (Harris and Campbell 1995: 61), with "ambiguity" as a prerequisite (Timberlake 1977).

'Extension' describes the reverse situation. That the sets of light verbs and auxiliaries are resistant to change, combined with metaphorical extension, leading to a change of category label, are clear illustrations of 'reanalysis', which has then more explanatory value than 'extension'.

'Borrowing' puts language contact into the equation. In this regard, tables 42 (see §4.7) and 70 (see §5.13) show that Chhitkul-Rākchham and Kinnauri share two copular auxiliaries, namely *to* and *tɔts*. *To* is attested in Shumcho (see §5.13), Patani or Manchad (Saxena 1992: 61), Tinan (Saxena 1992: 80) Kanashi (Grierson 1909, Sharmā 1992: 364), but not *tɔts*. The idea of a contact-induced linguistic transfer – commonly referred to as structural borrowing – is worth considering. There is more evidence that Kinnauri borrowed *to* and *tɔts* from Chhitkul-Rākchham than the reverse.

To start with, we can connect *to* and *tɔts* with *tɔŋ* ('to come') in Chhitkul-Rākchham, complying *en passant* with the cross-linguistically valid observation that whereas light verbs are morphologically identical to main verbs, it is only the case for auxiliaries at the initial stage (Butt and Lahiri 2002). In other words, the surface manifestation of *to* and *tɔts* as auxiliaries differs only slightly, as one should expect, from their main verb or light verb equivalent. Table 64 illustrates the distribution of main verb and light verb forms on the one hand, and auxiliaries on the other:

Table 64: Main verb and auxiliary forms for *tɔŋ* ('to come') in Chhitkul-Rākchham

Main verb	to-a (PROG)	tu-ti (PFV)	tu-te-∅	tu-no-∅	tu-ts (FUT.ASS)
Light verb			(IMPV-3)	(IRR.DUB-3)	
Auxiliary	-	to-ĩ (2SGHON)	tɔ-te-∅ (IMPV-3)	-	tɔ-ts (PEEX.HAB.ASS)

To as auxiliary is attested as verb root in *to-a* in Chhitkul-Rākchham. In comparison, *to* and *tɔts* do not fit as neatly in the Kinnauri verbal system. There are three lexical verbs that one may connect with *to* and *tɔts*, namely *to:f-i-mig* 'to sit, stay', *toŋ-mig*, 'to beat' (Bailey 1909: 677), and *ton-mig* (Bailey 1909: 683), 'to take out, pour out'. However, none of these verbs has *to* as verb stem, including in their most basic imperative form (*tof*, *toŋ*, and *tod*). Contrary to Chhitkul-Rākchham, where *to* and *tɔts* invariably have a different realization, the third person honorific form *tof* serves as both auxiliary (*to-∅-f* → to-PRS-3HON) and imperative for the lexical verb *toŋimig*, 'to sit, stay', in Kinnauri.

The three previously mentioned lexical verbs surface with the alternative Kinnauri 'imperfective' (Saxena 1995: 278) suffix *-id*, also used in some future tense constructions with an assertive flavour (factual future), hence *toŋ-id*, *toŋ-f-id*, and *to-f-id*.

Table 65: tense and aspectual inflections for Kinnauri *toŋimig* ('to stay, sit'), based on Bailey (1909: 682), Saxena (1995) and my own data

AUX		to-∅-š (PRS-3HON)		to-ke-∅ (PST-3HON)	-	tɔ-ts (PEEX.HAB.ASS)
<i>To:ŋimig</i> 'to sit, stay'	<i>tof</i> (IMP)	<i>toŋ-o</i> (PROG)	<i>toŋ-iŋ</i> (PFV)		<i>toŋ-e</i> (IRR.DUB)	<i>toŋ-id</i> (REAL.ASS)

Whereas *to* is the verb stem of *tɔŋ* in Chhitkul-Rākchham, the same form *tɔŋ* is a verb stem with a different meaning, 'beat', in Kinnauri. According to Moravcsik's (1978: 110), "structural borrowing is always preceded by lexical borrowing", this is precisely what seems to have taken place here.

From a semantic perspective, *to:ʃimig* 'to sit, stay', looks like a good auxiliary candidate from a semantic point of view, but note the long vowel. The other two previously mentioned lexical verbs have a meaning that is uncommon for an auxiliary. Following this lead, *to* in Kinnauri would have a different meaning from 'to come', contrary to Chhitkul-Rākchham and Shumcho.

I contend in the next section (see table 70), that the Kinnauri auxiliary *du* has a similar meaning to 'to sit, stay', which suggests that there is either no connection between the lexical verb *to:ʃimig* and the auxiliaries *to* and *tɔts*, or *du* has a different (existential?) meaning. If we agree *du* is a borrowing from Tibetan, it would then have triggered that of *to* and *tɔts*, which also implies that the Kinnauri evidential system originally rested upon a binary distinction assertive vs. dubitative.

Copula auxiliarization as "a gradual *expansion* into the domain of the verbal paradigm" (Dik 2011: 58) is at odds with any weakening of meaning. There are only very few and small nuances, in terms of semantics, between *ʃen*, *ano*, *ta*, *to* and *tɔts* as copulas and the same forms used as auxiliaries. 'Grammaticalization' as it is usually defined has no foothold and 'semantic bleaching' has none either. Hopper and Traugott, as proponents of 'grammaticalization', advocate an approach that is not applicable to Chhitkul-Rākchham, but their observation that "reanalysis may not necessarily involve elements becoming more grammatical" (1993: 49) is particularly interesting.

Copula auxiliarization in Chhitkul-Rākchham, as an illustration of 'reanalysis', does not go in hand with "the increase of the range of a morpheme advancing from a lexical to a grammatical or from a less grammatical to a more grammatical status" Kurylowicz (1965: 52) because we are dealing with evidentiality, a functional-semantic domain, not a grammatical category. Copula auxiliarization is in accordance with Harris and Campbell's (1995: 61) prediction that "semantic change is involved in many of the reanalyses". Semantic change is fairly limited in the case of Chhitkul-Rākchham, and there is no change in the surface manifestation of the relevant forms. It is so because copula auxiliarization is the 'endpoint' from a diachronic perspective.

All five Chhitkul-Rākchham auxiliaries are copulas in the first place, which does not mean all copulas have to be expandable to the verbal domain. Three Chhitkul-Rākchham

auxiliaries (*a*, *ta* and *to*) inflect for tense or mood. Since *to* is among the three archetypal Chhitkul-Rākchham auxiliaries, the inclusion of *tɔts* in the set makes sense because it has the same underlying form. The last auxiliary from the list, *hɛn*, is peculiar. We have to remember that as a copula, *hɛn* occurs in complementary distribution with *a:ts*. Yet, in §5.3 I take *hɛn* to serve an auxiliary function when *a:ts* functions as a second verb. From lexical verb (see §6.4), converb and auxiliary, *hɛn* is losing some of its verbal attributes, which explains why the form only passed the test of a formal identification as auxiliary by a slim margin in §5.3. In the Chhitkul-Rākchham auxiliary system, *hɛn* is the harbinger of change, the only element that contradicts its stability over time.

The scenario outlined here suggests that evidentiality did not emerge recently in Chhitkul-Rākchham. Until the 21st century, the mainstream view regarding Lhasa Tibetan was that evidentiality had emerged only lately. According to Zeisler (2000: 40), referring to Agha (1993: 155-234) and Tournadre (1996: 219-241), “evidentiality as well as novelty are not grammatically encoded in Old Tibetan (mid-7th-end of 10th century A.D.) or Classical Tibetan (11th -19th century), but evidentiality is, at least partially, grammatically encoded in all modern Tibetan vernaculars”. According to Hill (2013a: 12), “in Classical Tibetan (12th-16th centuries) the testimonial use of *hdug* is common”, based on the *Gñah-khri-btsan-po* myth and the biography of *Mi-la-ras-pa* (*Mi-la-ras-paḥi rnam-thar*) by Gtsaṅ smyon He-ru-ka Rus-paḥi Rgyan-can (1452-1507). The legend of Dri-gum-bstan-po is less conclusive in this regard, which “tentatively suggests that the meaning of *hdug* as a testimonial emerged during the Old Tibetan period” (ibid).

The emergence of evidentiality in Tibetan is not a recent phenomenon, although we cannot trace it back to Proto Tibeto-Burman. One surmise is that the emergence of *hdug* as testimonial kicked off changes in the underlying structure of the language (a contrast with *yod*), resulting in the increased complexity of the system over time. In fact, what took place in Tibetan with *hdug* and *yod* is a good illustration of the ‘reanalysis’ process discussed earlier.

Zemp (2017) describes a similar pattern in Purik and other Tibetan varieties between the factual *jot*, originally “evidentially neutral” (ibid, p. 621), and *duk* (Purik) or *’dug*. Epistemic judgement emerges hand in hand with source of information in the resulting contrast of

‘reanalysis’: the testimonial contrasts with the factual (or assertive), which means it has an inherent dubitative flavour.

Comparative evidence within West-Himalayish is scanty. Widmer (2014: 555-6) makes a number of assumptions in the case of Bunan which I found problematic, but this is because ultimately, it boils down to what we take evidentiality to be.

I do not concur with Widmer’s observation (ibid) that in Kinnauri, Shumcho and Darma, “epistemic categories are expressed by periphrastic constructions consisting of a non-finite verb followed by a copula rather than finite inflected verb forms”, because I argue that in Chhitkul-Rākchham (and in Kinnauri), an inflected finite verb alone may convey an epistemic (evidential) distinction. In fact, the dichotomy finite vs. non-finite verbs in terms of evidentiality is not valid either in Darma (see §5.13).

Based on this supposed dichotomy, Widmer claims that “it is thus highly unlikely that epistemic categories represent an ancient grammatical feature within this subgroup” (ibid). If my surmise about Kinnauri having borrowed *du* from Tibetan and *to* and *tɔts* from Chhitkul-Rākchham are correct, the two other predating auxiliaries precisely express epistemic distinctions. In addition, I claim in §4.4.6 that *hen* as a copula was originally an emphatic (assertive) particle, which suggests the presence of an evidential system, however basic, from a relatively early stage.

Finally, according to Widmer (ibid), the “inconsistent morphosyntactic encoding” found in Bunan “indicates that the system may not be very old”. Based on my definition, this versatility is in no way “inconsistent”, it is only so when we take evidentiality as a grammatical category. Consequently, a scattered evidential system as a token of novelty is not conclusive.

5.13 A comparative perspective on auxiliaries within West-Himalayish

Within the so-called West-Himalayish subgroup, data on auxiliaries are available for Darma, Bunan, Shumcho and Kinnauri¹³³. Chhitkul-Rākchham and Kinnauri have the most

¹³³ Sharmā (2001b: 229) mentions one auxiliary in the case of Rongpo, namely *hī*.

elaborate system in terms of number of relevant forms and resulting evidential distinctions. Syntactic allomorphy is restricted to these two languages.

An auxiliary in ‘West-Himalayish’ invariably has a copula function, but the reverse is not always true. Only one of the two auxiliaries (*lee*) function as a copula in Darma (Willis 2007a: 333-5), and two of the three auxiliaries (*taç* and *to*) in Shumcho (Huber 2013). In Chhitkul-Rākchham and Kinnauri, roughly half of the copulas have an auxiliary function.

The morphological template of the auxiliary verbs within the ‘West-Himalayish’ subgroup shows some degree of variation. There are wider inflectional possibilities in Darma and Shumcho than in Chhitkul-Rākchham and Kinnauri, whereas Bunan exhibits only one type of inflection.

In Darma, Willis (2007a: 335) mentions two auxiliaries, *lee-* (existential) and *ni-* (equational), both “inflected for tense, aspect, mood, and agreement”. In addition, “in non-past forms, the agreement marker follows the tense marker, while in past forms, the agreement marker precedes the tense marker” (2007b: 93).

Shumcho (Huber 2015) has a relatively similar system, where the auxiliaries *taç*, *to* and *wan* inflect for tense and agreement, mood and agreement, or aspect (*wan* only). The whole set of auxiliaries in Darma and Shumcho consists of compound forms.

Based on my own data, Kinnauri exhibits five auxiliaries, *ni*-, *nito*, *du*, *to*, and *tɔts*, two of which (*du* and *to*) are part of Saxena’s (2017) description, three of which (*du*, *to* and *ni*) of Sharmā’s (1988)¹³⁴. We all agree that an auxiliary in Kinnauri, like in Chhitkul-Rākchham, may inflect for negation and agreement. My analysis diverges from Saxena’s, however, in that an auxiliary may also inflect for aspect (habitual-assertive), as in *tɔ-ts*, and mood (irrealis-dubitative), as in *ni-to-∅*. I oppose Saxena’s claim (see table 59), that present tense is not overtly marked (-∅) on auxiliaries (see §4.1.2), contending instead it is not marked at all.

In Bunan, Widmer (2014: 640) identifies five types of periphrastic constructions involving the copulas *jen*, *ni*, *de*, and *ta*. The previous set inflects only for negation, but encodes

¹³⁴ For examples with *ni*, see Sharmā (1988: 143, 146, 163).

categories such as tense, number, subject agreement, and “conjunct-disjunct”. Widmer characterizes these constructions as “periphrastic” when negation is “predominantly expressed on the auxiliary, i.e. constructions of the type V-NFIN NEG-AUX” in contrast with “simple” constructions where negation is “commonly expressed on the main verb, i.e. constructions of the type NEG V-FIN” (ibid, p. 618). What Widmer refers to as “assumptive” forms, *tek*, *t^hek*, *tendzi* and *t^hentc^hok* (ibid, p. 636-638) “may go back to a non-finite verbal form that was followed by the equative copula *jen*”.

Table 66: morphological template for auxiliaries within the ‘West-Himalayish’ subgroup based on Willis (2007a), Huber (2015), Saxena (2017), Widmer (2014), and my own data

Darma	Shumcho	Chhitkul- Rākchham	‘Standard’ Kinnauri	Bunan
AUX-AGR- TNS ¹³⁵	AUX-TNS-(AGR)	AUX-(IMPV)-AGR	AUX-(TNS)-AGR	AUX.TNS.SG
AUX-TNS- AGR ¹³⁶	AUX-MOOD- AGR	AUX-(IMPV)-(AGR)	AUX-MOOD-AGR	AUX.TNS.PL
AUX-ASP	AUX-ASP	AUX-MOOD-AGR	AUX-ASP	AUX.DJ.PL
AUX-MOOD		AUX-ASP	AUX	AUX.DJ.SG
AUX		AUX		AUX.CJ
				AUX.AGR
				AUX

The most common templates are AUX-TNS-AGR and AUX-ASP.

Imperfective aspect, irrealis mood and subject agreement go in hand in Chhitkul-Rākchham and Kinnauri, but Huber (2013: 225) observes that “a main verb may be marked for aspect and have an auxiliary that is marked for tense but not for subject agreement” in Shumcho.

In Chhitkul-Rākchham, Kinnauri, and Shumcho, no auxiliary follows a main verb inflected for imperfective, past (both regular *-e/-ɔ/-a/-ø* and distant *-gyo* in Kinnauri), irrealis, and subject agreement, which indicates that one important function of auxiliaries is to express TAM and subject agreement distinctions when the main verb does not do so in the first place.

¹³⁵ In past tense forms (Willis 2007b: 93).

¹³⁶ In non-past tense forms (ibid).

A main verb inflected for aspect allows for auxiliiation in Chhitkul-Rākchham and Kinnauri (PROG *-o*, IMPF *-ts* and *-ld*, PERF *-ls*). Huber (2013: 226-7) lists five aspectual markers in Shumcho, with three resulting patterns: “perfective *-mɪn* and imperfective *-ɪ* may appear in constructions involving an auxiliary, progressive *-ʊ* must appear with an auxiliary, and perfective *-ʊ* and *-ɾɪʊ* do not appear in auxiliary constructions”.

Evidence from Shumcho suggests that the main verb and the auxiliary may inflect for aspect simultaneously, for the same type of aspect (Huber 2015: 5) or different aspects altogether (Huber 2013: 226). Only the latter configuration is found in Chhitkul-Rākchham and, based on my own data, in Kinnauri.

With regard to tense, we may divide the five languages into three groups depending on how many distinctions the respective sets of auxiliaries may express.

In Bunan and Chhitkul-Rākchham, whenever an auxiliary encodes a tense distinction, it is past tense only. Auxiliaries in Shumcho inflect for either past (*to-re*, Huber 2015: 6) or future tense (*waŋ-ro*, *ibid*, p. 7), present tense being “expressed by the use of the bare roots” (Huber 2013: 227). In Kinnauri, Saxena claims there are up to two tense distinctions per auxiliary, which is also the case in Darma, where *lee* may inflect for past (*lee-ju*, see Willis 2007b: 99) and non-past (*lee-ni*, 2007a: 336), and *ni* for future (*ni-yang*, 2007b: 104).

Table 67: tense inflections taken by auxiliaries within the West-Himalayish subgroup based on Willis (2007a), Huber (2015), Saxena (2017), Widmer (2014)

Shumcho	Darma	Chhitkul-Rākchham	‘Standard’ Kinnauri
taç-e (PST)	lee-ju (PST)	ta-se (PST)	du-∅ (PRS)
to-re (PST)	lee-ni (NPST)	to-te (PST)	to-∅ (PRS)
waŋ-ro (FUT.DUB)	ni-yang (FUT)		du-ge (PST)
			to-ke (PST)
			ni-to (FUT)

Subject agreement markers may combine with tense (or mood), but not aspect. A subject agreement system has been described for the five previously mentioned languages and for the other languages commonly assigned to the ‘West-Himalayish’ subgroup: Manchad

(Francke 1909: 78–86), Tinan (Francke 1909: 78-97), Rongpo (Zoller 1983: 66-71), Byangsi (Sharmā 2001b: 306-9), and Chaudangsi (Krishan 2001a: 417-9).

We may assume subject agreement is also marked on auxiliaries in these languages¹³⁷, but data is too scarce to include them in this study. Based on diachronic developments, three different patterns emerge.

Francke’s (1909: 65-77) data suggests Bunan had a “full-fledged person agreement system” (Widmer 2014: 570) one century ago. *Stricto sensu*, the Bunan system of subject agreement is limited to first person agreement forms in the past tense (ibid, p. 562), second forms in present tense interrogatives (ibid, p. 566), and non-first person forms. Subject agreement is only marked on main verbs, not on auxiliaries.

Darma has a basic agreement system: “agreement is overtly marked for first person plural, second person singular and second person plural. The same morpheme (-n) is used to mark agreement for all three” (Willis 2007b: 94). In addition, “second person plural non-past forms occasionally appear with ni” (ibid). The second person singular non-honorific form -n is described (Saxena 1997, DeLancey 2014: 5) as a well-retained feature of proto-TB among ‘West Himalayish’ languages. What Darma shares with Bunan is an agreement system in obsolescence.

We may assign Chhitkul-Rākchham, Kinnauri and Shumcho to a third group of languages where the subject agreement system is more complex. There is no overt marking on third person, and honorific distinctions are limited to second person singular in Chhitkul-Rākchham.

Table 68: subject agreement markers on auxiliaries in Darma (Willis 2007b), Chhitkul-Rākchham, ‘Standard’ Kinnauri (Saxena 2017: 765, Huber 2017: 55) and Shumcho (Huber 2015, 2017: 55)

Person	Darma	Chhitkul-Rākchham	‘Standard’ Kinnauri	Shumcho
1SG	-∅	-k	-k	-k ^h
2SGNHON	-n	-n	-ñ	-n

¹³⁷ Referring to Saxena (1992: 61, 77), subject agreement on auxiliaries is attested in Patani and Tinani.

2SGHON		-ĩ	-n	-na, -i
3SGNHON	-∅	-∅	-∅, -t, -d	-∅
3SGHON		-∅	-š	-ɕ
1PL INCL	-n	-tʃ	-(m)e	-ɕ, -ĩ
1PL EXCL		-tʃ	-tʃ	-ɕ, -ĩ, -k ^h
2PLNHON	-n(i)	-tʃ	-š, -tʃ	-ɕ, -ĩ
2PLHON			-n	-ɕ, -ĩ
3PLNHON	-∅	-∅, -tʃ	-š	-∅
3PLHON		-∅, -tʃ	-∅	-ɕ

Negation results in three very distinct patterns although all five languages share the prefix *ma-*. A first group of languages consists of Darma and Shumcho. In the former, Willis (2007a: 369) contends “the negative is found on finite and non-finite verb forms”, never on the two auxiliaries discussed previously. Similarly, negation is marked on lexical verbs in Shumcho.

In Bunan, whenever we are dealing with an auxiliary construction, negation is predominantly marked on the auxiliary, but this is not a fast rule.

The third group consists of Chhitkul-Rākchham and Kinnauri, where negation can indiscriminately occur on either the lexical verb or the auxiliary. In these two languages, the set of auxiliaries includes forms that can be negated (*ano*, *ta* and *to* in Chhitkul-Rākchham, *nito*, *du* and *to* in Kinnauri) and forms that may not (*hɛn* and *tɔts* in Chhitkul-Rākchham and *ni:* and *tɔts* in Kinnauri). Those auxiliaries that cannot be negated¹³⁸ convey assertive (*hɛn* and *ni:*) and personal assertive (*tɔts*) evidentiality. Table 69 sums up whether auxiliary verbs in the five languages may inflect for negation or not:

Table 69: negative placement in auxiliary constructions in Darma, Shumcho, Bunan, Chhitkul-Rākchham and ‘Standard’ Kinnauri

Darma	Shumcho	Bunan	Chhitkul-Rākchham	‘Standard Kinnauri’
Lexical verb only	Lexical verb only	AUX (predominantly)	Either lexical verb or AUX	Either lexical verb or AUX

¹³⁸ *hɛn* can be negated as a copula (*maʔɛn*) and so may *ni:* (*mani*) in Kinnauri.

			Lexical verb only with <i>hɛn</i> and <i>tɔts</i>	Lexical verb only with <i>ni:</i> and <i>tɔts</i>
--	--	--	--	--

From a semantic perspective, the situation is more homogeneous. Auxiliaries are verbs of motion ('to come', 'to go'), action ('to keep', 'to hold', 'to put'), location or existence ('to sit', 'to stay'), action-change of state ('to happen, become'). Chhitkul-Rākchham (*hɛn*) and Bunan (*jen*) add 'to hear'.

The same form *ni* (alternatively, *ni:*) is found in Darma, Bunan and Kinnauri, but not in Shumcho and Chhitkul-Rākchham. Interestingly, *ni* has an equational copula in Darma, but an existential one in Bunan. Kinnauri finds itself in an intermediary situation: referring to Saxena (1995: 266, 269), *ni* has both an equational and existential function.

The auxiliary *to* is attested in Shumcho, Chhitkul-Rākchham, Kanashi, and Kinnauri. In the first two languages, it has the meaning of 'to come'.

In most languages of the subgroup (Darma excepted¹³⁹) there is a pair of twin forms, one of which is *ni*, the other the origin of which we can trace back to /n/. As shown in table 68, Bunan has *jen* and *ni*, Chhitkul-Rākchham *hun* and *hɛn*, Kinnauri *ni:* and *nito*. Shumcho is a special case: *waŋ* is the only form we can trace back to *-way, but Huber (personal communication) makes mention of the verb *huŋma* used instead of *waŋma* by Shumcho speakers from Jangi village. Since Chhitkul-Rākchham *hɛn* has a syntactic allomorph in *hun*, syntactic allomorphy may also be attested in Shumcho.

Widmer (2014: 601) claims that *de* "is not attested as a copula [nor as auxiliary] in any other West Himalayish language (...) comparative evidence suggests that the copula represents the grammaticalized form of an old verb with the meaning "to go"". *De* has cognates in several languages from the subgroup, notably Darma *dee-mu* (Willis 2007a: 362). The grammaticalization path from 'to be' to 'to go' would be the result of language contact with Western Tibetan varieties¹⁴⁰, where a copula with a similar attributive function (and evidential meaning), *duk*, is attested, for example in Purik (Bielmeier 2000: 89-92).

¹³⁹ *Hen* serves however as non-past tense marker in Darma (Willis 2007: 539).

¹⁴⁰ Evidence from Lamjung Yolmo, spoken in Nepal (the auxiliary *dú* and its emphatic equivalent, *dúba*, having the meaning of 'exist') shows that its occurrence is not circumscribed to 'West-Himalayish' (Gawne 2014: 77, 164).

Kinnauri *du* is similar to Bunan *de*, but we cannot trace it back to an old verb with the meaning of ‘to go’, the Kinnauri form of which is *bimig* (Bailey 1909: 681). We cannot link *du* with any lexical verb either. The parallel with Lhasa Tibetan *hdug* is striking. The latter originally had the meaning of ‘sit, dwell, reside, stay’ (Delancey 1992: 52) or ‘sit, remain, stay’ (Hongladarom 1994: 673; Ebihara 2017: 41)¹⁴¹. Referring to Old Tibetan, Hill (2013) describes *hdug* as “existential”. In case Kinnauri *to* is derived from *tōshimig* ‘to sit, stay’, then *du* must have a different meaning. There is a close correspondence between Chhitkul-Rākchham *tasaj* (‘to put, keep’) and Kinnauri *tamig*, ‘to place’ (Bailey 1909: 681), ‘to keep’ (Saxena (2017: 763). *Ta* as auxiliary would have made sense in Kinnauri too, which makes the hypothesis of *du* as a borrowing from Tibetan even more likely.

Table 70 lists the auxiliaries found in the previously five ‘West-Himalayish’ languages and provide, whenever possible, the infinitive form and the meaning of the lexical verb to which they refer.

Table 70: infinitive forms and meaning of auxiliary verbs in Darma (Willis 2007), Bunan (Widmer 2014), Shumcho (Huber 2013, 2015), Chhitkul-Rākchham and Kinnauri (Bailey 1909; Saxena 1995)

Darma			Bunan			Shumcho		
AUX	INF	Meaning	AUX	INF	Meaning	AUX	INF	Meaning
<i>lee</i>	-	‘be, become, happen	<i>jen</i>	-	‘to hear, listen, obey’	<i>taɕ</i>	<i>ta:me</i>	‘to keep, put’
<i>ni</i>	-	EQ	<i>ni</i>	-	EX	<i>to</i>	<i>tɔme</i>	‘to come’
			<i>de</i>	-	‘to go’ ¹⁴²	<i>waŋ</i>	<i>waŋme</i>	‘to happen, become’
			<i>ta</i>	-	‘to keep, hold’ ¹⁴³			

Chhitkul-Rākchham			Kinnauri		
AUX	INF	Meaning	AUX	INF	Meaning
<i>hɛn</i>	<i>ɛnaŋ</i>	‘to hear’	<i>ni:</i>	<i>nimig</i>	‘to be, become’

¹⁴¹ According to Bielmeier (2000: 88), *duk* in Purik has the meaning of ‘to sit (down), to stay, to remain, to be situated’.

¹⁴² Widmer (2014: 601).

¹⁴³ Widmer (2014: 608).

<i>ano</i>	-	'to be'	<i>nito</i>	<i>nimig</i>	'to be, become'
<i>ta</i>	<i>tasəŋ</i>	'to keep, put'	<i>du</i>	-	EX?
<i>to</i>	<i>tɔŋ</i>	'to come'	<i>to</i>	<i>tōshimig?</i> ¹⁴⁴	'to sit, stay'
<i>tɔts</i>	<i>tɔŋ</i>	'to come'	<i>tɔts</i>	<i>tōshimig?</i>	'to sit, stay'

I show in §6.4 that /n/ became fused with /ma/ (*man*), /hu/ (*hun*) and /he/ (*hen*), with *hu* and *he* originally demonstratives reanalyzed as verbs (*hunəŋ* 'to live, stay', and *enəŋ*, 'to hear'). I also posit that /n/ is a shortening of the copula and auxiliary *hen*, hence *man* is a contraction of *mahen*, and the particle *no* a contraction of *hen=o*, see §8.2. Rather than the result of a fusion process between *way and *g-na-s (DeLancey 2008), syntactic allomorphy is the driving factor behind the nasal /n/ in Chhitkul-Rākchham.

The form *hekso* also suggests the base takes person agreement¹⁴⁵ as well (see table 80 in §6.4).

In addition, *hen* takes the negative prefix *ma-* when it serves a copula function, but not as auxiliary. In Kurtöp (Hyslop 2011a: 464), *wen* only occurs as a copula and has a suppletive negative form, *min*. Bumthang (Wyatt 2017: 65) *wen*, as a copula, does not take the negative prefix either. However, *wen* also serves an auxiliary function, although it "occurs only rarely" (ibid, p. 69). Negative forms excluded, the presence of two emphatic copulas is a feature that extends to languages such as Kurtöp (Hyslop 2011a) and Bumthang (Wyatt 2017).

Tables 71, 72, 73, 74 and 75 provide an overview of the morphosyntactic expression of evidentiality in 'West-Himalayish'. In terms of evidential meaning, I stay truthful to the denominations used by the authors themselves. However, relying on my own definition of evidentiality, I add one evidential category (assumptive) in the case of Bunan. Regarding Shumcho, Huber (2015: 10) discusses the semantics of *taɕ* and *to* and he also makes mention of *waŋ-ro* (ibid, p. 7), describing the form as 'simulative' and 'speculative'. Finally, he refers to two different types of future, one 'certain', and one where "the speaker merely considers the possibility" (2013: 236). I include these distinctions in table 73.

¹⁴⁴ See Bailey (1909: 670, 682) and Saxena (1995: 278).

¹⁴⁵ With regard to Bunan *jen*, Widmer (2014: 583) observes "there is evidence that the copula was originally fully inflected for person and number".

One has to consider the whole main verb complex, not just the auxiliary, to gain a precise overview of the morphosyntactic expression of evidentiality. The expression of evidentiality is conditioned by verb class (transitive, intransitive, middle), as in Darma and Bunan, verb form (stem, finite, non-finite), and type of inflection (INF, NOM, TAM). The combination V-TNS-AGR precludes auxiliation in Shumcho and Kinnauri. In Chhitkul-Rākchham, it is the combination V-IMPV-AGR, but we have to remember perfective and imperfective distinctions are expressed within past tense (§3.1.1.2). The absence of any auxiliary after some V-ASP configurations in Shumcho is an indication that a finite verb may have a different template than V-TNS-(AGR). Darma provides evidence that the dichotomy finite vs. non-finite is not always relevant in the expression of evidentiality.

The morphosyntactic expression of evidentiality varies greatly among the five languages. While in Shumcho, Kinnauri and Chhitkul-Rākchham this expression is mostly realized by a combination non-finite verb AUX, Bunan relies more widely on suffixes, notably in the past tense, like in Sunnami, Darma, Chaudangsi (Krishan 2001a: 418) and Byangsi (Sharmā 2001a: 56-7). In terms of reported evidentiality, Chhitkul-Rākchham and Kinnauri stand apart, sharing a quotative construction that includes an adverb with the meaning of ‘like’ and at least two lexical verbs.

Table 71: the morphosyntactic expression of evidentiality and the resulting evidential categories in Darma (Willis 2007b: 95)

Construction	Evidential meaning
V (finite or non-finite) <i>lee</i> V-NOM <i>lee</i> (inflected)	General knowledge/indirect (assumed)
V (finite or non-finite) <i>ni</i> V-NOM <i>ni</i> (inflected)	Direct/visual
V _{STEM} + FUT <i>lee</i> V _{STEM} <i>ya lee</i> V _{STEM} <i>lee</i>	Inferred
<i>la</i> ('to say, call') <i>leeda</i> (third person singular non-past form of 'to say, call')	Reported

Table 72: the morphosyntactic expression of evidentiality and the resulting evidential categories in Bunan (Widmer 2014: 539-551, 640-645)

Construction	Evidential meaning
V- <i>dza</i> and V- <i>ts^ha</i> (past tense)	Direct/perceptual
V _{INTR} or V _{MID} - <i>dzi</i> (singular) V _{INTR} or V _{MID} - <i>tɕ^hok</i> (plural) V _{TR} - <i>ta</i> V-INF <i>ni</i> V-INF <i>de</i>	Inferred Inferential future based on personal knowledge and past conditional Inferential future based on perception
V _{INTR} and V _{MID} - <i>tek</i> V _{INTR} and V _{MID} - <i>t^hek</i> V _{INTR} and V _{MID} - <i>tendzi</i> V _{INTR} and V _{MID} - <i>t^hentɕ^hok</i>	Assumptive
V-INF + <i>jen</i> (present tense) V _{STEM} -ACT= <i>jen</i> V _{STEM} -ACT= <i>jendzi</i> V _{STEM} -ACT= <i>jentɕ^hok</i> V _{INTR} and V _{MID} - <i>kani</i> : (NON1SG) V _{INTR} and V _{MID} - <i>k^hak</i> (NON1PL) V _{TR} - <i>kata</i> (NON1SG) V _{TR} - <i>kat^hat</i> (NON1PL)	'Generic'/factual
<i>riŋ-men</i> 'to say' (INTR) <i>lot-tɕ-um</i> 'to say' (TR)	Reported

Table 73: the morphosyntactic expression of evidentiality and the resulting evidential categories in Shumcho (Huber 2015)

Construction	Evidential meaning
V (non-finite) <i>to</i>	Personal experience
V (non-finite) <i>taɕ</i>	Perceptual
V (non-finite) <i>waŋ</i>	Simulative/speculative

V-FUT	
V-FUT-AGR	Factual
Inflected form of the verb <i>riŋ</i> (<i>riŋ-i</i> , <i>riŋ-u taç(e)</i>), 'to say'	Reported

Table 74: the morphosyntactic expression of evidentiality and the resulting evidential categories in Kinnauri, based on Saxena (1995, 2000, 2007, 2017) and my own data

Construction	Evidential meaning
V (non-finite) <i>ni</i> : V-HAB	Factual
V (non-finite) <i>nito</i> V-FUT-AGR	Dubitative
V (non-finite) <i>du</i>	Perceptual
V (non-finite) <i>to</i>	Personal experience
V (non-finite) <i>tɔts</i>	Personal experience-factual
Hearsay clitic = <i>e</i> Adverbs <i>hode</i> , <i>hone</i> , <i>hoje</i> + Inflected form of <i>riŋ</i> (when referring to the speaker) and <i>lo</i> (someone else), both meaning 'to say' – quotative	Reported

Table 75: the morphosyntactic expression of evidentiality and the resulting evidential categories in Chhitkul-Rākchham

Construction	Evidential meaning
V-PFV or V-PROG <i>hɛn</i> V-HAB	Factual
V (non-finite) <i>ano</i> V-IRR.DUB-AGR	Dubitative
V (non-finite) <i>ta</i>	Perceptual
V (non-finite) <i>to</i>	Personal experience
V (non-finite) <i>tɔts</i>	Personal experience-factual

Hearsay clitic =e Adverb <i>he</i> ('like') + inflected form of <i>riŋ</i> <i>loŋ</i> when referring to someone else – quotative	Reported
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All the tables discussed in this section shed light on the very close relationship between Chhitkul-Rākchham and Kinnauri. Their templates, range of inflections, negation strategies and evidential meanings are similar. Bailey (1909: 669) provides instances where the auxiliary *du* occurs in conditional clauses, the same way *ta* does in Chhitkul-Rākchham.

A difference is that *du* in Kinnauri inflects for subject agreement in both past (also distant: *du-gyɔ*, Saxena 2002) and in contexts with a present tense reading, including with first person singular. Thus, *du-k* is attested in the present tense (Sharmā 1988: 161; Saxena 1995, 273, 278) and *du-ge-k* in the past. A most plausible explanation for this peculiar feature of the Kinnauri *du* has to do with our assumption that it is a borrowing from Tibetan, where the 'testimonial' *hdug* (Hill 2013) may occur with first person (see DeLancey 2001: 374 for an example).

The five languages discussed in this section exhibit so sharp differences in terms of auxiliary system that based on evidentiality alone, we may refrain from assigning them to the same 'West-Himalayish' subgroup.

5.14 Concluding remarks on the Chhitkul-Rākchham auxiliaries

5.14.1 V₁ V₂ AUX as one syntagmeme

In non-copula clauses, the epicentre of the expression of evidentiality is located in the 'main verb complex' consisting of a hierarchical arrangement of a main verb, possibly a second verb, and an auxiliary. The 'main verb complex' is based on the concatenation of three units or 'tagmemes', each of which possibly conveying evidential distinctions, although not all three simultaneously.

I characterize the 'main verb complex' as a three-level hierarchical arrangement where the main verb comes first as the only 'tagmeme' that can stand alone. In case the main verb

(or the ‘second verb’) inflects for *-no* or *-ts*, the auxiliary either cannot occur at all, or only adds an evidential nuance. The auxiliary carries the whole evidential load if, and only if, the main verb inflects for PROG and PFV, which again highlights the subordinative relationship of the auxiliary towards the main verb: the set of available auxiliaries is conditioned by the inflection taken by the main verb. V-*ts* is a special case: *ta*, *to* and *hɛn* may follow, but not *ano* and *tɔts* (because these two are epistemically incompatible with *-ts*), the ultimate proof one has to consider the whole arrangement V AUX.

The widely shared claim that evidentiality in Tibeto-Burman languages is expressed by means of copulas in copular clauses and auxiliaries in non-copula constructions is very partial because it ignores the indefectible link between the three verbal components and the primacy of the main verb within this structure. Aikhenvald’s (2004: 70) observation, “that I have not found any convincing examples of evidentials expressed with serial verb construction may be accidental”, stems from a too rigid definition of evidentiality. It is nevertheless interesting that Aikhenvald leaves the door open on that matter.

The same way the treatment of *to* and *tɔts* as distinct copulas in chapter 4 is indicative of the validity of Harris’s (1951) approach and Frege’s (1884) ‘Principle of Semantic Compositionality’, so is the view of V AUX (or V₁ V₂ AUX) as one syntagmeme. Benveniste’s (1974) approach whereby both the main verb and the auxiliary contribute to the actual meaning of the overall AVC (see §5.1.2.2) is also entirely consistent with my findings. If *a:ts ta* (V AUX) introduces a semantic (evidential) nuance compared to *a:ts* (V) alone, there is no other way but to treat V and AUX as parts of a unit.

Since I ascribe an evidential function to main and second verbs, it may be useful to go back to the suffixes *-no* and *-ts*, which I have so far glossed as IRR.DUB and HAB.ASS respectively. Ultimately, TAM distinctions lack accuracy. The suffix *-no* is not just an irrealis marker, but an irrealis marker with a dubitative flavour, and *-ts* is not just a habitual aspect marker, but a habitual aspect marker that is assertive. In other words, *-no* and *-ts* do not have a primary or a secondary meaning, they have one unitary meaning that emerges when we consider their distribution.

We understand now the fallacy of Aikhenvald’s (2004) ‘primary meaning’. By applying this concept to 500 different languages, she disregards the unique system of oppositions that

prevails in all of them. Consequently, what we obtain from her rough descriptions is a splintered overview of the evidential system in these languages. Aikhenvald would dismiss *-no* as evidential on two main grounds. She would ascribe to *-no* a reductive ‘primary meaning’ as ‘irrealis’ and the label ‘evidential strategy’ owing to its epistemic ‘second meaning’ or ‘overtone’. The meaning of *-no* is dubitative irrealis, however, and table 30 (§4.2.3) and 41 (§4.7.1) make it abundantly clear *hunno*, *a:no* and *ano*, as dubitative forms, are part of an epistemic scheme that includes source of information, access to knowledge and factuality. The sharp distinction Aikhenvald (2021: 1-2) keeps drawing between evidentiality, egophoricity and epistemic modality does not hold¹⁴⁶.

In addition, the examples provided in this thesis suggest all types of ‘main verb complex’ in Chhitkul-Rākchham have an evidential value, be it neutral in a V-IMPV-AGR configuration, or inferable from context when the auxiliary is ‘optional’, i.e when the main verb inflects for aspect in the first place.

Among the twelve copulas from chapter 4, five have an auxiliary function. All the remaining affirmative forms, as syntactic allomorphs, fulfil a ‘second verb’ function in non-copula clauses. Claiming that forms such as *hunts*, *hunno*, *a:ts*, *a:no*, and *tuts* have an evidential meaning as syntactic allomorphs but are devoid of it as ‘second verbs’ would be nonsensical.

5.14.2 The primacy of epistemic considerations

The same way the copulas participate in an overall epistemic scheme, the auxiliaries do:

Table 76: The Chhitkul-Rākchham auxiliary system arranged on an epistemic scale

Certainty

—————→

Dubitative	Perceptual	Personal experience	Assertive	Personal assertive
(ma)ano	(ma)ta	(ma)to	hɛn	tɔts

¹⁴⁶ I leave aside for now the highly dubious category ‘mirativity’.

The epistemic scheme is especially discernible in an example like (112) where no fewer than seven possibilities, of which five include an auxiliary, are available to the speaker. Since the perceptual auxiliary *ta* turns (112) into an irrealis construction, how could one rightly claim source of information and epistemic judgement should be treated separately? The primacy of epistemic considerations is a widespread phenomenon – see Caplow (2000: 77) in the Dokpa dialect of Tibetan, Willis (2007b: 96) in Darma, Hyslop (2014b: 204, figure 2) in Kurtöp, and Tournadre (2017: 100) in Tibetic languages. Their descriptions point to a conclusion that is never clearly formulated because evidentiality as a grammatical category denoting source of information is, still today, taken for granted by too many scholars. Time has come to take a step further and recognize that a clear-cut separation between source (and access) of information and judgement about the same is nowhere to be found, even less so within linguistics, the social science *par excellence*.

5.14.3 A highly subjective evidential system

Chapters 4 and 5 make the case for a highly subjective evidential system. To start with, if non-deictic forms (*hɛn*, *hunts*, *a:ts*, and *tuts*) are found in more or less equal number than deictic¹⁴⁷ ones (*hunno*, *a:no*, *ano*, *ta*, *to* and *tɔts*) in copula clauses, the situation is different when it comes to auxiliaries: among the set of five forms, only *hɛn* is non-deictic. Rather than an opposition ‘deictic’ vs. ‘non-deictic’, ‘subjective’ vs. ‘inter-subjective’ are more appropriate terms: the distinction ‘self’ vs. ‘other’ (Frawley 1992: 413) has more relevance than ‘direct’ vs. ‘indirect’ (Wilett 1988: 57).

The subjective dimension is reflected in the occurrence of two ‘egophoric’ auxiliaries, *to* and *tɔts*, occurring with all persons and only separated by a different level of assertiveness. *Ano*, *tase*, *tɔte* (with animates as subjects, i.e. inflected for subject agreement) and *tɔts* may only occur in the past if the speaker has witnessed the described event. In the same past context, the speaker selects *tase*, *tɔte* or *tɔts* based on pragmatic considerations. Like with copulas, a large set of auxiliaries is available to the speaker in many instances. Factors such as person or aspect may restrict the choice, but only to a very limited extent, as table 77 illustrates:

¹⁴⁷ The term ‘deictic’ refers to auxiliaries that mark the locutor (*to* and *tɔts*) and ‘constatative’ or ‘inferential’ auxiliaries where the locator is also involved (see Tournadre 1992 for a discussion).

Table 77: distribution of the Chhitkul-Rākchham auxiliaries according to person, tense and aspect

Auxiliaries	Person	Past tense value	Present tense value	Future tense value	PROG	PFV	HAB
<i>hɛn</i>	1 and 3	X	X	X	X	X	X
<i>ano</i>	All	X	X	X	X	X	-
<i>ta</i>	2 and 3	X	X	X	X	X	X
<i>to</i>	All	X	X	X	X	X	X
<i>tɔts</i>	All	X	-	-	X	X	-

Examples (115), (116), (117) and (118) indicate that a Chhitkul-Rākchham speaker may alternate between the perceptual *ta* and the personal experience (‘egophoric’) *to*, and is in no way bound to using the latter when she has personally taken part to an event or has a fully integrated knowledge of the same. The choice of auxiliary is in many instances not exclusive: the speaker herself has the final word and syntax plays a secondary role.

Chapter 6: the expression of reported evidentiality by means of =e and *he*

Copulas and auxiliaries are far from being the only morphosyntactic devices serving the expression of evidentiality, as the present chapter and chapters 7, 8 and 9 will show.

The expression of reported evidentiality is realized at the verbal level by means of the hearsay clitic =e (§6.1), attaching to either the copula verb, the main verb (or second verb) or the auxiliary, and the quotative adverbial complementizer *he* ('like') followed by a verb of saying (§6.2). I show in §6.3 how object marking conditions the choice of a verb of saying, providing on the occasion a succinct overview of auxiliatio. §6.4 includes a diachronic discussion about the hearsay clitic =e and the quotative *he* where I establish that both share the same origin, the lexical verb *εναη* 'to hear'. §6.5 is a discussion about both syntactic devices from a comparative perspective. Finally, §6.6 provides a few concluding remarks.

As discussed in §6.1 and §6.2, both =e and *he* do not only occur at the verbal level. The clitic =e does so at the NP level (see §9.1.3), and the occurrence of *he* may coincide with a non-verbal utterance, as in (183). Alternatively *he* as a complementizer may precede a verb that is not a verb of saying, as in (184) and (185), which means, =e and *he* do not exclusively express reported speech evidentiality.

6.1 The hearsay clitic =e

I first discuss =e in connection with the syntagmeme $V_1 V_2 AUX$ (§6.1.1), before investigating the clitic as hearsay marker (§6.1.2)

6.1.1 Introductory remarks on the distribution of =e vis-à-vis $V_1 V_2 AUX$

In the following three examples, =e treats the main verb and the auxiliary as one single syntactic unit: it is attached to the main verb when the main verb occurs alone, to the second verb in a $V_1 V_2$ construction, and to the auxiliary in $V AUX$ or $V_1 V_2 AUX$ constructions. The distributional properties of =e indicate that we are right to take the

main verb, the second verb, and the auxiliary as three tagmemes that belong to the same syntagmeme.

In many instances, =e occurs in clause-final position, but this is not a fast rule. In (112), the querying particle *na* follows *tuts ta*, the distinctive syntactic unit of which is highlighted by =e.

In (163), =e treats V AUX as one unit, attaching to one - the main verb *malati* – or to the other, but it cannot attach to the main verb in case there is an auxiliary, as in *latfa anoe*. The clitic may also attach to a discourse particle, for example *na* in (164). The clitic invariably occurs in clause-final position, which makes sense in light of its syntactic function (hearsay) at the clausal level:

- (163) jo=∅ mun=i ni-r=i prɛs=∅ latf-a kamaŋ=∅
 3SG.NHON=ABS night=LOC day-E=LOC ironing=ABS do-PROG work=ABS
 latf-a a-no-∅=e sui=e ã sui=e
 do-PROG AUX-IRR.DUB-3=HSY tailor=GEN INTERJ tailor=GEN

 teɪləriŋ=∅ latf-a mun=i hojo jo=∅
 tailoring=ABS do-PROG night=LOC DEM.DIST 3SG-NHON=ABS
 bidʒl-i:=∅ band ma-la-ti=e prɛs=∅ ɔn=o
 electricity-FEM=ABS switched off NEG-do-PFV=HSY ironing=ABS on=LOC

 ta-i ta-fi
 keep-PFV keep-PFV

‘At night, he may be ironing and stitching (clothes) (I hear), that night power was not switched off, and he left the iron on’

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- (164) ma-tu-ts t^ha ma-tu-ts ma-tu-ts batfpan=∅
 NEG-come-HAB.ASS now NEG-come-HAB.ASS NEG-come-HAB.ASS childhood=ABS
 mā batfpan=∅ ta wa:pas ma-tu-ts kab^hi: lo
 REFL childhood=ABS COP.PE back NEG-come-HAB.ASS never either

ma-tu-ts na=e
NEG-come-HAB.ASS PTCL.QUER=HSY

‘Now it will not come (back), it will not come (back), (our) own childhood will not come back, it will never come back (I hear), will it?’

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6.1.2 The clitic =e as a marker of reported (hearsay) evidentiality

The available literature on the morphosyntactic expression of reported evidentiality is often explicit in postulating a strict distinction between two types: “the most common distinction is that between reported (stating what someone else has said without specifying the exact authorship) and quotative (introducing the exact author of the quoted report)” (Aikhenvald 2004: 177). In her ‘summary of information sources throughout the world’, Aikhenvald (ibid, p. 64) uses the term ‘hearsay’ instead of ‘reported’, although the definition does not differ: “reported information with no reference to those it was reported by”¹⁴⁸.

Mithun (1999: 184) uses the term ‘hearsay’ to characterize the former type in Central Pomo: “prototypical hearsay evidentials, which indicate verbal evidence from unspecified persons, are distinct from quotative makers used in citing the words of a specific speaker”. Thus, if we believe these two scholars, both ‘reported’ and ‘hearsay’ refer to the same type of evidential and reported speech is more often than not a hermetically compartmented binary system: the ‘reported’ or the ‘hearsay’ evidential reports speech that leaves the source of information unspecified whereas the quotative connects reported clause to one or several identifiable individuals.

The same simplicity characterizes Willett’s (1988: 96) typology. Willett distinguishes second-hand and third-hand evidence. The former refers to “the speaker claims to have heard of the situation described from someone who was a direct witness” (‘he says’ constructions) whereas the latter characterizes those situations where “the speaker claims to have heard about the situation described, but not from a direct witness” (typically, ‘I heard’, ‘people say’, or ‘it is said’ constructions). With a dual system, one would expect a

¹⁴⁸ In Aikhenvald (2018), the same summary includes the term ‘reported’ with the exact same definition.

morphosyntactic device to cover Willett's definition of 'second-hand' and another to cover 'third-hand'.

The previous typologies fail to take into account insights from several Tibeto-Burman languages (see §6.5). Chhitkul-Rākchham does not fit with these in several respects: from a diachronic perspective (see §6.4), the hearsay clitic *=e* and the quotative *he* have a common origin, the lexical verb *ɛnaŋ* 'to hear'. The former may only occur if the subject of the reporting clause is identifiable, a 'direct witness' in Willett (1988). Whether it is optional or obligatory has to do with definiteness, person, and specificity. In impersonal constructions starting with 'they say' (where 'they' does not refer to an identifiable group), 'it is said', or 'some people say', the hearsay clitic does not occur. With 'I hear' constructions, it is obligatory. The quotative construction typically introduced by *he* may include an impersonal subject. Chhitkul-Rākchham thus flouts many of the parameters discussed above.

The hearsay clitic *=e* occurs in narratives (although not first-person) and in standard speech. Leaving aside non-propositional evidentiality for now, its consistent clause-final position and "low degree of selection with respect to its hosts" (Zwicky and Pullum's (1983: 503) indicate we are dealing with a clitic. Referring to Klavans (1985), *=e* attaches to the final constituent of the 'main verb complex' (the 'dominance' parameter), invariably occurring after it or after any other syntactic element (the 'precedence' parameter). Finally, it serves as enclitic (the 'phonological liaison' parameter).

From a cross-linguistic perspective, however, one may argue clitics, like particles, refer to a rather versatile category. In terms of placement, clitics resemble suffixes, reason why Anderson (1992) uses the term "phrasal affix" instead. Anderson's observation makes sense, especially in light of the fact that *=e* is phonologically dependent on its host, and as such pronounced like a suffix. I nevertheless use the term clitic when referring to *=e* to the extent it reflects its morphological nature without concealing its function at the clausal level.

Definiteness governs the distribution of the hearsay clitic in Chhitkul-Rākchham. We may distinguish between three different situations when the reporting clause involves a verb of saying.

As shown in (165), (166), and (167) =e does not occur when the source of the report is impersonal. In (165), ‘it is said’ remains unexpressed. In (166), *mi:tfaŋ* ‘people’ is too vague, and so is *ts^hɔka mi:tfaŋ* ‘some people’ in (167):

(165) kinori pa:l=∅ nim-i riŋ-ã ta
 Kinnaurese apple=ABS tasty-MODIF say-PROG COP.PE

‘It is said Kinnaurese apples are tasty’ – DSN

(166) mi:-tfaŋ=∅ riŋ-ã to-∅ mata devi:=∅ tse kat=∅
 people-PL=ABS say-PROG AUX.PEEX-3 Mata Devī=ABS QNT language=ABS

ts^ha:-ts
 know-HAB

‘People say Mata Devī knows all languages’ – DSN

(167) ts^hɔka mi:-tfaŋ=∅ kɔlf-a to-∅ al-i tsi:z=∅
 QNT people-PL=ABS speak-PROG AUX.PEEX-3 sweet-MODIF thing=ABS
 zo-i ma-a:-ts
 good-MODIF NEG-COP-HAB.ASS

‘Some people say sweet things are not good (for one's health)’ – DSN

When the reporting clause involves a second person pronoun, the hearsay clitic =e is optional. In (168), the hearsay clitic may attach to whichever copula (*ano, ta, to, tɔts, hɛn*) the subject of the reporting clause selected in the original utterance:

(168) kin=∅ riŋ-ã to-ĩ ɛme=∅ zo-i
 2SG.HON=ABS say-PROG AUX.PEEX-2SG.HON 3SG.HON=ABS good-MODIF
 mi:=∅ a-no-∅ / a-no-∅=e
 man=ABS COP-IRR.DUB-3 COP-IRR.DUB-3=HSY

‘You say that he may be a good person’ – DSN

With third person subjects, the hearsay clitic is obligatory. In (169), the speaker of the report is also the subject of the embedded clause, whereas it is not the case in (170). The

use of a different subject agreement marker is what helps us distinguish between the two. In both cases, the clitic is obligatory because the subject of the reporting clause is third person:

(169) $\epsilon me = \emptyset$ riŋ-ã to- \emptyset $\epsilon me = \emptyset$ k^huŋ to-k=e
 3SG.HON=ABS say-PROG COP.PEEX-3 3SG.HON=ABS happy COP.PEEX-1SG=HSY

‘He says he is happy’ (referring to himself) – DSN

(170) $\epsilon me = \emptyset$ riŋ-ã to- \emptyset $\epsilon me = \emptyset$ k^huŋ to- $\emptyset = e$
 3SG.HON=ABS say-PROG COP.PEEX-3 3SG.HON=ABS happy COP.PEEX-3=HSY

‘He says he is happy (referring to someone else) – DSN

Subjects with a lower prominence follow the same pattern as third person subjects. The hearsay clitic obligatorily occurs with proper names, as in (171), with nouns, as in (172) and (173), but also with ‘the man’, ‘that man’, ‘a man’, and ‘someone’:

(171) anita=tŋi riŋ-de- \emptyset $\epsilon me = \emptyset$ tse pa:l= \emptyset za-i ta=e
 anita=ERG say-IMPV-3 3SG.HON=ABS QNT apple=ABS eat-PFV AUX.PE=HSY

‘Anita said he ate all the apples’ – DSN

(172) sat=tŋi riŋ-ã to- \emptyset $\epsilon me = \emptyset$ zo-i mi:= \emptyset
 deit=-ERG say-PROG COP.PEEX-3 3SG.HON=ABS good-MODIF ma=ABS

to- $\emptyset = e$

COP.PEEX-3=HSY

‘The deity says that he is a good man’ – DSN

(173) te lo-a ne ko:w-a:= \emptyset ka-n= \emptyset ta mǎmǎ
 then say-PROG PTCL.ASS crow-MASC.SG=ABS 2SG.NHON-2SG=ABS COP.PE INT

ban^thin-i gret= \emptyset ta-ts kǎ a:= \emptyset mi:= \emptyset mǎmǎ

beautiful-MODIF song=ABS keep-HAB 2SG.NHON mouth=ABS etc=ABS INT

suril-a: ta=e
 melodious-MASC.SG AUX.PE=HSY

‘Then (the fox) says: "crow, you sing very beautiful song(s), your voice is very melodious”

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Finally, the hearsay marker never occurs with first person subjects. In (174), we are not dealing with reported speech, but with the speaker’s personal opinion, hence the use of the auxiliary *to*:

(174) ga:=∅ riŋ-ã to-k hojo mi:=∅ zo-i
 1SG=ABS say-PROG AUX.PEEX-1SG DEM.DIST man=ABS good-MODIF
 to-∅
 COP.PEEX-3

‘I say this man is a good man’ – DSN

Another obviative mechanism takes place when the subject of the reported clause is first person. In that case, the copula or the auxiliary has a third person value. We can only understand (175) in comparison with (169). There is a need to distinguish between a construction where a third person is talking about herself, using a third person subject and a copula marked for first person in the reported clause, and a situation like (175), where it is the exact opposite:

(175) anita=tʃi riŋ-de-∅ ga:=∅ ne=i kʰre-i
 anita=ERG say-IMPV-3 1SG=ABS yesterday=LOC hungry-MODIF
 ta-se-∅=e
 AUX.PE-IMPV-3=HSY

‘Anita said that I was hungry yesterday’ – DSN

The subject of the reported clause is omissible, but recoverable from context, which means the rules of occurrence of the hearsay marker outlined previously are still prevalent.

Leaving aside non-specific subjects, the occurrence of the hearsay marker is concordant with the definiteness hierarchy mentioned below (Aissen 2003: 437):

Personal pronoun > Proper name > Definite NP > Indefinite specific NP > Non-specific NP

The least definite subjects obligatorily trigger the occurrence of =e while personal pronouns give rise to three scenarios. With a verb of saying, the reported marker is restricted to identifiable individuals gravitating around the speaker: it is about self vs. other. Person is therefore a relevant dimension, the real split being between first person on the one hand, and second and third on the other, although optionality makes second person stand out from third. Specificity is an additional factor that makes the cut-off between non-occurrence and obligatoriness: ‘a man’ and ‘someone’ are indefinite, but since they have a high degree of specificity, =e occurs obligatorily whereas ‘some people say’ is not specific enough.

When the main clause verb is ‘to hear’, the hearsay marker is obligatorily, including with first person and regardless whether the information comes from a specified or unspecified source, as in (176). As =e originates from the lexical verb *εναη* ‘to hear’, whenever the main clause includes an inflected form of ‘to hear’, =e in the reported clause has an emphatic function. Just like with a verb of saying, the marker in (176) indicates that whatever comes from hearsay is invariably doubtful:

(176) ga:=∅ εn-dε-k pa:l-tʃaη=∅ tʃʰɔs-i ta=e
 1SG=ABS hear-IMPV-1SG apple-PL=ABS ripe-MODIF COP.PE=HSY.EMPH

‘I heard that the apples are ripe’ – DSN

The hearsay clitic =e becomes optional in contexts where ‘to hear’ is not uttered. In (177), by using =e the speaker reveals her source of knowledge is hearsay, but she is not obliged to do so. The copula *hεn* is perfectly grammatical even if the information was overheard. A Chhitkul-Rākchham speaker is not committed to using the hearsay clitic as long as she does not utter ‘I heard’:

(177) ramεʃ=∅ rampal=e atʃi=∅ hεn-n=e
 Ramesh=ABS rampal=GEN son=ABS COP.EMPH-AUG=HSY

‘Ramesh is Rampal's son (I hear)’ – DSN

A speaker may therefore use the marker in any context where she wants to emphasize she acquired the information through hearsay. In (178), there is no reference whatsoever to a verb of hearing. The speaker may or may not use the hearsay clitic. If she does so, she indicates that the realization there is more than one temple in Chhitkul is not the result of her own investigations – be it through personal knowledge or visual evidence – but comes from someone else:

(178) ga:=∅ ts^ha-ji ma-tɔ-tɛ-k tʃ^hul dʒã tsoriŋ-tʃaŋ=∅
1SG=ABS know-PFV NEG-AUX.PEEX-IMPV-1SG Chhitkul QNT temple-PL=ABS

tɔ-ts=e

COP.PEEX-HAB.ASS=HSY

‘I did not know there were so many temples in Chhitkul (village)’ – DSN

As the previous examples suggest, the clitic =e may attach to all copulas and auxiliaries, including those denoting personal evidentiality. The compatibility of =e with forms such as *to* and *tɔts* is not contradictory with its absence from constructions starting with ‘I say’. In the former case, we are dealing with the reporting of someone else’s all-pervasive subjectivity whereas ‘I say’ has to do with first person. Consequently, the clitic=e does not modify in any way the knowledge status of the hearsay source. Going back to (171) and (172), the choice of copulas is that of the subject of the reporting clause and reflects her own knowledge.

The same observation applies to contexts where the hearsay source remains unspecified, either because the speaker cannot remember whence she heard the information from, or chooses not to reveal it. The clitic attaches to whichever copula or auxiliary the unspecified source originally used, which reflects her knowledge status from that precise moment. In (179), *tɔts* occurs if the information conveyed by the reported clause has been integrated by the unspecified source, *ta* in case the same information was new. The clitic =e indicates the speaker has been unable to check the information personally, thus casting some doubt on its reliability:

(179) ga:=∅ εn-dε-k kɔftampi def=o tʃʰandika devi:=e tsoriŋ=∅
 1SG=ABS hear-IMPV-1SG Kothi village=LOC Chandika Devī=GEN temple=ABS
 tɔ-ts=e / ta=e
 COP.PEEX-HAB.ASS=HSY COP.PE=HSY

‘I heard there is Chandika Devī 's temple in Kothi village’ – DSN

In case the speaker does not use ‘I hear’ or ‘I heard’, the marker is optional, which suggests its occurrence is not epistemically neutral. In fact, as my main consultant puts it himself: “when the information is confirmed, then there is no need to use =e”. (180) deals with common (assertive) knowledge. The clitic =e indicates lack of personal experience, hence the distance taken by the speaker from the content of the proposal:

(180) ʃra:b=∅ tu-aŋ zo-i ma-a:-ts /
 alcohol=ABS drink-INF good-MODIF NEG-COP-HAB.ASS
 ma-a:-ts=e
 NEG-COP-HAB.ASS=HSY

‘Drinking alcohol is not good’ – DSN

A similar pattern occurs in (181). By using =e, the speaker, albeit a member of Rākchham community, indicates she is repeating what people say about the morels found in the vicinity of the village, being unable to confirm herself that these have several benefits (which remain unspecified in the recording). We may infer she only uses them for cooking. Another clue she is not entirely certain about whether what she heard is true or not is the use of *hε: na* (‘right?’), borrowed from Hindi:

(181) raŋmu=∅ lo dʒã as-a raŋmu=∅ mi: ta te hojo
 morel=ABS also QNT happen-PROG morel=ABS etc. COP.PE then DEM.DIST
 na kjaŋ raŋmu=∅ lo kai pʰaida=∅ ta=e
 PTCL.QUER 1PL.POSS.INCL morel=ABS also QNT benefits=ABS AUX.PE=HSY
 hε: na
 COP.PRS.3 PTCL.QUER

‘Many morels happen to be growing; our morels (among other varieties of wild mushrooms) have several benefits also, right?’

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In (182), the difference between *mata* and *matae* is in term of reliability. Using *mata*, the speaker indicates she has been able to verify the content of the proposal by herself, having looked for some apple juice in shops and markets in vain. Conversely, *matae* reveals the speaker overheard the information from someone but has not conducted any investigation yet: hence the dubitative flavour. The clitic =*e* may surface as =*jə* with the copula *ta*, hence *matajə*:

(182) *ga:-∅* *ɛn-dɛ-k* *rekoŋ peo* *pa:l=e* *dʒu:s=∅* *ma-ta* /
1SG-ABS hear-IMPV-1SG Reckong Peo apple=GEN juice=ABS NEG-COP.PE

ma-ta=e
NEG-COP.PE=HSY

‘I heard that there is no apple juice in Reckong Peo’ – DSN

(182) also indicates that what can be negated is the content of the reported clause, not the reportative marker.

I characterize =*e* as a hearsay marker. A first reason is that the clitic is obligatory with ‘I heard’ constructions, but not with verbs of saying. Since =*e* occurs with both ‘I heard’ constructions and verbs of saying, one may say the use of the term ‘reportative’ would seem adequate. However, =*e* has a clear etymological origin, hence the translation of (171) as ‘Anita said he ate all the apples (and I heard it)’. My approach is consistent with *ga: riŋã tɔk* expressing an opinion, not a report, because ‘I say this man is a good man (and I hear it)’ does not make sense.

That the clitic may attach to all copulas and auxiliaries is a strong indication of an evidential value distinct from the perceptual, dubitative, personal experience, assertive and personal assertive. The hearsay marker passes a dubitative judgement upon the reported material but does not alter or modify the knowledge status of the subject from the reported clause.

Semantically, since =*e* comes from *ɛnaŋ*, as a repetition it serves an emphatic function, which does not contradict my characterization of it as expressing doubt, although some scholars seem to oppose both. *Ló* is a ‘reported’ particle found in Lamjung Yolmo. According to Gawne (2015: 303), “instead of weakening the speaker’s commitment to the utterance it [the reported particle *ló*] strengthens the content by invoking the knowledge of the quoted party”. Following this thread, =*e* would have a similar function to the focus clitic =*o* discussed in §8.1, only applied to hearsay.

Instead of a strengthening effect, the clitic, by casting light on someone else’s knowledge status is emphatic, but with a dubitative reading¹⁴⁹. A crucial piece of evidence is (180). If =*e* “invokes the knowledge of the quoted party”, then the clitic is redundant because *a:ts* or *maa:ts* already denotes ‘common knowledge’, a kind of knowledge the speaker can only challenge by using =*e*. The *raison d’être* of =*e* is to draw the line between what is part of the speaker’s experience, be it personal knowledge or perception, and what is not, which comes from report. What the speaker has not experienced she marks with the clitic because it is doubtful. Besides, as shown in (177), =*e* may occur in a sentence devoid of any verb of saying or hearing, that is, in this context there is no way to emphasize the knowledge of a specific ‘other’: the use of =*e* is speaker-centered.

6.2 The quotative construction *he* (‘like’, ‘thus’, ‘so’) + verb of saying (+ AUX)

Crystal (1980:258) characterizes a particle as “an INVARIABLE ITEM with grammatical FUNCTION, especially one which does not readily fit into a standard description of PARTS OF SPEECH”. Semantically, according to Zwicky (1985: 291), particles are ‘function’, rather than ‘content’ items. Chhitkul-Rākchham *he* is an adverb with the analogical meaning of ‘like’. The adverbial *he* introduces a quotative construction, usually occurring right after the quoted material. Quotation is only one of its functions, however. For these reasons, we cannot characterize *he* only as a particle.

A first example where *he* does not have a quotative function is (183), where it occurs as the only element of the sentence. The speaker uses *heo* to assent with what the interlocutor just said, namely that he had returned from Lavi Festival on the very same

¹⁴⁹ Emphasis is thus never epistemically neutral: assertive with *heŋ* or *man*, dubitative with =*e*.

night a fire incident ravaged Rākchham village in 2002. In that case, *heo* means ‘certainly, indeed’:

(183) *ã* *he=o*
 INTERJ like=FOC
 ‘Yeah, that’s right’
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As already seen in (98) and (111), *he rukfi ta* is a clause optionally added to a description, with an inferential meaning based on perceptual evidence. The succession of ‘like’ and ‘similar’ results in a more emphatic analogy (‘so it seems’).

In (184), *he* precedes the main verb *asaŋ* ‘to happen, become’ inflected for the habitual suffix *-ts*. The context is procedural: the speaker describes what usually happens during the Flower Festival (*Usko*). The adverbial *he*, like *no*, has an emphatic function:

(184) *ʃum* *gɔr=∅* *ʃɔn-ts* *ʃum* *gɔr=∅* *ʃɔn=i* *neotʃ=o=tʃi* *pʰir*
 three round=ABS dance-HAB three round=ABS group=LOC after=LOC=ABL then

dogodaga-tʃaŋ=∅ *tsʰaŋ=∅* *taŋ* *ʃɔn-ts* *kʰane=∅* *mun=i*
 youngster-PL=ABS morning=ABS POST dance-HAB QNT=ABS night=LOC
halua=∅ *ʈa:* *kʰane-tʃi* *kʰe* *ai* *zasaŋ=∅* *ɔn-a*
 halwa=ABS cook.PROG QNT-ERG what other eatables=ABS get out-PROG

he *a:-ts* *no*
 like happen-HAB.ASS PTCL.EMPH

‘People dance three rounds in group, then the youngsters dance all night long, some (people) cook halwa at night, and some bring other eatables, it happens like this’
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The form *he* serves a quotative function only when co-occurring with a verb of saying, introducing new clauses the function of which is emphatic. It is thus an adverbial complementizer, a marker of complements after verbs of saying, cognition (‘to think’, ‘to understand’), action (‘to do’) and perception (‘to hear’).

As shown in (185), a major difference between reportative and quotative is that in the latter case, one renders the speech event *verbatim*, reason why I add quotation markers in the translation. The adverbial *he* follows the quoted speech in most instances, but sometimes the quotative construction starts with the subject¹⁵⁰ followed by *he*. In other words, *he* is not phonologically dependent on any host. In addition, *he* is omissible, which suggests its function is to highlight we are dealing with a quotative construction:

(185) εme=∅ tse pa:l=∅ za-i ta-∅ he anita=tʃi riŋ-de-∅ /
 3SG.HON=ABS QNT apple=ABS eat-PFV AUX.PE-3 like anita=ERG say-IMPV-3
 anita=tʃi he riŋ-de-∅
 anita=ERG like say-IMPV-3

“He ate all the apples”, so Anita said’ – DSN

(185) is the *verbatim* repetition of a speech event. Consequently, the hearsay marker may or may not occur, depending on whether the initial speaker used it or not. In the previous example it does not, which means the speaker did witness what happened. Anita would have used *tæ* to indicate she did not witness the event herself, and in that case, *tæ* would be part of the quotation. In case the hearsay marker occurs, and in case *he* – not the subject – introduces the quotative construction, then =e and *he* follow each other.

(186) shows a quotative construction. One may also render *verbatim* what one heard from another person. The hearsay =e is obligatory with the verb of hearing *εnaŋ* as seen is §6.1:

(186) ga:=∅ εn-dε-k ai parosi:=∅ nas-i ta=e /
 1SG=ABS hear-IMPV-1SG 1SG.POSS neighbour=ABS sick-MODIF COP.PE=HSY
 ai parosi:=∅ nas-i ta=e he ga:=∅ εn-dε-k
 1SG.POSS neighbour=ABS sick-MODIF COP.PE=HSY like 1SG=ABS hear-IMPV-1SG

‘I heard that my neighbour is sick / “my (your) neighbour is sick”, so I heard’ – DSN

A quotative construction does not necessarily have a clearly identifiable subject. In (187), the subject is impersonal, and the quotative construction precedes the reported content, although this is less usual:

¹⁵⁰ One may omit the subject in case it is a personal pronoun.

(187) $\epsilon me = \emptyset$ $l\text{b}t\text{-}f\text{-}a$ $ma\text{-}ta\text{-}s\text{-}\emptyset$ $\epsilon me = \emptyset$ $zinda = \emptyset$ ta $ak^h e$
 like say-MID-PROG NEG-AUX.PE-IMPV-3 3SG.HON=ABS life=ABS COP.PE DISJ

$ma\text{-}ta = e$
 NEG-COP.PE=HSY

‘Whether he survived or not it is not said so’ – DSN

Example (174) shows that the reportative marker cannot occur in a clause preceded by *ga: riŋã tɔk* ‘I say’, because *ga: riŋã tɔk* conveys a personal opinion that the speaker cannot question since it is her own. The same restriction applies to the quotative construction *he ga: riŋã tɔk*. In (188), the occurrence of $=e$ would be ungrammatical. As shown in (186), $=e$ only occurs with first person with the verb of hearing *ɛnaŋ*. (188) also indicates that there is no self-quotation marker:

(188) $\epsilon me = \emptyset$ $zo\text{-}i$ $mi = \emptyset$ $to\text{-}\emptyset$ / $*to\text{-}\emptyset = e$ he
 3SG.HON=ABS good-MODIF man=ABS COP.PEEX-3 COP.PEEX-3=HSY like

$riŋ\text{-}\tilde{a}$ $t\text{-}k$
 say-PROG AUX.PEEX-1SG

“‘He is a good man”, so I say’ – DSN

In (188), the personal experience copula *to* is the only choice because the ‘I’ is obviously acquainted with the man from the sentence that precedes the adverb *he*.

Example (189) shows that *he* does not just occur in direct speech, but also in indirect (or ‘hybrid’ speech). Like the hearsay marker, the adverb *he* does not scope over negation. What can be negated is the content of the reported clause or the verb of saying or hearing:

(189) $\epsilon me = \emptyset$ $k^h u\text{f}$ $ma\text{-}t\text{-}k$ he $ga = \emptyset$ $tiŋ$
 3SG.HON=ABS happy NEG-COP.PEEX-1SG like 1SG=ABS POST.DAT
 $ma\text{-}riŋ\text{-}de\text{-}\emptyset$
 NEG-say-IMPV-3

‘He did not tell me that he was unhappy (talking about himself)’ –DSN

The Chhitkul-Rākchham adverbial *he* is optional, like all types of clauses it introduces. The only difference between the following two instances of direct speech is in term of emphasis:

(190) ram=tʃi riŋ-de-∅ ga:=∅ kamaŋ=∅ tse-dε-k / tse-ʃi
 Ram=ERG say-IMPV-3 1SG=ABS work=ABS finish-IMPV-1SG finish-PFV
 tɔ-k
 AUX.PEEX-1SG

'Ram said: "I have finished the work"' – DSN

(191) ga:=∅ kamaŋ=∅ tse-dε-k / tse-ʃi tɔ-k he
 1SG=ABS work=ABS finish-IMPV-1SG finish-PFV AUX.PEEX-1SG like.QUOT
 ram=∅ riŋ-de-∅
 Ram=ABS say-IMPV-3

"I have finished the work", so Ram said – DSN

The previous examples bear witness to a system where “the speaker reproduces the inflection that would have been used by the original speaker” (San Roque, Floyd and Norcliffe 2018: 64). The use of a *he* VoS (AUX) construction indicates the reported information, rendered *verbatim*, is the same as the original utterance. “Quotative faithfulness” (Slater 2003: 210-1) is appropriate to refer to the system described in this section. Whereas the hearsay marker =*e* is invariably dubitative, a reported content made *verbatim* gives more credit to the proposal content. However, depending on circumstances, of *he* may denote the speaker’s wish to dismiss any responsibility.

The adverbial may be part of a quotative construction the reading of which is invariably epistemic, reflecting the speaker’s attitude towards the content of the *verbatim* material, regardless of which evidential distinction the original speaker used. The quotative *he*, together with the evidentials identified so far (copulas, auxiliaries, the clitic =*e*) plays a defining role at the interactive level, notably in managing responsibility. As an emphatic marker, *he* does not necessarily refer to a quoted material that includes an evidential distinction, but if it does, it highlights it, the same way the hearsay =*e* does.

6.3 The verbs of saying *riŋ*, *lɔŋ*, *lɔtfaŋ*, *kɔlfəŋ*, and *antaŋ*

A verb of saying occurs before the reported content in Chhitkul-Rākchham. However, in quotative constructions, it generally occurs after, with one of the two following structures: *he* (SUBJ) VoS (AUX) or SUBJ *he* VoS (AUX) from a synchronic perspective.

Chhitkul-Rākchham has five verbs of saying: 1/ *riŋ* ‘to say, tell’; 2/ *lɔŋ* (or *lɔtfaŋ*) ‘to say, tell’; 3/ *kɔlfəŋ* ‘to speak, talk’; and 4/ *antaŋ* ‘to say – with criticism’.

Riŋ and *lɔŋ* (or *lɔtfaŋ*) are the most common, the last two verbs being more marginal. *Lɔŋ* and *lɔtfaŋ* occur with third person objects. These two verbs form a pair, like a few other verbs (*laŋ* or *latfaŋ* ‘to do’), *puəŋ* or *putfaŋ* ‘to plow’), *pɔnaŋ* or *pɔntfaŋ* ‘to sew’, etc.). *Lɔŋ*, like *riŋ*, refer to the most basic meaning of ‘to say, tell’. *Lɔtfaŋ* intensifies the meaning found in *lɔŋ*, as something said with more vigour or more heartedly.

The verb *kɔlfəŋ* ‘to speak’, is interchangeable with *riŋ* and *lɔŋ* (or *lɔtfaŋ*) in impersonal contexts such as ‘it is said’, ‘some people say’, etc, as shown in (192) in the present tense and in (193) in the past:

(192) mi:-tfaŋ=∅ lɔt-f-a / kɔlf-a / riŋ-ã to-∅
 people-PL=ABS say-MID-PROG speak-PROG say-PROG AUX.PEEX-3

mata devi:=∅ tse kat=∅ ts^ha:-ts
 Mata Devī=ABS QNT language=ABS know-HAB

‘People say Mata Devī knows all languages’ – DSN

(193) mi:-tfaŋ=∅ lɔt-f-a / kɔlf-a / riŋ-ã
 people-PL=ABS say-MID-PROG speak-PROG say-PROG

ta-se-∅ ga:=∅ bod-i tu-ĩ ta-se-∅
 AUX.PE-IMPV-3 1SG=ABS QNT-MODIF drink-PFV AUX.PE-IMPV-3

‘People were saying I had drunk too much’ – DSN

In case the object of the verb of saying remains unspecified, *kɔlfɑŋ* occurs in constructions starting with ‘I heard’, when a third person subject says something not directed to the speaker but to someone else, *riŋ* otherwise:

(194) *ga:=∅* *ɛn-dɛ-k* *rattan=tʃi* *riŋ-de-∅* / *kɔlf-a*
 1SG=ABS hear-IMPV-1SG Rattan=ERG say-IMPV-3 speak-PROG
ta-se-∅ *ɛme=∅* *kattai wapas ma-tun-nɔ-k=e*
 AUX.PE-IMPV-3 3SG.HON=ABS never back NEG-come-IRR.DUB-1SG=HSY

‘I heard Rattan said (to me/other people) he would never come back (talking about himself)’ – DSN

There is no instance of *antaŋ* in the documentary corpus. The verb means ‘to speak to someone’, but it is more colloquial and implies criticism, as in *satif tiŋ amir-∅ gopal=e tʃʰɛtiŋ man man maf-o anta-ʃa ta-se* Satish CONN Amir-ABS Gopal=GEN BEN INT bad-MS speak-PROG AUX.PE-IMPV ‘Satish and Amir spoke badly to Gopal’.

A Chhitkul-Rākchham quotative construction may include an object, like in *ga: ɛmesa: tiŋ la tɔk* (‘I am telling them’). The dative postposition *tiŋ* follows the object, but object marking¹⁵¹ is realized by means of two different verb stems, as shown in table 78.

Animacy and affectedness – the object is more affected if we compare ‘to give’ and ‘to bring’ – seem to play an important role; it also has an explanatory value in the case of *riŋ* and *laŋ*. Table 78 sums up which form of the verbs of saying *riŋ* and *laŋ* may occur, depending on subject (SUBJ 2= 2SGHON) and object.

With a first person subject, a different verb stem is used according to whether the object is second person or third. A similar pattern is observable with a second person subject, regardless of temporality: one verb stem occurs with first person object, and another verb stem with third person. The pattern in a past context is peculiar. With third person subjects, each object has a different verbal form: imperfective form of *riŋ* with first person object, perfective form of *riŋ* with second person object, and either the imperfective or the perfective form of *laŋ* with third person object.

¹⁵¹ Object marking applies to ‘to give’, but not ‘to bring’.

Table 78: inflection of *riŋ* and *lɔŋ* or *lɔtʃaŋ* ('to say, tell') according to subject and object in Chhitkul-Rākchham:

	Perfective and imperfective			Progressive			Dubitative irrealis		
	SUBJ.1	SUBJ.2	SUBJ.3	SUBJ.1	SUBJ.2	SUBJ.3	SUBJ.1	SUBJ.2	SUBJ.3
OBJ.1	-	<i>riŋdeĩ</i>	<i>riŋde</i>	-	<i>riŋã</i>	<i>riŋã</i>	-	<i>riŋnoĩ</i>	<i>riŋno</i>
OBJ.2	<i>rĩ</i>	-	<i>rĩ</i>	<i>riŋã</i>	-	<i>riŋã</i>	<i>riŋnɔk</i>	-	<i>riŋno</i>
OBJ.3	<i>lɔtʃi</i>	<i>lɔteĩ</i>	<i>lɔte</i> , <i>lɔtʃi</i>	<i>lɔa</i> , <i>lɔtʃa</i>	<i>lɔa</i> , <i>lɔtʃa</i>	<i>lɔa</i> , <i>lɔtʃa</i>	<i>lɔnɔk</i>	<i>lɔnoĩ</i>	<i>lɔno</i>

An auxiliary, *ta* or *to* in the present tense, *tase* and *tote* in the past, may follow *riŋã*, *lɔa*, *lɔtʃa* and *lɔlʃa*. Since all copulas or auxiliary may occur in the reported clause, a good way to avoid confusion is to keep the evidential distinctions in the reporting clause at a minimum: the choice is between *ta* and *to*. *In fine*, only the least epistemically loaded auxiliaries are part of a reporting clause because what truly matters in reported speech is the reported speech content.

Just like with any other lexical verb, the difference between *riŋde* and *riŋã tase* is aspectual. In (195), both may occur, what counts is that with a first person object only an inflected form of the verb *riŋ* is grammatical. The dative =*tiŋ* makes the quotative construction passive:

(195) *rekoŋ peo pa:l=e dzu:s=∅ ma-ta he ga:=∅=tiŋ*
 Reckong Peo apple=GEN juice=ABS NEG-COP.PE like.QUOT 1SG=ABS.DAT

riŋ-ã ta-se-∅ / riŋ-de-∅
 tell.OBJ.1.2-PROG AUX.PE-IMPV-3 tell.OBJ.1-IMPV-3

'I have been told that there is no apple juice in Reckong Peo' – DSN

The prefix *ma-* negates any verb of saying or hearing. The negative imperfective form of *riŋde*, *marin̄de*, like in (189), may surface as *marin̄* or *marin̄ẽ*.

A defining contrast in Chhitkul-Rākchham is between *riŋ* and the pair *loŋ* and *lotfaŋ*. The conjunction of the dative postposition *tiŋ* and object marking, both circumscribed to a few verbs, makes it relatively straightforward to keep track of who said what to whom in a context where personal pronouns and subject agreement on auxiliaries are omittable.

6.4 Some diachronic observations on the hearsay =e and the quotative construction

The hearsay clitic =e and the quotative *he* are phonologically very close. This suggests they have a common diachronic origin. The etymological source of =e leaves little room for doubt. The hearsay clitic stems from the lexical verb *enaŋ* ‘to hear’¹⁵², which is common from a cross-linguistic perspective. According to Aikhenvald (2004: 302), “the verb of ‘saying’ is a frequent source for reported and quotative evidentials, and the verb ‘feel, think, hear’ can give rise to non-visual evidentials in large systems”. The meaning of *he* differs (‘like, thus, so’) synchronically, but the adverbial serves a complementary function (quotative) to that of the hearsay.

Table 79 sums up the functions played by *he*, originally a proximal demonstrative, and reanalyzed as ‘to hear’:

Table 79: functions served by *he* in Chhitkul-Rākchham

Forms	Function	Meaning
<i>e</i>	Hearsay (=e)	‘to hear’
<i>he</i>	Complementizer Quotative	‘like, thus, so’
<i>heŋ</i>	Copula (emphatic) Auxiliary (emphatic)	‘to hear’ <i>he</i> = old PROX.DEM
<i>man</i>	Contraction of <i>maheŋ</i> in copula clauses, postverbal negator otherwise (allomorph of <i>ma-</i>)	‘to hear’
<i>hun</i>	Copula Syntactic allomorph of <i>heŋ</i>	<i>hu</i> = PROX.DEM
<i>heŋ-na</i>	Converb – inflected for the	‘if so’

¹⁵² *ga: ena tək* ‘I am hearing’; *endək* ‘I heard’; *ennək* ‘I will hear’.

	conditional	
<i>man-na</i>	Converb (<i>ma$\acute{h}$$\acute{e}$$\acute{n}$-na</i>) – inflected for the conditional	‘if not, otherwise’
<i>h$\acute{e}$$\acute{k}$-so</i>	Converb – inflected for the prospective	‘as soon as’
<i>h$\acute{e}$$\acute{t}$ ta</i>	Converb Concessive subordinator	‘perhaps, maybe’

In the available literature, ‘to say’ serves all the functions described in table 79 but one: the copula and auxiliary function. Based on those previous examples and the type of evidentiality *h \acute{e} \acute{n}* conveys, there is a close relationship between the quotative and assertiveness. The emphatic *h \acute{e} \acute{n}* and the negative copula *man* are morphologically similar, ending in /n/. As mentioned in §4.8, *h \acute{e} \acute{n}* behaves very similarly to the equative copula *sh \acute{i}* 是 found in Mandarin Chinese, the latter notably occurring in concessive conditionals. I also established in §5.8.3 that *h \acute{e} \acute{n}* functions as converb in conditional clauses, hence the form *h \acute{e} \acute{n} -na* (‘if like’), the antonym of *man-na* (‘if not’), and so does *h \acute{e} \acute{k}* in *h \acute{e} \acute{k} -so*¹⁵³. I deal with *h \acute{e} \acute{t} ta* ‘perhaps, possibly, probably’ in §7.1.

The contrast *h \acute{e} \acute{o}* ‘certainly, indeed’ and *h \acute{e} \acute{n}* suggests *o* and *n* have a different encoding. In §8.1, I describe =*o* as a focus clitic distinct from the emphatic particle *no*. However, diachronically, *no* consists of *n* and *o*. What allows us to reach this conclusion is their complementary distribution. The emphatic particle *no* cannot follow *h \acute{e} \acute{n}* and *man*. Referring to our discussion from §5.1.2, the ‘emphatic affirmation’ is one of the so-called NICE criteria (Huddleston 1976: 333) serving the formal identification of auxiliaries.

The forms *h \acute{e}* , *h \acute{e} \acute{n}* and *h \acute{e} \acute{t} ta* are all relevant in terms of evidentiality. Judging by its semantics, *h \acute{e} \acute{k}* in *h \acute{e} \acute{k} so* has no evidential value from a synchronic perspective. Diachronically, the situation is different. We cannot help but notice *h \acute{e} -AGR* stands close to the Kinnauri variant of *m \acute{a} \acute{n} \acute{i}* , namely *ma-AGR* (Saxena 2017). The same way *man* and *mat ti* have a different epistemic reading, so *m \acute{a} \acute{n} \acute{i}* and *ma-AGR* probably do, and if it is so, *ma-AGR* has a similar reading to that of Chhitkul-Rākchham *mat ti*, see table 42 in §4.7. However, *h \acute{e} \acute{k}* in comparison to *h \acute{e} \acute{n}* suggests two things. First, /n/ and -k were originally suffixes, and second -n and -k were contrasting with each other. Chhitkul-Rākchham *h \acute{e} -*

¹⁵³ In this context, /k/, similarly to /n/ may have served a copula function in the past: we cannot help but notice the parallel with the first person singular agreement marker -k.

AGR and Kinnauri *ma*-AGR are remnants of an old binary affirmative vs. negative system where the particle *he* had not yet acquired an epistemic meaning. The earlier stage I am alluding to would predate the first stage described in diagram 2 (Jespersen cycle) in §4.4.6.

We may now tentatively reconstruct the original Chhitkul-Rākchham evidential system:

Table 80: a tentative reconstruction of the original Chhitkul-Rākchham evidential system

Stage 1	<i>he</i> (PROX.DEM) – allomorph of <i>hu</i>	
Stage 2	<i>hen</i> (emphatic copula) reanalyzed as <i>enən</i> ('to hear')	<i>man</i> (emphatic copula - antonym of <i>hen</i>) reanalyzed as <i>hunən</i> 'to live, stay')
	<i>he</i> -AGR (all but assertive)	<i>ma</i> -AGR (all but assertive)
Stage 3	<i>het ta</i> (<i>hen ta</i> ; less assertive than <i>hen</i>) all but assertive	<i>mat ti</i> (<i>man ti</i> ; less assertive than <i>man</i>) all but assertive

The original evidential distinction is between assertive (/n/) vs. non-assertive (-AGR), with *he* and *ma*- as epistemically neutral. Stage 3 illustrates the dampening epistemic function of *ta* (or *ti* and *te*). In other words, assertive vs. non-assertive predates the introduction of the 'classic' evidential *ta*¹⁵⁴.

There is no contradiction in my treatment of *he* as having a double meaning: one is diachronic and the other synchronic. The form *he* as a demonstrative has been the object of reanalysis, a process whereby its original referential function has turned into a predicative one. Referring to the discussion from §4.1.8 (see Chang 2006: 132), the Mandarin Chinese *shi* 是 also underwent reanalysis, but in the opposite way, having lost its predicative function in Modern Chinese.

The claim I make in §6.4 – the quotative *he* stems from the lexical verb *enən* – raises the question of the status of /h/ in Chhitkul-Rākchham. In appendix 1, §1.2.1.1.2, I note that /h/ exclusively occurs in initial position (unless preceded by the negative suffix *ma*- invariably preceding a vowel, hence *hen*, *hun*, *he*, *hekso*, *het ta*, etc. There is no consonant cluster involving /h/ – see appendix 1, §1.2.6.2. We may therefore assume /h/ indicates

¹⁵⁴ As discussed in §5.12, the Lhasa Tibetan *hdug* would have emerged as the first 'classic' evidential, but like in Chhitkul-Rākchham, a broader definition of evidentiality suggests evidentiality emerged earlier than previously thought.

the absence of an initial consonant, a semi-vowel, or a “support vocalique”, to refer to Lalou’s (1950) treatment of Tibetan <ɣ>. As for *he* vs. *e* (as in *enaŋ*), the description from §6.1 suggests that it arose from the need to differentiate between two very similar functions: quotative vs. hearsay¹⁵⁵.

The root of *enaŋ* being |en|, the loss of coda in =*e* arose from the need to distinguish it from the copula, auxiliary and converb *he*. As mentioned in §6.1.2, the optional occurrence of =*e* in most contexts indicates =*e* in the reported clause has an emphatic (dubitative) function: /n/ is redundant. Once the demonstrative *he* was reanalysed as *enaŋ* ‘to hear’, it behaved the same way as monosyllabic verbs described in appendix 1, §1.5.1.1.7: a root augment, -*n*, is part of the stem, and this is apparent in conditional constructions (hence *he*-*na*). The difference is, -*n* is part of the infinitive stem in the case of *enaŋ* whereas it only occurs in the conditional in the case of *ɾɔ-ŋ* ‘to go’ → *ɾɔn-na*; *tɔ-ŋ* ‘to come’ → *tun-na*; *la-ŋ* ‘to do’ → *lan-na*. However, as discussed in appendix 1, §1.5.1.1.10, the augment /n/ only arose to replace a root-final -*t* because the consonant cluster /tn/ is not attested in Chhitkul-Rākchham. From a diachronic perspective, the root of *enaŋ* was |et|.

From a diachronic perspective, demonstratives are part of the morphosyntactic means of expression of evidentiality. In this regard, the effects of language contact with Kinnauri need further investigation. In appendix 1, §1.3.2.2.2, the base *he* is not found in any copula or auxiliary form in Kinnauri, but it is part of the two locational adverbs *hajaŋ* ‘here’ and *hadaŋ* ‘there’, which again casts light on the link between the emergence of evidentiality and temporal and locational adverbs – and the “grammaticalization of deixis” (Tournadre 1992, 2017: 99) discussed in §5.12.

The presence (and importance) of the adverb *he* ‘like’ as a morphosyntactic means of expression of evidentiality indicates that syntax is a multi-layered domain that encompasses lexical items.

Saxena (1988) contends that areal influence from Indo-Aryan is crucial to account for reported and quotative constructions in some Tibeto-Burman languages. In Hindi, the complementizer कि (*ki*, ‘that’), borrowed from Persian, introduces complement clauses

¹⁵⁵ Referring to the consonant phoneme inventory (appendix 1, §1.2.1.1.2), /h/ has phonemic status.

(Subbarao 1984). कि, from कहना (*kahnā*, ‘to say’), is the only form that may introduce a quotative construction (Willis 2019: 462). It is also part of several subordinating conjunctions, notably क्योंकि (*kyōki*, ‘because’). कि occurs optionally (Lutz, Müller and von Stechow 2000: 184). However, since *he* originates from *enaŋ* ‘to hear’, the Indo-Aryan hypothesis is not entirely satisfactory.

Matisoff (1991: 398-400) similarly highlights grammaticalization paths out of ‘to say’ in Thai, Khmer, and Lahu, where the quotative, typically omissible, introduces complement clauses and serves additional functions – topic introducer, hearsay marker, part of a compound conditional.

A glance at Tibetan is instructive. Hock’s (2016: 312) mention of pre- and postposed *ces(a)* ‘thus’, is of special interest here. In fact, it was already part of Jäschke’s [1881] (1987: 142) description: “in the later literature *ces* and the introductory words are often omitted, in colloquial language always”. Chhitkul-Rākchham exhibits a similar pattern of use. The quotative *he* is optional and can occur before or after the quoted content, although the latter is more common. It may seem unlikely for a written form¹⁵⁶ to have had an influence on Chhitkul-Rākchham, but we must keep in mind there is another attested case in the focus clitic =*o* and the emphatic particle *no* (see §8.3).

We can now elaborate on the template of the quotative complex provided in §6.3. Synchronically, the quotative complex consists of the adverb ‘like’, an inflected form of a verb of saying and an auxiliary (*ta* or *to*). Diachronically, we are dealing with a serial verb construction. This historical development explains why as a copula and auxiliary *heŋ* cannot take any TAM inflection: no adverb can. That *heŋ* can take the prefix *ma-* as copula but not as auxiliary also reflects the shift that has been taking place. The quotative *he* is drifting between a verb and an adverb, having some attributes of both.

An indication *he* + VoS refers to a serial verb is precisely that both may follow each other¹⁵⁷. The personal pronoun may occur either before *he* or between *he* and VoS. The more regular use of the latter order reflects the fact that *he* is synchronically an adverbial complementizer the function of which is to introduce new clauses. *Ga: he riŋā tək* is

¹⁵⁶ Kuiper (1974: 146) also mention the Written Tibetan verb *zer* (‘say’).

¹⁵⁷ In addition, the construction complies with all of Haspelmath’s criteria discussed in §5.1.2.1.

nevertheless perfectly grammatical due to the diachronic verbal nature of *he*. When *enaj* replaces a verb of saying, as in (177), from a diachronic perspective we are dealing with verb reduplication, hence the emphatic function of *he*.

Entitled *Serial verbs in transition*, Lord's (1973) comparative work has a clear bias towards African languages, but some of her insights have universal scope. Based on Bamgbose's (1972) typology, Chhitkul-Rākchham *he* + V is one of two types of serial construction, the so-called 'modifying' type, which refers to only one underlying sentence. According to Lord (1973: 270), "in the second type, the modifying verb does not have the full range of verbal characteristics, and it merely modifies the meaning of the main verb". Her description is truthful to a *he* + V construction where the modifying verb *he* does not take any TAM markers, functioning as adverb from a synchronic perspective.

Lord (ibid, p. 271) describes a comitative verb as "a historical source for Comitative, Instrumental and Manner prepositions, as well as conjunctions and adverbs". She (ibid, p. 292) also notes, referring to Mandarin Chinese and Thai, that some verbs in serial constructions "no longer take the full range of verb affixes, and are called co-verbs. Some co-verbs have homophonous verbs, some do not". The form *he* is thus a comitative coverb, "acting as comitative marker in serial constructions" (Arkhipov 2009: 233) from a historical perspective.

6.5 A comparative perspective on the hearsay =e and on the quotative construction

From a comparative perspective, reported speech forms in Tibeto-Burman are most often clause-final particles or clitics. They do not take morphological marking and are often monosyllabic.

The presence of two distinct forms, reported (alternatively, hearsay or 'reportative') and quotative, is a feature found in a number of Tibeto-Burman languages. Lepcha (Plaisier 2007: 137-9) has the hearsay *mere* and the quotative *yang*. Yongning Na (alternatively, Mosuo, Lidz 2007: 51-8) distinguishes between the reported *tsi* and the quotative *pi*. Akha (Hansson 2003: 251) has two distinct forms, a reported speech marker, *dze*, and a direct quote marker, *le*. Denjongke, (Sikkimese Bhutia, or Lokhe) exhibits a reportative, *lo*, and a

quotative, =s(ε), the latter “functioning as complementizer for verbs of saying and writing” (Yliniemi 2019: 382).

As mentioned earlier, ‘to say’ is the usual diachronic source for the quotative marker from a cross-linguistic perspective (Heine and Kuteva 2002: 261-268). ‘To hear’ as original source for the quotative is less common, but attested (Payne 1997: 70), together with verbs of cognition (Dixon 2006: 2-5). Kham (Tournadre and Lapolla 2014: 252) has a non-visual suffix originating from ‘to sound’. The verb ‘to hear’ has cognates within the ‘West-Himalayish’ subgroup - *hentɕ-um* in Bunan (Widmer 2014: 468, 867), *yanci-mo* in Byangsi (Sharmā 2001: 146), *yənpəŋ* in Rongpo (Sharmā 2001: 217), *yen-mu* in Darma (Willis 2007: 588) – and occurs as copula in Bunan¹⁵⁸. In only one of the previously mentioned languages, namely Byangsi (Byansi Bhotiya), it serves a quotative function (Trivedi 1991: 26)¹⁵⁹. Outside of ‘West-Himalayish’, the source of the reported marker, in at least some varieties of Lisu, notably Shibacha Lisu (Yu 2003), comes from ‘to hear’.

A few Tibeto-Burman languages exhibit forms that are phonologically close to =e and *he*, but their etymological origin remains unclear. Both Dumi (Van Driem 1991: 263) and Thulung Rai (Lahaussais 2002: 190) use *ʔe* as quotative and hearsay particle respectively. Khaling has the hearsay sentence final particle *ʔe*, not relatable to ‘to say’ or ‘to hear’. Lahaussais (2020: 20) notes that “the glottal stop is very marginal in Thulung”, adding that “some Kiranti scholars [Jacques 2012] transcribe all vowel-initial words as *ʔV*” whereas others (Bickel et al. 2007) never use the glottal initial. Still in connection with Thulung, Michailovsky (2017: 649) points out that “it is not clear whether such an element is a phonological segment”. In Dolakha Newar, the hearsay particle *hā* (Genetti 2007: 258) “indicates that the source of the speaker’s knowledge of the event is based on hearsay rather than on direct participation or observation”. Hargreaves (2005: 16) describes the exact same particle in Kathmandu Newar.

The functional correspondence between the quotative and the adverbial ‘like’ is otherwise common from a cross-linguistic perspective. In Hittite (Joseph and Schourup 1983), the quotative particle *war* and the adverbial *iwar* (‘like’) share a common origin. Both scholars note Lahu offers a good illustration within Tibeto-Burman. The Lahu quotative marker *qhe* (Matisoff 1973: 134) means ‘like, thus, as’. Another form, *tɛ*, occurs with longer quotations

¹⁵⁸ Widmer does not seem to make the connection between the equative copula *jen* and *hentɕ-um* (2014: 867).

¹⁵⁹ In Byangsi, the inferential evidential has the meaning of ‘to listen’.

with the meaning of ‘to be true’ (ibid, p. 171). There are similar cases of correspondence all over the world. Even young generations of English speakers make use of ‘like’ to introduce quotations – although this does not reflect a standard use (Ranger 2012).

The available literature on Tibeto-Burman languages shows that a quotative form with the meaning of ‘like, thus’ is not unusual. In Mongsen Ao, Coupe (2007: 131-3) reports a quotative particle, *tə* ‘thus’, which also means ‘certainly, indeed’. Like *he* in Chhitkul-Rākchham, *tə* is an adverbial complementizer followed by a verb of saying or any other complement-taking verb. A difference is, however, that *tə* invariably occurs right after the quoted material. In Lepcha, Plaisier (2007: 132) describes a quotative particle, *yang*, with the meaning of ‘thus’, typically followed by *hunu li ma* (‘(s)he said’).

In Tibetan, an equivalent to *he* is the particle *na-re*. There are however major differences between Chhitkul-Rākchham and Tibetan. Referring to the latter, Simon (1968: 555) points out that the end of direct speech is marked by *ces* when there is no equivalent marking of direct speech in Chhitkul-Rākchham. Simon (ibid, p. 556) also underlines that instrumentative case on the name of the speaker and *na-re* cannot co-occur whereas the former is obligatorily marked with the ablative in Chhitkul-Rākchham (like for all definite subjects). Finally, “*na-re* always follows *immediately* after his name [the name of the speaker]. (185) indicates Chhitkul-Rākchham has both word orders¹⁶⁰, one of which where the quotative precedes the name of the speaker (*he anitatfi riŋde* ‘so Anita said’). However, Simon also underlines that the function of *na-re* “does not merely consist in introducing an utterance” (ibid), based on the investigation of several texts from the Tibetan Canon, but includes emphasis. Simon’s claim is consistent with my findings from §6.2. I claim, however, that *he* does not introduce direct speech, but new clauses, the function of which is emphasis. Another significant divergence from *na-re* is that Simon’s argumentation leads to the conclusion it is not verbal, whereas *he* is definitely so. A surmise is that *he anitatfi riŋde* vs. *anitatfi he riŋde* has to do with additional emphasis put on Anita (the original source of the quoted speech) in the latter case. Regardless of which construction prevails in conversation, this is another blatant illustration of the central role played by emphasis in the Chhitkul-Rākchham evidential system.

¹⁶⁰ This feature is highly unusual from a comparative perspective. Note that the occurrence of an adverb, for example *ɔʃa ɔʃa* ‘quickly’ similarly results in two patterns: *he anitatfi ɔʃa ɔʃa riŋde*, and *anitatfi ɔʃa ɔʃa he riŋde*. According to the second pattern, the adverb is inserted between the name of the speaker and *he*, which speaks in favour of the verbal nature of *he*. We may connect the first pattern with the observation made in §5.12 that the auxiliary *hen* is losing some of its verbal attributes (it cannot be negated).

Within the ‘West-Himalayish’ subgroup, only Chhitkul-Rākchham and Kinnauri exhibit more than one verb of saying (see §5.13). In Kinnauri, Saxena (2000: 477, 2002: 171) mentions a pair of verbs, *riŋ* and *lo* (*lõnmig* as infinitive based on Bailey 1909: 679, *lonning* according to my main consultant). Object agreement is also what governs their distribution. According to Saxena, the distinction is between ‘the speaker’ (*riŋ*) and ‘someone else’ (*lo*).

A central point in Saxena’s (2002: 172) description is that “when *riŋ-ɔ* (literally ‘say-PST’) functions as a lexical verb, the direct speech (“complement clause”) does not encode a repeated utterance; rather it is always a first-time utterance. This distinguishes *riŋ-ɔ* when it functions as a lexical verb from its quotative function (...) *riŋ-ɔ* functions also as the quotative marker, occurring after the quoted material” (ibid). Saxena is adamant the verb of saying functions as quotative, and if any complementizer occurs, then it is a borrowing from Hindi, namely *कि ki* – see (Saxena 2000: 476). My own data indicates that the adverbial *he~hoe~hɔde* ‘like’ may introduce the quotative construction:

(196) kinoriŋ se-o=∅ ɛm du-∅ he / hoe / hɔde
 Kinnaur apple-PL=ABS tasty COP.PE-3 like.QUOT like.QUOT like.QUOT
 dɔ-gɔ riŋ-o tɔ-ʃ
 3SG-PL say-PROG AUX.PEEX-3.HON

“Kinnaurese apples are tasty”, so they are saying’ – DSN

The motivation for a choice between three alternatives may have to do with the necessity to distinguish ‘like’ from ‘again’ (*he*: in Bailey (1909: 685); *he li*: according to my main consultant). Further, *he~hoe~hɔde* do not refer to ‘to hear’ in Kinnauri, which has *thasming* ‘to hear’ – Saxena (1995: 276), and *rontfiming* ‘to listen’. The Kinnauri adverbial *he~hoe~hɔde* is much less productive than its Chhitkul-Rākchham equivalent. Among the range of functions outlined in table 79, it only serves a quotative and clause introducer function. There is no copula and auxiliary like *hen* in Kinnauri, and by extension no conditional compound form like *henna* (‘if’ = *dok*). For these reasons, *he~hoe~hɔde* is likely to be borrowed from Chhitkul-Rākchham.

The clitic =*e* is also part of my data on Kinnauri, although its distribution seems to differ greatly from Chhitkul-Rākchham. The clitic occurs in reportative contexts with impersonal subjects:

(197) mi:=∅ lo-f-o du-∅=e kinoriŋ se-o=∅ wahal ɛm
 people=ABS say-E-PROG AUX.PE-3=RPT Kinnaur apple-PL=ABS INT tasty
 ni:-ts
 COP-HAB.ASS

‘People say Kinnaurese apples are very tasty’ – DSN

The omission of both the quotative and the reportative in Saxena’s description appear surprising and yet some factors may account for it. Saxena (2000, 2002, 2007) has been dealing extensively with Kinnauri folktales, where “the participants are regularly identified” (2002: 166). There is not a single occurrence in her corpus of texts from the previously three mentioned papers with an impersonal subject. Further, the adverb *he* in Chhitkul-Rākchham is part of my corpus, but never as a quotative, a function that exclusively appears in my elicited data. In case *he ~hoe ~hɔde* is a borrowing from Chhitkul-Rākchham, it is not necessarily part of the repertoire of every Kinnauri speaker.

According to Saxena (2002: 173) “by retaining the original speech and by demarcating the quoted message from the rest of the narrative, this speech strategy may be seen as a linguistic device used to declare that the responsibility for the form as well as the content does not lie with the narrator”. A first observation is that the occurrence of *he ~hoe ~hɔde* is likely to result in a broader perspective judging by the available data from Chhitkul-Rākchham. Referring to §6.1, the hearsay clitic invariably conveys a dubitative flavour. Would the epistemic meaning of *he* be similar, why would Chhitkul-Rākchham use two different forms? From a cross-linguistic perspective, quotative markers often have the meaning of ‘certainly’, ‘to be true’, as in Lahu (Matisoff 1973: 171) and Mongsen Ao (Coupe 2007: 131-3), but whether *he* reflects mistrust or belief depends on context, notably who the source of the *verbatim* content is.

6.6 Concluding remarks on chapter 6

Chapter 6 in general and tables 79 (see §6.4) in particular provide an illustration of the central role played by the base *he* in the Chhitkul-Rākchham evidential system. The adverbial and quotative *he* is also part of a few converb constructions, one of which, *het ta*, consisting of CVB COP and serving an adverbial function, is the object of the next chapter.

Of utmost importance is the observation that reported evidentiality can under no circumstances be epistemically neutral. The hearsay clitic =*e* conveys a dubitative meaning and the optional use of *he* in quotatives gives more credence to the reported content, with pragmatic effects involved – the speaker’s taking no responsibility for what is said. Chapter 6 thus provides another illustration of the futility to distinguish between evidential markers and ‘evidential strategies’. The hearsay clitic =*e* and the quotative *he*, like the copula and the auxiliary systems described in chapters 4 and 5, are part of an epistemic scheme, i.e. we cannot tear apart the epistemic meaning of these markers from their source.

Chapter 7: the expression of evidentiality by means of the copula *ta* following a converb or a discourse particle

In this chapter, I address converb constructions followed by the perceptual *ta* (or a syntactic allomorph), namely *hɛt ta* 'maybe, possibly' (CVB.EMPH COP.PE), which also serves as concessive subordinator, *man ta*, and *ne te*. *Mat ti* also consists of CVB + *ti* – *ti* being a syntactic allomorph of *ta* – but in light of its copula function I treat it separately (see §4.1.2).

The converb construction *hɛt ta* consists of the converb *hɛt* and the copula *ta*. In addition, *hɛt* shares the same base as *he*, the diachronic origin of which is the lexical verb *ɛnaŋ* 'to hear' (§6.4). The converb construction *hɛt ta* bears witness to an harmonisation of coda and onset in the same point of articulation: the underlying form is actually *hɛn ta*, with *hɛn* serving a converb function and *ta* the epistemic (inferential) function of reducing the assertiveness conveyed by *hɛn*. *Man ta* consists of the converb *man* and the copula *ta* serving, like *mat ti*, a postverbal negator function. We have established in chapter 4 that *man* is the antonym of *hɛn* and in §5.8.3 that *manna* is the antonym of *hɛnna*. The antonymy is also reflected in *man ta* vs. *hɛt (hɛn) ta*. *Ne te* is the last representative of this quartet of non-lexical verb forms, but it differs syntactically, consisting of the discourse particle *ne*, and the copula *te*, syntactic allomorph of *ta*.

We are still dealing with the morphosyntactic expression of evidentiality at the verbal level, but in a different configuration than V CVB AUX (see §5.7). Although *hɛt ta* occurs at the beginning of a sentence, typically right after the subject, it fulfils an adverbial modifying function from a synchronic perspective, i.e. its occurrence is conditioned by that of the dubitative irrealis *-no* exclusively found at the verbal level. Like *hɛt ta*, *mat ti*, *man ta* and *ne te* may occur in a non-verbal utterance, but they otherwise invariably occur in postverbal position.

I first investigate *hɛt ta* in light of its clear adverbial function in §7.1. I then discuss *man ta* and *ne te* in §7.2 and §7.3 respectively. §7.4 provides a few concluding remarks on the chapter.

7.1 The converb *hɛt +ta*

§7.1.1 deals with the distributional properties and the semantics of *hɛt ta*. One often describes converbs as adverbial verb forms, the reason for which I discuss epistemic adverbials from a comparative perspective in §7.1.2.

7.1.1 Distributional properties and semantics

Among the so-called ‘parts of speech’, adverbs are the most diffuse category. As Payne (1997: 69) points out, “any word with a semantic content that is not clearly a noun, a verb, or an adjective is often put into the class of adverbs”. What adverbs often have in common, however, is an unrestricted position (Givón 1984: 77), a specific syntactic function (complementizer, subordinator), a role as modifier (of a verb, an adjective, another adverb, a clause), etc. Referring to their modifying function, so long one admits all types of verbs may express an evidential distinction – as established in §5.5 – treating verbs and adverbs jointly in the expression of morpho-syntactic evidentiality makes sense.

Modal adverbs of certainty “can mark certainty (or doubt), actuality, precision, or limitation (...) the source of knowledge or the perspective from which the information is given” (Biber and al. 1999: 972), a definition in accordance with a ‘knowledge management’ function. According to Simon-Vandenberghe and Aijmer (2007: 5), epistemic adverbs are indexically related to variables in the social situation and are associated with types of social activity, with social roles and with power”; this is in line with the imperative to investigate evidentiality in context.

Quirk and al. (1985: 615, 620) refer to adverbs of certainty as ‘content disjuncts’, which, alongside style disjuncts “make observations on the actual content of the utterance and its truth conditions”. These ‘content disjuncts’ contrast on a semantic basis with the so-called ‘subjuncts’, notably emphasizees, which I took in §6.2 as one relevant means to express morphosyntactic evidentiality in Chhitkul-Rākchham. If we take one element of a contrastive pair to be evidentiality, structuralism obliges us to do the same with the other.

Chhitkul-Rākchham has only one epistemic adverbial, *hɛt ta*. Its uniqueness fails to surprise against the backdrop of an incredibly complex evidential system consisting of a relatively

high number of copulas and auxiliaries. There is little functional need for adverbs conveying “the speaker’s attitude toward the truth, certainty or probability of the state of event” (Givón 2001: 92). As long as there is room for only one adverb, one may anticipate some degree of epistemic polysemy. In fact, *hɛt ta* occurs as simple adverb ‘maybe, possibly, probably’, and also serves as concessive subordinator.

Treating *hɛt ta* as part of the morphosyntactic expression of evidentiality is consistent with the indefectible link between source (or access) of information and epistemic judgement upon the same. “The treatment of adverbs of certainty in the literature is not consistent and they are classified in disparate ways reflecting the scholars’ varied approaches and interests” (Szczyrbak 2017: 93). While I cannot object Szczyrbak’s observation *per se*, no matter how we choose to define the term, the data from table 79 – *hɛt ta*, *hɛn*, and *hɛ* ultimately arise from the same diachronic source – is a strong argument for treating them alike.

There is little doubt *hɛt ta* is epistemic. The perceptual copula *ta* is cliticized to *hɛt*. Judging by the meaning of *hɛt ta* ‘maybe, possibly, probably’, we have another blatant illustration, in addition to an auxiliary construction where *ta* follows a lexical verb inflected for the habitual-assertive *-ts*, of an evidential denoting source of information with an serving an epistemic function.

The converb construction *hɛt ta* is a rarity in the corpus. However, it is elicitable. A major constraint upon its occurrence is the presence of the dubitative irrealis *-no*, be it on a copula, auxiliary or on a lexical verb. The converb construction *hɛt ta* is not compatible with any other copula or auxiliary but *ano*.

The meaning of *hɛt* is only comprehensible in relation with two similar forms, namely *hɛn* and *hɛk* (see tables 79 and 80 in §6.4). We have established in §4.4.6 /n/ in *hɛn* denotes assertive emphasis. Similarly, I surmise in §6.4 that *hɛk* refers to *hɛ*-AGR from a diachronic perspective. The suffix *-k* then refers to the first person singular subject agreement marker, i.e. to contexts where the resulting evidential value can be all but assertive (dubitative after *-no*, neutral after the imperfective markers *-e*, *-de* and *-te*, less than assertive when attaching to *ta* and *to*). Consequently, *hɛt ta* tones down the dubitativeness of a

construction that includes the dubitative *-no*, the same way *ta* in *V-ts ta* weakens the assertiveness expressed by *-ts*.

A first example with *hɛt ta* is (198), a locational copula clause where the speaker may use the adverb to modify the dubitative meaning expressed by the copula *ano*. The speaker does not remember where he put a certain book. Consequently, he is not sure the book is on the table, hence the use of *ano*. In case only *ano* occurs, we may translate (198) as ‘the book may be on the table’. The converb construction *hɛt ta* brings a nuance by making it more likely it is so. There is no straightforward way to translate *hɛt ta*, the function of which is to dampen the dubitative meaning of *ano*:

(198) ki:tab-∅ hɛt ta mɛz=∅=niŋ a-no-∅
 book-ABS CVB.EMPH COP.PE table=ABS=LOC COP-IRR.DUB-3

‘The book is on the table – maybe, probably (or is likely to be) – DSN

The converb construction *hɛt ta* similarly occurs in all types of copula clauses, as long as it functions as a modifier of *ano*. One exception is (199), where the occurrence of *ano* is not ungrammatical, but odd according to my main consultant. The reason is, there is usually little room for doubt with proper inclusion constructions. Consequently, although my main consultant judges *ano* acceptable, he would not use *hɛt ta* in (199):

(199) ɛme=∅ *hɛt ta pala-tʃi=∅ a-no-∅
 3SG.HON=ABS CVB.EMPH COP.PE shepherd-AGT=ABS COP-IRR.DUB-3

‘He is a shepherd – maybe’ – DSN

In (200), the speaker is not entirely certain he will arrive at five o’clock, thus the occurrence of a main verb inflected for the dubitative irrealis; *hɛt ta* reduces the degree of uncertainty conveyed by *-na*:

(200) ga:=∅ hɛt ta ŋã badʒ-e taŋ tʃʰitkul
 1SG=ABS CVB.EMPH COP.PE five o'clock-MASC.PL up to Chhitkul
 tu-na-k
 come-IRR.DUB-1SG

'I will arrive in Chhitkul at 5 o'clock – maybe, probably (or likely so)' – DSN

(201) shows *hɛt ta* may also occur when *ano* functions as auxiliary. The speaker is speculating about whether he may be able to buy some sheep and goats. Turning to shepherds makes the prospect less doubtful, hence the use of *hɛt ta*:

(201) pala-tʃaŋ=∅ da hɛt ta tɛt=∅ raŋtʃ-aŋ
shepherd-PL=ABS POST.have CVB.EMPH COP.PE sheep an goats=ABS sell-INF
a-no-∅
AUX-IRR.DUB-3

'Shepherds have sheep and goats to sell – maybe, probably (or likely so)' – DSN

The modifying function of *hɛt ta* in copula and non-copula constructions only applies to the copula and auxiliary *ano* or to a main verb (or second verb) inflected for *-no*. The converb construction *hɛt ta* cannot occur in other contexts. Referring to §4.2.4, the copula *to* invariably occurs with first person possession. Consequently, *hɛt ta* cannot occur in (202):

(202) ɛme=∅ *hɛt ta ai atʃi=∅ to-∅
3SG.HON=ABS CVB.EMPH COP.PE 1SG.POSS son=ABS COP.PEEX-3

'He is my son' – DSN

The form *hɛt ta* has one more noteworthy function as concessive subordinator 'although, even though, even if'. In (203), *hɛt ta* introduces the concessive construction. The converb construction *hɛt ta* may co-occur with the perceptual copula *ta* in clause-final position because in the context of (203), *hɛt ta* is a concessive subordinator. Like in the case of the subordinating conjunction *hɛnna* ('if), *ta* or *tɔts* - but not *ano* – may follow:

(203) hɛt ta huju kjim=∅ ʃar-e ta ga:=∅ huju
CVB COP.PE DEM.PROX house=ABS beautiful-FEM COP.PE 1SG=ABS DEM.PROX
ma-ts^hɔŋ-ã
NEG-buy-PROG

'Even though this house is beautiful, I won't buy it' – DSN

Referring to English, Huddleston and Pullum (2002: 768) claim a modal adverb belongs to one of four levels of strength in terms of speaker's commitment: strong, quasi-strong, medium and weak. A Chhitkul-Rākchham speaker does not make any difference between 'maybe, perhaps, possibly, conceivably, arguably, likely and probably', that is, between the weakest two categories (medium and weak), all conveyed by *hēt ta*.

Chhitkul-Rākchham thus makes a distinction between a dubitative epistemic meaning, conveyed by means of *-no*, and a less dubitative meaning conveyed by means of *hēt ta*. As *-no* conditions the occurrence of *hēt ta*, the latter expresses an epistemic meaning we must treat as a sub-category, or a sub-system of doubt.

The parallel between *he rukji* (or *ɾɔŋ=sea*) *ta* and *ano*, discussed in §4.3.2, and *hēt ta* and *ano* is striking. One may use *ano* instead of *rukji ta* even if the speaker has some perceptual evidence the same way *ano* may occur without *hēt ta* if the speaker does not want to bring a nuance to her dubitative statement. Both *rukji ta* and *hēt ta* dampen the dubitative reading of *ano*, with *rukji ta* occurring instead of *ano*, and *hēt ta* co-occurring with *ano*.

The binary system of epistemic modality described above is in keeping with Greenbaum's (1969: 203) fundamental distinction between 'conviction', conveyed in English by adverbs such as 'definitely', 'certainly', or 'undoubtedly', and 'degree of doubt', conveyed by 'presumably', 'likely', or 'probably'. Within this framework, we may distinguish between 'warrantability' on the one hand (doubt and certainty) and 'comprehensibility' (observation or perception) on the other. The model accounts for the distribution of *hēt ta*: when it modifies the dubitative meaning expressed by *ano*, we are dealing with warrantability, and when it occurs as concessive, with comprehensibility, hence the co-occurrence of the perceptual *ta*, as in (198).

7.1.2 *hēt ta* from a comparative perspective

The converb *hēt* in *hēt ta*, contrary to *he* as a clause introducer or complementizer, has no longer the attributes of a verb, apart from being followed by a copula, notably due to its position in the clause, typically right after the subject. Since no verbal form ever follows *hēt ta*, we cannot say we are dealing with a serial verb construction from a diachronic

perspective. The same observation applies to *het ta* as a subordinative conjunction. The converb construction *het ta* is invariably separated from the verb by the subject whereas *he* may occur before or after.

I translate *het ta* as ‘maybe, likely, probably’. The same meaning is found in Hindi शायद (*śayad*), commonly but too vaguely translated as ‘perhaps’ – see Snell and Weightman (2010: 417). However, the system of modal adverbs in Hindi diverges significantly from that of Chhitkul-Rākchham in that there is a choice of adverbs to express certainty (Hansen 2018: 214).

A connection between the epistemic adverb ‘maybe’ and copular verbs is not new from a cross-linguistic perspective, and is in no way circumscribed to the Tibeto-Burman language family. English and French (*peut-être*) are languages that display a similar connection. It may nonetheless be worth investigating whether the wide range of functions ascribed to ‘to say’ under the influence of Indo-Aryan – or to ‘to hear’ in Chhitkul-Rākchham – includes the epistemic adverb or not.

Thulung has an adverb, *hola* ‘maybe’, borrowed from Nepali, where it in all likelihood relates to the auxiliary *ho* (Lahaussois 2002: 194). However, a borrowing from Nepali makes it likely ‘perhaps’ was originally entirely absent from the language. In addition, there is no connection between *śayad* and होना (‘to be’) in Hindi and between *šā’ida* and *hōṇa vālā* in Punjabi, but *śayad* is originally from Urdu. Marathi has two copulas, *ahe* ‘to be’ and *hone* ‘to become, happen’, which do not relate with ‘maybe’, namely *kadāčita* (Dhongde and Wali 2009:196, alternatively *bahutek*). Bengali also counts two copulas, *howa* and *ach*, both differing greatly from ‘maybe’ *hate pāre* (Bhadra and al. 2016: 81). We cannot relate ‘maybe’ with a copula in the four major Indo-Aryan languages. Only Nepali differs from the pattern; in this case, *hola* relates to ‘to be’.

I do not mention Nepali by chance. Some Tibeto-Burman languages from Nepal follow a similar pattern whereby one can draw a straightforward connection between the native terms. In Thangmi, *t^haṇun* ‘perhaps’ (Turin 2007: 488) relates to one of the two copular verbs, *tha-sa*¹⁶¹ (the other being *hok-sa*). In Dolakha Newar, *jeu* ‘perhaps’ (Genetti 2007: 144) relates to the ‘regular’ stem verb *jur-* (the ‘highly irregular’ being *khyañ*) with the

¹⁶¹ The former means ‘to be, become, happen’ (ibid, p. 409-10).

meaning ‘to be, become, happen’ (ibid, p. 281). A similar pattern is also found in East Bodish: in Kurtöp, Hyslop (2011: 551) mentions *wenta* “used when the speaker does not expect something to be the case”, i.e. what she calls a “mirative form”.

At this stage of enquiry, I am not aware of any other Tibeto-Burman language where ‘maybe’ relates to a lexical verb the meaning of which would be ‘hear’. The situation is however different when it comes to the complementizer and quotative *het*. Dixon (2006: 1) observes that “in many languages, certain verbs – notably ‘see’, ‘hear’, ‘know’, ‘believe’, ‘like’, and often also ‘tell’ and ‘want’ – can take a clause, instead of an NP, as a core argument”.

Chhitkul-Rākchham *het ta* being more or less the equivalent of Hindi *śayad*, it differs from Standard Tibetan, where probability plays a more prominent role referring to Vokurkova’s (2008: 145-6) description. The use of *phal.cher* ‘perhaps’ denotes close to 50% possibility and contrast with ‘probably’, expressed by means of an epistemic ending on the main verb. That *het ta* conveys the meaning of ‘maybe’, ‘possibly’, ‘probably’, ‘likely’ indicates that probability is not a pivotal factor.

Within the ‘West-Himalayish’ subgroup, Chhitkul-Rākchham and Kinnauri, where *het ta* occurs too, stand again in sharp contrast with the other languages. One cannot relate the relevant epistemic adverbs to any lexical verb in any language of the sub-group. In Darma, Willis (2007a: 203, 346, 488, 554) mentions *baydabe* ‘perhaps’, but she never discusses its etymology. In Bunan, Widmer (2014: 358) refers succinctly to *tantan* as ‘truly, surely, definitely’, also found in the Tibetan *rten rten* ‘accurate’. In Byangsi, Sharmā (2001a: 80) translates *wakhato* as ‘perhaps’ without any further information.

7.2 The converb *man + ta*

Man ta formally consists of the converb *man* and the copula *ta*. In that it stands close to *het ta* (§7.1), the difference being, the latter never occurs after the verb complex. While a Chhitkul-Rākchham speaker marks a short pause between *het* and *ta*, the case of *man ta* is different, reason why I gloss it with *ta* cliticized to *man*, as one phonological unit. *Man ta* may occur directly after a main verb or after any copula or auxiliary. We may translate *man ta* as ‘isn’t it?’, the occurrence of *ta* making the emphatic *man* slightly less assertive, which

makes sense because *man ta* exclusively occurs when asking for the interlocutor's confirmation.

In (204), the speaker answers a question about the duration of *Usko* ('The Flower Festival'), the use of *man ta* indicates (s)he is asking for a confirmation that three days is the answer. There is no copula, main verb, or auxiliary. The copula *a:ts* would have been appropriate here because we are dealing with procedural knowledge:

(204) homo dear=∅ man=ta usko=∅
three day(s)=ABS CVB.NEG.EMPH=COP.PE Flower Festival=ABS

'The Flower Festival is of three days, isn't it?

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In (205), the participants are describing how life is in Rākchham village all year long. The husband plays the role of an interviewer of his wife. When describing the kind of food that is available around Rākchham village, his wife alludes to crops and the husband enquires about shops. Probably not shopping himself, he enquires about the possibility of buying food from shops, hence his use of the dubitative *ano*. In this context *man ta* does not modify the evidential distinction expressed by *ano*. Rather, *man ta* invites the interlocutor to confirm or disprove what the speaker just said:

(205) dukan=o=tji ts^hɔŋ-ã a-no-∅ man=ta
shop=LOC=ABL buy-PROG AUX-IRR.DUB-3 CVB.NEG.EMPH=COP.PE

'Well, then (they) will be buying (something) from the shop, will not they?'

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In (206), the participants are the same as in (204) and (205), and the husband asks his wife about the most significant months for members of the Rākchham community, proposing two possibilities. In this context, the use of *man ta* signals he is waiting for his wife's approval. Again, *man ta* does not modify in any way the evidential distinction conveyed by *to*:

(206) ʃrʋənən=∅ badraŋ=∅ ta kjaŋ=∅ mā mā te-i
 Shravan=ABS Bhadrapada=ABS COP.PE 1PL.INCL=ABS INT big-MODIF

to-∅ man=ta kʰe:
 COP.PEEX-3 CVB.NEG.EMPH=COP.PE why

‘Shravan, Bhadrapada, these are very big moments for us, why so?’

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(207) is ‘monologic’. The speaker is cooking some chiltas and comments on its health benefits. That chiltas are tasty is part of ‘common localized knowledge’, hence the use of *a:ts* as copula. *Man ta* in does not weaken the assertiveness conveyed by *a:ts* in any way. Rather, it is an invitation to the non-initiate listener to taste and realize how tasty it is:

(207) bā mā nim-i a:-ts man=ta brasu hət=∅
 INT tasty-MODIF COP-HAB.ASS CVB.NEG.EMPH=COP.PE bitter buck chilta=ABS

‘Bitter buck chilta is very tasty, isn't it?’

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From a semantic perspective, it would make little sense not to treat *man ta* as part of knowledge management, especially in those constructions where no copula occurs. Comparing *biskut tiŋ tʃa: tsʰaŋpʰuliŋ tʃʰetiŋ zoi a:ts* with *biskut tiŋ tʃa: tsʰaŋpʰuliŋ tʃʰetiŋ zoi manta* ‘biscuits and tea are appropriate for breakfast’, and ‘biscuits and tea are appropriate for breakfast, aren't they?’, the interactional function of *manta* is obvious. In the former case, the speaker anchors its proposal in ‘common knowledge’, whereas in the latter case she backgrounds her own knowledge and by using *man ta*, gives precedence to the interlocutor. My description is in keeping with Maschler's (2012) view that the function of what he calls ‘interpersonal markers’ is precisely to negotiate the relationship between the speakers in discourse¹⁶². In that sense, it is epistemic so long we take the term to be a larger phenomenon than “attitude or beliefs towards knowledge”, referring to Stivers & al. (2011) definition. Since it is epistemic, it is then part of evidentiality.

¹⁶² It is also in keeping with Fraser (1990, 1996, 2009) ‘discourse markers’ a subtype of what he calls ‘pragmatic markers’ – markers with a pragmatic meaning.

Tsangke (Shigatse) Tibetan has *menta ~meta* (as antonym of *yinta ~yöta*), referring to Haller's (2000) description. These forms also occur in Dingri Töke, about which Herrmann (1989: 61) makes the observation, also valid in Chhitkul-Räkchham, that they are restricted to third person subjects.

7.3 The discourse particle *ne + te*

I include *ne te* in the morphosyntactic means of expression of evidentiality in Chhitkul-Räkchham for one obvious reason. *Ne te* consists of the discourse particle *ne*, which I treat as assertive in §8.4, and *te* (like *ti* in *mat ti*, syntactic allomorph of *ta*), which is also epistemic, reducing the assertiveness of *ne*. From a morphosyntactic perspective, we can establish a connection between /n/ in *ne* and /n/ in forms that are already part of my description, namely *hen*, *hun*, *man*, and *n(j)o*. As long as one treats *ne* and *man* as morphosyntactic means of expression of evidentiality, it would not make sense to exclude *ne te* and *man ta*.

Like *man ta*, *ne te* occurs in an inter-subjective context where the speaker requests the hearer's consent. As such, *ne te* occurs in clause-final position with a similar interrogative meaning to *man ta*. In both cases, the discourse particle *ne* and the converb *man* denote assertiveness with *te* and *ta* weakening this assertiveness, because we find ourselves in an interrogative context. The most salient difference between these two is that *ne* is affirmative whereas *man* is negative. We may therefore translate *ne te* as 'is it?' and *man ta* as 'isn't it?', but the epistemic reading is similar.

Like *man ta*, *ne te* does not modify the evidential meaning conveyed by the proposal. In (208), the interlocutors are discussing the idea of teaching Chhitkul-Räkchham to children one hour a week during their holidays. The speaker is obviously convinced by this idea, using the habitual-assertive *-ts*. The occurrence of *ne te* serves to indicate that the idea remains open to debate:

- (208) huʃ-i-tʂ ne=te
 learn-E-HAB.ASS CVB=COP.PE
 '(They) will learn, won't they?'
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Ne te consists of a discourse particle and a syntactic allomorph to *ta* which I treat as an assertive question tag, i.e. with a clear interactional function. In this context, *te* (and *ta* in *man ta*) stands close to the question particle *a* (§8.5.3) both phonologically and functionally.

Example (208) resembles (139) – see §5.7 – the difference being the focus clitic =*o* occurs between *hufits* and *ne te*. (234) – see §9.1.3 – is another example with *ne te* following *ga: fe:li tɔk* ('I am the fox'). I had instructed the speaker to tell the story of *Jackal and the Crow* from the fox's perspective. He then started doing so by checking that he understood my instructions correctly, thus using *ne te*.

7.4 Concluding remarks on chapter 7

So far, the morphosyntactic devices serving the expression of evidentiality – copulas, auxiliaries, the hearsay clitic =*e*, and the quotative *he* did not constitute any typological oddity. The real innovation is in chapter 5, where I show that in auxiliary constructions one has to consider the whole template $V_1 (V_2) \text{ AUX}$, and not just AUX , to understand how evidentiality is expressed. §5.7 introduces another type of construction, $V \text{ CVB } \text{AUX}$, that includes converbs in subordinate clauses. Yet, the role played by converbs in the expression of evidentiality takes another dimension in the present chapter: *mat ti*, *het ta*, *man ta* and *ne te* are all $\text{CVB} + ta$ constructions and all may occur in main clauses, confirming *en passant* the dampening epistemic function of the perceptual copula *ta*. Table 81 sums up the epistemic values of the previous four constructions:

Table 81: a list of $\text{CVB} + ta$ constructions: their evidential (epistemic) value and syntactic function

converb	copula	epistemic meaning	Function
<i>mat (man)</i> CVB.EMPH	<i>ti</i> COP.PE	less assertive than <i>man</i>	syntactic allomorph of <i>mahen</i> copula and postverbal negator
<i>het (hen)</i> CVB.EMPH	<i>ta</i> COP.PE	less assertive than <i>hen</i>	adverbial concessive

			subordinator
<i>man</i> CVB.EMPH	<i>ta</i> COP.PE	less assertive than <i>man</i>	syntactic allomorph of <i>mahen</i> confirmational
<i>ne</i> PTCL.ASS	<i>te</i> COP.PE	less assertive than <i>ne</i>	consent

We are still at the verbal level, but *het ta* typically occurs right after the subject, at the beginning of a sentence.

Chapter 8: additional means of expression of evidentiality at the verbal level

In this chapter, I investigate additional syntactic elements that attach to or follow the verb complex with an evidential meaning. These syntactic elements are loosely integrated into the sentence structure, also occurring at the NP level.

The morphosyntactic expression of evidentiality in Chhitkul-Rākchham also includes discourse particles such as *no~ njo*¹⁶³ (emphatic) and *ne* (assertive).

§8.1 deals with the focus clitic =*o* and §8.2 with the emphatic discourse particle *no*. I treat *no* as evidential because of its complementary distribution with the emphatic (assertive) copula and auxiliary *hɛn*. Whenever *hɛn* occurs, *no* cannot. Both therefore share the same meaning and must be treated on par. §8.3 discusses the relationship between =*o* and *no*. Diachronically, *no* consists of /*n*/ and =*o*. §8.4 deals with the discourse particle *ne* to which I ascribe an evidential status due to its assertive meaning. In §8.5, I briefly investigate the remaining syntactic elements occurring at the verbal level, the discourse particles, *na* and *ba* and the motion clitic =*niŋ*, reaching the conclusion they are not evidential. §8.6 provides some concluding remarks on the chapter.

8.1 The focus clitic =*o*

I argue in this section that =*o* is a focus clitic that may attach to other parts of speech than verbs. Within the verb complex, =*o* may follow the main verb, as in (209), (210) and (211), or a ‘second verb’, as in (212) and (213), but never both simultaneously.

We may say =*o* is ‘terminative’ in that it invariably marks the boundary of a verbal unit, attaching to the main verb, or to $V_1 V_2$. However, =*o* never occurs in presence of an auxiliary, be it after a main verb or after a $V_1 V_2$ construction. I explain why in §8.2.

The clitic may only occur between the main verb and the second verb in the following example, where the former inflects for the progressive - \emptyset . I ascribe this exception to the

¹⁶³ *No* and *njo* are in free variation, see appendix 1, §1.2.1.2.3.

available data from table 53 (§5.6.3), where the combination V-PROG *hunts* is equivalent to V-HAB¹⁶⁴:

- (209) t^han t^urizəm=∅ kjaŋsa: din prati din boq^hea-∅
today tourism=ABS 1PL.INCL.POSS day by day increase-PROG
boq^hea-∅=o ro-a to-∅ boq^hea-∅=o he
increase-PROG=FOC go-PROG AUX.PEEX-3 increase-PROG=FOC like

tsalea-∅=o hun-na ta:ŋ-na kjaŋsa: t^urizəm=∅
go-PROG=FOC stay/live-COND see-COND 1PL.INCL.POSS tourism=ABS

a: boq^hea-∅=o hun-ts
CONN increase-PROG=FOC keep-HAB.ASS

‘Today, tourism is increasing day by day, if it goes on like (this), then tourism will continue to grow’

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The focus clitic may follow a main verb inflected for the habitual *-ts*, as in (223):

- (210) ã kjaŋ au ama=∅ te hojo kat-tjaŋ=∅
INTERJ 1PL.INCL.POSS father mother=ABS then DEM.DIST language-PL=ABS
lo-a ta ta:ŋ-na de te at-tjaŋ=∅ məsaŋ məsaŋ
tell-PROG AUX.PE see-COND again then child-PL=ABS slowly slowly

huŋ-i-ts=o ne=te
learn-E-HAB.ASS=FOC PTCL.ASS=COP.PE

‘Yes, children will learn gradually if they see (their) parents talking in these languages, won’t they?’

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The focus clitic =o may also follow a main verb inflected for the infinitive, as in (211):

¹⁶⁴ This equivalence may be explained in terms of semantics: ‘to keep doing’ has the attributes of habituality.

(211) *kjaŋ-sa:=∅ latf-aŋ=o=sea i: dear man-na ta*
 1PL.INCL-PL=ABS do-INF=FOC=NOMI one day NEG.PTCL.EMPH-COND COP.PE

baɖa muʃkil a:-no-∅ i: dear
 INT difficult COP-IRR.DUB-3 one day

‘We should do (this), otherwise one day it will become very difficult’

DEB_cik01-RK-BSN1-2018-10-15-75

Examples (212) and (213) indicates =o treats a V_1V_2 construction as one syntactic unit. In the example below, =o attaches to the ‘second verb’ *asaŋ* (‘to happen, become’) inflected for the habitual -ts, which occurs in the right-most position of the verb complex:

(212) *k^haskər pɔʃ=∅ tʃi:=∅ ʃiŋ=∅ mi: sə kəm kəm tu-ʃi*
 especially dried leaves=ABS grass=ABS wood=ABS etc. QNT QNT QNT bring-PFV
ta-ʃi deʃ=o ja mun=i antʃ-a dau ʃja:-g-a
 bring-PFV village=LOC DISJ night=LOC get up-PROG outside look-E-PROG
ta:-ŋ-a hojo hoʃtaŋ nigran-i:=∅ la-ŋ=sea apa:s
 see-E-PROG DEM.DIST just vigilance-FEM=ABS do-INF=NOMI turn
du na man-na kjaŋ dobara
 POST.LOC PTCL.QUER NEG.COP.EMPH-COND 1PL.INCL.POSS again
kjaŋ p^hikʃ-aŋ a:-ts=o
 1PL.INCL.POSS drop-INF happen/become-HAB.ASS=FOC

‘Especially dried leaves, grass, wood, etc., should be brought in lesser quantity in the village, or we should just hold watch in turn at night, otherwise fire incidents will take place again’

NDB_cik01-VKN-NB1-2018-11-21-52

In (213), =o occurs right after *gints*, which indicates *t^helaŋ gints* must be taken as one syntactic unit. In table 50 (§5.6.2), I take *gints* to be a ‘second verb’:

(213) *t^ha he=o a:ts ba k^he la: te rum=∅*
 now likeFOC COP.HAB.ASS PTCL.DMEAN what do.PROG then green bushes=ABS

ta t^hel-aŋ gin-ts=o
 COP.PE carry on back-INF need-HAB.ASS=FOC

‘Now, it will happen like (this), what (can we) do? The green bushes will have to be carried on back’

NDB_cik06-BS1-AD-2019-03-07-155

Example (214) confirms that =o is not terminative in the sense that it ends a sentence, as already shown in (210), being followed by the discourse particle *ba* and the hearsay clitic =e:

(214) ba ufa kjaŋ-sa: kwɔlea-∅ ne ee
 PTCL.DMEAN helpless 1PL.INCL.POSS-PL feel-PROG PTCL.ASS 3PL.NHON.POSS
 tarm=e tse kaŋi-fi=o ba=e kaŋi-fi kaŋi-fi
 time=GEN QNT spend-PFV=FOC PTCL.DMEAN=HSY spend-PFV spend-PFV

‘We are feeling likewise, but everyone (enjoyed) their time, enjoyed and enjoyed’

NDB_cik04-MK-SD1-2018-11-24-152

Back to (211) and (212), we are dealing with a construction where =o and =sea follow V-INF and a construction where only =sea follows the same. The insertion of =o between V-INF and sea makes it likely =o is a clitic.

Another argument that sustains the claim that =o is a clitic is that it follows other parts of speech than verbs, as (213) illustrates. The array of functions that =o fulfils has focus as denominator. Following personal pronouns, =o is reflexive. On adjectives, a sub-class of verbs, =o is (optionally) involved in comparisons. The marker =o also functions as definiteness marker. Attaching to nouns, =o may also convey the meaning of ‘only’.

The clitic also serves as locative case marker, which suggests we are dealing with the expansion of the locative (see appendix 1, §1.4.4.3.2) into another domain from a diachronic perspective.

8.2 The emphatic particle *n(j)o*

The emphatic particle *no* may only follow the main verb in the absence of a ‘second verb’, or an auxiliary, as in (215):

- (215) *hojo tse batan=∅ ek^he lat-i lut-i ε:k ni:t-i:=∅*
 DEM.DIST all thing=ABS together do-PFV do-PFV one regulation-FEM=ABS
tan-na kjaŋ deŋaŋ=∅ dzo hε: age ro-no-∅
 make-COND 1PL.INCL.POSS village=ABS that COP.3SG later go-IRR.DUB-3

no
 PTCL.EMPH

‘After looking at these issues, if one set of regulations is made, then our village will make headway’

DEB_cik01-RK-BSN1-2018-10-15-58

No, contrary to the focus marker =*o*, may follow main verbs inflected for *-no*. In (216), *no* occurs after the copula *tɔts* and after a V (*huŋi*) AUX (*tɔts*) construction, in right-most position of the verb complex:

- (216) *kjuki bεsik dzo jikja=∅ tɔ-ts no*
 because basic DEM.DIST education=ABS COP.PEEX-HAB.ASS PTCL.EMPH
hojo ra:tsum=tʃi huŋ-i tɔ-ts no
 DEM.DIST Rākchham=ABL study-PFV AUX.PEEX-HAB.ASS PTCL.EMPH

‘Because there is basic education, which I learned from Rākchham’

TOP_cik01-RK-2018-10-08-8

No does not modify the evidential distinction conveyed by the proposal, but emphasizes it. In (215), *no* follows a main verb inflected for *-no*. The emphatic discourse particle in (215) does not make the evidential distinction doubtful, but reinforces its dubitativeness. In that sense, we may say the particle functions as some kind of intensifier of whichever evidential the speaker selects. In (217), *no* occurs both as non-propositional marker and as discourse particle at the verbal level:

(217) i kjaŋ kahawat=∅ no b^haia kī
 one 1PL.POSS.INCL saying=ABS PTCL.EMPH younger brother 2SG.POSS.HON
 raŋ=∅ ma-brals taŋ ʈa: pa:-ŋ no raŋ=∅
 horse=ABS NEG-collapse POST cook.PROG build-INF PTCL.EMPH horse=ABS

bral-i neotf=o ʈa: pa-ĩ pu-ĩ hojo
 collapse-ACT after=LOC cook.PROG build-PFV build-PFV DEM.DIST
 k^hɛts=o mɛhtau=∅ ma-to-∅ no
 something=FOC.DEF importance=ABS NEG-AUX.PEEX-3 PTCL.EMPH

‘Brother, based on one of our sayings, steps should be made before your horse collapses, making steps afterward is not useful’

DEB_cik01-RK-BSN1-2018-10-15-64

In (218) the speaker selects *a:ts ta* to infer about the future of Chhitkul village. Again, the occurrence of *no* right after does not alter the evidential meaning conveyed by *a:ts ta*. Rather, *no* emphasizes it:

(218) ətsə ətsə dʒ^hopr-i:=∅ numa p^hɛt-i p^hut-i wohə b^hi: a:dʒ
 small small bush house-FEM=ABS like put-PFV put-PFV DEM also today
 k-a: dʒo ɦɛ: sa:dan=∅ baɽ^hia a:-ts ta
 GEN-MASC.SG DEM COP.3SG source=ABS good become-HAB.ASS AUX.PE.INFR

no
 PTCL.EMPH

‘Making small cottages and the like (rooms) will be a good source (of income)’

DEB_cik01-RK-BSN1-2018-10-15-39

In (219), *no* follows a copula in a procedural narrative where the speaker describes the role played by the Interpreter in Rākchham village, hence the use of *a:ts*:

(219) baki uts=∅ ʈ^hɔm-i neotf=o hojo neotf=o maɽ^ha=e
 CONN flowers=ABS accept-ACT after=LOC DEM.DIST after=LOC interpreter=GEN
 rol=∅ a:-ts njo
 role=ABS COP-HAB.ASS PTCL.EMPH

‘Once the flowers have been accepted (by the deity), the rest is up to the Interpreter’

TRD_cik09-SS1-2019-04-11-21

No may also occur in negative constructions. In (220), a teacher from Chhitkul village is reflecting over education in general and how important basic education is to children. As the content refers to common knowledge, the main verb inflects for the habitual *-ts*:

(220) battʰ-õ ko he gin-aŋ no ki au ama=tʃi dʒab
child-OBL.PL DEF like need-INF PTCL.EMPH COMP father mother=ABL when
hut tu-no bɔre dil=∅ pʰɛt-i pʰɛt-i huʃ-aŋ
teach come.OBJ.2.3-SIM when heart=ABS put-PFV put-PFV study-INF
ɔr ɛ:k ba:r wɔkt=∅ lau=niŋ=tʃi ro-i neotʃ=o dobara
CONN one once time=ABS hand=LOC=ABL go-ACT after=LOC again
ma-pɔri-ts no
NEG-get-HAB.ASS PTCL.EMPH

‘Children should focus on their studies when taught by their parents; once time is over, it will never return again’

TOP_cik02-RK-2018-10-08-9

At the VP level, *no* treats V AUX as a single unit. The logical conclusion is that *no* contributes to a category expressed by the verb complex, and this category is evidentiality.

In addition, I gloss copulas such as *hɛn* and *man* as COP.EMPH, with /n/¹⁶⁵ contributing an emphatic meaning, because *no* may follow any copula (or auxiliary) except *hɛn* and *man*. The complementary distribution of /n/ and *no* indicates that one has to treat these two on par. *No* conveys some overtones of assertiveness¹⁶⁶, but the speaker emphasizes the evidential value conveyed by the main verb alone, or collectively by V₁ AUX. There is therefore no doubt *no* is part of the evidential system.

¹⁶⁵ I cannot take *n* to be an emphatic suffix because *man* already includes the negative prefix *ma-*.

¹⁶⁶ Certainty is one of several possible additional overtones. Norman (1988: 122) adds finality, supposition, surprise and limitation in the case of Chinese.

By contrast, =*o* may have a function close to emphasis, but this is not enough to qualify as evidential. The focus marker shares none of the previously highlighted characteristics: it is not part of the evidential system from a synchronic perspective.

8.3 Some comparative notes on =*o* and *n(j)o*

Tournadre and Jiatso (2001: 61) and Takeuchi (2014: 409) describe a “statement” or “terminative” particle found in Old and Literary Tibetan. According to Tournadre and Jiatso, the statement particle *o* (ཨ་ is 'o in Wylie, with a lot of allomorphs, as it assimilates to the coda of the preceding verb form), together with a list of variants that includes *no* (ibid, p. 63), follows the verb or the auxiliary. Takeuchi (2014: 409) contends the particle “marks the end of the sentence” and “expresses affirmative judgement” in Old Tibetan. According to Takeuchi (ibid), “the form of this particle is invariable regardless of the grammatical person of the subject”.

The previous description fits my own description of =*o* and *no*, although =*o* and *no* are not always “terminative” and that our accounts in terms of semantics differ slightly. However, *o* and *no* in Old Tibetan (mid-7th-end of 10th century A.D.) and =*o* and *no* in Chhitkul-Rākchham are too close to reject the idea of a borrowing from the former to the latter, hence focus > locative.

The blurred lines between evidentiality and emphasis are certainly not new from a Tibeto-Burman perspective. Gawne (2014: 81) reports an emphatic perceptual evidential, *dùba*, in Lamjung Yolmo, *dù* being the ‘regular’ perceptual form. The emphatic perceptual indicates “the information is not only new to the speaker, but also surprising”. The situation is different in Chhitkul-Rākchham: *hē* and *ma-*, the underlying forms of *man* and *hēn*, are not copular verbs (or auxiliaries) like Lamjung Yolmo *dù*.

Copulas ending in /*n*/ are certainly not a rarity: equative Bunan copula *jen* (Widmer 2014: 637), Kinnauri negative copula *māni* (Sharmā 1988: 152-3), So far, no one has formally identified *māni* as emphatic because *ni* is plainly described as a copula (see §3.8). Other instances of /*n*/ outside of ‘West-Himalayish’ include Kurtöp (Hyslop 2011a: 464, 549-51) and Bumthang (Wyatt 2017: 39, 65) *wen*, and the ‘egophoric’ *jīn* found in Brokpa (Funk 2020: 125).

None of the previously mentioned scholars formally identify these forms *as* emphatic, however. One claim is that /*n*/ is a shortened version of the copula and auxiliary *hɛn*, which suggests *no* is actually a contraction of *hɛn=o* (see §5.13) i.e. the focus marker =*o* was historically part of the evidential system. The previous observations are consistent with Takeuchi's (1990: 409) surmise that the terminative particle “-*o* probably carried out a function similar to that of *so* in old Japanese nominal sentences, which expressed affirmative judgement. That is, it fulfilled a copula function that appositionally connected the subject and complement”.

A confirmation that *no* is actually a contraction of *hɛn=o* is found in the distributional properties of *no* and =*o*. The former may follow any auxiliary (*hɛn* being the only exception, precisely because it is emphatic) whereas the latter may not, because it actually already does so, being fused with *n* (*hɛn*) from a synchronic perspective.

8.4 The assertive discourse particle *ne*

Like *no*, there are good reasons to treat *ne* as a particle. To start with, *ne* may occur in complete isolation, i.e. *ne* is a free element – see Zwicky's (1985: 287) ‘binding’ criterion to distinguish between clitics and particles.

Ne is “odd on distributional grounds” (Zwicky 1985: 290), an indication we are dealing with loosely integrated elements into the sentence structure. Like *no*, *ne* may occur outside of the verb complex and may be combined with other particles such as *ba* or *na*, as shown in (236) in §9.1.5.

I include *ne* in the list of morphosyntactic devices involved in the expression of evidentiality based on one central argument, namely that *ne* is assertive. As a discourse particle, *ne* serves a role at the verbal level, occurring after a lexical verb, as in (221) and (222). As such, it has no modifying effect on any of the evidential used in the clause. Rather, *ne* asserts the whole content of the proposal.

In the corpus, *no* occurs much more regularly than *ne*. The difference in meaning between these two is thin: emphatic vs. assertive, which means, both particles belong to the evidential system¹⁶⁷.

In (221), an autobiographic narrative, the speaker reminisces about his contacts with the Tibetans before the Indo-Chinese 1962 war. The use of *ne* in clause-final position signals the speaker vouches for the content of the proposal:

- (221) hu-i raŋ=tʃi tʰa niŋ ni-ʃi mi:=∅
 DEM.PROX-MODIF mountain=ABL now 1PL.EXCL 1PL.EXCL.DU man=ABS
 huŋ-i he si=o ma-ro-i raŋ=tʃi ne
 stay-PTCP like anyone=FOC NEG-go-PFV mountain=ABL PTCLASS
 ‘Now we are two people alive, no one (else) went beyond that mountain’
 AUT_cik10-JL-2018-11-25-4

The particle *ne* may occur right after a complement clause introduced by the adverb *he*. In (222), the speaker, a former Oracle, provides a procedural narrative about how *Mata Devī* answers questions from community members. *Ne* in reinforces the veracity of the information:

- (222) baki si=∅ riju-tʃ-aŋ ɔkʰa: sɔkʰ-a:=∅ dʒua tʃʰul
 CONN anyone=ABS ask-TR-INF predicament-MS=ABS here Chhitkul
 sat=∅ da: to-a tʃʰul sat=tʃi fukum=∅
 goddess=ABS give.PROG come-PROG Chhitkul deity=ERG order=ABS
 la-ts atʃa:nak=o upa=∅ to-a ʃʰa:ŋ=∅
 do-HAB suddenly=LOC inspiration=ABS come-PROG mustard seeds=ABS
 da-ts ʃʰa:ŋ=∅ ʃʃ-i: a:-ts
 give-HAB mustard seeds=ABS check-PTCP happen/become-HAB.ASS
 ma-dikʰ-na njaŋ riju-ts he ne=o
 NEG-match-COND again ask-HAB like PTCL.ASS=FOC

¹⁶⁷ This conclusion is also consistent with the symmetry observed at the phonological level between the close-mid back vowel /o/ and the close-mid front vowel /e/.

‘Anyone may come and ask (Mata Devī) to solve (one's) difficulties, the village deity gives orders and solutions, suddenly ideas come to my mind, (I) distribute mustard seeds for people to check; if they do not match, (one) asks again - this is how it goes’

AUT_cik10-JL-2018-11-25-11

As shown in (223), *ne* may also occur at the NP level. The particle may occur several times in the same clause, a stylistic effect of repetition that emphasizes assertiveness. The speaker laments about young children not studying properly. By using *ne* three times, she casts light on the fact that she is experiencing the negative effects of the situation:

(223) ã dolo ta attʃaŋ=∅ pəɖ^ha-i:=∅=du d^hjan=∅
 INTERJ CONJ COP.PE children=ABS study-FEM=ABS=LOC attention=ABS
 ma-da-g-a ne hojo tenʃən=∅ ne kjaŋ-sa:=∅
 NEG-give-E-PROG PTCL.ASS DEM.DIST tension=ABS PTCL.ASS 1PL.INCL-PL=ABS
 ne
 PTCL.ASS

‘Yes, even when children do not study attentively, we get tensed because of that’

NDB_cik04-MK-SD1-2018-11-24- 30

In addition to its assertive flavour, the particle *ne*, like *no*, interacts with the expression of evidentiality as realized by auxiliaries. In the following example, the speaker speculates about what the fox is thinking when seeing the crow on a tree with a fish in his mouth. He could use three of the relevant auxiliaries, namely *ano*, *ta*, and *to*, but chooses not to make use of any. *Ne* in this context is a way to relegate the speaker’s subjectivity to the background and draw the attention to what the fox is thinking:

(224) hojo matʃ^h-i:=∅ gale-a gale-a ka:=∅ i paŋ=∅
 DEM.DIST fish-FEM.SG=ABS chase-PROG chase-PROG crow=ABS one tree=ABS
 niŋ paŋ=∅ niŋ ro-i tsərna ʃeli=∅ lo po=tʃi
 POST.LOC tree=ABS POST.LOC go-PFV silently fox=ABS also below=ABL
 suntse-a ne baia=∅ hojo ka:=e a:-r=o=tʃi
 think-PROG PTCL.ASS brother=ABS DEM.DIST crow=GEN mouth-E=LOC=ABL

ga:=∅ matʃⁿ-i:=∅ hale ɔn-na-k jara=∅ ga:=∅=niŋ
 1SG=ABS fish-FEM.SG=ABS how get out-IRR.DUB-1SG friend=ABS 1SG=ABS=MOT

‘Chasing that fish, the crow is on a tree, is going silently on a tree, the fox is (certainly) thinking, from below: "brother, how will I get the fish out of that crow's mouth?"’

JAC_cik06-BS1-2019-03-07-13

(224) illustrates that optional auxiliatioation may be motivated, in addition to the fact that it is inferable from context (see §5.8.5), by the occurrence of a discourse particle.

8.5 The status of the remaining syntactic elements at the verbal level

In the following sub-sections, I take a stance on the evidential status of the remaining syntactic elements occurring at the verbal level: *na* (§8.5.1), *ba* (§8.5.2), *a* (§8.5.3) and *=niŋ* (§8.5.4).

8.5.1 The querying particle *na*

Na is a querying particle and as such requests some kind of reaction from part of the addressee in statements, similarly to Hindi *hε*: *na* (COP + *na*).

In (225), *na* follows the copula *ta*. We are dealing with a conversation where one of the speakers, by using *na*, initiates a query to which the hearer may or may not react:

(225) te ma-fuʃ-a kjaŋ-sa:-∅ mi:-∅ ta
 then NEG-study-PROG 1PL.INCL-PL-ABS human being-ABS COP.PE
 na
 PTCL.QUER

‘Then, (they - children) are not studying, we are human beings, aren't we?’

NDB_cik04-MK-SD1-2018-11-14

In (226), the participants reminisce about their childhood. One of the speakers uses *na* to prompt a reaction from the interlocutor:

(226) *ã sant-o ro-a na hai ai hɛtʃ-an rɔ-ŋ*
 INTERJ temple-LOC go-PROG PTCL.QUER INTERJ CONN play-INF go-INF

‘Yes, we used to go to the temple (complex), hai! And go playing!’

NDB_cik04-MK-SD1-2018-11-24-33

In (227), the participants are still reminiscing about their childhood, and the speaker underlines the passage of time, using *na* to query a reaction from part of the addressee:

(227) *attʰ-a: attʰ-a: baɦut taim=∅ as-e-∅*
 well-MASC.SG well-MASC.SG INT time=ABS become/happen-IMPV-3
na ma-tʰukʃ-i kjaŋ-ʃi
 PTCL.QUER NEG-meet-PFV 1PL-DU

‘Well, well, a lot of time went by since we met, don't you think?’

NDB_cik04-MK-SD1-2018-11-24-3

The querying nature of *na* is relatively neutral in terms of attitude. A relevant question to ask is whether /n/ in *na* is emphatic, like in *ɦɛn*, *man* (and *man ta*), and *no*. Since the answer to this question is no, I do not treat *na* as part of the morphosyntactic expression of evidentiality.

In *ɛme palatʃi ɦɛn* ‘he is a shepherd’, *no* cannot follow *ɦɛn*, precisely because both *ɦɛn* and *no* include the emphatic /n/. *No* cannot occur in this context because it is redundant. *Na* (and *ne*) may occur however: *ɛme palatʃi ɦɛn na* ‘he is a shepherd, isn't he?’ is still assertive, but *na* indicates the speaker invites the interlocutor to react to the statement, i.e. it is querying, but not evidential.

8.5.2 The demeaning discourse particle *ba*

Another discourse particle is *ba*. In (228), *ba* is demeaning and typically occurs when a speaker laments about a situation. The particle conveys an attitude towards the content of the proposal, but it is not epistemic:

(228) t̪ʰa=mã batʃpan=e din kʰe wa:pas tu-no-∅ ba=e
now=LOC childhood=GEN day what back come-IRR.DUB-3 PTCL.DEMEAN=HSY

na

PTCL.QUER

‘Now we may be coming back to childhood days (I hear), aren't we?’

NDB_cik04-MK-SD1-2018-11-24-10

Schiffrin (1987: 31) defines discourse markers as “sequentially dependent elements that bracket units of talk’. *No*, *ne*, *na* and *ba* bracket entire clauses and smaller ‘units of talk’. They all occur after the verb complex and the NP level. However, only *no* and *ne* have an evidential function.

8.5.3 The question particle *ã*

Another syntactic element in the verb complex is the question particle *ã*, which occurs right after the main verb or right after the ‘auxiliary’ (§5.3), but not necessarily in clause-final position. In fact, *na* is the only discourse particle among the previously mentioned set that can follow the question particle *ã*, which is consistent with its querying meaning. The particle *ã* does not modify the evidential meaning expressed in the clause, i.e. it is not evidential.

8.5.4 The motion¹⁶⁸ clitic =*nij*

The motion clitic =*nij*, homophonous with the locative (see appendix 1, §1.4.4.3.2), invariably occurs in clause-final position, as in (229), the only exception being when the hearsay clitic =*e* do so instead:

¹⁶⁸ Guillaume and Koch (2020) use the term ‘Associated Motion’, “a verbal grammatical category, separate from tense, aspect, mood and direction, whose function is to associate, in different ways, different kinds of translational motion to a (generally non-motion) verb event”. Associated motion is also attested in Gyalrong languages (Jacques 2013; Jacques, Lahaussis and Shuya 2021), notably Japhug, Kiranti (Khaling, Yamphu (Rutgers 1998)), Sinitic and Burmese. Associated Motion is probably an under-reported phenomenon – see also Zhang (2020: 507-617).

(229) $\int\epsilon li-\emptyset=e$ $ka:=\emptyset$ $a:-r=o$ $mat\int l-i:=\emptyset$ $ta-\tilde{i}$ $tu-\tilde{i}$
fox-ABS=HSY crow=ABS mouth-E=LOC fish-FEM.SG=ABS see-ACT see-ACT
 ta $b^a a:nti$ $d\int an-a$ po $hame$ $\int\epsilon li=\emptyset$ $mat\int l-i:=\emptyset$
AUX.PE strangely behave-PROG down when fox=ABS fish-FEM.SG=ABS

 ai $a:-r=o$ $hame$ $tu-no-\emptyset=ni\eta$
1SG.POSS mouth-E=LOC when come-IRR.DUB-3=MOT

'The fox is behaving strangely having seen the fish in the crow's mouth, the fox below thinks: "when will the fish come into my mouth"'

JAC_cik03-NB2-2019-03-06-4

The clitic *=ni η* occurs independently of any evidential distinction expressed in the clause and it does not have any epistemic meaning: it is not part of the evidential system.

8.6 Concluding remarks on chapter 8

Chapter 8 demonstrates that the morphosyntactic expression of evidentiality in Chhitkul-Rākchham goes even beyond copulas, V_1 (V_2) (AUX) constructions, to which the hearsay clitic *=e* may attach, and converb constructions followed by *ta*. Evidentiality is also expressed by means of non-verbal syntactic elements, namely two discourse particles also found at the NP level, *no* and *ne*. From a diachronic perspective, we may also treat the focus clitic *=o* as being part of the evidential system since *no* originally consisted of the emphatic /n/ and *=o*.

An emphatic discourse particle is not necessarily part of the evidential system of each and every language, but Chhitkul-Rākchham *no* is undoubtedly evidential because *h ϵ n* functions as emphatic copula and auxiliary and because I provide evidence (see §8.2) that *no* interacts with the copula and auxiliary system: *no*, contrary to *ne* and *na*, cannot follow *h ϵ n* because both share an emphatic function. If *h ϵ n* conveys an evidential distinction, *no* does so too. The particle *ne* is also part of the evidential system due to its epistemic (assertive) meaning.

The inclusion of some of the discourse particles in the evidential system should not come as a surprise since these particles express an attitude towards the clause content. What

makes *no* and *ne* part of the evidential system is that the kind of attitude they convey is epistemic.

Chapter 9: The expression of non-propositional evidentiality

The morphosyntactic expression of evidentiality at the NP level is an under-researched phenomenon, especially within the Tibeto-Burman language family.

Non-propositional evidentiality – with a noun phrase as its scope – is a relatively recent discovery. In Jarawara, the same set of evidential markers occurs at both clausal and NP level (Dixon 2004: 306-9), but this is not necessarily true in all the languages where the phenomenon has so far been described.

In her monography, Aikhenvald (2004: 130) mentions the subject only briefly. Although she devotes more attention to non-propositional evidentiality in subsequent publications, the phenomenon “appears to be a rarity” (2015: 9) cross-linguistically.

There are objective reasons to believe non-propositional evidentiality is much more widespread than initially thought, however. With a few exceptions, the phenomenon is usually not elicitable, which means in the absence of any corpus, it is likely to stay unnoticed. In addition, if one looks at evidentiality as the semantic-functional domain of knowledge management, the occurrence of evidential markers at the NP level is not surprising. Knowledge management is not just referring to source or access to information and epistemic judgements, but also to information packaging.

Jacques (2015) provides the most comprehensive account to date of non-propositional evidentiality from a comparative perspective. Among numerous insights, Jacques makes it clear the phenomenon, “more diffuse” in the Himalaya (ibid, p. 31), goes way beyond demonstratives, but involves adverbs and markers of various sorts, notably affixes.

In some languages, Jacques claims evidential markers at the NP level may “encode morphosyntactic parameters such as case or topicality”. Jacques (ibid, p. 31) further observes that “in most languages, propositional and non-propositional evidentials form completely distinct systems; the only exception appears to be Jarawara”. Another observation (ibid, p. 32) is that “non-propositional evidential markers are overwhelming sensory evidentials”, while “systems encoding non-sensory evidential meanings are extremely uncommon” (ibid, p. 23). In fact, Jacques can only refer to two languages where

it is the case, namely Tsou (Yang 2000) and Nambiquara. He notes that “in addition to sensory evidentials, the rich non-propositional evidential systems of these two languages have distinct inferential and hearsay markers” (ibid, p. 25).

What at first sight may appear to be an almost insignificant feature of evidentiality is actually of the utmost importance. In case the phenomenon is more widespread, it then forces us to expand our definition and challenges the commonly accepted view that evidentiality is essentially a verbal phenomenon, especially in Tibeto-Burman languages.

9.1 Markers of non-propositional evidentiality in Chhitkul-Rākchham

Chhitkul-Rākchham exhibits a system of six distinct markers of non-propositional evidentiality. One borrowing from Hindi excepted, these six markers do not differ from those found for clausal evidentiality; they form a subset hereof.

Like at the clausal level, the system or morphosyntactic expression found at the NP level is scattered, including the copulas *ta* and *to*, the hearsay clitic =*e*, the emphatic particle *no*, and the assertive particle *ne*. In addition, Chhitkul-Rākchham uses Hindi *dʒo hɛ:* (‘that is’).

The perceptual *ta* and =*e* clearly occur more frequently in the corpus. *To* is by comparison much rarer. The copulas *ta* and *to* are invariable forms in the context of non-propositional evidentiality, they do not inflect for tense or subject agreement. The use of Hindi *dʒo hɛ:* varies greatly from one speaker to another.

There does not seem to be any restriction in terms of which case marking these markers may follow. Based on the corpus, the copula may follow a noun or a personal pronoun marked for the absolutive (- \emptyset), the ergative (-*tʃi*) and the locative case markers =*o* and =*du*. The hearsay clitic =*e* may follow a noun inflected for the dative =*tij*.

9.1.1 The copula *ta*

Ta is the most common marker of non-propositional evidentiality. The copula may follow any kind of NP as table 82 illustrates. Based on the corpus, *ta* occurs after adverbial

phrases (temporal adverbs and the adverbial *he*, ‘like’), after a numeral, after an intensifier or after a personal pronoun, or after an NP consisting of DEM +N or NUM + N.

Table 82: examples from the corpus with ta as marker of non-propositional evidentiality in Chhitkul-Rākchham

Example	Translation	Reference in the corpus
homo baniŋ ta	three pitchers	JAC_cik01-DSN-2018-12-29-4
ŋrwoŋaŋ du ta	In the mouth	JAC_cik01-DSN-2018-12-29-25
t ^h a ta	now	JAC_cik03-NB2-2019-03-06-7
hojo ka: ta	that crow	JAC_cik05-YS1-2019-03-07-9
de ta	again	JAC_cik03-NB2-2019-03-06-13
man man ta	very	JAC_cik05-YS1-2019-03-07-20
t ^h an ta	nowadays	JAC_cik05-YS1-2019-03-07-48
nuŋ ta	again	JAC_cik06-BS1-2019-03-07-14
kan ta	you (NHON)	JAC_cik06-BS1-2019-03-07-15
hojo neotfo ta	after that	JAC_cik06-BS1-2019-03-07-17
ga: k ^h ud ta	myself	JAC_cik07-RK-2019-03-09-30
patf badze ta	five o’clock	NDB_cik01-VK-NB1-2018-11-21-27
teotfo ta	before	NDB_cik01-VK-NB1-2018-11-21-57
heo ta	that’s right	NDB_cik01-VK-NB1-2018-11-21-74
kjimo ta	at home	DEB_cik04-CRN-YS1-2018-11-22-33
hojo t ^h etiŋ ta	that is why	DEB_cik07-RKKF-SS3-2019-05-27-34

An interesting feature is the repeated occurrence of *ta* in strings of NPs. In (230), from *Jackal and the Crow*, *ta* occurs no fewer than six times:

(230) paŋ=niŋ ro-i neotf=o te ta po te po ga:=∅
tree=LOC go-PRF after=LOC then COP.PE down then down 1SG=ABS
miŋ-i jara jo=∅ ta paŋ=niŋ ro-de-∅ t^ha ta
think-PFV friend 3SGNHON=ABS COP.PE tree=LOC go-IMPV-3 now COP.PE

matʰi:=∅ ta gin-aŋ=o=sea upasaŋ ta upasaŋ
 fish=ABS COP.PE need-INF=FOC=NOMI without food COP.PE without food
 dan=∅ ta paŋtʃ-aŋ=sea
 stomach=ABS COP.PE to fill up-INF=NOMI

‘After reaching the tree, then down, then down, I thought (my) friend: “he went to the tree, now (I) need the fish, the empty stomach has to be filled up’

JAC_cik06-BS1-2019-03-7-20

In (230), the first occurrence of *ta*, after *te*, shows that both verbal and noun phrase evidentiality may be part of subordinate clauses.

There are a few instances with *mi:ta* in the corpus. *Mi:ta* occurs in the same contexts than *ta*, the only difference being it may only follow animate nouns or personal pronouns, *mi:* also having the meaning of ‘human being’, ‘man’, or ‘people’:

(231) te hojo matʰli:=∅ za-i zu-i hojo ʃeli=∅ mi:-ta
 then DEM.PROX fish=ABS eat-PFV eat.PFV DEM.DIST fox=ABS ANIM-COP.PE
 okʰo tʰa:t=tʃi nɔn-i=e tʰa:t ka:=∅ tʰa:t=tʃi
 only comfort=INSTR sleep-PFV=HSY comfort POST.MASC.SG=ABS comfort=INSTR
 nɔn-i ai kɔwa:-∅=sea okʰo ʃja-i ta-i ta-ʃi
 sleep-PFV CONN crow-ABS=AGT.NOMI only look-PTCP see-PTCP keep-PFV
 ka:=tʃi=sea kal=tʃi
 crow=ERG=AGT.NOMI above=ABL

‘Then, after eating that fish, the fox slept straight away, (he) slept very comfortably, and the crow just kept looking from above’

JAC_cik10-SD1-2019-03-10-16

(238) is another example with *mi:ta*. I take *mi:* to be an animate¹⁶⁹ prefix, a bound morpheme combined with either *ta* or with the hearsay clitic =*e*, as in (234).

¹⁶⁹ Animacy is notably of relevance in the case of the copula system: *hunno* and *hunts* only occur with animates (see §4.1.2). Furthermore, the locative case clitic =*nij* exclusively occurs with animates (appendix 1, §1.4.4.3.2).

9.1.2 The copula *to*

To as a marker of non-propositional evidentiality is a rarity. *To* only follows nouns and question words as far as I can judge from the corpus. Table 83 provides a few examples:

Table 83: examples from the corpus with *to* as marker of non-propositional evidentiality in *Chhitkul-Rākchham*

Example	Translation	Reference in the corpus
ka: to	the crow	JAC_cik08-JC-2019-03-09-20
ʃeli to	the fox	JAC_cik09-MSN-2019-03-09-10
matʃʰli: to	the fish	JAC_cik09-MSN-2019-03-09-21
ʈʰa tʃʰul kʰe to saɖak to	now in Chhitkul, what to say, there is a road	AUT_cik01-RK-2018-10-08-24
kjaŋ djuattʃaŋ to	our children	DEB_cik07-RKKF-SS3-2019-05-27-15

Based on its distribution, *to* seems to mark specific nouns. Specificity is especially noticeable as the defining factor because *to* never occurs in non-basic noun phrases that include adjectives, demonstratives or numerals.

In (232), the copula *to* occurs right after *ka:* ('the crow'). *Ka: to* is following *ga: i ʃeli tək* ('I am a fox'), which is exactly when the speaker starts narrating *Jackal and the Crow* from the fox's perspective. The speaker playing the role of the fox, *to* following the crow is contrastive. As suggested by the English translation, *ka: to manta* forms an independent clause:

(232) ka:=∅ to man=ta zangəl=o i matʃʰa:=∅ tsum-ʃi
crow=ABS COP.PEEX NEG.EMPH=COP.PE forest=LOC one fish=ABS catch-PFV
tsam-ʃi i: paŋ=nin ro-de-∅
catch.REDUP-PFV one tree=LOC go-IMPV-3

'The crow, isn't it, caught a fish in the forest and went to a tree'

JAC_cik08-JC-2019-03-09-20

Referring to table 83, *to* never occurs from the beginning of any recording: a contrastive reading makes sense. Having specificity (or focus) and contrast in mind, one surmise is that *to* has similar functions to that of Hindi *to*¹⁷⁰, where it serves as a conjunction ('so, then') and a polysemous inter-subjective discourse particle: contrastive or emphatic (McGregor 1972: 141), thematic and topic (Montaut 2015). The latter scholar (*ibid*, p. 12-3) posits a common denominator, contending that *to* "obeys a single basic meaning, although not concretely semantic but rather pertaining to an abstract operation (...) *to* seems to convey the speaker's judgement on a term or sequence on which it has scope". *To* needs further research, but referring to my definition of evidentiality (§2.4.2), even if I take it to be a borrowing from Hindi, it is evidential.

9.1.3 The clitic =e

The hearsay clitic =e has similar distributional properties than the copula *ta*, occurring after basic and more elaborate NPs and adverbs, including temporal. Table 84 provides a few examples:

Table 84: examples from the corpus with =e as marker of non-propositional evidentiality in Chhitkul-Rākchham

Example	Translation	Reference in the corpus
hodo bara=e	meanwhile	JAC_cik01-DSN-2018-12-29-23
gi:dəqtʃi=e	the jackal	JAC_cik01-DSN-2018-12-29-30
ka:=e	the crow	JAC_cik03-BSN2-2019-03-06-35
ʃɛli=e	the fox	JAC_cik03-NB2-2019-03-06-4
huju kaḥani:=e	this story	JAC_cik01-DSN-2018-12-29-31
si:d ^h a=e po	straight down	JAC_cik04-BSN2-2019-03-06-13
te=e	then	JAC_cik05-YS1-2019-03-07-7 and 60
te nuŋ=e	then, again	JAC-cik10-SD1-2019-03-10-19
ti:n a k ^h e tʃa:r=e g ^h aḍa:	three-four pitchers	JAC-cik10-SD1-2019-03-10-19

Comparing tables 82, 83 and 84, *ta*, *to* and =e may all follow *ka*: 'the crow', which means syntax does not govern the choice of evidential markers in noun phrases. Rather, context,

¹⁷⁰ One difference is, however, in terms of frequency: low in Chhitkul-Rākchham, high in Hindi.

that is, pragmatics, is the defining factor. In the same vein, *hojo ka: ta* (table 82) and *huju kahani:=e* (table 84) suggest definiteness is not relevant.

In (233), =e attaches to a noun phrase consisting of a demonstrative and a noun. The speaker ponders over the lesson we can draw from the whole story of *Jackal and the Crow*, which means he is not narrating or describing anymore and takes a step back from the pictures:

(233) *huju kahani:=∅=e huju kahani:-∅=e he sabak=∅*
 DEM.PROX story-FEM=ABS=e DEM.PROX story-FEM-ABS=e like lesson=ABS
no ki su:-lo=∅ dʒuʔ^h-a: ta:rif=niŋ
 PTCL.EMPH COMP everyone-INDF=ABS false-MASC.SG praise=LOC

mã ma-rɔ-ŋ=niŋ
 POST.LOC NEG-go-INF=MOT

‘This story’s lesson is that no one should be deceived by false praise’

JAC_cik01-DSN-2018-12-29-31

Similarly to *ta*, =e may take the animate prefix *mi:-* as in (234), which refers to the very first sentence of the third stage of the description, when the speaker tells the story from the fox’s perspective. The distal demonstrative precedes *ka:*, mentioned for the first time at this third stage of the task:

(234) *ga:=∅ ʃɛli=∅ tɔ-k nete ma:n lo ga:=∅ i:*
 1SG=ABS fox=ABS AUX.PEEX-1SG PTCL.CONNS let suppose also 1SG=ABS one

ʃɛli=∅ na ʃɛli=∅ te hojo ka:=∅ mi:=e matʃ^hli:=∅
 fox=ABS PTCL.QUER fox=ABS then DEM.DIST crow=ABS ANIM=HSY fish=ABS

k^huanf-aŋ tu-ti
 find-INF come-PFV

‘I am a fox, right? Let suppose I am a fox - then that crow came to find (some) fish’

JAC_cik10-SD1-2019-03-10-33

I discuss the semantics of all the previously mentioned markers in more detail in §9.4. Suffice it to say for now that (233) shows that =e occurs in a specific non-visible and abstract NP.

9.1.4 The particle *no*

The emphatic discourse particle *no* occurs in the same environments than *ta* and the hearsay clitic =e, that is, after demonstratives, nouns, pronouns, numerals, question words and adverbs.

Table 85: examples from the corpus with *no* as marker of non-propositional evidentiality in *Chhitkul-Rākchham*

Example	Translation	Reference in the corpus
hojo no	that	JAC_cik01-NB2-2019-03-06-13 NDB_cik01-VK-NB1-2018-11-21-2
sabak no	lesson	JAC_cik01-DSN-2018-12-29-31
matʃ ^h li: no	the fish	JAC_cik01-NB2-2019-03-06-17
ka: no	the crow	JAC_cik06-BS1-2019-03-07-1 and 4 JAC_cik07-RK-2019-03-09-19
nuŋ no	later, after	JAC_cik01-BS1-2019-03-07-17
te no ʃeli ta	then the fox	AUT_cik01-RK-2018-10-08-28
a:rotʃi no	from the mouth	AUT_cik01-RK-2018-10-08-25
i no upa:j	one plan	AUT_cik01-RK-2018-10-08-26
ga: no	I	JAC-cik10-SD1-2019-03-10-17
kaliŋ no	above	NDB_cik05-BD1-BD2-2019-03-07-76
ʃale no	how	JAC-cik10-SD1-2019-03-10-23
i kjaŋ kaʃawat no	(according to) one of our sayings	NDB_cik01-VK-NB1-2018-11-21-63
ga: gret no ruŋʃaŋ to	I want to listen to a song	JAC_cik09-MSN-2019-03-09-7

Again, *no*, like *ta*, *to*, and =e, may follow *ka:* ('the crow'): these forms obey pragmatic considerations.

In (235), the speaker is describing one sequence of Jackal and the Crow, using *no* right after *a:rotʃi* ('from the mouth'). There is no reason to believe *no* has another function than emphasis, also at the NP level. The occurrence of *no* after *a:rotʃi* instead of the personal pronoun *jo* for example, indicates that the speaker wishes to highlight, from pragmatic reasons, this particular word:

(235) diŋ=tʃi kʰre-i ʃɛli=tʃi po=tʃi ro-i ru-i jo=∅
 that=ABL hungry-MODIF fox=ERG below=ABL go-PFV go-PFV 3SG.NHON=ABS

 a:-r-o=tʃi no matʃʰ-i:=∅ tʃʰin-aŋ tʃʰɛtiŋ baɖa bʰari
 mouth-E-LOC=ABL PTCL.EMPH fish-FEM=ABS snatch-INF POST.PURP INT

 koʃiʃ=∅ latʃ-i
 effort=ABS do-PFV

'After this, the hungry fox came from below and tried her best to snatch the fish from his mouth'

JAC_cik07-RK-2019-03-09-25

9.1.5 The particle *ne*

A first indication that *ne* is part of the expression of non-propositional evidentiality is (223), where it occurs after a noun and a pronoun. *Ne* is however a rarity at the NP level. Table 86 provides a few instances from the corpus, all from the same conversation¹⁷¹.

Table 86: examples from the corpus with *ne* as marker of non-propositional evidentiality in *Chhitkul-Rākchham*

Example	Translation	Reference in the corpus
teŋʃən	tension	NDB_cik04-MK-SD1-2018-11-24- 30
kjaŋsa:	we (INCL)	NDB_cik04-MK-SD1-2018-11-24- 30
ba	demeaning PTCL	NDB_cik04-MK-SD1-2018-11-24-13
andʰadʰund	much	NDB_cik04-MK-SD1-2018-11-24-54

¹⁷¹ The use of *no*, *ne*, *na* and *ba* at the NP level varies greatly from one speaker to the other. Very few conversations exhibit the whole set.

In the following example, *ne* follows another particle, the demeaning *ba*:

- (236) pɛɦle=mã ta kjaŋ-sa:=∅ wal ba ne sukul=o
 before=LOC COP.PE 1PL.INCL-PL=ABS () PTCL.DMEAN PTCL.ASS school=LOC
 ro-no bɔr-e ɦe bikt-a:=∅
 go-IRR.SIM CVB-IMPV like difficulty-MASC.SG=ABS
- ‘Before we used to face difficulties when going to school’
- NDB_cik04-MK-SD1-2018-11-24-13

The occurrence of *ne* after the first person plural *kjaŋsa*: suggests *ne* at the NP level has a similar meaning as at the verbal level, namely assertive, being used when both participants have a clear recollection of a past event. Like the auxiliary *tɔts*, *ne* seems to be restricted to past events in which the speaker took part, hence the assertive meaning.

9.1.6 The Hindi *dʒo ɦɛ*: (‘that is’)

As mentioned earlier, *dʒo ɦɛ*: is a borrowing from Hindi, where *ɦɛ*: functions as 3SG copula. Table 87 shows its wide distribution, just like *ta*, *=e* and *no*. Sometimes *ɦɛ*: occurs alone and sometimes a noun is inserted between *dʒo* and *ɦɛ*:. The copula *ɦɛ*: invariably occurs with third person singular:

Table 87: examples from the corpus with dʒo ɦɛ: as marker of non-propositional evidentiality in Chhitkul-Rākchham

Example	Translation	Reference in the corpus
ʃɛli dʒo ɦɛ:	the fox	JAC_cik03-BSN2-2019-03-06-3
ka: dʒo ɦɛ:	the crow	JAC_cik03-BSN2-2019-03-06-11
ʈiktiki dʒo ɦɛ	continuously	JAC_cik07-RK-2019-03-09-8
i dʒo ɦɛ: upa:j	one plan	JAC_cik07-RK-2019-03-09-9
kal paʃo dʒo ɦɛ:	upwards	JAC_cik07-RK-2019-03-09-11
mazatʃi dʒo ɦɛ:	with pleasure	JAC_cik07-RK-2019-03-09-17
ka:tʃi dʒo ɦɛ:	the crow (ERG)	JAC_cik07-RK-2019-03-09-28
k ^h e dʒo ɦɛ:	what	JAC_cik07-RK-2019-03-09-31

ga: dʒo hɛ:	I	JAC_cik07-RK-2019-03-09-32
mi: dʒo hɛ:	people	JAC_cik07-RK-2019-03-09-34
lomadj:tʃi hɛ:	the jackal	JAC-cik10-SD1-2019-03-10-10
neotʃo dʒo hɛ:	after	AUT_cik01-RK-2018-10-08-2
hojo tʃʰɛtiŋ dʒo hɛ:	that is why	DEB_cik01-RK-BSN1-2018-10-15-78
hamara: dʒo bʰa:ʃa: hɛ:	our language	DEB_cik04-CRN-YS1-2018-11-22-11

Similarly to other markers, *dʒo hɛ:* may occur more than once in the same clause, as in (237):

(237) jo=tʃi ka ka latʃ-i ka ka la-no bɔr-e e
3SG.NHON=ERG INTERJ do-PFV INTERJ do-IRR.SIM CVB-IMPV 3SG.NHON.POSS
a:-r-o=tʃi matʃʰl-i:=∅ dʒo hɛ: da-ti du-ti po
mouth-E-LOC=ABL fish-FEM.SG=ABS DEM.DIST COP.3SG fall-PFV fall-PFV down
ʃɛli=∅ kʰre-i ʃɛli=∅ dʒo hɛ: jo=tʃi
fox=ABS hungry-MODIF fox=ABS DEM.DIST COP.3SG 3SG.NHON=ERG
tsɔm-ʃi
catch-PFV

‘He (the crow) starts singing (ka ka) and while doing (this), the fish fell down from his mouth, the hungry fox caught it’

JAC_cik07-RK-2019-03-09-14

The use of *dʒo hɛ:* varies from one speaker to another. Most examples from table 87 come from the same speaker, a teacher at Chhitkul’s secondary school, where the language of instruction is Hindi. Consequently, he uses *dʒo hɛ:* frequently. Contrary to *ta*, *to*, *=e* and *no*, *dʒo hɛ:*, as a borrowing from a language, Hindi, that does not exhibit perceptual or egophoric evidentiality – only epistemic distinctions – is evidentially neutral.

9.2 Cases of double evidential distinctions at the NP level

Chhitkul-Rākchham exhibits one peculiar characteristic in terms of non-propositional evidentiality. A few examples from the corpus show a few combinations of two, and up to three consecutive markers. The phenomenon is quite rare, but attested, reflecting the fact

that the hearsay marker =e may attach to *ta* and *to* in their copula or auxiliary function, and even to the emphatic particle *no* when dealing with propositional evidentiality. As shown in table 88, the combinations are limited:

Table 88: examples from the corpus with two consecutive marker of non-propositional evidentiality in Chhitkul-Rākchham

Example	Translation	Reference in the corpus
ai no e	and	NDB_cik04-MK-SD1-2018-11-24-44
kjaŋsa:tʃi no e	we (ERG)	NDB_cik04-MK-SD1-2018-11-24-106
au ama mi: ta no e	people	NDB_cik04-MK-SD1-2018-11-24-24

The following example exhibits three of the previously mentioned markers, namely *ta*, *no* and =e. Note that the animate prefix *mi:-* attaches to *ta* no fewer than three times in (238):

(238) ha:l=∅ kjaŋ au=∅ ama=∅ mi:=ta
situation=ABS 1PL.INCL.POSS father=ABS mother=ABS ANIM=COP.PE
no=e bardio=∅ ma-pukj-a kjaŋ-sa:=∅ mi:=ta
PTCL.EMPH=HSY uniform=ABS NEG-provide-PROG 1PL.INCL-PL=ABS ANIM=COP.PE
haj mi: da=tʃi tɔ-tʃ-a laʃ-i tɔ-tʃ-e-∅
INTERJ people DAT=ABL take-TR-PROG wear-PFV wear-TR-IMPV-3
ni-sa: mi:=ta
1PL.EXCL-PL ANIM=COP.PE

‘(Bad) situation: our parents could not provide us with a uniform, hai! We wore such ones after getting (them) from (some) people’

NDB_cik04-MK-SD1-2018-11-24-24

The semantic meaning resulting from the concatenation of at least two non-propositional markers is unclear at this stage. Further research will determine whether it is a purely stylistic effect or not.

9.3 Distribution of non-propositional evidentiality markers according to genre

One thing is striking when looking at the previous tables: examples of non-propositional evidentiality come overwhelmingly from *Jackal and the Crow*, that is, from a picture-based task. There are a few examples that stem from conversations – either past narratives, or everyday conversations – but these are much less frequent. Historical narratives and autobiographical accounts are entirely devoid of it.

The highly asymmetrical occurrence of *ta*, *to*, *=e* and *no* according to genre suggests these serve as knowledge builders. The reason why they do not occur in autobiographical narratives, is that in this specific context, the speaker already has a refined knowledge about what (s)he is telling about. The same observation applies to past narratives. The narration of *Mata Devī's* origins does not include non-propositional evidentiality, this is because the speaker, *Mata Devī's* oracle for sixty years, is fully acquainted with the story. Prior knowledge may exist in the case of *Jackal and the Crow*, but not necessarily. The second picture-based task, *The Family Story*, is entirely new to community members. I have not had the opportunity to work on these recordings the same way I did with those from *Jackal and the Crow*, but they do include many instances of non-propositional evidentiality.

The relevant markers seem to serve a packaging information function that makes the knowledge contained in descriptions more readily absorbable for both the speaker and the listener(s).

An alternative hypothesis is that *ta*, *to*, *=e*, *no*, *ne* and *dʒo hɛ:* are fillers or pauses. However, taking these forms as fillers is not consistent with the list of examples from table 88, where they can be combined.

No and *ne* have the same meaning at the VP and NP level. *To*, *ta* and *=e* also occur at the NP level, where we may treat them as discourse markers (as a result of expansion from one domain to the next, or as a borrowing in the case of *to*), but their presence at the VP and NP level is intriguing: if *no* and *ne* have the same evidential meaning regardless whether they occur at the VP or NP level, there is no reason to posit that the situation is different with *to*, *ta* and *=e*.

9.4 The semantics of non-propositional evidentiality in Chhitkul-Rākchham

The semantic meaning of *ta* as a non-propositional evidential marker exhibits a few nuances compared to its more regular function in the verb complex.

To start with, a picture-based description like *Jackal and the Crow* exclusively involves visual perception. There is no objective reason to posit that *ta* at the NP level accounts for other senses such as touch, taste and smell.

Based on table 82, specificity is also a relevant factor. *Ta* may occur after both the proximal (*hui* or *huju*) and the distal (*hojo*) demonstrative: deixis does not govern its occurrence. *Ta* helps locate a description in time. We may therefore establish a connection between *ta* and specificity. Li (2008) mentions two particular functions when investigating contrastive focus structure in Mandarin Chinese: informational (presentational) or identificational (contrastive). The former fits with the Chhitkul-Rākchham *ta*. An elicited example from my main consultant indicates that the semantic meaning of *ta* goes beyond visual or surprise: *hju k^he ta e ga: mats^ha: tɔk* ‘this is something I do not know’. The use of =e indicates we are dealing with abstract (cognitive) reasoning, and *ta* right before adds specificity (or informational content) in addition to the proximal demonstrative *hju*.

Since *ta* occurs for example right after *ka:* (‘the crow’) at the very end of each step of the description, we cannot say *ta* conveys newness of information as it may in propositional evidentiality.

Ta as a marker of non-propositional evidentiality may convey surprise, as shown in the following elicited example. My main consultant is adamant *ta*, which occurs at the PP level in (239), is obligatory in case one wants to convey surprise:

(239) ai kjusu=∅=du ta rupe=∅ ta
1SG.POSS pocket=ABS=LOC COP.PE money=ABS COP.PE

‘There is (some) money in my pocket!’ – DSN

While all the relevant markers may follow some adverbs like *nun* (‘later, after’), only *ta* may follow temporal adverbs such as *t^ha* (‘now’) and *t^han* (‘nowadays’) that refer to

fale ka: ka: lat lut-i matʃʰi:=∅ to ne pʰikʃ-i
 how INTERJ do do.REDUP-PFV fish=ABS COP.PEEX PTCL.ASS drop-PFV

ro-i
 go-PFV

‘The crow, happy in his heart: "he praised me very much"; as the crow began to sing,
 the fish fell down from his mouth’

JAC_cik09-MSN-2019-03-09-21

Since *to* never occurs after temporal adverbs, it would seem it serves to track noun referents only: temporality is secondary.

Judging by table 84, *=e* attaches to specific NPs or adverbial phrases. Contrary to *ta*, it occurs in the more abstract parts of the description, when the speaker, like in (233), draws a lesson from the tale instead of describing the situation.

Example (242) is similar to (233) in that the speaker is not describing the story referring to a specific picture or a specific event in the story, but makes a general comment about the jackal, hence the use of the hearsay marker:

(242) gi:dəq-tʃi=e tʃəturai=∅ lat lut-i=e dan=∅ ta
 jackal-ERG=HSY shrewdness=ABS do do.REDUP-PFV=HSY stomach=ABS COP.PE
 pəŋ-de-∅ ka:=∅ bitsar-a: upasan-a: ʃun-de-∅
 fill up-IMPV-3 crow=ABS poor-MASC hungry-MASC stay-IMPV-3

‘The jackal filled up his stomach with his shrewdness, the crow remained hungry’

JAC_cik01-DSN-2018-12-29-30

In (243), *=e* follows *ʃɛli* (‘the fox’) at the very beginning of the description, when ‘the fox’ imprint in the speaker’s consciousness is still weak. The speaker makes mention of the fox for the second time in the recording:

(243) $\text{ʃɛli-}\emptyset=e$ $ka:=\emptyset$ $a:-r=o$ $\text{mat}^{\text{h}}\text{l-i}:=\emptyset$ $ta\text{-}\tilde{i}$ $tu\text{-}\tilde{i}$
fox-ABS=HSY crow=ABS mouth-E=LOC fish-FEM.SG=ABS see-ACT see-ACT
 $ta\text{-}\emptyset$ $dʒən\text{-}a$ po $hame$ $\text{ʃɛli}=\emptyset$ $\text{mat}^{\text{h}}\text{l-i}:=\emptyset$ ai
AUX.PE-3 behave-PROG down when fox=ABS fish=ABS 1SG.POSS

 $a:-r=o$ $hame$ $tu\text{-no-}\emptyset$ nij
mouth-E=LOC when come-IRR.DUB-3 PTCL.MOT

‘The fox is behaving strangely after looking and looking at the fish in the crow’s mouth: the fox below is thinking: “when will the fish come into my mouth?”’

JAC_cik03-NB2-2019-03-06-4

In (244), $=e$ attaches to $ka:$ (‘the crow’) for the same reasons of abstract reasoning. *Ta* cannot occur in the context of (244) because the speaker describes the crow’s internal psychological state that is not accessible visually. With propositional evidentiality, the speaker could use *ano* to infer about how someone else feels. With non-propositional evidentiality, the speaker may select $=e$ to mark the crow, thus indicating (s)he cannot verify the content of the proposal visually:

(244) $hojo$ $neot\text{f}=\text{o}$ te $ga:=\emptyset$ $ka:=\emptyset$ ʃjana $ka:-\emptyset=e$ $uda:s$
DEM.DIST after=LOC then 1SG=ABS crow=ABS COMP crow-ABS=HSY depressed
 $hun\text{-}a$
stay-PROG

‘After that I saw the crow, the crow was depressed’

JAC_cik04-BSN2-2019-03-06-35

Whether the referent is visible or not is not relevant, the function of *no* is to put emphasis on whichever element – noun, numeral, adverb, personal pronoun, etc. – the speaker wishes to highlight.

In (245), *no* occurs right after $ka:$ (‘the crow’), when the crow is for the first time introduced in the description, hence the need for emphasis:

(245) homo gɔr=∅ na gɔr=e u:=tʃi ka:=∅
 three clay pitcher=ABS PTCL.QUER clay pitcher=GEN inside=ABL crow=ABS
 no ɔntʃ-a matʃ^hi:=∅ ɔntʃ-a ta
 PTCL.EMPH extract-PROG fish=ABS extract-PROG COP.PE

‘Three clay pitchers; the crow is extracting (some) fish from inside the pitcher’

JAC_cik06-BS1-2019-03-07-1

(246) provides another illustration of the emphatic nature of *no*. The speaker is describing one of the pictures from *Jackal and the Crow* and urges us, while doing so, to have a look at the crow, using the imperative ‘look at the crow!’ followed by *no*:

(246) ka:=∅ no hɔja tjo-saŋ mɔk^haŋ=∅ ʈat ta-fi nɔle
 crow=ABS PTCL.EMPH here weep-INF mouth=ABS make keep-PFV look!

‘Look at the crow that kept making a weeping face!’

JAC_cik07-RK-2019-03-09-19

Finally, another indication that *no* is emphatic is its comparatively frequent occurrence following objects. In (247), the particle follows the object, *matʃ^hli*: ‘the fish’, thus putting the emphasis on it at the expense of *ga*: the subject, left unmarked:

(247) ga:=∅ he miʃ-a ne hɛ ra:m pɔstea-∅ ga:=∅ sinda
 1SG=ABS like think-PROG PTCL.ASS INTERJ repent-PTCP 1SG=ABS vainly
 ga:=∅ matʃ^hl-i:=∅ no no grɛt=∅
 1SG=ABS fish-FEM.SG=ABS PTCL.EMPH PTCL.EMPH song=ABS
 ta-dɛ-k ba na
 keep-IMPV-1SG PTCL.DMEAN PTCL.QUER

‘I am thinking like this: "Oh Rama! I am regretting, I sang a song unnecessarily"’

JAC_cik03-NB2-2019-03-06-17

I therefore treat *no* as emphatic. By doing so, I am fully aware that ‘emphatic’ stands incredibly close to ‘contrastive’, a point that I further discuss in §9.5.

Table 89 sums up our brief outline of the semantics of non-propositional evidentiality:

Table 89: the semantics of the Chhitkul-Rākchham non-propositional evidentiality markers:

Non-propositional markers	Semantic domains
<i>ta</i>	Visual Surprise Specificity
<i>to</i>	Integrated knowledge
<i>=e</i>	Abstract reasoning
<i>no</i>	Emphasis Contrast
<i>ne</i>	Assertive

If we now go back to Jacques’s (2015) comparative observations, the Chhitkul-Rākchham case is peculiar in that the non-propositional evidential system is not distinct from the propositional one, but forms a sub-system hereof, including in its morphosyntactic realization. *Ta* and *no* acquire new meanings and *=e* a new one altogether at the NP level.

Chhitkul-Rākchham is irreconcilable with the claim that “non-propositional evidential markers are overwhelming sensory evidentials” (ibid, p. 32): out of the four relevant forms, only *ta* is sensory.

Jacques however mentions Tsou (Yang 2000) as a Tibeto-Burman language where other evidentials than sensory are part of the non-propositional system of evidentiality. Tsou and Chhitkul-Rākchham suggest that non-propositional systems of evidentiality are semantically more complex than one would expect based on the available (and scanty) literature on this issue.

9.5 A comparative perspective on non-propositional evidentiality

As mentioned earlier, Jacques (2015: 31) takes non-propositional evidentiality to be a “more diffuse” phenomenon in the Himalayan region. However, a closer look at the few ‘West-Himalayish’ languages reveals it is a more widespread phenomenon. The basic explanation for its absence of recognition is that scholars have so far looked at non-propositional evidentiality markers with exclusive syntactic lenses, as general emphasis or discourse markers.

In Darma, Willis (2007b: 99) mentions a ‘contrastive’ particle *da* that follows nouns such as *r’aja* ‘king’, or *r’ipya* ‘rupees’ (ibid. p. 105). Further, she glosses *na*, which follows *r’aksa* ‘together’ (ibid, p. 106) as emphatic. Finally, Willis refers to an hesitation marker (HM), *jo nini* (ibid, p. 102), which stands close to the non-past auxiliary *lee-ni* and the subject agreement marker *-n(i)* (see §5.13). All these forms are part of a traditional narrative.

Under the heading ‘discourse clitics and discourse particles’, Widmer (2014: 370-392) reports a topic marker, *ni*, which also serves the function of existential auxiliary. Topicality is among the domains that non-propositional evidentiality typically encodes according to Jacques (2015: 31). Widmer also mentions the adversative (contrastive) *=ta* (ibid, p. 379), which is also the possessive copula (ibid, p. 607). Finally, Widmer observes that the hearsay clitic *=na* (ibid, p. 381) “prototypically occurs on verbs, but is also attested on other syntactic constituents such as nouns and interjections”, that is, plays a role at the NP level.

In Shumcho, Huber (2013: 226) mentions of three emphatic markers, *e*, *te* and *le*, in the same example. We do not know what the difference between these three is, but *te* stands incredibly close to the perceptual copula *taç*.

Non-propositional evidentiality is evidently a feature of Kinnauri. Investigating narratives, Saxena (2000: 479; 2002: 170) reports a form she glosses as ‘emphatic’, *tə*, which occurs after the temporal adverb *hun* ‘now’, after a noun, *raja* ‘king’ (ibid, p. 182), after the first person singular pronoun *gə*, unmarked for the absolutive and marked for the ergative (*gə-s*) (ibid). *Tə* is very similar to Chhitkul-Rākchham *ta*. Saxena mentions *le*, also found in Shumcho, as emphatic as well, occurring after *rani* ‘the queen’ (2000: 479; 2002: 182).

None of these two forms, *tə* and *le*, is part of propositional evidentiality, an important divergence with Chhitkul-Rākchham. We may also surmise that *tə* stems from Chhitkul-Rākchham and *le* from Shumcho, which means non-propositional evidentiality may have been part of the evidential repertoire of Kinnauri since only recently.

Willis and Widmer use the term ‘contrastive’ and ‘adversative’ to characterize the particle *da* in Darma and the clitic =*ta* in Bunan while Huber and Saxena give preference to ‘emphatic’. The problem is, Huber and Saxena do not discriminate between, *e*, *te* and *le* and *tə* and *le* respectively. Judging by their data, *le* seems to be the contrastive or emphatic marker, but the difference between ‘contrastive’ and ‘emphatic’ is rather fuzzy. In Chhitkul-Rākchham, I use the term ‘emphatic’ because both *no* and *n* serve the exact same function and *n* is fused with *he-*, with *hen* being more emphatic. In fact, one may use *hen* without any contrastive effect, as a simple statement.

The same constituents may take a different marker, which means information structure obey pragmatic rather than syntactic considerations the same way propositional evidentiality does. The less expected the focus content is judged to be for the hearer (relative to the ‘common ground’, see Clark 1996: 37), the more likely a speaker will mark the constituent by means of the set of markers described here, thus putting the emphasis on them. This observation is especially consistent with the use of *no*.

Comparing our findings on the semantics of non-propositional evidentiality (table 87) with insights from information structure or packaging (Krifka 2008), points of convergence exist. The copula *to* as denoting ‘background’ or ‘old information’ is close to my description as ‘specific integrated knowledge’. The notion of focus in its contrastive information or contrary-to-expectation dimensions is not too distant from the emphatic function played by *no* at the NP level. However, ‘newsy information’ (surprise) applies to *ta*. The term topic (primary and secondary, see Nikolaeva 2001) to characterize *ta* is worth considering, but it does not explain why *ta* (and other relevant forms) occurs at the adverbial phrase level too. Finally, the semantic category ‘abstract reasoning’ is nowhere to be found in the available literature.

9.6 Concluding remarks on chapter 9

From a cross-linguistic perspective, non-verbal elements can relate two NPs in a copular clause. Within the Tibeto-Burman context, particles (Thurgood 1982: 69; LaPolla 1994: 71) do have a copula-like (linker) function.

The previous sections are of tremendous importance in our journey into evidentiality. The term refers to a functional-semantic domain the morphosyntactic expression of which goes way beyond copulas, auxiliaries and reported speech particles or clitics.

To gain a complete overview of evidentiality, it is necessary to understand its 'scattered' or diffuse nature. Far from being "only marginally relevant" (Aikhenvald 2004: 81), this is actually its core characteristic.

Evidentiality is not just a verbal, i.e. a clause-final phenomenon, but as a functional-semantic domain it is as much salient at the noun phrase or adverbial phrase level, where a sub-set of forms used at the verbal level may serve a similar function (*to*, *no* and *ne*), display semantic nuances or extensions (specificity in the case of *ta* and abstract reasoning in the case of *=e*).

Again, due to its obvious information-packaging function, one can fully integrate non-propositional evidentiality into an account of morphosyntactic expression of evidentiality as long as one relies on a broad definition as 'knowledge management' (see §2.4.2).

Conclusion

In this thesis, I have examined the various means of morphosyntactic expression of evidentiality in Chhitkul-Rākchham.

The copula system thoroughly discussed in chapter 4 consists of ten copula verbs, of which five underlying forms. *Ta* denotes source of information, *to* access to information, *ano* and *hɛn* are purely epistemic, and *tɔts*, which combines access to information and epistemic meaning, epitomizes evidentiality as I have defined it in §2.4.2. None of these copulas are epistemically neutral and all of them are part of one indivisible system, which, from a semantic point of view, we can arrange on an epistemic scale of (un)certainty.

In non-copula clauses, the smallest verb complex structure consists of a single (main) verb, i.e. one slot and one tagmeme, with the main verb inflected for TAM, and possibly object marking and subject agreement. The second tagmeme, the second verb, occurs obligatorily, but does not bear the same semantic weight as the main verb. Alternatively to a second verb, a converb occurs as second tagmeme in subordinate clauses, taking only one type of inflection. The third tagmeme, the auxiliary, may be negated with the prefix *ma-*, bears limited TAM morphology, and is omissible.

From the viewpoint of ‘tagmemics’, evidentiality is potentially expressed by all three units, the hierarchical arrangement of which entails that main verbs, whenever they express an evidential distinction, have a restrictive effect on the choice of auxiliaries.

The set of auxiliaries that I have formally identified in §5.3, namely *hɛn*, *ano*, *ta*, *to*, and *tɔts*, is optional in almost all contexts in Chhitkul-Rākchham, a characteristic that helps draw a clear distinction with ‘second verbs’ in serial verb constructions. §5.8.4 suggests that when an auxiliary does not occur, it is inferable from context. The degree of inferentiality found in the evidential system is influenced by the immediate context: what has been said before and speech genre.

The prominence of epistemic judgements in the evidential system is not just a Tibeto-Burman feature. Boas and many other scholars working on South-American languages refrained from making any distinction between source of information and epistemic

modality. Such a distinction is invalid and results in a very partial account of the evidential systems of this language family (see §2.2.2) and by extension in many others. The co-occurrence of two evidentials¹⁷² in Qiang (visual and inference, see LaPolla 2003: 70) and in the Brag-Bar dialect of Situ Rgyalrong (egophoric and sensorial, see Zhang 2021: 322) should alert that double marking does not necessarily mean that we are dealing with two distinct categories, but with a unified semantic domain. From this perspective, that Tsafiki “marks both egophoricity and evidentiality on the predicate” (Widmer 2017: 4) does not constitute “one crucial piece of evidence” that one should treat both – regardless of the problematic term ‘egophoricity’¹⁷³ – as two separate categories.

In light of the growing evidence, since 2004, that ‘information source’ is an utterly inadequate definition, Aikhenvald’s repetition of the exact same line of argumentation in 2018 is odd. There is no denying that one pitfall is to be too Tibeto-Burman-centered, but many insights from this language family fail to influence the debate the way they should. *Evidentiality and language contact* (Aikhenvald 2018) is another illustration of Aikhenvald’s reluctance to harness data from Tibeto-Burman.

Still from the point of view of epistemic judgement, *hen* is of particular importance, notably from a comparative perspective. We find cognates and forms with a similar emphatic meaning in a few Tibeto-Burman languages, including, within ‘West-Himalayish’, Bunan (*jen*) and Kinnauri (*māni*). Scholars describe these forms as assertive, but they usually lack a formal identification as emphatic¹⁷⁴, a sub-system in all these languages. Huddleston’s (1976: 333) ‘emphatic affirmation’ is thus a fundamental dimension of Tibeto-Burman auxiliaries. In Chhitkul-Rākchham, focus is another closely related semantic domain that we cannot clearly separate from evidentiality (see §7.3), another reason why a definition seems “elusive” (Hill 2017: 3).

Searle’s theory of Speech Acts (1969) distinguishes between five types of assertions: representatives, commissives, directives, declarations, and expressives. Emphasis and/or disagreement (or contradiction) belongs to the category of ‘expressives’. Searle also uses the term ‘assertives’ to refer to ‘representatives’. Based on Searle’s typology, there is thus

¹⁷² See also Aikhenvald (2004: 87 ff.).

¹⁷³ This thesis makes it abundantly clear personal experience, or ‘egophoric’, is part of the evidential system, which not only contradicts Widmer and Zúñiga (2017), but also DeLancey (2018) and Hyslop (2018).

¹⁷⁴ Revisiting evidentiality in Tibetan, Oisel (2017: 99, 109-10) takes “emphatic assertion” to play an “atypical function of evidentials”, but he puts emphasis and “novel realization” (a semantic extension) on the same level.

a slight semantic difference between ‘expressives’ such as *man* and *hɛn*, which indicate “the speaker’s psychological state or mental attitude” (or how the speaker feels), and assertives such as *a:ts*, *hunts* and *tuts*. However, both ‘expressives’ and ‘assertives’ appear under the denomination ‘assertions’ and the types of speech acts expressives and representatives are referring to are not fixed in stone, as pointed out by Clark (1996: 134-135). Emphasis is conveyable through statements or through what Searle refers to as ‘representatives’ (assertions), which is precisely where it intersects with assertiveness. The distributional properties of *man*, typically used to contradict a statement, and *hɛn*, which has the attributes of factuality, indicates that in Chhitkul-Rākchham, these domains are not distinct. This is reflected in the observation that *a:ts* and *hɛn* (as copulas, see §4.3.3) and *tts* and *hɛn* (as auxiliaries, see §5.4) occur in complementary distribution.

Table 90 is indicative of an evidential system both present at the NP and VP level and expressed by means of an array of morphosyntactic devices:

Table 90: A summary of the morphosyntactic devices serving the expression of evidentiality in Chhitkul-Rākchham

Suffixes (V ₁ , V ₂)	CVB	Copulas and allomorphs	AUX	Reported speech	Discourse particles	NP level
-no	<i>hɛnna</i>	<i>ano</i>	<i>ano</i>	HSY =e	emphatic <i>no</i>	<i>ta</i>
-ts	<i>manna</i>	<i>a:</i>	<i>hɛn</i>	QUOT <i>hɛ</i>	(<i>hɛn=o</i>) ¹⁷⁵	<i>to</i>
	<i>hɛt</i>	<i>hun</i>	<i>ta</i>		assertive <i>ne</i>	=e
	<i>mat</i>	<i>hɛn</i>	<i>to</i>			<i>no</i>
	<i>man</i>	<i>ta</i>	<i>tts</i>			<i>ne</i>
		<i>to</i>				<i>dʒo hɛ:</i>
		<i>tts</i>				
		<i>tuts</i>				
		<i>man (ma-hɛn)</i>				
		<i>ti</i>				
		<i>te</i>				

¹⁷⁵ Based on my observations from §8.3, the focus particle =o is also part of the evidential system from a diachronic point of view, and so are the demonstrative bases *hɛ* and *hu* and the person indexation system (see §5.11.1 and table 80 in §6.4).

The variety of morphosyntactic means of expression puts us light years away from misinformed and typological crude statements such as “in numerous other Tibeto-Burman languages (such as Lhasa Tibetan and some other Tibetan dialects) evidentials are expressed with copulas and auxiliary verbs” (Aikhenvald 2004: 69).

This thesis reveals the Chhitkul-Rākchham repertoire of morphosyntactic means of expression of evidentiality is eclectic, and consists of copulas, auxiliaries, converbs, suffixes (-*no* and -*ts* on main and second verbs), discourse particles, a hearsay clitic and a form, *he*, serving multiple functions. This eclecticism is also found at the NP level. Non-propositional evidentiality reveals a sub-system consisting of copulas, a clitic and two discourse particles. I show in §9.5 that it is a more widespread phenomenon in the ‘West-Himalayish’ subgroup than initially thought. Evidentiality is a functional-semantic domain that pervades the entire language, being attested at the NP and VP level, in subordinate clauses, in the imperative mood, etc.

We are dealing with a ‘scattered’ system that “may not form one coherent category”, and that is “somewhat problematic and thus only marginally relevant”, according to Aikhenvald (2004: 80-1), but this may only be the case when one looks at evidentiality as a grammatical category. A trail of morphosyntactic devices (and lexical elements) along the whole clause has a sheer coherence when one takes evidentiality as a functional-semantic domain: there is no need to separate – on arbitrary grounds – the comet from its tail.

From a semantic perspective, Chhitkul-Rākchham exhibits a highly intricate evidential system based on seven distinctions: dubitative, perceptual, personal experience, assertive, personal assertive, reported, and neutral. Reported evidentiality aside, the semantic arrangement subsumes the tryptic factual-sensory-egophoric found in Tibetic languages, reaching a new level of complexity owing to the dubitative and two contrastive personal forms. The fundamental evidential distinction is between self (*ta*, *to*, *tɔts*, *ano*) and other (*hɛn*, *a:ts*, *tuts*, *=e*). Assertive (‘factual’) knowledge is only rarely purely objective and more often that not socially (locally) produced. Optional auxiliation after V_{PROG} or V_{PFV} indicates that the evidential system to some extent rests upon inferential processes. Evidentiality defined as ‘knowledge management’ (see §2.4.2) is highly appropriate because it highlights agency and subjectivity, two notions at the heart of the evidential system.

This thesis abundantly relies on a documentary corpus of various speech genres that involve some kind of interaction. In this context, in terms of distribution, copulas and auxiliaries obey a few syntactic rules, but more often than not, a speaker of Chhitkul-Rākchham has a choice. In addition, auxiliaries are often optional. In other words, semantic and pragmatic factors are driving the system. These two have been the object of a substantial amount of attention over the past few years, but the persistence of some sterile discussions – one example being the ‘conjunct-disjunct’, which puts the emphasis on person rather than subjectivity – still hampers scholars from giving to pragmatics the place it deserves in their accounts.

From a comparative perspective, the importance taken by subjectivity in the evidential system reaches an extremely high level notably due to the pair of ‘personal experience’ copulas and auxiliaries (*to* and *tɔts*) occurring with all persons. Referring to Tournadre’s classification (1992: 206), the auxiliary system consists of two ‘egophoric’ forms (40%) and three ‘heterophoric’ ones (60%). Subjectivity plays a lesser role in the copula system and especially in non-propositional evidentiality, where the occurrence of *to* is a rarity. Conversely, assertiveness is more pervasive within the copula system (*hunts*, *a:ts*, *tuts*, *hen*, *tɔts*, and *man*) – the more basic the sentence the more likely it is for the speaker to display confidence – and comparatively less within the auxiliary system (*hen* and *tɔts*). Two markers of assertive evidentiality occur at the non-propositional level, namely *no* and *ne*.

Referring to Aikhenvald (2018), “if two languages are in contact, they are likely to develop similar evidential systems”. ‘Direct diffusion’ – the borrowing of one or several markers by one language from the other – is a reality. I argue in §5.13 Kinnauri borrowed *to* and *tɔts* from Chhitkul-Rākchham. The term ‘Indirect diffusion’ – similar ‘meanings and usage’ by different forms – is also relevant. Future research will probably pinpoint some differences.

Based on the previous chapters, I contend Chhitkul-Rākchham has a lot of features in common with the Bodic branch consisting of the ‘West-Himalayish’ sub-group, Kiranti and East Bodish languages. Some scholars (Gerber and Grollmann 2018: 99) contest the coherence of the Kiranti branch, pointing out that “certain languages outside the Kiranti speaking area may be more closely related to certain Kiranti languages than those are to other Kiranti languages”. In the same vein, Hyslop (2013) observes that “the exact

placement of East Bodish within Tibeto-Burman remains unknown". The previous observations open interesting avenues for further research.

Following up on our discussion from §5.12 on diachronic considerations, it seems the influence of Tibetan on Chhitkul-Rākchham was paramount up to the emergence of the evidential system (as defined in a 'classic' way), which scholars now situate sometime during the Classical period (12-16th century). Up to that point, we can draw a clear connection between Chhitkul-Rākchham focus clitic =*o*, emphatic *n* and *no*, and the Tibetan 'statement particle' *o* (and its variants that include *no*), which "occurs mainly in classical Tibetan (even in archaic Tibetan) but does not appear so frequently in modern written Tibetan" (Tournadre and Jiatso 2001: 63). Another possible important point of convergence is the quotative (see §6.4). The numerous similarities between Chhitkul-Rākchham and Kiranti and East Bodish languages points in the same direction: Chhitkul-Rākchham is not Tibetic.

Based on table 80 (§6.4), evidentiality as I define it in §2.4.2 emerged earlier, during 'phase 2', the original evidential distinction being between assertive and non-assertive. If the cement of the evidential system is epistemic judgement, then it makes sense it emerged before source of information. I claim in §1.1.5 that the community migrated from current day Nepal to Garhwal under the Katyuri dynasty (700-1200), before retreating towards the North (Kinnaur) under the pressure of the *Khasas* to find itself under the Tibetan influence again. We may surmise the evidential system as we know it now emerged at the junction of these two periods. The emergence of evidentiality has mostly to do with reanalysis, first and foremost of *he* from demonstrative pronoun to emphatic copula (*hεn*). The diachronic development of evidentiality may be linked to aspect (*-a* vs. *-ts*, see table 63 in §5.12), emphasis and focus (see §8.3), deixis (demonstrative system, locational and temporal adverbs, and person indexation – see table 80 in §6.4 and §5.12).

The in-depth investigation of the morphosyntactic means of expression of evidentiality leaves a few questions open in order to gain a complete overview of the phenomenon in Chhitkul-Rākchham: a finer grained study of semantics, an in-depth investigation according to clause types (notably interrogatives) and speech genre, an account of the use of evidentials in the most interactional situations (everyday conversations), and, finally, an outline of the function(s) of evidentiality.

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1.1 Introduction

In this appendix, I provide a linguistic description outlining the major grammatical features of Chhitkul-Rākchham. Chapter 3 and some subsections from chapter 4 deal with a few aspects of the Chhitkul-Rākchham verbal system (first of all the morphology of copulas, auxiliaries, main and second verbs) on which I do not elaborate here. In the following sections, I adhere to the same methodological considerations described in §2.5.4 for the thesis.

The description includes an overview of the phonological system (§1.2) which is followed by an overview of the parts of speech (§1.3). The following two sections deal with the structure of the noun phrase (§1.4) and the morphology of the verb phrase (§1.5) respectively. The last but one section addresses the major clause types (§1.6). Finally, I provide a list of some of the most commonly occurring ‘speech formulas’ (Amery 2009: 138) in §1.7.

1.2 The sound system

Chhitkul-Rākchham has 24 phonemic consonants and 10 oral phonemic vowels. I introduce the consonant phoneme inventory in §1.2.1 and the phonological processes affecting consonants in §1.2.2. I provide the vowel phoneme inventory in §1.2.3 and I address the phonological processes affecting vowels in §1.2.4. I then briefly discuss tone in §1.2.5 before describing the phonotactics (syllable structure, consonant clusters and diphthongs) of Chhitkul-Rākchham in §1.2.6. Finally, I provide some succinct comparative observations in §1.2.7. The data presented throughout this section is based on the International Phonetic Alphabet (IPA).

1.2.1 Consonant phoneme inventory

We may divide the Chhitkul-Rākchham consonant phonemes into obstruents (stops, fricatives, affricates and glottals) and sonorants (nasals, laterals, trills and semi-consonants). Sounds between brackets are not phonemic but typically occur in loan words (mainly Hindi and English).

Table 91: inventory of consonant phonemes in Chhitkul-Rākchham (sounds between brackets are not phonemic)

		Bilabial	Labio-dental	Alveo-dental	Retroflex	Post-alveolar	Palatal	Velar	Glottal
Nasal	V.	m		n			(ɲ)	ŋ	
Stop	Unv.	p		t	ʈ			k	
	Asp.	p ^h		t ^h	ʈ ^h			k ^h	
	V.	b		d	ɖ			g	
Fricative	Unv.		(f)	s		ʃ			
	V.		(v)	z		ʒ			ɦ
Affricate	Unv.			ts			tʃ		
	Asp.			ts ^h			tʃ ^h		
	V.			(dz)		(dʒ)			
Trill	V.			r	(ɽ)				
Lateral	V.			l					
Glides		(w)					j		

1.2.1.1 Obstruents

The Chhitkul-Rākchham obstruents include stops (§1.2.1.1.1), fricatives (§1.2.1.1.2), including the glottal /ɦ/, and affricates (§1.2.1.1.3).

1.2.1.1.1 Stops

Chhitkul-Rākchham has both plain and aspirated stops with four places of articulation. Retroflex stops are an areal feature attested in Himalayish languages (Matisoff 2003: 22). They are found in loan words from IA (Hindi), but also in indigenous words. Speakers of Chhitkul-Rākchham may use voiceless aspirated stops common to IA languages, like Hindi

b^hanza: ‘nephew’, depending on how refined their knowledge is, but in most cases, they do not pronounce these sounds with the aspiration and no minimal pairs are available, reasons why I exclude /b^h/, /d^h/, /d^h/ and /g^h/from the Chhitkul-Rākchham phonemic inventory.

All stops listed in table 91 can occur at syllable onset and at syllable coda: *mɔktʃaŋ* ‘to clip, shave’; *njɛkʃaŋ* ‘to hide oneself’; *naɣaŋ* ‘to be sick’; *rapja* ‘bird’, etc.

Voiceless unaspirated stops may occur in word-final position.

Examples with the velar /k/ include *bak* ‘mask’ *botɔk* ‘spider’; *buzuruk* ‘elder’; *dapak* ‘suddenly’; *atʃa:nak* ‘suddenly’; *soruk* ‘sixteen’; *sɔɔk* ‘heaven, paradise’; *suluk* ‘deep’, and *ra:k* ‘stone’.

Examples with the dental /t/ include *ryt* ‘goat’; *bwat* ‘skin’; *grɛt* ‘song’; *jyt* ‘dry fried barley wheat’; *nat* ‘disease’; *rit* ‘season’; *sat* ‘deity’; *sigit* ‘eleven’.

Examples with the bilabial /p/ include *tʃɔp* ‘soup’; *k^hap* ‘quickly – when eating’.

Words ending in /t/ are invariably from Hindi, for example, *ap^hat* ‘issue’. /t/ can otherwise occur in initial and medial position: *t^haniŋ* ‘this year’; *t^huŋ* ‘shoes’; *t^hureŋ* ‘to run’; *maɕiŋ* ‘soil’; *meaɕaŋ* ‘maternal house’, also with loan words: *ɕurizəm* ‘tourism’.

The voiced velar /g/ may occasionally occur in word-final position as well, as in *rɔg* ‘cash’.

Aspirated and voiced stops may also occur in word-final position, but in that case we are exclusively dealing with loan words: *a:t^h* ‘eight’; *alag* ‘different’; *ba:ɕru:m* ‘bathroom’, *band* ‘closed’; *gi:dəɖ* ‘jackal’; *gɔlbənd* ‘scarf’, *divəlop* ‘develop’, etc.

I provide evidence for the phonemic status of the three bilabial stops /p/, /p^h/ and /b/ below:

pɔsaŋ ‘to sit’	p ^h ɔsaŋ ‘to dry’	bɔsaŋ ‘dust’
pɛraŋ ‘family’	bɛraŋ ‘time’	

pulaŋ 'to take care'	p ^h ulaŋ 'fruits'
bɔʃaŋ 'year'	pɔʃaŋ 'side'
bɔre 'wife'	pɔre 'weighing unit' (local system)

The oral bilabial stops are found to be in contrastive distribution with the nasal bilabial stop: /p/, /b/ and /m/. There is no minimal set to show the phonemic of the three bilabial stops as a whole. I provide below contrastive examples between /p/ and /m/ and /b/ and /m/:

pɔnaŋ 'to sew'	mɔnaŋ 'to wish, desire'
paʃo 'direction'	maʃo 'ugly, bad – MSC'
bun- 'burn'	mun 'night'
baŋ 'full'	maŋ 'to dream'

The phonemic status of the three dental stops /t/, /t^h/ and /d/ is established below:

taŋ 'up to'	t ^h aŋ 'plain tea'	daŋ 'care'
taŋaŋ 'to keep, put'	t ^h aŋaŋ 'to break –TR'	
ta 'is – perceptual copula'	t ^h a 'time'	da 'have – POST'
taŋaŋ 'to put, keep'	daŋaŋ 'to give'	
t ^h i: 'wet'	ti: water	
te 'then'	de 'again'	

The phonemic status of the three retroflex stops /t¹⁷⁶/, /t^h/ and /d/ is established below:

ʈaŋ 'to make, build, cook'	t ^h aŋ 'to hit, beat'	djaŋ~dɛaŋ 'body'	ɖa:ŋ 'to be depleted'
ʈatʃaŋ 'to make, build, cook'	t ^h atʃaŋ 'to hit, beat'		

A minimal pair establishing the phonemic status of the two voiced stops /t/ and /t/ is given below:

tuaŋ 'to drink'	ʈuaŋ 'to plant'
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¹⁷⁶ Loan words from English that include /t/ at the beginning of a word or in word-medial position are pronounced as retroflex /t/: hoʈəl, ʈurist, etc.

A minimal pair and a near-minimal pair of the two voiced stops /d/ and /d̪/ is given below:

deaŋ 'to carry'	de̪aŋ 'body'	
dasan̪ 'to give'	da:san̪ 'to stop – a liquid thing'	(near minimal pair)

I provide evidence for the phonemic status of the three velar stops /k/, /kʰ/ and /g/ below:

kolaŋ 'to remember'	kʰolaŋ 'to peel'	golaŋ 'Adam's apple'
kamaŋ 'work'	kʰamaŋ 'darkness'	gamaŋ 'warm'
kan '2SG.NHON'	kʰan 'uphill'	
kat 'language'	kʰat 'stairs'	
ka: 'crow'	ga: '1SG'	
karaŋ 'meal'	garaŋ 'river'	
kjaŋ 'we – 1PL.INCL.POSS'	kʰiaŋ 'to feed'	

1.2.1.1.2 Fricatives

Chhitkul-Rakchham has a limited set of fricatives occurring as voiced and voiceless – in alveolar, palatal and glottal places of articulation. /f/ occurs in loan words only, typically from English. The occurrence of the sibilant fricative /ʒ/ is very rare, just like in Hindi, but I have one contrasting example with /z/ in my database, namely *zaŋ* 'gold' vs. *ʒaŋ* 'this side', reason why I ascribe a phonemic status to both. /z/ is otherwise in free variation with [dz], thus *zoi* ~ *dzoi* 'good'¹⁷⁷.

All fricatives may occur in syllable-initial, word-medial position (*huʃaŋ* 'to learn, study, read') or in word-final position.

/s/ only occurs in word-final position with loan words (*unnis* 'nineteen'; *wapa:s* 'back'), a notable difference with Kinnauri. Compare Chhitkul-Rakchham *maʃʰa* and Kinnauri *maʃʰes* 'interpreter'.

¹⁷⁷ As in Kinnauri (Takahashi 2001: 104).

There is a continuum from /j/ to palatalized /ç/ extending to affricates /tʃ/ and /tʃ̣/ and voiced [dʒ] and [ẓ]. Palatalization does not go as far as [ʒ] turning into /dj/ or /tʃ̣/ turning into /tj/: *tçasaŋ* ‘to pack’ and *tjasan* ‘to dance’.

The phonemic status of the two alveolar fricatives /s/ and /z/ is established below:

saŋ ‘to kill’	zaŋ ‘gold’
-so (SIM)	zo ‘crossbreeding of a yak and a cow’
soi ‘cold’	zoi ‘good’
sɔmaŋ ‘to collect’	zɔmaŋ ‘to get together’

The phonemic status of the palatalized fricative /ʃ/ is confirmed by providing contrasts with /s/:

su: ‘who’	ʃu: ‘deity’
bosaŋ ‘dust’	bɔʃaŋ ‘year’
susaŋ ‘to rot’	sʊʃaŋ ‘to bathe’
mesaŋ ‘slowly’	meʃaŋ ‘quiet’

The glottal fricative /h/ is voiced and only occurs word initially (unless preceded by the negative prefix *ma-*), invariably preceding a vowel. I provide below a few contrastive examples with the fricatives /z/, /ʃ/, /ʃ̣/

haŋ ‘snow’	zaŋ ‘gold’	saŋ ‘to kill’
hare INTERJ	ʃare ‘beautiful’ – FEM’	
huʃaŋ ‘to learn, study, read’	sʊʃaŋ ‘to bath oneself’	

1.2.1.1.3 Affricates

Affricates have voiced and unvoiced aspirated forms and only two places of articulation, namely alveolar (/ts/ and /tsʰ/) and palatal (/tʃ/ and /tʃʰ/). Aspirated affricates exclusively occur in word-initial position. Unaspirated affricates may occur in both word-initial and word-final position (*sunts-* ‘think’; *swats* ‘true’; *uts* ‘flower’; *tʃɔtʃ* ‘beak’; *urtʃ-* ‘wash’; *antʃ-* ‘wake up’, etc.).

The phonemic status of the two alveolar affricates /ts/ and /tsʰ/ is established below:

tsam 'wool'	tsʰam 'bridge' (alternatively, tʃʰam)
tsaŋ 'bad grass'	tsʰaŋ 'morning'
tse- 'finish'	tsʰa 'salt' (near minimal pair)
tsɔŋ 'group dance'	tsʰɔŋ 'to buy, trade with Tibet' (near minimal pair)

I provide evidence for the phonemic status of the palatal affricates /tʃ/ and /tʃʰ/ below:

tʃe 'lips'	tʃʰɛ 'six' (from Hindi)
tʃul turnip	tʃʰuli 'wild apricot'

The affricates /ts/ and /tsʰ/ are found to be in contrastive distribution with the fricatives /s/ and /z/. There is no minimal set to show phonemic status of all the affricates, fricatives and nasals in relation to each other. Instead, near-minimal pairs are given for /ts/ vs. /tʃ/, /tsʰ/ vs. /tʃʰ/, /ts/ and /tʃʰ/. It is also clear from the following list that /tʃ/ contrasts with /ts/ and /tj/ as well:

tsʰaŋ 'morning'	tʃʰaŋ 'loan'
tʃe 'lips'	tse 'all' tje- 'to write'
kats 'walnut'	katʃ- 'to laugh'
tsʰa: 'knowledge'	tʃa: 'tea'
tsusaŋ 'to divide, distribute'	tʃʰusaŋ 'to touch'

/ʒ/ and [dʒ] are in free variation in Chhitkul-Rākchham. With loan words from Hindi, [dʒ] and [z] are also in free variation: *zaruri*: vs. *dʒaruri*: 'necessary'; *sabdʒi*: vs. *sabdʒi*: 'vegetable'. There is no contrast between [dʒ] and [ʒ] in the following list:

su 'who'	dʒu 'cloud'
ʃjaŋ 'mustard'	dʒiaŋ 'to howl'
garaŋ 'river'	dʒaraŋ 'dumb and deaf'
latʃaŋ 'to do'	ladʒaŋ 'shame'
tʃʰɔa 'grain'	dʒɔa 'here' – alternatively dʒua
tʃalaŋ 'sieve'	dʒalaŋ 'cobweb'

1.2.1.2 Sonorants

The Chhitkul-Rakchham sonorants include nasals, liquids, trills and glides.

1.2.1.2.1 Nasals

Nasals occur in three places of articulation: bilabial, alveolar and velar. There is no retroflex nasal (a feature of IA languages) as in Kinnauri (Takahashi 2001: 102). [n] and [ɲ] are free variants in word-initial position (monosyllabic words)¹⁷⁸, and so are /k/ and /kʲ/¹⁷⁹, where the underlying phoneme is /n/ and /k/ respectively. The glidalization of /d/¹⁸⁰ and /g/¹⁸¹ results in vowel lowering.

A minimal set establishing the phonemic status of the three nasals is given below:

rin 'loan'	riŋ 'to tell'	rim 'nose'
-na 'COND'	ŋã 'five'	ma- 'NEG'
man 'is not'	maŋ 'to dream'	
num 'cap'	nuŋ 'later'	
kim 'house'	kin 'you' (2SGHON)	
mi: 'people, human being, man'	ni: 'sun'	
gun 'winter'	gum- 'walk, wander'	
ts ^h am 'bridge'	ts ^h aŋ 'morning'	

Each nasal may occur at initial, medial and final position. Only very few words have the velar nasal /ŋ/ in initial (*ŋã* 'five'; *ŋʃe* 'friendship') and medial (*niŋsa*: '1PL.EXCL'; *raŋãl* 'large bee'; *raŋmu* 'morel'; *saŋtubrea* 'three days before yesterday').

¹⁷⁸ As discussed in §8.2, the emphatic particle surfaces as *no* or *njo* in the documentary corpus. The same applies to *naŋ* 'again', which may surface as *njaŋ* or *neaŋ*. Sharmā (1992: 214) mentions *potjo*, which surfaces as *neotjo* 'after, behind' in the corpus. Sharmā makes mention of *panaŋ* 'to conceal', also part of my elicited materials [*njanaŋ*].

¹⁷⁹ *kim* vs. *kjim* 'house'.

¹⁸⁰ *deaŋ* vs. *djaŋ* 'body'.

¹⁸¹ *geŋaŋ* vs. *gjaŋaŋ* 'to win'.

1.2.1.2.2 Liquids

Chhitkul-Rākchham counts two liquids, /l/ and /r/. They may occur at any position, as shown below, including medial: *guɔlda* 'kite bird'; *kaliŋ* 'uphill'; *haraŋ* 'bone'; *hɔrki* 'far', etc. /l/ is always voiced. /r/ is usually voiced but it is voiceless in final position. /r/ is invariably the second element in the case of a consonant cluster: *frɔul* 'roof';

I provide evidence for the phonemic status of the two alveolar liquids below:

raŋ 'horse'	laŋ 'to do'
gɔr 'clay pitcher'	gɔl 'month'
rɔŋ 'to go'	lɔŋ 'to tell'
rɔktʃaŋ 'to graze'	lɔktʃaŋ 'to burn'
dʒaraŋ 'dumb and deaf'	dʒalaŋ 'cobweb'

1.2.1.2.3 Glides

All words starting with [w] are loan words, mainly from Hindi/Urdu, where /v/ and /w/ are allophones: *wakt* (or *vakt*) 'time'; *wa:pas* (or *va:pas*) 'back'; *wika:s* (or *vika:s*) 'development'. I therefore do not treat [w] as part of the consonant phoneme inventory and transcribe [w] as /u/ in native words where it follows a consonant in initial position, thus *buat* 'skin'; *guan* 'rain'; *gualtsaŋ* 'moon', *gui* 'nine'; *guɔrbɔŋ* 'house, property', or a consonant cluster, after [ʃr], as in *frɔul* 'roof' and *frɔɔnaŋ* 'beak'. In the previous examples, we are dealing with diphthongs.

The situation is different with /j/. I can provide the following contrasts, with the liquid /r/: *ryt* 'Tibetan goat' vs. *jyt* 'dry fried barley', and also with /l/: *lo* 'also' vs. *ro-* 'to go' vs. *jo* '3SGNHON'. As mentioned in §1.2.1.2.1, [nj] is in free variation with /n/, with /j/, featurally identical to /i/, undergoing lowering to /e/ before /a/ and /o/, thus *njotʃo~neotʃo* 'after, behind', and *njaŋ~neaŋ* 'again'. As already mentioned, [dj] is also in free variation with /d/, thus *djaŋ~deaŋ*, where /j/ also undergoes lowering.

In addition to word-initial position¹⁸², [j] otherwise exclusively occurs after stop consonants: /n/ and /d/, as already mentioned, but also bilabial /b/, as in *bjasan* ‘to have the habit of’, dental /t/, as in *tjosan* ‘to weep’, *tjutisan* ‘to squeeze’, and velar /k/, as in *kjalak^ha* ‘enough’, *kjan* ‘1PL.POSS.INCL’, and *kju* ‘chest’. In addition, [jj] invariably occurs in initial position, preceding either /ɛ/ (alternatively [e]), as in *jjɛl* ‘medicine’, and *jjesan* ‘to recognise’, or /a/, as in *jjatfan* ‘to search, look for’. In all cases, except after /n/ and /d/, /j/ must occur, as part of a consonant cluster, according to my main consultant¹⁸³. /j/ never occurs in syllable-coda position.

Further, the glide /j/ is very distinctively pronounced in inter-vocalic environments: *bijan* ‘seed’, *bjjin* ‘man’, etc.

1.2.2 Phonological processes affecting consonants

Consonants are subject to various phonological processes that are connected to one morphological operation, for example the addition of the plural marker *-tfan*, source of gemination, (syllable) deletion, and deaffrication. These phonological processes are usually limited to one or a few words only; they may reflect variation depending on which of the two villages a speaker comes from.

1.2.2.1 Gemination

A few words exhibit a double consonant, invariably a plosive, as shown in table 92:

Table 92: a few cases of gemination in Chhitkul-Rākchham

Word	Meaning
bɛttan	to be afraid
ħɔttan	just
kaddu	pumpkin
lɔttan ¹⁸⁴	to forget

¹⁸² In case /j/ is followed by /u/, the latter undergoes fronting, surfacing as [y], thus *jynan* ‘to walk’.

¹⁸³ Since there are no contrastive examples, it seems palatalization of onsets is either optional, speaker or variety dependent, however. Further research will allow us to take a stance.

¹⁸⁴ To be compared with the pair *lɔŋ* and *lɔttan* (TR) ‘to tell’.

rattfaŋ	animals
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Gemination may be the result of the addition of some morphology to the relevant noun or verb.

Monosyllabic nouns ending in /t/, the plural marker *-tfaŋ* triggers consonant gemination, thus *rat* ‘animal’ vs. *rattfaŋ* ‘animals’; *sat* ‘deity’ vs. *sattfaŋ* ‘deities’.

The addition of the conditional *-na* to monosyllabic verbs stems such as *ro* in *roŋ* ‘to go’, *to* in *toŋ* ‘to come’ and *la* in *laŋ* ‘to do’ results in gemination (stem alternation): *ronna* (vs. *rono* – IRR.DUB); *tunna* (vs. *tuno* – IRR.DUB); *lanna* (vs. *lano* – IRR.DUB).

Object marking may also trigger the doubling of /n/, see §1.5.3.

Gemination is otherwise found in the converbs *henna* ‘if so’ and *manna* ‘if not, otherwise’. Finally, the copula and auxiliary *hen* results in the articulation of the final /n/ for a longer period when followed by the hearsay clitic =e → *henne*, as in (176).

1.2.2.2 Deletion

With multisyllabic – typically disyllabic – noun ending in *-tʃi*, the occurrence of the plural marker *-tfaŋ* results in syllable deletion, thus *palatʃi* ‘shepherd’ → *palatfaŋ* ‘shepherds’.

One example of consonant deletion is the verb *ʃifaŋ* ‘to die’, the imperfective and dubitative irrealis forms of which are *ʃide* and *ʃino* respectively. In the previous example, the middle voice marker /ʃ/ is the object of a process of deletion. No other middle class verbs (see §1.5.1.1) undergo a similar process.

A similar process affects /s/ in those few verbs listed in §1.3.3.2 having it as part of their stem: *ʃos-aŋ* ‘to sit’ → *ʃose* but *ʃono*; *tus-aŋ* ‘to bring’ → *tuse*, but *tu:no*, etc.

Another example of vowel deletion involves the voiced nasal velar /ŋ/. *Niŋsa:*, the first person plural exclusive pronoun, surfaces in some recordings as *nisa:*. The third person plural pronoun *emesa:* has a dialectal variant in *imsa:*.

1.2.2.3 Deaffrication

Deaffrication takes place in the case of monosyllabic nouns ending in *-tʃi* taking the plural marker *-tʃaŋ*, thus *atʃi* 'child' → *attʃaŋ* 'children'.

1.2.2.4 Glidialization

The high vowels /i/, and /o/ may be pronounced with the front glide /j/, thus *kim* ~ *kjim* 'house' and *no* ~ *njo* (PTCL.ASS). /i/ and /o/ also tend to become glide-vowels in occurrence with other vowels. An illustration is found in §1.3.3.2 with the infinitive pairs *riŋ/rijaŋ* 'to tell', *tɔŋ/toaŋ* 'to come', and *rɔŋ/roaŋ* 'to go'. This is also the case of /u/, for example in *tuaŋ* 'to drink'.

1.2.2.5 Voicing

The numeral *nisa* is in free variation with *niza* 'twenty'.

1.2.2.6 Epenthesis (excrecence)

Consonant epenthesis involves the liquid /r/ and the nasals /m/ and /ŋ/. /r/ is inserted between two vowels, the first being long: /a:/ and /o/ in *a:ro* 'in the mouth', where *a:* means 'mouth' and =o serves as locative marker, or in *niri*, where *ni* means 'day, sun' and =i serves as locative marker. The same phenomenon is observable in *mai i:-r-o* 'on the first of May'; *mai niʃi-r-o* 'on the second of May'; *mai ʃum/homo-r-o*; *mai ŋã-r-o* 'on the fifth of May';

The occurrence of the locative =o triggers another instance of consonant epenthesis in the case of *ts^haŋmo* 'in the morning', from *ts^haŋ* 'morning'. In this case, the insertion of *-m* is motivated by an incompatibility between /ŋ/ and /o/. In fact, there is not a single word ending in /ŋo/ in my database. Whereas *raŋo* 'in the mountains' is grammatically correct in Kinnauri, the equivalent in Chhitkul-Rākchham is *raŋ=niŋ* or *raŋ=du*.

Finally, verb stems ending in /o/, as in *oəŋ* ‘to rise’, *ts^hoəŋ* ‘to buy’, /u/, as in *tuaŋ* ‘to drink’, or in the long vowel /a:/ take the epenthetic /ŋ/ when they inflect for imperfective and dubitative irrealis: *ɔŋde*, *ɔŋno*; *ts^hɔŋde*, *ts^hɔŋno*; *tun̄de*, *tun̄no*; *tan̄de*, *tan̄no*.

1.2.3 Vowel phoneme inventory

Chhitkul-Rākchham has a set of five vowels, [i], [ɛ], [a], [u] and [ɔ], each with a distinction in terms of length. In addition, three vowels from the set are nasalized, two of which having a phonemic status. The sounds [e], [o] and [ɣ] are not phonemic. All vowels can occur in word-initial position.

Table 93: inventory of vowel phonemes in Chhitkul-Rākchham (sounds between brackets do not have phonemic status)

	Front	Central	Back
High	i i: ɨ̃ (ɣ)		u u:
Higher-mid	e e: (ẽ)	(ə)	o o:
Lower-mid	(ɛ)		(ɔ)
Low		a a: ǣ	

1.2.3.1 Short vowels

The five short phones with a phonemic status are the two front unrounded vowels /i/ and /ɛ/, the central (unrounded) vowel /a/, and the two back rounded vowels /u/ and /ɔ/.

The phonemic status of the oral vowels in relation to each other is established below:

-si ‘PFV’	-se ‘IMPV’	sa- (‘kill’)	su ‘who’
-so ‘SIM’			
nij ‘LOC.POST’	nɛŋ ‘again’	naŋ ‘opposite side’	nun̄ ‘later, after’
tete ‘grand-father’	tute (IMPV of <i>tɔŋ</i> ‘to come’)	tɔte (IMPV of COP)	
ʃiŋ ‘wood’	ʃuŋ (‘three’, from K)		

nənəŋ 'to fall asleep'	n(j)anəŋ 'to hide'	nɔnəŋ 'to sleep'
min 'name'	man 'is not'	
nimi 'tasty'	nima 'till date'	
ʃəl 'medicine'	ʃəl 'summer'	
k ^h ai 'black'	k ^h ui 'dog'	
atʃi 'child'	ɔtʃi 'at night'	
kim 'house'	kum 'cushion, pillow'	
pə 'four'	po 'down'	
ate 'elder brother'	ata 'elder sister'	
ʃjesəŋ 'to recognise'	ʃjasəŋ 'to look'	
sapə 'fourteen'	sapa 'snake'	

[o] and [ɔ] are in complementary distribution. The phone [o] occurs whenever followed by an oral (/a/ and /i/) or a nasalized (invariably [ɪ̃]) vowel: *roa* 'going'; *toa* 'coming'; *loa* 'telling'; *p^hoi* 'dry'; *soi* 'cold'; *zoi* 'good'; *to-ĩ* (COP.PEEX-2SG.HON). In word-initial position, [o] occurs when followed by /b/, as in *obi* 'tomorrow'; /k^h/, as in *ok^ho* 'only'; /l/, as in *olan* 'shadow'; /r/, as in *orea* 'carpenter', and when followed by a vowel, as in *oəŋ* 'to rise'. Only [o] may occur in word-final position. No vowel may follow the phone [ɔ]. In word-initial position, [ɔ] occurs whenever followed by /m/, as in *ɔm* 'path' or *ɔme* 'friend'; /n/, as in *ɔnəŋ* 'to pluck, take out'; /ʃ/, as in *ɔʃa* 'quick'; /tʃ/, as in *ɔtʃe* 'please', and /z/, as in *ɔza* 'wheat'. Most importantly, the phone [ɔ] occurs in all syllable-final instances, whenever followed by nasals /m/, /n/ and /ŋ/, as in *ɔman* 'to collect'; *ɔmzəŋ* 'to understand'; *dʒɔn* 'downhill'; *hɔntʃəŋ* 'to raise'; *rɔŋ* 'to go', but also voiceless stops /p/, /t/ and /k/: *tʃ^hɔp* 'soup'; *ɔtɪŋ* 'spiritual power'; *grɔktsu* 'oracle'; dental /d/: *hɔda* 'there', fricative /ʃ/: *pɔʃ* 'dried leaves', affricates /tʃ/ and /tʃ^h/: *tʃɔtʃəŋ* 'to light', and *tʃ^hɔsəŋ* 'to get ripe'; lateral /l/: *gɔlbənd* 'scarf', and trill /r/: *gwɔrbɔn* 'house, property'; *hɔrki* 'far'. Since [o] occurs as long vowel but [ɔ] does not, I claim that [o] and [ɔ] are allophones of the same phoneme /o/.

[e], [ɛ] and [ə] are in complementary distribution. The phone [e] occurs whenever followed by /a/, as in *eəŋ* 'inauguration of the sowing season'. In word-initial position, [e] occurs before velar /k^h/, as in *ek^he* 'together' and palatal /tʃ/, as in *etʃəŋ* '3PL.NHON.POSS', [ɛ] before nasals /m/ and /n/, as in *eme* '3SG.HON' and *ənəŋ* 'to hear', and [ə] before alveolars /ts/ and /r/, as in *ətsə* 'small' and *ər* 'weed'. Only [e] and [ə] may occur in word-final position: *breme* 'yak'; *tse* 'all'; *dɔne* 'at that time'; *holase* 'thanks'; *kuant^he* 'necklace –

made of 108 pieces of sandal wood'; *majare* 'ugly – FEM'; [ə] exclusively following /ts/ in disyllabic words: *atsə* 'small', *butsə* 'worm'; *jangstə* 'bee'. In syllable-final instances, [e] is the only phone among the three to be followed by other vowels: *tei* 'big'; *kɔneə* 'three days after tomorrow'; *lageaŋ* 'to cross'; *neotfo* 'after'. The phone [e] may also follow [o]: *goeniŋ* 'rain'. The phone [ə] occurs with loan words, mainly from Hindi. The phone [ɛ] occurs before nasals: *benaŋ laŋ/latfaŋ* 'to love'; *bɛŋtu* 'Tibetan goats and sheep'; *brɛme* 'yak'; before stops: *brɛt* 'flour', *hɛkso* 'as soon as'; before fricative /s/, as in *dɛso* 'migration to lower places'; before affricates: *hɛtfaŋ* 'to play'; *k^hɛts* 'alone'; before lateral /l/: *mɛliŋ* 'fire place', and before /r/: *k^hɛraŋ* 'milk'. Since [e] occurs as long vowel but [ɛ] does not, and that [ə] occurs in a limited number of environments, I claim that [ɛ], [e] and [ə] are allophones of the same phoneme /e/.

[u] and [y] also occur in complementary distribution, the latter being restricted to a very limited number of environments. [y] never occurs in word-initial and syllable-initial position, contrary to /u/. The pair *jytfaŋ* 'to grind' and *putfaŋ* 'to plow' indicate that the occurrence of [y] is motivated by the preceding context. [y] can occur after the glide /j/ (*jynaŋ* 'to walk' being another example), and after /t/ and /r/: *tyaraŋ* 'festival'; *ryt* 'Tibetan goat'; but not /p/: *puaŋ* 'to plow', /h/ *huaŋ* 'to teach', /s/: *suneasaŋ* 'to narrate'; /t/ (monosyllabic words): *tuaŋ* 'to drink', etc. We may therefore conclude that [u] and [y] are allophones of the same phoneme /u/.

1.2.3.2 Long vowels

The set of long vowels with a phonemic status consists of /i:/, /e:/, /a:/, /u:/ and /o:/. I demonstrate that vowel length is phonemic based on the following contrasting examples:

mi 'eye'	mi: 'man, human being, people'
-ji 'PFV'	ji: 'death'
tji 'young'	tji: 'grass'
k ^h e 'what'	k ^h e: 'why'
ra 'one hundred'	ra:(k) 'stone'
kar star	ka:r 'ritual'
taŋ 'up to'	ta:ŋ 'view'
zaŋ 'gold'	za:ŋ 'to point, show'

tasəŋ 'to put, keep'	ta:səŋ 'to allow'
dasəŋ 'to give'	da:səŋ 'to break – INTR'
dano 'will give – OBJ.3'	da:no 'will give – OBJ.1.2'
rəŋ 'mountain'	ra:ŋ 'to sell'
tuts 'will come'	tu:ts 'will bring'
gulaŋ 'to cough'	gu:laŋ 'root'
-u 'LOC'	u: 'inside'
go:l 'month'	go:l 'round'
-no 'IRR.DUB'	no: 'nine' (from Hindi)

1.2.3.3 Nasal vowels

In Chhitkul-Rākchham, vowels may be co-articulated nasalized in nasal environments, but there are also contrastive nasal vowels. However, there are a limited number of cases where a nasalized vowel occurs without any triggering environment. In this precise context, the nasal vowels do not form a unique set in terms of vowel quality. The three nasal vowels [ĩ], [ẽ] and [ã] represent a reduced set of the oral vowels discussed earlier. Other nasal vowels [õ], and more rarely [ũ], are from IA loan words, for example *kyõki* 'because'¹⁸⁵, one variant of which is *kjũ*. Chhitkul-Rākchham nasal vowels [ĩ], [ẽ] and [ã] invariably occur in word-final position. I can find only one example for each nasal vowel showing a contrast with short and long oral vowels:

-ti 'PFV'	ti: 'water'	tĩ 'green'
huni 'stay, live – PFV'	hunĩ 'stay, live – IMP 2SGHON'	
sa- 'kill'	-sa: 'PL'	sã 'some'

In addition, there is the following contrast between the long oral vowel /a:/ and the nasal [ã]:

ka: 'crow'	kã '2SG.NHON.POSS'
ma: 'female sheep'	mã 'POST.LOC (mã mã 'very')

¹⁸⁵ According to Masica (1991: 117), Hindi nasalized vowels are all long. Vowel length may vary from one Chhitkul-Rākchham speaker to the other as to their realization. Note that [ũ] occurs only once in my database, in *dʒiũ*, the second person singular non-honorific imperative of *dʒiaŋ* 'to howl'.

Only one word from my database ends in [ẽ], namely *mẽ* ‘fire’. Another *mẽ* (POST.LOC ‘in’) is borrowed from Hindi.

Based on the evidence provided above, I conclude that [ĩ] and [ã] have a phonemic status in Chhitkul-Rākchham, but not [ẽ], which, in addition to *mẽ*, exclusively occurs in the imperative (see §3.1.1.3), where it conveys heightened politeness, that is, a nuance, not a completely different meaning, and in *dʒĩẽ* discussed below, in free variation with *dʒĩĩ*.

The vowel [ĩ] occurs after /a/ with a few adjectives such as *ts^haĩ* ‘white’ and *maĩ* ‘red’. However, /i/ in *k^hai* ‘black’, is not nasalized – in *lei* ‘red’, neither. The previous observations suggest nasalization can be transferred between a syllable-initial plosive /m/ and the second vowel, alternatively from a consonant cluster [ts], or [kr] when the first consonant is voiceless, but not otherwise. This explains why /i/ is nasalized in *ts^haĩ* ‘white’, *kraĩ* ‘hard’, and *tsuĩ* ‘tailor’, but not in *k^hai* ‘black’, and *dʒui* ‘cloudy’.

The perfective suffix *-i* becomes nasalized after back rounded /u/ and /o/ in the case of monosyllabic stems, thus *tuĩ* ‘drank’; *puĩ* ‘sowed’, *ts^hoĩ* ‘bought’. What the previous examples have in common is a voiceless plosive in syllable-initial position. The perfective *-i* is also nasalized in the unique case of *oan*, where the verb stem only consists of *o* → *oĩ*. A verb stem ending in /i/ is a special case. There is no nasalization when the infinitive is *-san*, i.e. when /s/ is inserted between /i/ and the final nasal /ŋ/. However, nasalization does take place when the infinitive is *-an* or *-ŋ*, the difference being, the verb stem final /i/ becomes nasalized in the former case (stem alternation, i.e. there is no addition of a perfective suffix), as in *krĩ* ‘shivered’, whereas the perfective marker *-i*, which undergoes nasalization, attaches to the verb stem in the latter case, as in *riĩ* ‘told’.

A transfer also occurs in the case of a single nasal consonant occurring in initial position, as in *maĩ* ‘red’ or *nuĩ* ‘new’, or in medial position, as in *kamĩa* ‘worker’.

/ĩ/ may thus occur after back vowels /o/ and /u/, and after the central vowel /a/, but never after the front vowel /e/, see for example *k^hrei* ‘hungry’. The vowels /a/, as in *kamĩa*, and /ũ/, as in the imperative second person singular non-honorific *dʒĩũ*, may follow /ĩ/. The sequence *ĩ + ẽ* is also attested in the imperative second person extra-honorific, but in that case, I argue *=ẽ* is actually a particle that became cliticized, see §3.1.1.3.

Further, $-ĩ$ is the second person singular honorific subject agreement suffix occurring after imperfective and dubitative irrealis markers on copulas, main verbs and auxiliaries, which means, $-ĩ$ occurs after [o] and also [e] in these contexts, because its occurrence is not phonologically, but morphologically conditioned. The marker $-ĩ$ is also the second person singular honorific imperative form, occurring as such after all the previously mentioned oral vowels, but also after all verb roots (see table 96). The imperative form of *riŋ* (alternatively *ri-aŋ*) ‘to tell’, namely *riĩ*, exhibits two nasals in a row. The addition of the imperative clitic $=ẽ$ results in three nasalized vowels in a row $\rightarrow riĩ=ẽ$. Finally, in addition to the word *tĩ* ‘water’, [ĩ] is attested in *kĩ*, the second person singular honorific possessive form. *Dzi-aŋ* ‘to howl’ takes two nasalized vowels in some contexts: as discussed in §1.5.5, the verb root occurring in causative constructions is *dziĩ*, alternatively *dziĩẽ*; the imperative second person singular non-honorific is *dziũ*. In this case too, the occurrence of /ĩ/ is not phonologically, but morphologically conditioned.

By comparison, the occurrence of $=ẽ$ and [ã] is more limited. Invariably following [ĩ], $=ẽ$ exclusively occurs in second person singular honorific imperative forms. [ã] is found in a few instances only in addition to the possessive pronoun *kã* and the quantifier *sã*. In my corpus, it occurs in the numeral *ŋã* ‘five’ and the quantifier *dziã* ‘many’, that is, invariably in syllable-final position of monosyllabic words and in a few progressive verbal forms, as a result of following the velar nasal $-ŋ$, thus *ru-aŋ* ‘to wait’ $\rightarrow ruŋã$ ‘is waiting’, *ts^ho-aŋ* ‘to buy’ $\rightarrow ts^hoŋã$, see §3.1.1.2.1. Finally, *mã mã* is a variant of the intensifier *man man*. Other instances of [ẽ] and [ã] are from Hindi, for example the interjection *hã*¹⁸⁶ ‘yes’, and *mẽ* ‘in’.

1.2.4 Environmental effects – in addition to nasalization

In addition to nasalization affecting vowels preceding and following a nasal stop, vowels undergo a process of lowering, heightening and deletion in some specific environments described below.

1.2.4.1 Vowel weakening

Consonant placement may influence vowel height. Close-mid vowels /e/ and /o/ become open-mid in some environments. The copula and auxiliary *to* is pronounced /tɔ/ before the

¹⁸⁶ Sometimes the glottal /h/ is omitted. In that case, *ã* contrasts with *a*: ‘mouth’.

second person singular non-honorific subject agreement suffix *-n* → *tɔn*, the first person singular subject agreement suffix *-k/* → *tɔk*, and before the first and second person plural subject agreement suffix *-tʃ/* → *tɔtʃ*. Further, *to* surfaces as *tɔte* in the third person imperfective and as *tɔts* when inflected for the habitual-assertive *-ts*. The same phenomenon applies to the dubitative irrealis suffix *-no*. Compare *hunno* ('will live, stay', third person) and *hunnoɔk*, *hunnoɔn*, and *hunnoɔtʃ*. [e] surfaces as /ɛ/ in the same imperfective environments: *tɔtɛk*, *tɔtɛn*, *tɔtɛtʃ*, and *hundɛk*, *hundɛn*, and *hundɛtʃ*.

Verb stems ending in /i/ surface as [e] when inflecting for the progressive *-a*, thus, *suarisaŋ* 'to repair' → *suarea*; *bazisaŋ* 'to play' → *bazea*.

When the verb stem ends in two consecutive vowels (but not *ea*) with the last one being invariably /a/, the epenthetic /ŋ/ is inserted between both to convey the progressive meaning: *oŋ* 'to rise' → *ɔŋa*; *tuaŋ* 'to drink' → *tuaŋã*. In the former case, the vowel [o] undergoes a process of lowering and surfaces as /ɔ/.

1.2.4.2 Vowel raising

Verb stems ending in /ɛ/ surface as [e] when inflecting for the progressive *-a*, thus, *ɔmzɛŋ* 'to understand' → *ɔmzɛa*; *tʰurɛŋ* 'to run' → *tʰurɛa*. Another form of vowel eightening is the imperfective form of the very same verbs, where /ɛ/ surfaces as /i/, as in *ɔmzide* and *tʰuride*.

1.2.4.3 Vowel deletion

With verb stems ending in two consecutive vowels, /a/ being invariably in final position, the imperfective suffix *-de* is added after the deletion of /a/: *tsʰoŋ* ('to buy') → *tsɔŋde*; *tuaŋ* 'to drink' → *tunde*.

In case the verb root ends in the long vowel /a:/, the nasal velar /ŋ/ is inserted between /a:/ and the suffix *-de*: *ta:ŋ* ('to see') → *ga: kjalakʰa mi: taŋ-de-k* ('I saw many people'). Consonant insertion also occurs when the word *a:* 'mouth' inflects for the locative *-o* → *a:ro* 'in the mouth'.

The previous observations actually refer to a process of stem alternation, described in more detail in appendix 1, §1.5.1.1.

1.2.4.4 Epenthesis (anaptyxis)

The vowel /i/ is inserted between a verb stem ending in alveolar and post-alveolar *-s*, *-ts*, *-ʃ* and *-tʃ* and the dubitative irrealis *-no*, the habitual-assertive *-ts* and the conditional *-na*. Thus, *pɔsaŋ* ‘to sit’ → *pɔsino*, *pɔsits* and *pɔsina*; *suntseŋ* ‘to think’ → *suntsino*, *suntsits* and *suntsina*; *hufaŋ* ‘to learn, read, study’ → *hufino*, *hufits* and *hufina*; *tutfaŋ* ‘to bring’ → *tutfino*, *tutfits* and *tutfina*.

1.2.5 Tone

We may argue Chhitkul-Rākchham is a tonal language based on a binary tone distinction found in the word *raŋ*, ‘mare’¹⁸⁷ and ‘mountain’¹⁸⁸. *Ràŋ* ‘horse’ has a low tone – like Chinese *mà* - and *ráŋ* ‘mountain’ has a high tone. I give an example of each below:

eme ráŋniŋ huna ‘(s)he is living in the mountains’

bojiŋtʃi ràŋ tʰatʃi ‘the man hit the horse’

Further research is needed to identify additional contrastive sets, but the phenomenon seems very limited¹⁸⁹.

1.2.6 Phonotactics

1.2.6.1 Syllable structure

The table below presents the basic syllable inventory, which allows for many combinations. V syllables are attested. There is a preference for consonant onset with a CV pattern as the most common. Closed syllables are also attested.

¹⁸⁷ ‘Horse’ is *kjo raŋ*.

¹⁸⁸ Note that another *raŋ* ‘colour’ is a loan word from Hindi. *Ra:ŋ* means ‘to sell’.

¹⁸⁹ One of the few Kiranti languages with tonal contrasts is Khaling (Jacques et al. 2012; Jacques 2016). Michailovsky (2017: 7) reminds us that tone was reported in Sunwar and Thulung.

Table 94: syllable structure in Chhitkul-Rākchham

Syllable structure	Chhitkul-Rākchham example	Gloss
V	a:	mouth; still; and
CV	me	fire
VC	ɔm	path
CVV	lei	yellow
CVC	paŋ	tree
VCV	ɔme	friend
VVC	oaŋ	to rise
VCVV	ɔlea orea	poor
CCVC	gret	song
CCVV	k ^h rei	hungry
CVVC	ryaŋ	to ask
CVCC	gupt	invisible
VVCV	earo	after
CVCVC	dojaŋ	curd
CCVCC	ʃrɔul	roof

A limited set of consonants may occur as the final consonant: all nasals, voiceless unaspirated bilabial, dental and velar /p/, /t/ and /k/, the voiceless unaspirated palatal /tʃ/, and voiced liquids /l/ and /r/. No aspirated consonant may occur in final position. All consonants and vowels can occur word-initially. There is a limited set of syllable-onset consonant clusters. /r/ invariably occurs in second position, following palatal /j/ and velar /k/, /k^h/ and /g/.

1.2.6.2 Consonant clusters

Consonant clusters involve a set of phonemes among those listed in §1.2.1. Those occurring within one syllable are limited in number, occurring in syllable-onset and much more rarely in syllable coda environments. Liquids /r/ and /l/, glides /w/ and /j/, or both, are invariably involved in a consonant cluster, following a stop. A consonant cluster may involve up to three consonants.

Consonant clusters in monosyllabic words typically consist of a plosive, followed by a glide or a liquid. As shown in table 95, I have also one instance of a combination sibilant + liquid ([ʃr]):

Table 95: consonant clusters occurring within one syllable in Chhitkul-Rākchham (syllable-onset position)

Word	Cluster	Meaning
kri	[kr]	last
kra:ŋ	[kr]	to open
k ^h rei	[k ^h r]	hungry
kjaŋ	[kj]	1PL.INCL.POSS
kju	[kj]	chest
djaŋ	[dj]	body
ʃrɔul	[ʃr]	roof

In syllable-coda position, a stop invariably occurs as second consonant, as shown below:

Table 96: consonant clusters occurring within one syllable in Chhitkul-Rākchham (syllable-coda position)

Word	Cluster	Meaning
a:rt	[rt]	prayer
b ^h ant	[nt]	unpredictable
laɭ ^h	[ɭ ^h]	saliva

In disyllabic words, consonant clusters occurring in word-initial position involves the liquid /r/, more often than not as second constituent, after the plosives /t/, /k/, /b/, /g/, the sibilant /ʃ/, and the glides /w/ and /j/ (also in second position) as shown below:

Table 97: consonant clusters occurring in word-initial position in Chhitkul-Rākchham – disyllabic words

Word	Cluster	Meaning
njaŋro	[nj]	on the next day
njuglaŋ	[nj]	plain area
həkso	[ks]	as soon as
kjalak ^h a	[kj]	enough
bjaŋaŋ	[bj]	to have the habit of
tresaŋ	[tr]	to mix
tjoŋaŋ	[tj]	to weep
tjutisaŋ	[tj]	to squeeze
tʃjaŋaŋ	[tʃj]	to dance
kramtʃaŋ	[kr]	to bind
kriŋʃaŋ	[kr]	to shiver
brasu	[br]	bitter/black buck
grəktsu	[gr]	oracle
ʃrupaŋ	[ʃr]	to wipe
ʃruoŋaŋ	[ʃr]	beak, jaw
hərki	[rk]	far

Note that some disyllabic words may include two consonant clusters, [nj] and [ŋr] in *njaŋro*; [nj] and [gl] in *njuglaŋ*; [kr] and [mtʃ] in the case of *kramtʃaŋ*, and [gr] and [kts] in the case of *grəktsu*.

Consonant clusters are very common across syllable boundaries. The most common combination is that of a nasal stop followed by plosives /t/, /k/, /b/, /t^h/, sibilants /ʃ/, /z/, /ts/ and /tʃ/, and the liquid /r/ as shown in the following list:

Table 98: consonant clusters occurring across syllable boundaries in Chhitkul-Rākchham –
first consonant: nasal stop

Word	Cluster	Meaning
nɛmʃa	[mʃ]	daughter-in-law
sɔmzɛŋ	[mz]	to understand
sɛmtʃɛn	[mtʃ]	animals (of a certain size)
rankəl	[nk]	arm
kuanbo	[nb]	shortage
kuanʈ ^h e	[nʈ ^h]	necklace
guanʈ ^h raŋ	[nʈ ^h]	cow urine
tɔnʃaŋ	[nʃ]	to take a nap
suntseŋ	[nts]	to think
antʃaŋ	[ntʃ]	to stand, wake up
hɔntʃaŋ	[ntʃ]	to raise
baŋzisaŋ	[ŋz]	to smell
raŋmu	[ŋm]	morel
saŋtubrea	[ŋt]	three days before yesterday
bɛŋtu	[ŋt]	Tibetan goats and sheep
bɛŋka:r	[ŋk]	Tibetan sheep
nɛŋʃaŋ	[ŋʃ]	to fight
jaŋtsə	[ŋts]	bee
saŋtʃaŋ	[ŋtʃ]	to fill
bɔŋtʃaŋ	[ŋtʃ]	feet
diŋtʃi	[ŋtʃ]	after that
njaŋro	[ŋr]	on the next day
bɛŋryt	[ŋr]	Tibetan goat

Across syllable boundaries, the liquid /r/ is present in a significant number of cases, where it usually – but not always – occurs as the first consonant, before the plosives /m/, /t/, /k/, /b/, /t^h/, /g/ and sibilants /ts/ and /tʃ/. Only plosives /m/, /t/ and /b/ can precede it.

Table 99: consonant clusters occurring across syllable boundaries in Chhitkul-Rākchham –
first consonant: liquid /r/

Word	Cluster	Meaning
barma	[rm]	middle
bərteaŋ	[rt]	to use
hərki	[rk]	far
guərbəŋ	[rb]	property
mərthə	[rt ^h]	corpse
bargat	[rg]	blessing
urtsu	[rts]	wooden storage unit
bərtʃaŋ	[rtʃ]	to disperse
dartʃuət	[rtʃ]	flag
urtʃaŋ	[rtʃ]	to wash

Table 100: consonant clusters occurring across syllable boundaries in Chhitkul-Rākchham –
second consonant: liquid /r/

Word	Cluster	Meaning
zəmreŋ	[mr]	to be born
patraŋ	[tr]	leaf
tubrea	[br]	day before yesterday

Across syllable boundaries, the other liquid /l/ is also attested. Like /r/, /l/ generally occurs as first consonant, preceding plosives /t/, /b/, /g/ and sibilants /ʃ/, /ts/ and /tʃ/, but this is not a fast rule. Both plosives /b/ and /g/ can precede /r/, as shown below:

Table 101: consonant clusters occurring across syllable boundaries in Chhitkul-Rākchham –
first consonant: liquid /l/

Word	Cluster	Meaning
paltəŋ	[lt]	to plow
sualbəŋ	[lb]	half
sualgaŋ	[lg]	sky

ɔlgo	[lg]	sweet buck
kualʃaŋ	[lʃ]	to speak
rɔlʃaŋ	[lʃ]	to cooperate
gualtsaŋ	[lts]	moon
tʰɛltʃaŋ	[ltʃ]	to carry

Table 102: consonant clusters occurring across syllable boundaries in Chhitkul-Rākchham –
second consonant: liquid /l/

Word	Cluster	Meaning
nabliŋ	[bl]	last year
njuglaŋ	[gl]	plain area
ɔgli	[gl]	buckwheat

A few consonant clusters include /k/ as first consonant, followed by the sibilants /ʃ/ or /tʃ/:

Table 103: consonant clusters occurring across syllable boundaries in Chhitkul-Rākchham –
combination /k/ and palatal /ʃ/ or /tʃ/:

Word	Cluster	Meaning
rakʃaŋ	[kʃ]	to soak
hɔtpikʃaŋ	[kʃ]	to lose
tʃʰukʃaŋ	[kʃ]	to meet
lɔktʃaŋ	[ktʃ]	to burn
rɔktʃaŋ	[ktʃ]	to graze
tʃaktʃiŋ	[ktʃ]	home-made food for cattle
tʃɔtkaŋ	[tk]	chin

Other possible combinations, rarely attested in the corpus, are [st], as in *tustaŋ* ‘to reach’ and *ʃestaŋ* ‘close friend’, [zg], as in *sɔzgui* ‘nineteen’, [pts], as in *nuptsaŋ* ‘to return’, i.e. either two plosives in a row or a plosive followed by a sibilant.

To sum up, the following combinations are attested in a two-consonant cluster:

Nasal or liquid + plosive (table 96)

Nasal + plosive or nasal (table 98)

Sibilant + plosive [zg], [st]

Plosive + glide/liquid

Plosive + sibilant (table 103 – [tk] excepted; table 97 - [ks])

Plosive + plosive (table 103 – [tk])

Liquid + plosive/nasal (table 97 – [rk]; table 97)

Three consonant clusters involve the following combinations, with plosives and sibilants invariably occurring in second and third position:

Nasal + plosive + sibilant (table 98 – [ɲtʃ], [ɲts] [ntʃ] and [mtʃ])

Liquid + plosive + sibilant (table 101 – [lts])

Plosive + plosive + sibilant (table 99 [rtʃ] and table 101 – [ktʃ])

1.2.6.3 Diphthongs and triphthongs

Diphthongs are very common in Chhitkul-Rākchham, as shown in the table below. There are also a few cases of triphthongs and even quadriphthongs. Diphthongs may be falling, like [ei], [au], [ai], [ae], [oi] and [eu], or rising, like [ea], [oa], [ua] and [ya] and [uɔ]. Height-harmonic diphthongs include [ui], and [iu]¹⁹⁰. As many case markers, for example genitive =e and locative u: (inside), are vowels, their occurrence (or combination) may result in diphthongs, as in *kim* ‘house’ → *kim=e u:* ‘inside of the house’. Whenever diphthongs and triphthongs are preceded by a consonant, it is in most cases a stop. The combinations [ie], [ue] and [eu] are attested when =e serves as genitive marker¹⁹¹. To my knowledge, and based on the vowel phonemic inventory provided in §1.2.2, only [io] remain unattested. [ya] is the only diphthong involving [ɣ].

¹⁹⁰ [iu] is attested in a few second person singular non-honorific imperative forms such as *swariu* – from *swarisaj* ‘to repair’, and *t^huriu* – from *t^hureŋ* ‘to run’.

¹⁹¹ The genitive =e may follow /i/ in *felɪ=e* ‘of the fox’; it may also follow /u/ in *randju=e* (‘of the widow’). The vowel /u:/ may also follow the genitive =e in *kjim=e u:* ‘inside of the house’.

Table 104: list of diphthongs in Chhitkul-Rākchham

Word	Type of diphthong	Meaning	Minimal pairs
nei	[ei]	yesterday	nei vs. ne (PTCL.ASS), and nei vs. ni- (1PL.EXCL)
tei	[ei]	big	tei vs. te ('then'), and tei vs. -ti (PFV)
bei	[ei]	thin	
k ^h rei	[ei]	hungry	
lei	[ei]	yellow	
dear	[ea]	day	
beaŋ	[ea]	to fall (with animates only)	
moneasaŋ	[ea]	to celebrate	
nirea	[ea]	the day after tomorrow	
neotʃo	[eo]	after	
teotʃo	[eo]	before	
au	[au]	father	
ai	[ai]	1SG.POSS, other	
ae	[ae]	1SG.POSS	
k ^h ai	[ai]	black	k ^h ai vs. k ^h a 'great-grand', as in k ^h a aja 'great-grand-mother' ¹⁹²
nizao	[ao]	twenty	
nui	[ui]	new	nui vs. nu- ('gulp'), and nui vs. ni- (1PL.EXCL)
k ^h ui	[ui]	dog	
tsuĩ	[uĩ]	tailor	
hui	[ui]	this (PROX)	
puanŋ	[ua]	to sow	

¹⁹² K^ha also refers to white drawings made inside homes during Sazo Festival in January.

rijuan̩	[ua]	to ask	
jyani	[ya]	walked (PFV)	
dartʃuɔt	[uɔ]	flag	
ʃɾul	[ɔu]	roof	
p ^h oi	[oi]	dry	
soi	[oi]	cold	
zoi	[oi]	good	zoi vs. zo ‘crossbreeding of a yak and a cow’
poareŋ	[oa]	deity’s lower part structure	
oaŋ	[oa]	to rise, grow, come out	
suariu	[ua] and [iu]	IMP 2SG.NHON suarisaŋ	
t ^h uriu	[iu]	IMP 2SG.NHON t ^h ureŋ	
lia	[ia]	To be able to – PROG	

Triphthongs are a rare phenomenon. Most of the time they have /a/ in final position, as shown in table 105. A few verbs derived from Hindi (see §1.5.1) have their second person singular non-honorific imperative ending /eau/.

Table 105: examples of triphthongs in Chhitkul-Rākchham

Word	Triphthong type	Meaning
aia	[aia]	grand-mother (father side)
ziua	[iua]	heart
doiafaŋ	[oia]	to cry
mɔneau	[eau]	celebrate! (IMP.2SG.NHON)

The occurrence of the genitive =e may actually result in quadriphthongs: *aia=e* (‘of the grand-mother’).

1.2.7 A comparative perspective

I provide in the following two subsections a brief comparison between my own description of the sound system and that of Sharmā (1992) in the case of Chhitkul-Rākchham, and that of Takahashi (2001) in the case of Kinnauri.

1.2.7.1 Sharmā on Chhitkul-Rākchham

Sharmā (1992: 209) provides the following consonant phonemic inventory, which includes 32 consonants, observing that: “in most of the cases, the contrasts are limited to the initial positions only”, which is consistent with the minimal pairs provided in §1.2.1.

Table 106: *consonant inventory in Chhitkul-Rākchham according to Sharmā (1992: 209)*

	Bilabial	Dental	Palato- alveolar	Palatal	Retroflex	Velar	Glottal
Plosives							
VI.	p, ph	t, th		c, ch	ʈ, ʈh	k, kh	ʔ
Vd.	b	d		ɟ	ɖ	g	
Affricates							
VI.			č, čh, v				
Vd.			j				
Nasals	m	n		ɲ	ɳ	ŋ	
Vibrant					r		
Flapped					ɾ		
Lateral				l			
Fricatives							
VI.		s		ʃ	(ʂ)		

Vd.		z		ž			
Semi-vowels	w			y			

A first observation is that Sharmā’s transliteration scheme is confusing. Some of the minimal pairs he provides (for example *paŋ* ‘tree’ vs. *baŋ* ‘leg’: I transcribe the latter as *bɔŋ*) differ from mine in transcription, although in most cases this does not prevent us from reaching the same conclusions.

I contest the validity of the only minimal pair Sharmā provides (ibid, p. 211) to claim that the nasal retroflex [ŋ] and the nasal palatal [ɲ]: in my own wordlist, *k^hane* ‘some’ does not have any variant, and I transcribe ‘to hear’ by *enaŋ*, not *naŋ*. In addition, Sharmā includes a few sounds in the phonemic inventory that he never discusses, for example [ɾ], which has phonemic status in Hindi, but not in Chhitkul-Rākchham. Sharmā also adds [v], a free variant of [w] in Hindi, but [v] is attested in a few loan words only and does not contrast with any other, reason why I put it between brackets in my own inventory (together with [f] among others).

Further, I disagree with Sharmā (ibid, p. 212) on the fact that there are no voiced aspirated consonants in Chhitkul-Rākchham, and that “the contrast of aspiration is hardly attested in non-initial position” (ibid, p. 210, 215). However, I would not characterize Chhitkul-Rākchham as a “non-plosive consonant ending dialect” (ibid, p. 215) having provided a significant number of words ending in a plosive in this section.

While Sharmā contends the plosive glottal /ʔ/ has phonemic status, I claim we are dealing with the fricative glottal /h/ (voiced) instead.

With regard to consonant clusters, Sharmā notes (ibid, p. 217) that “there is very limited scope for the occurrence of clusters of different classes of consonants in the initial position and no scope at all in the final position. The only environment for the occurrence of different combinations of clusters is the medial position”. I do concur with Sharmā that in initial position a consonant cluster invariably involves a plosive and either a semi-consonant or a liquid. We also agree that a consonant cluster starting with the liquid /r/ is attested, although in one case only from the corpus. Table 96 provides a few examples of

consonant clusters in word-final position, which contradicts Sharmā’s claim. Our description does not diverge in any other respects.

Sharmā, in his earlier description, found a slightly divergent vowel inventory. I reproduce his phonemic inventory below:

Table 107: vowel inventory in Chhitkul-Rākchham according to Sharmā (1992: 204)

	Front	Central	Back
High	i		u
Mid	e	ə	o
Lower mid	(E)		(ɔ)
Low			a

Sharmā ascribes a phonemic status to [ə] when I do not, demonstrating in §1.2.2.1 that /e/, [ɛ] and [ə] are in complementary distribution, with /e/ occurring in most environments. There are instances where Sharmā (1992: 204-5) transcribes with [ə] when I use /a/, for example *nasi* ‘sick’ (vs. *nasi*), *man* ‘not’ (vs. *mən*), *dari* ‘beard’ (vs. *dari*), etc. In addition, the sound [y] remains unnoticed by Sharmā, occurring in only one word from his description (ibid, p. 207). Most importantly, Sharmā (1992: 207) is adamant “there is no phonemic contrast between the long and short quantity of a vowel”, but I show in §1.2.2.2 that vowel length is phonemic.

Sharmā (1992: 208) makes mention of nasalization as a phonological process:

All vowels tend to be nasalized in the vicinity of a nasal consonant:
 /hom/ [hɔ̃m] a bear. Besides nasalization, vowels /o/ and /e/ tend to be
 opener when accompanied with a nasal consonant or nasality.
 Consequently /o/ is realized as /ɔ/ (/roŋ/ [rɔ̃ŋ] to go) and /e/ as /E/.

I argue that the process of vowel lowering [o] → /ɔ/ and [e] → /ɛ/ is not just triggered by nasal consonants, as discussed in §1.2.2.1.

Providing the following pair, Sharmā argues that nasalization is phonemic: /tĩ/ green vs. /ti/ water. I argue the vowel is long in the case of ‘water’, but this does not prevent us from concluding /ĩ/ has a phonemic status. However, Sharmā never makes any mention of the other two nasalized vowels mentioned in §1.2.2.3.

We agree that Chhitkul-Rākchham is not a tonal language from a synchronic perspective. While I take note of the triple meaning of *raŋ* (one of which is a borrowing from Hindi), Sharmā (ibid, p. 205) makes mention of *raŋ* as ‘horse’ and *rəŋ* as ‘hill’.

There is no difference – the sequence [aə] being an exception – between Sharmā’s list of vocalic sequences and my own list from §1.2.4.3. I argue that no diphthong includes [ə].

Sharmā (1992: 220-1) mentions eight types of syllabic units in monosyllabic words: V, VC, CV, CVC (as in /gol/ month), CCVC (as in /pyac/ bird), CVCC (as in /sust/ lazy), CCV (as in /khre/ hunger) and CCVCC (as in /khyacc/ all alone). Referring to §1.2.4.1, I argue there are sixteen combinations. We do agree, however, that the most complex pattern includes five components.

1.2.7.2 A brief comparison with Kinnauri

In this section, I briefly compare the main features of the Chhitkul-Rākchham sound system with that of Pangi Kinnauri (Takahashi 2001) and Sanglā Kinnauri (Saxena 2017).

Takahashi (2001: 105) identifies 29 phonemic consonants and Saxena (2017: 756) 31. Takahashi (ibid, p. 104) argues /n/ is in free variation with the retroflex nasal [ŋ]. By comparison, the palatal [ɲ], which exclusively occurs word-initially, is in free variation with /n/ in Chhitkul-Rākchham. There is some variation with regard to the affricate [dz], not part of the Kinnauri phonemic inventory according to Saxena (ibid, p. 757). Takahashi (ibid, p. 104) claims /dz/ is in free variation with [z] in Kinnauri. As discussed in §1.2.1.1.3, it is also the case in Chhitkul-Rākchham, the difference being all three [dz], [dʒ] and /z/ are free variants. Takahashi (ibid) also claims /dʒ/ and [ʒ] are in free variation whereas Saxena (ibid) gives a phonemic status to both. Finally, according to Takahashi, /ʃ/ and [ʂ] are in complementary distribution whereas Saxena ascribes a phonemic status to both. In Chhitkul-Rākchham, only /ʃ/ is attested. Another difference between the available

descriptions of the Kinnauri sound system is [v], treated as phonemic by Saxena, but not by Takahashi. Like in Chhitkul-Rākchham, /h/ only occurs in initial position (Takahashi 2001: 103), always preceding a vowel (see the comparison with Chaudangsi, Byangsi, and Rongpo in §1.2.7.3), as discussed in §6.4. I claim that in Chhitkul-Rākchham, we are dealing with the fricative glottal /h/ (voiced).

Describing Chhitkul-Rākchham, Sharmā (1992: 217) is adamant “the scope of consonant clusters is not as wide as we find it in Standard Kinnauri”. Takahashi (ibid, p. 105) notes that “Kinnauri has many kinds of consonant clusters at the initial and final positions”. The combinations he provides do not differ from Chhitkul-Rākchham. Based on the rather limited wordlist provided by Takahashi, there does not seem to be any three-consonant clusters in Kinnauri either – see Sharmā (1988: 34-39).

In terms of vowel inventory, Saxena (ibid) lists /i/, /e/, /a/, /u/, and /o/, with vowel length being phonemic, for example ri ‘day before yesterday’ vs. ri: ‘pine nut’. “Nazalization is not phonemic”. Further, Saxena emphasizes on the variation found in the realization of vowel phonemes. She notably mentions the pairs [e]-[ɛ] and [o]-[ɔ]. Takahashi (ibid, p. 107) adds the close central unrounded /i/, in complementary distribution with the close back unrounded [u]. By comparison, the close front rounded [y] is in complementary distribution with the close back rounded /u/ in Chhitkul-Rākchham. The shwa is not phonemic, neither in Chhitkul-Rākchham nor in Kinnauri. Takahashi claims vowel length is phonemic as well, which means Kinnauri has 12 vowels with a phonemic status. He provides only three examples that include nasalized vowels, which suggests the phenomenon is rather limited. /pãẽ/ ‘two days after tomorrow’ indicates Kinnauri too may have two consecutive nasalized vowels.

The list of diphthongs Takahashi (ibid, p. 108) provides seems more limited than the list I provide in §1.2.4.3 in the case of Chhitkul-Rākchham, but it suggests the same restrictions, for example [io] does not occur.

There is also the interesting case of a word the meaning of which is ‘horse’ and the other ‘mountain top’. According to Saxena, the contrast between these two is in terms of vowel length: *raŋ* ‘horse’ vs. *ra:ŋ* ‘mountain top’. However, Takahashi (ibid, p. 109) claims it has to do with pitch contrast, found in “only a few words”. The pair I have identified in

Chhitkul-Rākchham suggests we are not dealing with vowel length but with a two-way pitch contrast.

1.2.7.3 A brief comparative perspective on ‘West-Himalayish’

With regard to consonant phonemes, Chaudangsi (Krishan 2001a: 402-3), Byangsi (Sharmā 2001: 23) and Rongpo (Sharmā 2001: 199) are very distinctive in having pre-aspirated nasals /hm/ and /hn/ and pre-aspirated trills and laterals /hr/ and /hl/. Darma (2007: 42) has no fewer than six places of articulation for plosives. Darma, Byangsi, Rongpo and Bunan do not have the fricative [z] in their phonemic inventory – the uvular fricative /χ/ in Darma.

The Chhitkul-Rākchham glide /j/ is peculiar. Contrary to Bunan (Widmer 2014: 81), it never occurs in syllable final position. However, its occurrence in post-initial position is a widely attested phenomenon within ‘West-Himalayish’, for example in Byangsi (Sharmā 2001: 29) and Rongpo (Sharmā 2001: 201).

A comparison of the vowel inventory found within ‘West-Himalayish’ reveals Chhitkul-Rākchham, Kinnauri and Bunan (Widmer 2014: 87-8) are distinct in that there is no contrast between [e] and [ɛ] and between [o] and [ɔ], contrary to Darma (Willis 2007: 45), Byangsi (Sharmā 2001: 13) and Chaudangsi (Krishan 2001a: 403). [y] seems to be specific to Chhitkul-Rākchham.

Bunan diverges from Chhitkul-Rākchham and Kinnauri in that it has three diphthong phonemes, of which only one, the rising diphthong /wa/ (Widmer 2014: 96), would be native – the other two borrowed from Tibetan. In comparison, referring to table 103 in §1.2.6.3, Chhitkul-Rākchham has four falling diphthong phonemes, namely /ei/, /ui/, /oi/, and /ai/.

Vowel length is phonemic in all ‘West-Himalayish’ varieties except Chaudangsi. The contrast oral and nasal is common to Chhitkul-Rākchham and Byangsi (Sharmā 2001: 20-1), although one may argue the evidence for claiming nasalized vowels are phonemic in the former is weaker in comparison.

The voiced fricative /h/ is attested in various Himalayan languages, some of them Kiranti, like Khaling (Jacques et al. 2012: 1098). However, as it is, /h/ is not part of the inventory of any other language commonly assigned to the ‘West-Himalayish’ subgroup.

1.3 Parts of speech

Parts of speech in Chhitkul-Rākchham include numerals, nominals, verbs, adjectives, adverbs, postpositions, discourse particles and interjections. Numerals may inflect for the locative =o. Nominals inflect for categories such as case and number, while verbs inflect for TAM and object marking. Having covered copulas and auxiliaries in chapters 4 and 5, I exclusively deal with lexical verbs under the category ‘verbs’. Adjectives may inflect for the modifier -i. Other parts of speech do not take any inflection.

An introductory remark has to do with the clitic =sea, which occurs quite often in the corpus. The particle may follow pronouns (*ga: sea*), nouns (*himatfal sea* ‘Himachali’, *tət sea* ‘goats and sheep owner’), verbs (*rɔŋ sea* ‘similar’, where it functions as relator), and adjectives, *feki* ‘proud’ → *i feki sea bojɪŋ* ‘a proud man/a man who is proud’; ‘a bearded man’. In all these instances, the particle sea has an attributive function, i.e. it is not derivational.

1.3.1 Numerals

Cardinal numerals precede the head noun. Table 108 provides the list of numerals from 1 to 20. Above 20, Chhitkul-Rākchham relies on a vigesimal system. Thus, 50 = 2 X 20 + 10 = *nif nizaο se*.

Table 108: cardinal numerals from one to twenty in Chhitkul-Rākchham

i:	one
nif(i)	two
homo or ʃuŋ ¹⁹³	three
pə	four
ŋã	five

¹⁹³ Derived from Kinnauri *ʃum* (Saxena 2005: 188).

tu ¹⁹⁴	six
tij	seven
rɛ	eight
gui	nine
sɛ(a)	ten
sigit	eleven
sɔnij	twelve
sɔrum	thirteen
sapə	fourteen
sɔŋǎ	fifteen
sɔruk	sixteen
sɔstij	seventeen
sɔrea	eighteen
sɔzgui	nineteen
nisa niza nizao	twenty
ra:	one hundred

Niza ‘twenty’ takes the vocalic ending =o (locative suffix) when preceded by another numeral, thus *niza nij* ‘22’, but *nij nizao* ‘40’. A case marker (locative or genitive) on numerals is a common feature within ‘West-Himalayish’. The numeral *nij* ‘two’ surfaces as *niji* when followed by a noun or when following a personal pronoun (see §1.3.2.2.1) reason why I treat *-i* as a modifier. *Ra* ‘one hundred’ is the biggest counting unit. Bigger units, *haza:r* ‘one thousand’ and *la:k^h* ‘one hundred thousand’ are loans from Hindi. Numerals do not inflect for the plural suffixes *-tʃaŋ* (non-specific) and *-o* (specific). These suffixes may however attach to nouns preceded by numerals.

Like numerals, ordinals precede the head noun. *Ai* ‘the one after one, i.e. second’¹⁹⁵ is highly productive, having the additional functions of first person singular possessive pronoun (inalienable possession) and adverbs ‘next’ and ‘other’.

¹⁹⁴ Variant of Kinnauri *tuk-tug* (Takahashi 2001: 101).

¹⁹⁵ But *meɪ nijiro* ‘on the second of May’.

(248) mei-j=o ai tit^haŋ=∅ to-a to-∅
 May-E=LOC the one after one pilgrimage=ABS come-PROG AUX.PEEX-3

‘The second pilgrimage comes in May’ – DSN

With regard to multiplicatives, Chhitkul-Rākchham uses *i:ro* ‘once’, consisting of the numeral *i*: ‘one’, the epenthetic consonant *-r* and the locative =*o*. From twice onwards, the numeral precedes *patan* ‘time’ (*nifi patan*):

(249) fu-i teotj=o hapta=o ga:=∅ nij-i patan=∅
 DEM.PROX-MODIF before=LOC week=LOC 1SG=ABS two-MODIF time=BS
 sant=o ro-i
 temple=LOC go-PFV

‘This week, I went to the temple twice’ – DSN

As shown in (11), Chhitkul uses the Hindi approximative लगभग *lagabagə*¹⁹⁶ as an equivalent of ‘about’ or ‘approximately’, invariably in pre-numeral position:

(250) nabliŋ alu pɛdaij=∅ lagəbagə nij-i tɔn ta-se-∅
 last year potato harvest=ABS about two-MODIF ton COP.PE-IMPV-3

‘Last year, the potato harvest was about two tons’ – DSN

Finally, Chhitkul seems to have a limited system of fractionals of its own. For any other fractional than ‘half’, it is borrowing from Hindi:

(251) t^hanmun=i kjaŋ=∅ oko sualbɔŋ¹⁹⁷ bravər gualsəŋ=∅ ta:ŋ-ts
 tonight=LOC 1PL.INCL=ABS only half equal moon=ABS see-HAB

‘Tonight we can only see half of the moon’ – DSN

¹⁹⁶ The shwa insertion is consistent with my data: final -g is not permitted.

¹⁹⁷ Alternatively: *k^hane*.

1.3.2 Nominals

Nominals include nouns, pronouns, and demonstratives.

1.3.2.1 Nouns

Nouns, which typically denote abstract or concrete objects, are the syntactic head of an NP, in the sense of Zwicky (1985: 2): ‘the intuition to be captured with the notion HEAD is that in certain syntactic constructs, one constituent in some sense ‘characterizes’ or ‘dominates’ the whole’.

Chhitkul-Rākchham is predominantly a head-final language: numerals, quantifiers, demonstratives, adjectives, intensifiers and genitive phrases all precede the head noun. Only postpositions, plural suffixes and case marker occur in postnominal position.

A personal or demonstrative pronoun may replace a noun in some contexts – see (257) and (258).

Nouns can be monosyllabic or multisyllabic (mostly disyllabic, but there are instances of trisyllabic nouns) as shown below. They are not morphologically distinguishable from other parts of speech.

Table 109: syllabic shape of a few monosyllabic nouns in Chhitkul-Rākchham

Transcription	Syllable shape	Gloss
a:	V	mouth
ɔm	VC	path
ni:	CV	sun, sunlight
ɔme	VCV	friend
lau	CVV	wrist, hand
gun	CVC	winter
ħaŋ	CVC	snow
kar	CVC	star
kum	CVC	cushion

ɒʃ	CVC	knee
k ^h ul	CVC	animal dead skin
ma:r	CVC	butter

Table 110: a few disyllabic nouns in Chhitkul-Rākchham

Transcription	Gloss
dʒilaŋ	root
guɔlda	kite bird
lɔnjaŋ	garlic
faraŋ	bone
nimbu	lemon
sat ^h ar	snow leopard
maɽ ^h a	interpreter
kutsu	rice

Table 111: a few trisyllabic nouns in Chhitkul-Rākchham

Transcription	Gloss
sɔmdaran	sea
kjopiʃi	male cat
bɛʃak ^h aŋ	month of Beshakh – mid April-mid May
brastʃisaŋ	bitter buck flour
buzuruk	elder
ts ^h aŋp ^h uliŋ	breakfast

Table 112: a quadrisyllabic noun in Chhitkul-Rākchham

Transcription	Gloss
baraboiri	enemy

1.3.2.1.1 Derivation

Chhitkul-Rākchham exhibits a few mechanisms serving the derivation of nouns: 1/ a diminutive suffix *-ts(ə)*; 2/ the attributive particle *sea*; 3/ the masculine prefix *kjo-*; 4/ nouns formed by compounding; and 5/ nouns formed by reduplication.

The diminutive suffix *-ts(ə)* is attested in a few nouns from my database, originating from the Proto-Tibeto-Burman root **tsa* ‘child’ (Matisoff 2003: 644). Chhitkul-Rākchham *atfi* ‘son, child’ probably developed into the diminutive *-ts(ə)* – via a process of depalatalization – the same way Chinese *zǐ* ‘son, child’ did (Norman 1988: 113-4).

The suffix denotes that the referent is small in size and attaches to other parts of speech – the quantifier *sã-tś* ‘a little bit’ (with *sã* having the meaning of ‘some’), the adjective *ə-tśə* ‘small, short’ and the adjective and adverb *k^hε-tś* ‘alone’. Diminutive nouns derived from simple nouns include *jan-tśə* ‘fly’; *jaŋ-tśə* ‘house fly’; *hɔsjaŋ-tśə* ‘bee, honey bee’; *bu-tś* ‘insect’; *mε-tś* ‘tail’; *ɾ-tś* ‘ear – of a human being’; *mu-tśə* ‘mustache’; *u-tś* ‘flower’; *tś^hεsa-tś* ‘young woman’ (borrowing from Kinnauri), etc.

Agent nouns take the attributive clitic *=sea*. All these markers attach to nouns¹⁹⁸. Thus *kamaŋ=sea* ‘worker/one who is working’, alternatively *kamīa*, both forms derived from Hindi काम ‘kām’; *tεt sea* ‘shepherd/one who has goats and sheep’; *tsuptjimats=sea* ‘binding material’; *dari=sea bojij* ‘a bearded man’; *homo bɔŋ=sea k^hui* ‘three-legged dog’. In *hojo mi: rofan min=sea rode* ‘the man whose name is Roshan left’, the clitic *=sea* again serves an attributive function. Further, a proverb like *dan bɔŋ sua=sea* (literally, ‘stomach full teeth’) designates a person with bad intentions.

An alternative agentive marker is the suffix *-ia*, found in *def-ia* ‘villager’ (from *def* ‘village’); *bəgar-ia* ‘carrier’ (with *bəgar* having the meaning of ‘load’). A noun like *ɾətua* ‘aimless walker’ does not seem to be breakable into several morphemes.

There is also one agentive suffix found in *ɾəŋ pala-tji* ‘horsekeeper’, which also fulfils the functions of ergative (agentive) and instrumental. The suffix *-tji* attaches to the noun

¹⁹⁸ *=sea* also functions as adjectivizer, as in *ɾɔŋ* ‘to go’ → *ɾɔŋ=sea* ‘similar’ or in *himatfal* (‘Himachal’) → *himatfal=sea* (‘Himachali’), and as adverbializer, as in *feki* ‘proud’ → *feki=sea* ‘proudly’. *=sea* also attaches to personal pronouns, thus *ga:=sea*.

pala 'shepherd', origin of the verb *palan* 'to rear'. The ablative marker *-tʃi* is found in *kinɔres/kanɔres/kinɔreŋ-tʃi i: mi:* 'a person from Kinnaur'.

Genuine Chhitkul-Rākchham nouns may take a gender (masculine) prefix, but this is a rarity (see also Sharmā 1992: 229). A handful of animal nouns take the masculine prefix *-kjo*. Thus, *kjo-ràŋ* 'horse'; *kjo-piʃi* 'male cat'; *kjo-kʰui* 'male dog', etc. There is no equivalent feminine prefix. In terms of kinship, nouns ending in the vocalic /a/ tend to be feminine, but this is not a fast rule: *ama* 'mother'; *aja* 'grand-mother', *ata* 'elder sister'. Nouns ending in *e* tend to be masculine: *tete* 'grand-father', *ate* 'elder brother', etc. There is also a gender distinction in *deatʃi* 'little boy' (*dja* 'male') vs. *djuatʃi* 'little girl' (*dju* 'female'). The suffixes *-pa* and *-mets* also serve the function of distinguishing male vs. female community members, thus, *tʃʰitkul-pa* 'male member of Chhitkul's community' vs. *tʃʰitkul-mets* 'female member of Chhitkul's community'. Borrowed nouns come overwhelmingly from Hindi, where there is a strict distinction between masculine and feminine. The distinction is strictly adhered to in the singular (masculine *-a:* vs. feminine *-i:*) but not in the plural (masculine *-e* vs. feminine *-iyã:*).

There are a few cases of compound nouns in Chhitkul-Rākchham. These compounds are invariably righthanded endocentric: the second constituent is the semantic head:

$N_1 + N_2 > N_3$

panpan → *pan* 'pine' + *pan* 'tree' = 'pine tree'

metsan → *me* 'fire' + *tsan* 'type of wood rich in turpentine' = firewood

melin → *me* 'fire' + *lin* 'place'¹⁹⁹ = fireplace

hɔsjanʃə → *hɔs* ~ *uɔs* 'honey' + *janʃə* 'bee' = 'honey bee'

ri:putʃa → *ri:* 'field' + *putʃa* 'sowing' = 'harvest'

ʃjan telan → *ʃjan* 'mustard' + *telan* 'oil' = 'mustard oil'

A few exocentric compound nouns are also attested in Chhitkul-Rākchham:

$N_1 + N_2 > N_3$

au ama → *au* 'father' + *ama* 'mother' = parents

junʃu riŋʃu → *junʃu* 'sister's brother' + *riŋʃu* 'brother's sister' = siblings

¹⁹⁹ From Tibetan *gling*.

rafan pa:ni: → *rafan* 'ration' *pa:ni*: 'water – borrowed from Hindi' = foodstuffs

Chhitkul-Rākchham also exhibits compounds consisting of an adjective followed by a noun.

There is no instance of the reverse combination in my database:

ADJ + N₁ > N₂

zakaŋ pafo → *zakaŋ* 'right' + *pafo* 'side, direction' = East

kɔjaŋ pafo → *kɔjaŋ* 'left' + *pafo* 'side, direction' = West

guṭ^{hi}/p^huri ken → *guṭ^{hi}/p^huri* 'thick, fat' + *ken* 'finger' = thumb

naki ken → *naki* 'thin, slim' + *ken* 'finger' = little finger

k^hai ja: → *k^hai* 'black' + *ja:* 'meat, flesh' = birthmark

POST-ABL + N₁ > N₂

dautfi mi: → *dau-tfi* 'from outside' + *mi:* 'people, man' = outsider(s)

Compounds with verbal roots

V + N₁ > N₂

hufa atfi → *huf-a* 'learning' + *atfi* 'child' = student

Coordinative compounds are a rarity. In 'day and night', a Chhitkul-Rākchham speaker uses the coordinating conjunction *tiŋ* to coordinate *niri* and *muni*, thus *niri tiŋ muni*. 'Here and there' is conveyed by only one adverb, namely *nedze*. The only one instance from my database consists of two verbs: *ɾɔŋ tɔŋ* → *ɾɔŋ* 'to go' + *tɔŋ* 'to come' = back and forth

There is one noun from my database formed by reduplication. In addition, there are a handful of cases where a disyllabic noun is reduplicated:

(*k^ha*) *tete* '(great)-grand-father'

reataŋ rutaŋ → *reataŋ* 'marriage'

auri nauri → *auri* 'excess'

t^hano raŋo → *t^hfaŋ* 'children' – borrowed from Kinnauri (-o → PL)

aŋiŋ fatiŋ → *aŋiŋ* 'last rites'

rehan sehan → *rehan* 'living standards' – borrowed from Hindi *reh-* 'stay, live'

beopar *supar* → *beopar* 'business' – derived from Hindi *vyāpar*

ḍaṇḍo *kʰaṇḍo* → *ḍaṇḍo* 'inaccessible terrain'

Finally, I have two instances in my database where the noun is derived from infinitive verb forms (deverbal nouns):

za:ŋ ta:ŋ → *za:ŋ* 'to point, show' + *ta:ŋ* 'to see' = 'sight-seeing'

zasaŋ tuaŋ → *zasaŋ* 'to eat' + *tuaŋ* 'to drink' = 'eatables'

Borrowed nouns stem from Hindi/Urdu. They often have an economic and technical connotation. *Awadi* (from Urdu *a:ba:di:*); or *dʒansankʰja:* 'population'; *a:mad* 'income'; *sabzi:* 'vegetables'; *a:va:z* 'voice'; *rozga:r* 'employment'; *ba:za:r* 'market'; *bag bagi:tʃa:* 'orchard'; *batʃpan* 'childhood'; *bidʒeli:* 'electricity'; *dʒimidar* (from Urdu *zami:nda:r*), *garhi:* 'car'; *sarak* 'road'; *gɔlbənd* (from Hindi *gulubənd*); *ila:dʒ* 'treatment'; *ima:ndari* 'honesty'; *kʰatarna:k* 'danger'; *sapa* (from Hindi *sa:np*), *gjan* 'knowledge'; *ummi:d* 'hope', etc. The same applies to terms borrowed from English: *dʒu:s* 'drinks'; admission; hospital; forest; education; environment; car; road; income, etc. There are also terms borrowed from Tibetan: *tsʰa:* 'knowledge'. Finally, Chhitkul-Rākchham has loan words from Kinnauri: *api* 'grand-mother', *bazgi* 'music', *kadis* 'dialect', *benaŋ* 'love', *pʰɔlaŋ* 'fruits'; *ju:* 'deity'; *tʃisaŋ* 'flour';

1.3.2.1.2 Morphology of nouns

A Chhitkul-Rākchham countable noun inflects for number. There are two plural suffixes, -*tʃaŋ* (non-specific and optional) and -*o* (specific and obligatory), thus *tse duka:ntʃaŋ* 'all the shops' (in general) vs. *tse duka:no* 'all the shops' (within a specific context, i.e. from a particular place). Sharmā (1992: 230-1) makes only mention of the former.

In a sentence like *tse mi: galti lats* 'all people make mistakes', *mi:* 'people' is not obligatorily marked for -*tʃaŋ* since the sentence, which includes the quantifier *tse* 'all', refers to people in general. The same applies to a sentence like *tse kjimo sat ta* 'in each house there is a deity': *kjim* 'house' is marked for the locative -*o*, but optionally for -*tʃaŋ*.

When a demonstrative – with or without the quantifier *tse* – precedes a noun, there is no distinction between specific and non-specific anymore and in that case, only *-tfaŋ* may occur, thus *huju tse dukan(-tfaŋ) ətsə ta* ‘all these shops are small’, *huju fare ra:k(-tfaŋ)* ‘these beautiful stones’, *huju niŋi kjum(-tfaŋ) fare ta* ‘these two cushions are beautiful’.

Some Chhitkul-Rākchham nouns resemble adjectives – subclasses of verbs – and verbs by taking the perfective (verbal) suffix *-fi*. When the adjective ends in /ʃ/, the noun is identical to the adjective: *mifi* ‘thirsty, thirst’; *k^hufi* ‘happy, happiness’²⁰⁰, but can *-fi* occurs when the adjective ends in a vowel: *k^hrei* ‘hungry’, *k^hrefi* ‘hunger’. Nouns that take the suffix *-fi* typically refer to general notions.

Another class of nouns referring to general notions end in /aŋ/: *jəlaŋ* ‘exhaustion’, *baŋ* ‘smell’ (*baŋzisaŋ* ‘to smell of’); *nenəŋ* ‘sleep’ (*nənaŋ* ‘to sleep’); *bettaŋ* ‘fear’; *ma:seasaŋ* ‘loneliness’ (to be compared with *ma:sea* ‘lonely’ and *malia* ‘alone’); *ladzaŋ* ‘shame’ (from Hindi लज्जा); *suk^haŋ* ‘peace’ (from Hindi सुख), *k^hamaŋ* ‘darkness’, *siমাŋ* ‘boundary’; *duk^haŋ* sadness; *bendaŋ* ‘pain/close relationship’, *pe-raŋ* ‘family’; *de-faŋ* ‘village’ (as an area: *defo* → ‘in the village’); *santaŋ* ‘temple’ (as an area: *santo* → in the temple), etc. Sharmā (1992: 225-6) characterizes *-aŋ* as a “naturalizing formative suffix” occurring with borrowed stems from Indo-Aryan. The assumption is correct in most cases, but not all (*pe-raŋ*, *de-faŋ*, *santaŋ*), however.

Chhitkul-Rākchham also exhibits a semblative clitic, =*rukfi*, and an enumerative clitic, =*mi*:. I propose that these are clitics, i.e. they are in an intermediate stage between a suffix and an independent phonological word, in light of their fixed position within the noun phrase, their absence of selectivity as to the morphological host, and syntactic scope – they attach to the last syntactic constituent, including in two coordinated noun phrases:

(252) ɛme-sa:=tʃi ʃiŋ=e pitaŋ-tʃaŋ=∅ tiŋ k^hidk-i:-tʃaŋ=∅ rukfi
 3SG.HON-PL=ABL wood=GEN door-PL=ABS CONN window-FEM-PL=ABS SML.REL
 ta ʃa:
 COP.PE make.PROG

‘They make things like wooden doors and windows’ – DSN

²⁰⁰ Borrowed from Hindi बुखी.

All nouns may be marked for case marking, which I discuss in §1.4.4 – =*tʃi* (ablative, ergative and instrumental), -∅ (absolutive), =*tiŋ* (dative and comitative), =*da* (dative) =*e* (genitive), =*o*, =*i*, =*du* and =*niŋ* (locative) on which I elaborate in §1.4.4. Case marking also involves postpositions (see §1.3.6).

1.3.2.2 Pronouns

I deal exclusively with personal (§1.3.2.2.1) and demonstrative (§1.3.2.2.2) pronouns – a closed class of nominals – in this section. I address possessive pronouns in §1.4.2.

1.3.2.2.1 Personal pronouns

Chhitkul-Rākchham has a pronominal system based on three numbers – singular, dual and plural – and honorific distinctions on both second and third person singular and plural, though non-honorific forms are nowadays less often in use. There are also inclusive/exclusive distinctions in first person plural. Dual forms are attested for all persons. There is no gender distinction.

1.3.2.2.1.1 The whole paradigm of Chhitkul-Rākchham personal pronouns

The first person singular *ga:* has a suppletive form (*ai/a:*), a common feature of the ‘West-Himalayish’ subgroup. The suffix *-n* marks second person singular, dual and plural (*ka* and *ki* are borrowings from Kinnauri). The contrast inclusive vs. exclusive, restricted to non-singular first person, is reflected in the use of the stems *kjaŋ* vs. *niŋ*. Inclusive *kjaŋ niŋi* specifically includes the addressee(s) whereas exclusive *niŋ niŋi* refers to a situation where someone else is present but excluded, or to a situation where someone else is present in addition to the speaker, but where ‘we’ includes a friend who is not present. The suffix *-ʃi*, sometimes preceded by the numeral *ni*, is the dual marker. *-sa:* and *-tʃaŋ* are two competing plural markers. It would appear that the former is the plural marker for first person and for second and third person honorific forms whereas the latter is the plural marker for second and third person non-honorific forms, but the form *emetʃaŋ*, though not attested in my corpus, is said to be a valid alternative to *emesa:*. The plural marker *-sa:* is sometimes omitted in the case of first person plural. The third person non-honorific form (*ho*)*jo* also has the function of distal demonstrative. The adverbial form *tse* (alternatively

tʃe), ‘all’ may be added to first, second and third person plural forms, but this is only very rarely part of my elicited data. As regards third person, *hojo* and *jo* are to be distinguished according to which the referents are known or unknown to the speaker. The form *e* occurs in both cases indiscriminately.

The scope of phonological variation between Chhitkul and Rākchham is very limited (*niḥsa:* vs. *nisa:* and *εmesa:* vs. *imsa:*). Personal pronouns can stand on their own; they can be inflected for absolutive (unmarked), ergative/instrumental/ablative (=tʃi), and genitive (=e), only plural forms in the latter case. They do not occur obligatorily. I provide the full system below:

Table 113: the Chhitkul-Rākchham personal pronouns

	SG	DU	PL
1	ga:	kjaŋ niʃi or kjaŋʃi (no one around, INCL), niŋ niʃi, or niŋʃi, or nini(ŋ) (people around, someone is excluded - EXCL)	kjaŋ(sa:) (tʃe/tse), PL.INCL/niŋ(sa:) (ni(sa:) (tʃe~tse), (people around, someone is excluded - EXCL)
2HON	kin or ki	kinʃi or kiʃi	kinsa: (tʃe~tse)
2NHON	kan or ka	kanʃi	kantʃaŋ (tʃe~tse)
3HON	εme	εmeʃi	εmesa: (imsa:) or εmetʃaŋ
3NHON	hojo (unknown person), jo (known person), e (both known and unknown persons)	hojo niʃi (unknown persons), jo niʃi (known persons), e niʃi (both known and unknown persons)	hojotʃaŋ (unknown persons), jotʃaŋ (known persons), etʃaŋ (both known and unknown persons)

1.3.2.2.1.2 Dual as a grammatical number

Pairs such as *kjaŋ niʃi* and *kjaŋʃi* and *niŋ niʃi* and *niŋʃi* shed light on a deletion process (of the first syllable). In other words, *niʃi*, alternatively *-ʃi* in some cases, refer to the numeral ‘two’, which surfaces as *niʃi* because *-i* serves the function of modifier, as when followed by a noun, as seen in §1.3.1.

One may therefore argue we are not dealing with dual but with plural personal pronouns. *We two are going to the market* does not allow us to conclude that English has dual pronouns.

However, forms such as *kjaŋji*, *kinji*, *kanji* and *emeji* form a complete paradigm where one may treat the suffix *-ji* as dual, which is what I choose to do in this section. Another argument for postulating the existence of dual pronouns has to do with the distribution of the two plural markers *-tjaŋ* and *-sa:*. The third person honorific plural is the only case where both markers may occur, but there is not a single example of this in the corpus. In other words, these markers are in complementary distribution. By contrast, the suffix *-ji* occurs in all forms, regardless of person and honorificity. Finally, dual suffixes typically have coronal fricatives (Limbu *-si* (1DU, Jacques 2012: 86); Khaling *-su* (2/3DU, see Jacques et al. (2012: 1101), or affricates initials (the ancient dual #tsi (DeLancey 2019) in Trans-Himalayan.

A surmise is that the dual marker *-ji* is ancient and that the long form of the numeral *niji* is *nif-ji* (NUM-DU)²⁰¹, which underwent degemination.

1.3.2.2.1.3 A comparison with Bailey (1920), SIL (1988) and Sharmā (1992)

The pronominal system described in Bailey (1920: 80) is a lot sketchier. Mention is made of *ga:*, *kan* (though as both second person singular and plural form), *yo:* (third person singular and plural), *ninin* (you and I) and *niji* (he and I). Bailey missed most of the dual forms and the honorific and plural ones altogether, unless dual forms are a post-1920 development.

The data from SIL (1988: 35-6) is confusing. It shows a distinction based on honorificity for second person singular only (*kɪn* vs. *ken*). Plural forms are mixed with dual ones. Consequently, the suffix *-ji* cannot be identified as dual. The contrast between the forms *kjaŋ* (inclusive) and *nin* (exclusive) is missed as well. The suffixes *-tjaŋ* and *-sa:* cannot be explicitly described as plural either. Forms such as *imi* (third person singular in the Chhitkul variant) and *hojomi* (third person plural in the Rākchham variant) are not attested in my data (*mi:* having the meaning of ‘man, human being, people’). Finally, the data shows much more variation between the two villages than I have been able to ascertain.

²⁰¹ Like Japhug *ynuz ni* (Jacques 2016: 2).

1.3.2.2.1.4 A brief comparative perspective

From a comparative perspective, the Chhitkul-Rākchham pronominal system is unsurprisingly similar to that of Kinnauri and other neighbouring languages in its main features of number, honorific, and first person inclusive vs. exclusive distinctions. The suppletive root as first person singular possessive pronoun is a feature of all so-called ‘West-Himalayish’ languages.

Referring to the comparative data provided by Huber (2008: 29; 2017: 54), the elements *ka* and *ki* are also present in Standard Kinnauri, Lower Kinnauri, Shumcho, and to some extent Jangrami. The suffix *-fi* is found in Sharmā’s (1988: 98) and Saxena’s (2017: 763) descriptions of Standard and Sanglā Kinnauri respectively, but is restricted to some dual forms whereas it is treated as such in Shumcho (Huber 2013: 224), and Byangsi (Sharmā 2001: 284). The Chhitkul-Rākchham dual marker is close to **-si* and *#tsi* identified by LaPolla (2000: 8) and DeLancey (2019: 110), referring to Bauman (1975: 194-197) and van Driem (1993: 322), as the West-Himalayish proto suffix.

A somewhat intermediary situation is found in Bunan, where “dual forms are formed periphrastically by postposing the numeral *nispi* “two (human)” after a pronoun” (Widmer 2014: 267).

In a recent paper, DeLancey (2019: 14-6) argues convincingly for the gradual replacement, “motivated by semantic transparency”, of the dual formative *#tsi* by *#ni* (‘two’) in the Western branch of TB languages, referring to a sample of TB languages that includes Sunuwar and Shumcho. Nowhere this tendency is more clearly illustrated than in Chhitkul-Rākchham, where the forms *kjaŋ nifi* and *niŋ nifi* are in free variation with *kjaŋfi* and *niŋfi*. The first person exclusive form *niŋ* is found Shumcho (Huber 2017: 54) and in Darma (Willis 2007: 200), though without the exclusive meaning in the latter case. A similar exclusive form, *hiŋ*, occurs in Bunan (Widmer 2014: 268). The form *nifi* also appears in Saxena’s description of Sanglā Kinnauri (2017: 761). Saxena characterizes the form *kifi* as second person dual honorific in the same paper (ibid).

The Chhitkul-Rākchham third person forms are clearly distinct from their Kinnauri equivalent based on Sharmā’s (1988: 98) and Saxena’s (2017: 761) data. The conflation

between third person pronominal and demonstrative forms is conversely attested, not only in Kinnauri (ibid), where third person pronouns are shortened forms of the demonstratives, but also in Bunan (Widmer 2014: 296), where the demonstratives *t^he* and *t^hadzu* are often used instead of the third person pronoun *tal*, in Rongpo (Sharmā 2001: 208), and Shumcho (Huber 2013: 224). The distinction, with regard to third person non-honorific forms, in both the singular and the plural, is of “qualitative” (Diessel 2009: 35) nature, i.e. provide some qualitative (rather than deictic) information about the referent. Among the six qualitative features discussed in Diessel (ibid, p. 47-49), it would seem that “boundedness” is the most relevant here: “when a quantity is specified as ‘bounded’, it is conceived to be demarcated as an individuated unit entity” (Talmy 1988: 178-180). The same distinction is found in Saxena’s description of Sanglā Kinnauri (2017: 761), applying to third person singular and plural (there is no honorific distinction, like in Chhitkul-Rākchham).

The use of the adverb ‘all’, however infrequent, is a peculiarity: Krishan mentions the use of an Indo-Aryan loan with the same meaning in Chaudangsi (2001a) and Raji (2001b) which gives an inclusive sense to the first person plural form. In C-R, not only it is not a loanword, but *tse* (or *tje*) can occur indiscriminately for both inclusive and exclusive forms and in the case of second person plural as well.

1.3.2.2.1.5 Reflexive pronouns

Reflexive pronouns consist of the set of personal pronouns provided above and the focus particle *o* discussed in §8.1. Thus, *ga:* (1SG) → *ga: o*; *εme* (3SG.HON) → *εme o*; *jo* (3SG.NHON) → *jo o*; *kjaṅsa:* (1PL.INCL) → *kjaṅsa: o*, etc. In comparison, Sharmā (1992: 243-4) mentions the emphatic *i* for first and second person (*gai* and *kii* respectively), but this is not consistent with my own data:

(255) *εme=tʃi* *εme=∅=o* *satʃ-i*
 3SG.HON=ABL 3SG.HON=ABS=FOC kill-PFV

‘He killed himself/she killed herself’ – DSN

With possessive pronouns, the same particle has the meaning of ‘own’, thus *ai o* ‘my own’. The following example includes the first person plural inclusive possessive:

(256) *kjaŋ-sa:=∅* *kjaŋ-sa:=o* *maz-a:=∅* *kuolea-∅*
 1PL.INCL-PL=ABS 1PL.INCL.POSS-PL=FOC pleasure-MASC.SG=ABS feel-PROG

na

PTCL.QUER

‘We are having our own fun, don't we?’

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1.3.2.2.2 Demonstratives

Chhitkul-Rākchham has a set of demonstrative pronouns denoting a proximal vs. distal distinction. I deal with demonstrative adverbs in §1.3.5. In addition to their function of modifying a noun, demonstratives may occur as the head of the NP in the absence of any noun, as shown in (258). The choice of demonstrative pronoun is ‘person-oriented’ meaning the deictic center is based on the speaker and hearer (Diessel 1999: 39). Singular and plural forms are identical. A demonstrative pronoun invariably consists of a root (ibid, p. 28) to which a morpheme is added.

The forms *hui* and *huju* are interchangeable as proximal demonstratives; *hojo*, alternatively just the morpheme *jo*, is the distal demonstrative. The proximal demonstrative *hui* consists of the root *hu* to which the modifier *-i* is added. The other proximal demonstrative *huju* consists of the root *hu* and the suffix *-ju*, which suggests *hu* has a proximal deictic meaning. The distal *hojo* consists of the root *ho* and the suffix *-jo*, meaning the root bears the deictic distinction while the meaning of the additional morpheme *-jo* remains to be ascertained.

It is worth noting *hojo* is identical to the third person non-honorific personal pronoun mentioned in §1.3.2.2.1, used to refer to unknown referents to the speaker. Interestingly, only *hojo* may function as a substitute for an entire NP, which suggests its occurrence indicates that something is relevant in the immediate discourse context and that *hojo* has a referential function, hence its occurrence in relative clauses (see §1.6.6):

(257) *saṭʰər=∅* *bʰa:gj-a* *to-∅*
 snow leopard=ABS run-PROG AUX.PEEX-3

‘The snow leopard is running’ – DSN

(258) *hojo*=∅ ɔfa ɔfa b^ha:gj-a to-∅
DEM.DIST=ABS fast run-PROG AUX.PEEX-3

‘It is running fast’ – DSN

My treatment of *hojo* as the distal demonstrative is consistent with its role as personal pronoun, where it refers to unknown referents to the speaker. The idea of distance is also attested in a sentence such as *tʃ^hul amir gest haʊs te hojo neotʃo ai kjim to* ‘in Chhitkul, my house is opposite that of Amir Guest House’.

The demonstratives *huju* and *hojo* also function as NP head in instances such as *huju rukji* ‘like this’ and *hojo rukji* ‘like that’.

The same distinction proximal vs. distal is observed in *hui* (or *huju*) *i: dʒoao ta* (or *to*) ‘this one right here’ vs. *hojo i: hɔdao ta* (or *to*) ‘that one right there’, where *i:* has an emphatic function and =*o* a focus one.

The two-way deictic system I describe is consistent with Sharmā’s (1992: 242) findings, although he only identified two forms, namely *huju* ‘this’ and *hojo* ‘that’.

I observe in §6.5 that the copula *hun* has the same base as *huju* and *hui*. The connection between demonstratives and the evidential is also conspicuous In §6.2 and §6.4: I provide an account of the quotative *he*, which function as base for the copula and auxiliary *hen*.

Further, specific question words: *hale* ‘how, what’; *hanaŋ* ‘how much, how many’; *hame* ‘when’ and temporal adverbs: *halta* ‘right now’; *hatji* ‘next year’ stand phonologically close to the demonstratives with a similar base + additional morphology structure.

All the previously mentioned forms exhibit a base consisting of /h/ (which I treat as a “support vocalique” in §6.4) followed by a vowel. /h/ + V is highly productive in Chhitkul-Rākchham, giving rise to various parts of speech – *hui* also serves as adjective ‘old’.

1.3.3 Verbs

Verbs are the clausal predicate, denoting actions, states and events. Chhitkul-Rākchham exhibits three kinds of verbs: lexical verbs, copulas and auxiliaries. All lexical verbs inflect for negation (the prefix *ma-*), and the vast majority of copulas and auxiliaries as well. Lexical verbs inflect for TAM, subject and, in some cases, for object agreement. Copula and auxiliaries exclusively inflect for tense and subject agreement (see table 45 in §5.4).

I exclusively focus on lexical verbs – an open class of verbs – in this section. Finite and non-finite verb morphology has been dealt with in §3.1 and §3.2 respectively. In this section, I briefly introduce the phonotactic structure of verbs (§1.3.3.1), I address infinitive marking (§1.3.3.2). Finally, I deal with complex verbal forms (§1.3.3.3).

1.3.3.1 Phonotactic structure of lexical verbs

Phonotactic constraints are more rigid with verbs compared to nouns. Lexical verbs carry the main semantic content of the verb phrase. Verb stems are either mono or disyllabic, as shown in tables 114 and 115. Chhitkul-Rākchham exhibits stem alternation, on which I elaborate in appendix §1.5.1:

Table 114: syllable shape of a few monosyllabic verb stems in Chhitkul-Rākchham

Verb stem	Syllable shape	INF	Gloss
o	V	o-aŋ	rise, grow, come out
oŋ	VC	o-aŋ	rise, grow, come out
ro	CV	ro-aŋ	go
ass	VCC	as-aŋ	happen, become
tjo	CCV	tjo-saŋ	weep
tau	CVV	ta-saŋ	keep, put
pal	CVC	pal-aŋ	rear
dʒiũ	CCVV	dʒi-aŋ	howl
tsum	CCVC	tsum-aŋ	catch
tʌtʃ	CVCC	tʌtʃ-aŋ	make, build, cook
tʃja	CCCV	tʃja-saŋ	dance

kuats	CVVCC	kuats-aŋ	master
njekf	CCVCC	njekf-aŋ	hide oneself
nupst	CVCCC	nupst-aŋ	return
njektf	CCVCCC	njektf-aŋ	hide

Table 115: a few disyllabic verb stems in Chhitkul-Rākchham

Verb stem	INF	Gloss
suariu	suari-saŋ	repair
hagoj	hagoj-aŋ	understand
ʃranim	ʃranim-aŋ	freeze
mɔneau	mɔnea-saŋ	celebrate
puziu	puzi-saŋ	worship
ri:putf	ri:putf-aŋ	harvest
sosol	sosol-aŋ	split
suntsiu	suntse-aŋ	think, imagine
zagjau	zagja-saŋ	protect
sɔmziu	sɔmzɛ-ŋ	understand

Referring to my database, initial consonants of verb stems include b, d, dʒ, d^h, g, h, j, k, k^h, l, m, n (but not ŋ), p, p^h, r, s, ʃ, t, t^h, ts, ts^h, tʃ, tʃ^h, t̥, and t̥^h.

Initial clusters often involve consonant + glide: *tʃja-saŋ* ‘to dance’, *ʃja-saŋ* ‘to see’, *tjuti-saŋ* ‘to squeeze’, *gjal-aŋ* ‘to win’²⁰², *bja-saŋ* ‘to have the habit of’, *k^hju-saŋ* ‘to scratch’, *njan-aŋ* ‘to hide’. Alternatively initial clusters consist of /ts/, /ts^h/, /tʃ^h/, as in *tsum-aŋ* ‘to catch’, *ts^ho-aŋ* ‘to buy’, and *tʃ^he:-saŋ* ‘to finish’. Among the two initial clusters reconstructible from Proto-Kiranti (labial or velar stops followed by *l and *r – see Jacques 2017: 17) only the latter is attested in Chhitkul-Rākchham, as in *bra:-saŋ* ‘to chew’, *krɔ-saŋ* ‘to mix’, and *kra:-ŋ* ‘to open –TR’. Many of the initial consonant clusters attested in for example Wambule, Khaling and Bantawa have been lost in Chhitkul-Rākchham.

²⁰² [g^hlaŋ] in Khaling (Jacques 2017: 17).

As shown in table 114, a verb stem consists of at least a vowel²⁰³ (*o-aŋ* ‘to rise, grow, come out’ is the only example from my database; there is an alternative VC stem (see appendix 1.5.1), namely *ɔŋ*). Monosyllabic verb stems exhibit more complexity than monosyllabic nouns, consisting of at least two constituents and up to six – against one to three (see table 106). CVC is the most common shape among the set. As tables 114 and 115 indicate, there are instances of (imperative) verb stems ending in a diphthong.

Chhitkul-Rākchham has stem-final consonant clusters, a peculiar feature found in only a few Tibeto-Burman languages – mostly Kiranti. Stem final clusters include [tʃ], as in *latf-aŋ* ‘to do’, [ts], as in *kuats-aŋ* ‘to master’, [lt], as in *palt-aŋ* ‘to plow’, [ŋʃ], as in *runʃ-aŋ* ‘to listen, wait’, [lʃ], as in *rɔʃ-aŋ* ‘to cooperate’, [kj], as in *tsɔmkj-aŋ* ‘to shine’, [kʃ], as in *nʃɛkʃ-aŋ* ‘to hide oneself’, [ktʃ], as in *rɔktʃ-aŋ* ‘to graze’, [mtʃ], as in *kramtʃ-aŋ* ‘to bind’, [ntʃ] as in *antʃ-aŋ* ‘to get up, stand up, rise’, and [pst], as in *nupst-aŋ* ‘to return’, see appendix 1, §1.2.6.2. All verbs with a stem final cluster take the infinitive suffix *-aŋ*. As Jacques (2017: 29) points out, complex codas is a feature typically found in Kiranti languages. However, Chhitkul-Rākchham departs from Jacques’s claim that “the second element of these clusters is either *-t* or *-s*” (ibid) – *nupst-aŋ* excepted.

Monosyllabic stems may end in the following list of consonants: /k/ ([guɔrk], from *guɔrkaŋ* ‘be late’), /l/ ([tʃul], from *tʃulaŋ* ‘to cut’), /m/ ([rum], from *rumaŋ* ‘to count’), /n/ ([hun], from *hunaŋ* ‘to live, stay’), /ŋ/ ([tsʰɔŋ], from *tsʰoŋaŋ*), /p/ ([ʃup], from *ʃupaŋ* ‘to sacrifice’), /r/ ([ur], from *uraŋ* and *urtʃaŋ* ‘to wash’), /t/ ([lat], from *laŋ* ‘to do’), /tʃ/ ([latʃ], from *latʃaŋ* ‘to do’), /s/ [pɔs], from *pɔsaŋ* ‘to sit’, and /ʃ/ ([huʃ], from *hufaŋ* ‘to learn, read, study’). Monosyllabic verb stems may end in a single vowel, short or long, or a diphthong ([iu], [ia], [au], and [ou]).

Disyllabic stems may end in a more restricted set of consonants (/l/, /m/, /t/, /ʃ/, and /tʃ/). Whenever they end in a diphthong, it is invariably [iu]. Note the triphthong [eau] in table 115.

Second person singular non-honorific imperative (see table 144 in appendix 1, §1.5.4.3.1) and verb root are in most cases identical, but not always. Chhitkul-Rākchham exhibits a rather complex system of stem alternation that I introduce in appendix 1, §1.5.1.

²⁰³ A verb stem consisting of a single vowel is also attested in Khaling |i| ‘laugh’ (Jacques 2017: 18).

1.3.3.2 Infinitive forms

Morphologically, verbs are distinct from other lexical classes²⁰⁴ in terms of inflection and derivation. Verbs inflect for TAM, subject and object agreement, and for the infinitive, see table 116 below.

I define as infinitive the verbal form the type of verbal noun that occurs in purpose clauses, see §1.6.3 and §1.6.4 for some examples. User-defined (external) criteria such as the arbitrarily chosen citation form used in lexicography (see appendices 4 and 5) and the form that my main consultant gave me when answering the question ‘how would you say ‘to teach’?’ are consistent with the language-defined (internal) provided here.

The infinitive form of a verb is realized by adding the suffixes *-(a)ŋ* and *-saŋ* directly to the stem, which corresponds in most cases to the second person singular non-honorific imperative form.

The suffix *-aŋ* attaches to monosyllabic and disyllabic verb stems ending in a consonant. Nasals /n/ and /m/, as in *tsum-aŋ* ‘to catch’, plosive /k/, as in *guɔrk-aŋ* ‘to be late’, fricatives /s/ and /ʃ/, as in *pɔs-aŋ* ‘to sit’, *hagɔf-aŋ* ‘to understand’²⁰⁵, affricates /tʃ/ and /ts/, as in *latf-aŋ* ‘to do’, *kuats-aŋ* ‘to master’, liquids /r/ and /l/, as in *pal-aŋ* ‘to rear’, the glide /j/, as in *tsɔmkj-aŋ* ‘to shine’. The infinitive *-aŋ* also occurs after monosyllabic verb stems ending in the back rounded vowels /u/ and /o/, as in *pu-aŋ* ‘to sow’, *tu-aŋ* ‘to drink’²⁰⁶, *o-aŋ* ‘to rise, grow, come out’, *tsʰo-aŋ* ‘to buy’²⁰⁷. Finally, *-aŋ* attaches to verb stem ending in /i/ and starting in a consonant cluster: *kri-aŋ* ‘to shiver’, *dʒi-aŋ* ‘to howl’, etc.

The allomorph *-ŋ* attaches to monosyllabic and disyllabic verb stems ending in /e/, which then undergoes a process of lowering, surfacing as /ɛ/, as in *pʰɛ-ŋ* ‘to send’²⁰⁸, *ɔmzɛ-ŋ* ‘to understand’²⁰⁹, *tʰurɛ-ŋ* ‘to run’²¹⁰ provided the stem does not start in a consonant cluster (in that case, the infinitive is *-saŋ*). In addition, the marker *-ŋ* attaches to the only

²⁰⁴ As discussed in §1.3.4, some adjectives may inflect for tense and subject agreement as well.

²⁰⁵ From Tibetan *ha.go*.

²⁰⁶ Cognate of Tibetan *ʹthung*, *btungs*, and Khaling *[tuŋ]* (Jacques 2017: 13).

²⁰⁷ From Tibetan *ʹtshong*, *btsongs*, with loss of *-ŋ*, as in *tuaŋ* vs. *ʹthung*, *btungs*.

²⁰⁸ It is likely the stem had a final **-ŋ*, as in Khaling *[pʰiŋ]* (Jacques 2017: 33).

²⁰⁹ Borrowing from Hindi समझना (*samajhnā*).

²¹⁰ *Suntse-aŋ* ‘to think’ is the only exception. We may infer this is because this lexical verb is derived from Hindi सोचना (*ɔtʃnā*).

monosyllabic verb stem ending in /i/, thus *riŋ* ‘to tell’. Note that there is an alternative infinitive form to *riŋ*, namely *ri-aŋ*. Finally, *-ŋ* attaches to the two monosyllabic stems ending in /o/, *ro* and *to*, which then undergo a process of lowering: *ɾɔŋ* and *tɔŋ*. Here again, there is an alternative infinitive form to *tɔŋ* and *ɾɔŋ*, namely *toaŋ* and *roaŋ*, where the infinitive marker is *-aŋ*. The infinitive pairs *riŋ/riaŋ*, *tɔŋ/toaŋ* and *ɾɔŋ/roaŋ* involve a process of vowel deletion, invariably involving /a/.

The marker *-saŋ* attaches to monosyllabic stems ending in the front unrounded vowel /a/ and /a:/. Thus, the infinitive marker is *-saŋ* in *ʃja-saŋ* ‘to look’, *ta-saŋ* ‘to keep, put’, *za-saŋ* ‘to eat’, *da:-saŋ* ‘to break – INTR’, etc. It also attaches to monosyllabic and disyllabic stems ending in the front unrounded /i/ or /i:/, hence *p^hi-saŋ* ‘to throw’, *ʃi-saŋ* ‘to die’, *suari-saŋ* ‘to repair’, *baŋzi-saŋ* ‘to smell’, and *tʃi:-saŋ* ‘to bite’. The marker attaches to a verb stem ending in the back rounded vowel /u/ and the front unrounded vowel /e/ provided the stem starts in a consonant cluster (otherwise the infinitive marker is *-aŋ*): *k^hju-saŋ* ‘to scratch’, *tsu-saŋ* ‘to rot’, *tʃ^hu-saŋ* ‘to divide, distribute’, *ʃje-saŋ* ‘to recognize’, *tʃ^he:-saŋ* ‘to finish’, etc. The same applies to when the stem ends in the back rounded vowel /o/, thus *tjo-saŋ* ‘to weep’, *kro-saŋ* ‘to mix’, etc. the difference being, *-saŋ* is also the infinitive marker when the stem starts in an aspirated plosive: *k^hɔ-saŋ* ‘to reap’, *p^hɔ-saŋ* ‘to dry’, etc. Finally, the infinitive *-saŋ* also attaches to verb stems, invariably derived from Hindi, ending in /ea/: *batʃea-saŋ* ‘to conserve’, *bitea-saŋ* ‘to spend’, *mɔnea-saŋ* ‘to celebrate’, *pɔzea-saŋ* ‘to worship’, *sunea-saŋ* ‘to narrate’, etc.

From a comparative perspective, *-saŋ* has cognates in the Kurtöp (Hyslop 2011a: 469) nominalizer *-saŋ*, in the Lepcha infinitive marker *-shaŋ* (ibid, p. 471), and in the Bumthang ‘infinitival future’ *-saŋ* (van Driem 2015: 41), which Wyatt (2017: 37) connects with ‘clausal nominalization’.

Table 116 shows that a few lexical verbs have their infinitive stem ending in /s/: *as-aŋ* ‘to become, happen’, *pɔs-aŋ* ‘to sit’, *k^has-aŋ* ‘to be cold’, *gis-aŋ* ‘to sneeze’, and *nas-aŋ* ‘to be sick’.

In the case of *tu-saŋ* ‘to bring’, the imperative forms of which are all irregular (see §1.5.5.1)²¹¹, we may infer /s/ is part of the verb stem by looking at the inflectional

²¹¹ We are here dealing with archaisms.

properties of the verb: *tusa*, *tusi*, *tuse* (but *tu:no* and *tu:ts*, because there are no consonant cluster such as [sn] and [sts] in Chhitkul-Rākchham). Thus, ‘to bring’ has three stems, namely [tu], found with the infinitive and causative, [tu:], and [tus].

A verb like *ffe-saŋ* ‘to recognize’ has its progressive *ffes-a* and imperfective *ffes-e* (in free variation with *ffe-de*), and its imperative in *ffeu*. ‘To recognize’ has thus three stems, [ffe], [ffeu], and [ffes]. The same pattern applies to *tʰe:-saŋ*, which has three stems: [tʰeu], [tʰe:] and [tʰes] (in the perfective).

Still referring to table 116, *tʰɔ-saŋ* ‘to get ripe’ has two stems, [tʰo] and [tʰɔs] (in the perfective).

A verb stem ending in /e/ usually undergoes laxing, as in *sɔmzɛ-ŋ* ‘to understand’, and take the infinitive *-ŋ*, as mentioned earlier. However, *tʰe-saŋ* ‘to write’ and *tʰe:-saŋ* ‘to finish’ take the infinitive *-saŋ* if we refer to the inflectional paradigm described in the table below, whereas *suntse-aŋ* ‘to think’ takes *-aŋ*. We may infer ‘to finish’ and ‘to write’ do not take *-ŋ* because vowel lowering is blocked when the lexical verb starts with an affricate.

The above description is consistent with Sharmā’s (1992: 286) account: “in this dialect, the infinitive which simply expresses the action of the verb without predicating it of any subject, is obtained by suffixing /-aŋ/, /-iŋ/ and /-saŋ/ to the stem”. I suggest, however, that there is no infinitive in *-iŋ*, the lexical verb *riŋ* ‘to tell’ having its infinitive marker in *-ŋ*. We nevertheless agree that the infinitive markers are in complementary distribution.

Table 116 provides the inflectional paradigm of a few verbs having the sound /saŋ/. It is very clear only the handful of verbs having their second person singular non-honorific imperative ending in /s/ have it as part of their stem. This is the case of *asaŋ*, *gis-aŋ*, *na-saŋ*, *kʰasaŋ*, *tusaŋ* and *ffesaŋ*, which have their infinitive in *-aŋ*. All the others verbs have their infinitive in *-saŋ*.

Table 116: inflectional paradigm of a few verbs with a verb stem ending in /s/ or taking the infinitive -saŋ

INF	2SGNHON IMP	PROG	PFV	IMPV	FUT	Gloss
as-aŋ	ass	asa	asi	ase	a:no	To happen, become
pɔs-aŋ	pɔs	pɔsa	pɔsi	pɔse	pɔno	To sit
gis-aŋ	gis	gisa	gisiti	gise~gisite ²¹²	gino	To sneeze
nas-aŋ	nas	nasa	nasi	nase	na:no	To be sick, get sick
k ^h as-aŋ	k ^h as	k ^h asa	k ^h asi	k ^h ati dei	k ^h ano	To be cold
tu-saŋ	kara	tusa	tufi	tude	tu:no	To bring
ʃje-saŋ	ʃjeu	ʃjesa	ʃjeʃi	ʃjese~ʃjede	ʃjeno	To recognize
tʃ ^h ɔ-saŋ	tʃ ^h o mat	tʃ ^h oa	tʃ ^h osi	tʃ ^h ode	tʃ ^h ono	To get ripe
tʃ ^h e:-saŋ	tʃ ^h e:u	tʃ ^h e:eja	tʃ ^h e:si	tʃ ^h e:de	tʃ ^h e:no	To finish
ʃja-saŋ	ʃjau	ʃjaga	ʃjasi	ʃjade	ʃjano	To watch, look (at)
k ^h ju-saŋ	k ^h iju	k ^h jua	k ^h juʃi	k ^h jude	k ^h juno	To scratch
tsu-saŋ	tsuu	tsua	tsuʃi	tsude	tsuno	To rot
tʃ ^h u-saŋ	tʃ ^h uu	tʃ ^h ua	tʃ ^h uʃi	tʃ ^h ude	tʃ ^h uno	To divide, distribute
p ^h ɔ-saŋ	p ^h o mat	p ^h osa	p ^h o matʃi	p ^h o mate	p ^h ono~p ^h o mano	To dry
li-saŋ	lits	lia	lii	lide	lino	To be able to
za-saŋ	zau	za:~zaga	zai	zade	zano	To eat
da-saŋ	dau	da:~daga	daʃi	dade	dano	To give
t ^h a-saŋ	t ^h au	t ^h aga	t ^h aʃi	t ^h ade	t ^h ano	To break – TR
da:-saŋ	da:u	da:ga	da:i	da:de	da:no	To break –

²¹² According to my main consultant, the few cases of variation mentioned in this table are not of sociolinguistic, generational, or dialectal nature, but are instances of free variation.

						INTR
ts ^h a-saŋ	ts ^h au	ts ^h a:~ts ^h aga	ts ^h afi	ts ^h ade	ts ^h ano	To know
ta-saŋ	tau	ta:~taga	tatfi	tade~tatje	tano	To put, keep
tje-saŋ	tjeu	tjea~tjaga	tjeji	tjede	tjeno	To write
tji:-saŋ	tji:u	tji:ja	tji:fi	tji:de	tji:no	To bite, get stung
p ^h i-saŋ	p ^h iu	p ^h ia	p ^h ifi	pide	p ^h ino	To throw
fi-saŋ	fiu	fia	fii	fide	fino	To die
ali-saŋ	aliu	alea	alifi	alite	alino	To call, invite
puzi-saŋ	puziu	puzea	puzifi	puzide	puzino	To worship
suari-saŋ	swariu	swarea	swarifi	swaride	swarino	To repair
baŋzi-saŋ	baŋziu	baŋzea	baŋzifi	baŋzide	baŋzino	To smell – TR
baŋde- saŋ	baŋdeu	baŋdea	baŋdefi	baŋde	baŋdeno	To smell of – INTR
bazi-saŋ	baziu	bazea	bazifi	bazide	bazino	To play an instrument
tja-saŋ	tjeu	tjeja~tjega	tjei	tjjade	tjeno	To dance
badeli-saŋ	badeliu	badelea	badelifi	badelide	badelino	To change
koli-saŋ	koliu	kolea	kolifi	kolide	kolino	To feel
pali-saŋ	paliu	palea	palifi	palide	palino	To maintain, take care of
ŋuni-saŋ	ŋuniu	ŋunia	ŋunifi	ŋunide	ŋunino	To shout
ta:-saŋ	ta:u	ta:ga	ta:fi	ta:de	ta:no	To allow
tjŋuti-saŋ	tjŋutiu	tjŋutia	tjŋutifi	tjŋutide	tjŋutino	To squeeze
bra:-saŋ	bra:u	bra:ga	bra:fi	bra:de	bra:no	To chew
dzami-saŋ	dzamiu	dzamia	dzamifi	dzamide	dzamino	To taste
tjo-saŋ	tjeu	tjoa	tjoi	tjode	tjono	To weep
k ^h o-saŋ	k ^h ou	k ^h oa	k ^h ofi	k ^h ode	k ^h ono	To reep
krɔ-saŋ	krou	kroa	krofi	krode	Krono	To mix

A surmise is that *-s* is a remnant of some derivational mechanism that is no longer productive from a synchronic perspective. One piece of evidence is Tibetan *na* ‘be sick’ (Takeuchi 1995: 279), devoid of any /s/²¹³. However, table 116 also suggests that *-s* reflects past tense (IMPV and PFV), as in Tibetan and Rgyalrong (Jacques 2010: 47), and aspect (PROG).

Benedict (1972: 98-9) and Matisoff (2003: 471-2) note that the suffix has cognates in many Tibeto-Burman languages. There is also comparative evidence within the so-called ‘West-Himalayish’ subgroup: Widmer (2014: 401) describes *-s* as a stative suffix in Bunan. A stative reading is certainly not applicable to Chhitkul-Rākchham, however, since verbs having /s/ are both stative (*posaŋ* ‘to sit’) and dynamic: *asaŋ* ‘to become, happen’; *gisaŋ* ‘to sneeze’.

Sharmā (1992: 286) notes /s/ in *-saŋ* “seems to be the remnant of the verb root /se-/ which is attested as /sennig/ ‘to cause’ to apply, to put, etc. in Standard Kinnauri and is used as causative/transitive formative in it”. However, as shown in §1.5.1.2, the infinitive causative suffix is *-(i)maŋ* in Chhitkul-Rākchham, reason why I cannot follow the lead of a connection with the causative²¹⁴.

Back to the previous table, both *baŋdesaŋ* ‘to smell – INTR’ and *baŋzisaŋ* ‘to smell – TR’ have /s/. In other words, we cannot conclude *-s* is a transitivity or detransitivizing²¹⁵ marker:

(259) $\epsilon me = \emptyset$ $mat^{\text{h}}l-i := e$ $baŋde a - \emptyset$
 3SG.HON=ABS fish-FEM=GEN smell.INTR-PROG

‘(S)he smells of fish’ – DSN

(260) $\epsilon me = \emptyset$ $ku \text{ } \text{ } n = \emptyset$ $baŋze a - \emptyset$ ta
 3SG.HON=ABS food=ABS smell.TR-PROG AUX.PE

‘(S)he is smelling the food’ – DSN

²¹³ In comparison, *k^hasaŋ* ‘to be cold’ has its stem in *k^ha*, consistent with the adjective *k^hati* ‘cold’.

²¹⁴ Matisoff (2003: 472) makes mention of the causative *-s* in Kiranti.

²¹⁵ As in Bunan (Widmer 2014: 404).

Matisoff (2003: 472) makes the observation that “possibly related to the non-syllabic stative *-s suffix is a fully syllabic -*śi* in Kanauri”, adding, “there is scattered evidence in Himalayish languages for a sibilant suffix that carried a stative, inner-directed, or “middle” meaning”. The same suffix - *śi* indeed appears as a middle voice marker in all ‘West-Himalayish’ languages, including Chhitkul-Rākchham (see table 130 in §1.5.2.1).

Following Matisoff’s observation *asaŋ*, *gisaŋ*, *nasaŋ*, *k^hasaŋ* and *paŋsaŋ* would all denote a sense of physical and/or psychological self-affectedness that is the glue holding all the verbs taking the middle voice marker -*f* mentioned in §1.5.2.1. From a diachronic perspective, a handful of verbs that initially had the middle voice marker -*f* would have undergone a process of post-alveolar fronting whereby it turned into /*s*/.

Data on the causative infinitive suffix -*maŋ* (see §1.5.2.3, where the causative form of *paŋsaŋ* ‘to sit’, namely *paŋ-maŋ* results in the deletion of /*s*/) and causative constructions (where the same phenomenon is observable, see §1.5.7) also allow us to isolate /*s*/ in those verbs where it is however part of the verb stem.

1.3.3.3 Complex verb forms

I address tripartite verb structures ($V_1 V_2$ and AUX) in §5.6 as part of my investigation of the Chhitkul-Rākchham evidential system. I also discuss the distinction between serial verbs and light verbs (or compound verbs) in §5.1.2.1. A defining difference between these two types of verbs is of semantic nature: the first element of a compound verb construction carries most of the semantic load.

The present section exclusively deals with light verb constructions the first component of which is usually either a verb or a noun. Light verbs are often composed of nouns borrowed from Hindi, English and Kinnauri, but there are also genuine Chhitkul-Rākchham instances:

Table 117: Some N + V light verbs in Chhitkul-Rākchham

Noun	Gloss	Verb	Gloss	Complex verb	Origin
kamaŋ	work	latʃaŋ, laŋ	to do	to work	derived from Hindi
ja:d	remembrance	latʃaŋ, laŋ	to do	to remember	borrowed from Hindi
ʃuru	(to) start	asaŋ	to happen/to become	to start	borrowed from Hindi
gret	song	tatʃaŋ, tasaŋ	to keep	to sing	Chhitkul-Rākchham
kuɔn	food	ʃatʃaŋ, ʃaŋ	to make, build, cook	to cook	Chhitkul-Rākchham
ni:	sun	oaŋ	to rise, come out, produce	to rise	Chhitkul-Rākchham
ni:	sun	rijaŋ	to go down	to set	Chhitkul-Rākchham
dusti	sweat	oaŋ	to rise, come out, produce	to sweat	Chhitkul-Rākchham
zali	lie	antaŋ	to tell	to lie	Chhitkul-Rākchham
bənaŋ	love	latʃaŋ, laŋ	to do	to love	borrowed from Kinnauri
sa:saŋ	breathe/sign of life	tutʃaŋ	to bring	to breathe	Chhitkul-Rākchham
t ^h u:paŋ	spit	p ^h isaŋ	to throw	to spit	Chhitkul-Rākchham

Compound verbs typically consist of N + V, more rarely ADV + V, for example *wa:pas tɔŋ* ‘to return’, with *wa:pas* ‘back’ borrowed from Hindi. There are also instances of V + V where the negative prefix *ma-* attaches to the second element. Like in Hindi, the number of compound forms where the first element is a borrowing from English is increasing. Table 118 provides a few examples:

Table 118: examples of V + V compound verbs where the first element is a borrowing from

English:

V1	Gloss	V2	Gloss
pas	to pass	latʃaŋ, laŋ	to do
tʃu:z	to choose	latʃaŋ, laŋ	to do
ju:z	to use	latʃaŋ, laŋ	to do
trænsfɜ:r	to transfer	asaŋ	happen, become

1.3.4 Adjectives

Adjectives consistently appear in prenominal position and one cannot separate them from their head noun with the use of another modifier.

1.3.4.1 Adjectives form sub-classes of verbs

There are different classes of adjectives in Chhitkul-Rākchham. All native classes of adjectives are sub-classes of verbs. Most adjectives are verb-like forms distinct from nouns in that they do not inflect for case and number. Adjectives do not take all verb inflections, however: most take the past participial *-i*, some take the dubitative irrealis *-no* (followed by subject agreement), others the infinitive suffix *-aŋ*, others the aspectual *-ts*. Contrary to verbs, most adjectives do not take the negative prefix *ma-*.

As mentioned in §4.2.2, disyllabic adjectives (*jali* ‘tired’; *gʷərki* ‘late’; *nasi* ‘sick’, etc.) inflect for irrealis and subject agreement, thus *jalnɔk*, *gʷərɔnɔk* and *na:nɔk* as shortenings of *jali anɔk* ‘I may be tired’; *gʷərki anɔk* ‘I may be late’, and *nasi anɔk* ‘I may be sick’ respectively. Note that the latter forms are not grammatically correct, only *jalnɔk*, *gʷərɔnɔk* and *na:nɔk* are. These disyllabic adjectives also inflect for the habitual-assertive *-ts* occurring in some future tense constructions, thus, *jal-i* → *jal-ts* (NEG: *ma-jal-ts*). That we can negate the previous forms with the prefix *ma-* suggests *jal*, *gʷərɔk* and *nas* are actually verb stems. In fact, *nas-* is the verb stem of *nasəŋ* ‘to be, get sick’ (see §1.3.3.2).

All adjectives ending in *-i* form a sub-class of verbs once we establish that *-i*, also found in some numerals, in the proximal demonstrative *hui*, and in some quantifiers, fulfils both a modifying and an active participle function²¹⁶.

Table 119: a few participial adjectives in Chhitkul-Rākchham

Participial adjective	Gloss
teʃ-i	mashed
jal-i	tired
ʃ-i	dead
sus-i	rotten
huf-i	educated
kan-i	bored
p ^h ɔs-i	dried

I provide below a list of adjectives exhibiting the modifying suffix *-i*:

Table 120: a few adjectives exhibiting the suffix -i in Chhitkul-Rākchham

Adjective	Gloss
zo-i	good
so-i	cold
te-i	big
ʃek-i	proud
le-i	yellow
hɔrki	far
k ^h uf-i	happy
mif-i	thirsty
p ^h ur-i	fat, thick
na:k-i	thin
nas-i	sick
p ^h oi	dry

²¹⁶ (Widmer 2014: 321) observes a similar phenomenon in Bunan: ‘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’.

tʃ-i	young
nim-i	tasty
nur-i	soft
soj-i	cold
nu-i	new
ru-i	tall, long
rukʃ-i	similar
al-i	sweet
bantʰin-i	beautiful
dʒu-i	cloudy
gjuʃ-i	angry
ɦu-i	old
nak-i	thin, slim (round and spherical items)
kʰa-i	black
kʰat-i	cold (weather)
tʃʰet-i	warm (weather)
kʰre-i	hungry
be-i	thin (everything but round and spherical items)
tun-i	small
tʃʰɔs-i	ripe
zor-i	loud
bərk-i	full
ʃur-i	sour

Yet another class encompasses adjectival forms identical to verbs inflected for the infinitive *-aŋ*. I provide a list below. Some adjectives are otherwise conflated with verbs: *kʰasaŋ* 'to be cold'; *guɔrkaŋ* 'to be late'; *bettaŋ* 'to be afraid, worry', etc.

Table 121: a few adjectives exhibiting the infinitival suffix *-aŋ* in Chhitkul-Rākchham

Adjective	Gloss
dem-aŋ	true
gam-aŋ	warm
jal-aŋ	tiring
k ^h ɔj-aŋ	left
zak ^h -aŋ	right
meɸ-aŋ	quiet
kuɔts-aŋ	strong, intelligent
suk ^h -aŋ	easy
b-aŋ	full
dʒar-aŋ	dumb and deaf
malis-aŋ	difficult

Comparing tables 119 and 121, we have the past participial adjective *jali* 'tired' and the infinitival *jal-aŋ* 'tiring'. Note that another adjectival form inflected for the aspectual (progressive) *-a* may express the English gerund, thus *fi* 'dead' and *fia* 'dying'.

A handful of adjectives end in *-ts*, which I take to be an aspectual marker occurring on verbal forms:

Table 122: a few adjectives exhibiting the habitual suffix *-ts* in Chhitkul-Rākchham

Adjective	Gloss
bari-ts	wise
sua-ts	true
k ^h ɛ-ts	alone
ə-tsə	small, short

Another handful of adjectives are derived from nouns inflected for the genitive suffix *-e*, thus *fiŋ* 'wood' vs. *fiŋe* 'wooden'; *zaŋ* 'gold' vs. *zaŋe* 'golden', etc.

The last class of native adjectives are reduplicative, as shown in table 123:

Table 123: a few adjectives based on reduplication in Chhitkul-Rākchham

Adjective	Gloss
gul gul	soft
ɖək ɖək	thick (books, pillows, blankets)
ɦuʃi ɦaʃi	educated
kir kir	flat and round

Finally, another class of adjectives includes borrowed items, essentially from Hindi. I provide a few examples below. Adjectives from Hindi may exhibit a gender distinction: *-a:* (MASC) vs *-i:* (FEM):

Table 124: a few adjectives borrowed from Hindi

Adjective	Gloss
a:sa:n	easy
galat	wrong
mufkil	difficult
zaruri:	necessary
baɖ ^h ia:	good
bura:/ buri:	bad
sa:hukar	rich
laʃa:/laʃi:	dumb
daŋbalea:/daŋbali:	bald
beima:n	dishonest
ra:zi ba:zi: or ra:zi k ^h uʃi:	cheerful

A pair of adjectives exhibiting a gender distinction appears to have been borrowed from the Western Pahari language supposedly spoken by the lower castes throughout Kinnaur, where *-o* is the masculine suffix and *-e* the feminine (Huber, personal communication): *ʃaro* vs. *ʃare* (as mentioned in table 125, the adjective *bant^hini* conveys a similar meaning). Very few Trans-Himalayan languages have gender, typically marked on animals, as in Qiang (LaPolla 2003: 48):

Table 125: a pair of adjectives exhibiting a gender distinction

Masculine	Feminine	Gloss
ʃaro	ʃare	beautiful, pretty, handsome
dʒaraŋ	dʒare	deaf

(261) i: ʃar-e mɔriŋ=∅
 one beautiful=FEM woman=ABS

‘A beautiful woman’ – DSN

(262) i: ʃar-o bɔjiŋ=∅
 one handsome-MASC man=ABS

‘A handsome man’ – DSN

The masculine *ʃaro* undergoes a process of syllable deletion when negated, thus *mafo* (*mafare* with the feminine equivalent).

As shown in (263) and (264), the female gender is the default one, in both singular and plural, for non-animate referents. This is what Huber (2011: 52) also observes in the case of Shumcho. However, the following examples contradict Sharmā’s (1992: 229) claim that “the feature of gender distinction is confined to animate beings only”:

(263) huju tsāĩ ra:k=∅ osɔli²¹⁷ ʃar-e ta
 DEM.PROX white stone=ABS really beautiful-FEM COP.PE

‘This white stone is really beautiful’ – DSN

(264) huju tsāĩ ra:k-tʃaŋ=∅ osɔli ʃar-e ta
 DEM.PROX white stone-PL=ABS really beautiful-FEM COP.PE

‘These white stones are really beautiful’ – DSN

²¹⁷ Borrowed from Hindi.

The data provided in this section indicates adjectives form a sub-class of verbs. The numerals *i* and *nifi*, the demonstrative *hui*, the quantifier *bodi* ('many'), all ending in the participial suffix *-i*, share the same status. The absence of any agreement in number and gender between native adjectives and nouns, and of case marking reveals a clear separation from nouns.

1.3.4.2 The lack of comparative and superlative adjectival forms

Adjectives in Chhitkul-Rākchham do not display an alternative form when used in comparative or superlative contexts. When making a comparison, the focus particle *o* optionally follows the adjective. With regard to superlative constructions, the adverb *tse* 'all' precede the adjective (like Hindi *sabse* 'of all'):

(265) rekɔŋ peo=∅ tʃʰul=∅ ʃjana te-i=o zaga=∅ tɔ-ts
 Reckong Peo=ABS Chhitkul=ABS COMP big-MODIF=FOC place=ABS COP-PEEX.ASS

'Reckong Peo is bigger than Chhitkul' – DSN

(266) hu-i bɔks=∅ ai huju ʃjana te-i ta
 DEM.PROX-MODIF box=ABS other PROX.DEM COMP big-MODIF COP.PE

'This box is bigger than that other one' – DSN

(267) tʃʰul=∅ tse bantʰin-i zaga=∅ ta tʰan ta:-ŋ ga:=∅
 Chhitkul=ABS all beautiful-MODIF place=ABS COP.PE today see-INF 1SG=ABS

ʃnanɔŋ zaga=∅ taŋ-ʃi / taŋ-dɛ-k
 how much/many place=ABS see-PFV see-IMPV-1SG

'Chhitkul is the most beautiful place I have ever seen' – DSN

1.3.5 Adverbs

Adverbs do not form a coherent class in Chhitkul-Rākchham. They may consist of a nominal or adjectival base followed by some additional morphology. Adverbs in Chhitkul-Rākchham

may be of manner, locational, directional, temporal, of quantity, and frequency. The converb *het ta* (see §7.1) ‘maybe, possibly’ may function as epistemic adverb.

Adverbs of manner take the ablative =*tʃi*. Thus *zoritʃi* ‘loudly, literally with loud’ modifies the manner of *zori* ‘loud’, and *məsantʃi* ‘slowly’ modifies the manner of *məsəŋ* ‘slow’.

Reduplication may also give an adverbial meaning. Thus, *ɔʃa ɔʃa* ‘quickly’ and *məsəŋ məsəŋ* are interchangeable with *ɔʃatʃi* and *məsantʃi* respectively.

Demonstrative adverbs include locational and directional forms. The former subset indicates the location of a situation or an event while the latter provides information about the direction of the same. Both subsets consist of a deictic base, often identical to that of a demonstrative (the proximal *hu* and *dʒu* – the latter being a borrowing from Kinnauri – the distal *hɔ*), and an additional morpheme the meaning of which remains to be investigated.

Table 126: a few locational adverbs in Chhitkul-Rākchham

Adverb	Gloss
hɔ-ja	here
dʒoa	here (həjaŋ in Kinnauri)
hɔ-da	there (hədəŋ in Kinnauri)
no-a	over there (visible and non-visible)
hɔrk-i	far, over there (visible and non-visible)
hu-du (mã)	in there (hu-nu (mã) in Kinnauri)
hu-ju (mã)	surroundings
hɔ-jo netʃo	over there (ago, behind)
i: dʒoa=o	right here
i: hɔda=o	right there
piŋ-ã	near
dau:	outside

In §6.4, I speculate about the base *he*, which serves as quotative marker and which is also found in the copula and auxiliary *hen*, and a few converbs, being the diachronic source of the Chhitkul-Rākchham evidential system. Interestingly, the same base is attested in

Kinnauri (in *həjaŋ* and *hədaŋ*), although there is no copula or auxiliary with a similar base in the latter. In the same vein, the base *hu* is part of both languages, and the pair *dzo* and *dzu* as well. Further research is needed to unravel the threads woven over the years between Chhitkul-Rākchham and Kinnauri in terms of demonstratives and locational adverbs, and possibly find out which language borrowed a given base from the other. Referring to §6.4, it seems demonstratives and locational adverbs play a much more important role in the emergence of the evidential system in Chhitkul-Rākchham.

The additional morphology in the case of locational adverb is in some cases the progressive suffix *-a*. The locative postposition *ma* may also follow a few of these forms. *Dau*: ‘outside’ is the antonym of *u*: ‘inside’. As mentioned in §1.3.4, the progressive marker *-a* is found in some adjectives, for example *ʃia* ‘dying’, which suggests there is a close relationship between adjectives and adverbs.

Table 127: a few directional adverbs in Chhitkul-Rākchham

Adverb	Gloss
(tse ²¹⁸) kaliŋ	uphill, up there
k ^h an	uphill
(tse) po	downhill
dʒɔn	downhill
zak-aŋ (paʃ-o)	right (side)
koj-aŋ (paʃ-o)	left (side)

The morphology of directional adverbs is not straightforward. Both *zakaŋ* ‘right’ and *kojaŋ* ‘left’ have a recognizable adjectival ending. The quantifier (intensifier in this context?) *tse* ‘all’ may precede some of the other forms. The following example shows that *kaliŋ rɔŋ* ‘to go up there’ is used attributively in pre-nominal position, as an adjective would:

(268) kaliŋ rɔ-ŋ ɔm=∅ dʒy-a=tʃi hɔrk-i mat ti
 up there go-INF track=ABS DEM.PROX-IMPf=ABL far-MODIF CVB.NEG COP.PE

²¹⁸ From Tibetan *rtse* ‘peak, summit’?

‘The uphill track (literally, the track to go up there) is not far from here’ - DSN

In (269), however, the directional adverb does not modify the preceding noun:

(269) ai ome=e kim=∅ tse kaliŋ / tse po
 1SG.POSS friend=GEN house=ABS all up there all down there

‘My friend's house is located up there’ – DSN

Temporal adverbs are often marked for the locative =o and -i or the progressive -a:

Table 128: a few temporal adverbs in Chhitkul-Rākchham

Adverb	Gloss
t ^h a (ma)	now
halta	right now
t ^h an	today
t ^h an ta	nowadays
ob-i	tomorrow
nire-a	the day after tomorrow
ne-i	yesterday
tubre-a	the day before yesterday
neotf-o	after
teotf-o	before
t ^h a niŋ/hu-ju bofaŋ	this year
nabliŋ	last year
ha-tfi	next year
te	then
diŋ-tfi/hojo nejotf-o/do nejotf-o	after that
hojo teotf-o	before that
nuŋ	later
d3ã teotf-o	a long time ago
ts ^h ɔka bofaŋ teotf-o	a few years ago

Table 129: a few adverbs of quantity in Chhitkul-Rākchham

Adverb	Gloss
tse	all, each, entire
kjalak ^h a	enough
(man man) dʒã	too much/too many
k ^h ane, ts ^h ɔka	some, a few
bod-i	many, most
sã sã	a little bit

Adverbs of frequency most often than not take a locative clitic =*nij* (-o in Kinnauri):

Table 130: a few adverbs of frequency in Chhitkul-Rākchham

Adverb	Gloss
djar= <i>nij</i> , djar-o (Kinnauri)	daily
gɔl= <i>nij</i> , gɔl-o (Kinnauri)	monthly
bofaŋ= <i>nij</i> , bofaŋ-o (Kinnauri)	yearly
ina ina	sometimes
hameja	always (from Hindi)
i:ro	once, never

1.3.6 Postpositions

I address postpositions in more detail in the next section when dealing with case marking in §1.4.4.

1.3.7 Discourse particles

Discourse particles include the emphatic *no*, the assertive *ne* (also found in *ne te*, see §7.3) the querying *na*, and the demeaning *ba*. They are therefore monosyllabic. I provide a detailed account of these discourse particles – some of which are part of the evidential system – in chapter 7.

1.3.8 Interjections

Interjections typically occur at the beginning of a sentence, but this is not a fast rule. Interjections are not inflected, like discourse particles. A great deal of the Chhitkul-Rākchham interjections are borrowings from Hindi-Urdu, thus *(h)ā* ‘yes’, *attʰa*: ‘good, really, I see’, *he Ram/he Bʰagwa:n* (religious interjections: ‘Oh my God’), *bəs* ‘enough’, *baṅke bihar* and *bura: ha:l* ‘(what a) bad situation’, etc. One example of native interjection is *ala*, which denotes surprise:

- (270) *ala ai kita:b=∅ ta mɛz-∅=niŋ ma-to-∅*
INTERJ.SURP 1SG.POSS book=ABS COP.PE table=ABS=LOC NEG-AUX.PEEX-3

ma-ta
NEG-COP.PE

‘Oh! My book is not on the table!’ – DSN

1.4 Structure of the noun phrase

In this section, I deal with the structure of the Chhitkul-Rākchham noun phrase. In §1.4.1, I describe the basic phrasal order, §1.4.2 deals with genitive phrases, §1.4.3 provides a brief account of conjunction and disjunction. §1.4.4 gives an outline of case marking and §1.4.5 sums up the position of the constituents in a Chhitkul-Rākchham noun phrase.

The glossed examples provided in this thesis make it clear Chhitkul-Rākchham is a consistent SOV language. For stylistic effects, subjects may occur in clause-final position in narratives, however.

Animacy and definiteness influence clausal constituent order. When the direct object is inanimate and the indirect object is animate, the former may precede or follow the latter in Chhitkul-Rākchham, as shown in (271) and (272). The direct object may also occur in clause-initial position, as in (273):

- (271) *ram=tfi i: kita:b=∅ anita=∅ da-de-∅*
Ram=ABL one book=ABS Anita=ABS give-IMPV-3

'Ram gave a book to Anita' – DSN (session 18)

(272) anita=tʃi ram=∅ i: kita:b=∅ da-de-∅
anita=ERG Ram=ABS one book=ABS give-IMPV-3

'Anita gave Ram a book' – DSN (session 18)

(273) i: kita:b=∅ ram=∅ anita=tʃi da-de-∅
one book=ABS Ram=ABS anita=ABL give-IMPV-3

'Anita gave Ram a book' – DSN (session 18)

However, in case the direct object – 'food' in (274) - is indefinite, i.e. not preceded by a modifier, it cannot precede the indirect animate object:

(274) i: mi:=∅ bæ:t-tʃaŋ=∅ kuɔn=∅ da: to-∅
one man=ABS bird-PL=ABS food=ABS give.PROG AUX.PEEX-3

'A man is giving food to the birds' – DSN

In case both the direct and indirect objects are animates, the former obligatorily precedes the latter:

(275) ama=tʃi atʃi=∅ moma=∅ kjim=o p^hε-te-∅
mother=ABL son=ABS maternal uncle=ABS home=LOC send-IMPV-3

'The mother sent the boy to his maternal uncle' – DSN (session 18)

1.4.1 Basic phrasal order

Classifiers are not among the list of noun phrase constituents in Chhitkul-Rākchham. According to Fu (2014: 44), "languages without classifiers prefer one order: OV, NumN, and DemN". This is consistent with the harmonic order of constituents observed in Chhitkul-Rākchham.

The numeral *i* ‘one’ used as indefinite article, i.e. in prenominal position, like any kind of numeral (cardinal, multiplicative, etc.).

As already discussed in §1.3.2.2.2, demonstratives consistently occur before the head noun. In the most complex PP cases, demonstratives occur in initial position, followed by the other constituents. The following example has the following structure: PP = DEM + NUM + INT + ADJ + N + POST:

(276) hu-i nij-i man man far-e mɛz-∅=niŋ
 DEM.PROX-MODIF two-MODIF INT beautiful-FEM table=ABS=LOC

‘On these two very beautiful tables’ – DSN

Lexical quantifiers consistently occur before the head noun as well, for example following a demonstrative, as shown in (277):

(277) huju tse dukan=∅ ai to
 DEM.PROX QNT shop=ABS 1SG.POSS COP.PEEX

‘All these shops are mine’ – DSN

1.4.2 Genitive phrases

The possessor consistently occurs in prenominal position in Chhitkul-Rākchham, which is consistent with Greenberg’s universal number two according to which “in languages with prepositions, the genitive almost always follows the governing noun while in languages with postpositions it almost always precedes”. The observation is also consistent with Hawkin’s (1983: 64, 67) implicational universals number one (“If a language has OV word order, then if the adjective precedes the noun, the genitive precedes the noun”) and four (“If a language has Postp word order, and if the adjective precedes the noun, then the genitive precedes the noun”).

In (278), a prenominal possessor occurs before any quantifier:

(278) defaŋ=e tse kim fiŋ=e ta
village=GEN QNT house wood=GEN COP.PE

‘All the houses of the village are wooden’ – DSN

Regardless of whether the genitive is headed by a noun or by a pronominal, the word order remains the same: NP → POSS NUM INT ADJ N.

As shown in (278) and (279), the clitic =e marks the possessor – not the possessed noun:

(279) sat=e min=∅ mata devi:=∅ ta
goddess=GEN name=ABS Mata Devī=ABS COP.PE

‘The goddess’ name is Mata Devī’ – DSN

The Chhitkul-Rākchham possessive pronouns are identical to the personal ones, the suppletive form *ai* being the only exception²¹⁹). The choice among possessive forms is more restricted than among personal forms: whereas *kinsa:* and *kina* can both occur as personal forms, only *kinsa:* can be as a possessive. The same applies to *emesa:* and *emetfaŋ*. Only the latter serves as possessive pronoun.

Plural possessive pronouns may be followed by the genitive marker =e. Like in the case of personal pronouns, the adverbial form *tse* (alternatively *tfe*), ‘all’ may be added to first, second and third person plural forms.

Finally, it is worth noting that a Chhitkul-Rākchham speaker may use the first person possessive pronoun *kjaŋ* – instead of the first person possessive *ai* – to refer to her mother or father, an honorific use similar to that of the plural suffix -e in Hindi. Thus, ‘my father lives in Reckong Peo’: *ai au/kjaŋ au rekɔŋ peo huna to*.

²¹⁹ For the third person plural non-honorific possessive, the forms *e*, *e niŋi* and *etfaŋ* may be used as well.

Table 131: possessive pronouns in Chhitkul-Rākchham

	SG	DU	PL
1	ai	kjaŋ niŋi/kjaŋŋi (no one around, INCL), niŋ niŋi (people around, EXCL)	kjaŋsa:(e) PL.INCL niŋsa:(e) (people around, EXCL)
2HON	kī/kin	kinŋi/kiŋi	kinsa:(e)
2NHON	kā/kan	kanŋi	kantŋaŋ(e)
3HON	eme	emeŋi	emesa:(e) or imsa:(e)/emetŋaŋ
3NHON	jo (known person)/e (both known and unknown persons)	jo niŋi (known persons)/e niŋi (both known and unknown persons)	jotŋaŋ(e) (known persons)/ ee (both known and unknown persons)/etŋaŋ(e)

There are two types of possession: alienable and inalienable. The first person singular form *ai* occurs with inalienable possession (kinship, body parts, neighbours, name, etc.). The first person singular personal pronoun *ga:*, followed by the postposition *da*, occurs for alienable possession – in the case of tangible items such as pens, money, time, land, animals, etc. Both *ai* and *ga: da* may occur with housing terms such as shops, houses, hotels, buildings, etc. The following examples illustrate alienable possession, where the structure is possessor – POST – possessed thing – COP:

(280) dea-atŋi=∅ da i: kita:b=∅ ta
 male-child=ABS POST one book=ABS COP.PE

‘The boy has a book’ – DSN

(281) ga:=∅ da niŋ ni-za=o se la:=∅ to
 1SG=ABS POST two two-twenty=LOC ten goat=ABS COP.PEEX

‘I have fifty goats’ – DSN

This strict head-final pattern observed in basic phrasal order and genitive phrases is what is generally found in West Himalayish languages, for example in Rongpo (Zoller 1983: 98),

Darma (Willis 2007a: 316) and Bunan (Widmer 2014: 360), though it is less strict in the latter case. Chhitkul-Rākchham exhibits the same Genitive-Noun order as Kinnauri (see Sharmā 1988: 85).

1.4.3 Conjunction and disjunction

Crystal's (2008: 101, 150) defines conjunction as “an item or a process whose primary function is to connect words or other constructions” – with a distinction between coordination and subordination – and disjunction, “the process or result of relating two propositions in such a way that they are in an ‘either-or’ relationship”.

1.4.3.1 Coordination

Noun phrases are coordinated with the conjunction *ai*, homophonous with ‘my’, as shown in (270), and ‘other’, as shown in (266). The conjunction occurs between the two conjoined elements or before the last one in case there are more than two:

(282) au=∅ ama=∅ ai at-tʃaŋ=∅ tse sant=o ro-a
 father=ABS mother=ABS CONN children-PL=ABS QNT temple=LOC go-PROG
 to-∅
 AUX.PEEX-3

‘The father, the mother and the children are all going to the temple’ – DSN

Within a noun phrase, two adjectives may also be (optionally) coordinated by means of *ai*, as shown in (283):

(283) fuju ətsə ai ʃar-e kum=∅
 DEM.PROX small CONN beautiful-FEM cushion=ABS

‘This small and beautiful cushion’ – DSN

Chhitkul-Rākchham uses the ‘zero-strategy’ (Payne 1985) to coordinate two contrasting noun phrases, as shown in (284) and (285). There is no equivalent to English ‘but’:

(284) huju=∅ ai skul=∅ hojo=∅ kī skul=∅
 DEM.PROX=ABS 1SG.POSS school=ABS DEM.DIST=ABS 2SG.HON.POSS school=ABS

‘This is my school and that is your school’- DSN

(285) dea atji=∅ teog-a to-∅ dju atji=∅ katf-a
 male child=ABS weep-PROG AUX.PEEX-3 female child=ABS laugh-PROG

to-∅

AUX.PEEX-3

‘The boy is weeping, but the girl is laughing’ – DSN

The conjunction *tij*, also used as comitative case marker, can coordinate two noun phrases, with a slightly different meaning, namely ‘with’. Stassen (2000) argues convincingly about a AND-drift – WITH-languages becoming AND-languages over time – to explain the conjoint use of two connectives:

(286) tji:=∅ tij ti:=∅ la:=∅ da-ĩ
 grass=ABS CONN water=ABS goat=ABS give-2SG.HON.IMP

‘Give grass and water to the goat’ – DSN

Chhitkul-Rākchham conveys ‘both...and’ by using the conjunction *tij* (‘with’), together with the numeral *nifi*. The focus particle *o* may follow the second noun, as shown in (287):

(287) mōriŋ=∅ tij bōjiŋ-∅ nif-i mi:-∅=o ri:putf-a
 woman=ABS CONN man=ABS two-MODIF person=ABS=FOC harvest-PROG

to-∅

AUX.PEEX-3

‘Both women and men harvest (the crops)’ – DSN

Chhitkul-Rākchham conveys ‘neither...nor’ (negative correlative coordination) by the adjoining *lo* to both NPs as shown in (288):

(288) *huju=∅ kramal paŋ=∅ lo man kats paŋ=∅ lo*
 DEM.PROX=ABS poplar tree=ABS CONN COP.NEG.EMPH walnut tree=ABS CONN
 man
 COP.NEG.EMPH

‘This is neither a poplar tree nor a walnut tree’ – DSN

To convey ‘either...or’, Chhitkul-Rākchham uses the Hindi connective *या ja:*, as shown in (289):

(289) *ga:=∅ negi=∅ ja: alu go:bi=∅ za-saŋ gin-a tɔ-k*
 1SG=ABS negi=ABS CONN alu goobi=ABS eat-INF want-PROG AUX.PEEX-1SG

‘I want to eat either negi or alu goobi’ – DSN

1.4.3.2 Subordination

Chhitkul-Rākchham makes use of a few subordinating conjunctions, *dolo* ‘even though’, *hɛkso* ‘as soon as’, *golo* ‘wherever’, *sulo* ‘whoever’, *hametaŋ* ‘unless’, *henna* ‘if like’, *manna* ‘if not, otherwise’, typically occurring after the main verb, but before the auxiliary in case there is one. These subordinating conjunctions typically consist of a base and some additional morphology: the aspectual *-so*, the conditional *-na*, the infinitive *-aŋ*, suffixes taken by non-finite verb forms. I deal in §5.8.3 with forms such as *henna* and *manna*, and the conclusion is clear: these behave like converbs – based on Haspelmath’s (1995: 3-4) definition.

In (290), the converb *dolo* has the meaning of ‘even though’. We may surmise *dolo* consists of the base *do* and the indefinite suffix *-lo* also found in *golo* ‘wherever’ and *sulo* ‘whoever’:

(290) *ai atji=∅ tʰan nas-i to-∅ do-lo skul=∅*
 POSS child=ABS today sick-MODIF COP.PEEX-3 CVB-INDF school=ABS
 ro-no-∅
 go-IRR.DUB-3

‘My son will go to school today even though he is sick’ – DSN

- (291) εme=∅ kamaŋ latf-a hɛn-na lo εme=∅
3SG.HON=ABS work do-PROG CVB-COND CONN 3SG.HON=ABS
kin=∅ hɛk-so kɔl tu-ts
2SG.HON=ABS CVB-PROSP speak come-HAB

‘Even if (s)he is working, (s)he can speak to you at the same time (meanwhile)’ –
DSN

As shown in (292), a subordinating conjunction such as *golo* ‘wherever’ precedes the verb from the subordinate clause, verb inflected for the conditional *-na*:

- (292) jo=∅ go=lo ron-na suk^haŋ=∅ ma-dɛ-ts
3SG.NHON=ABS CVB=INDF go-COND peace=ABS NEG-find-HAB

‘Wherever he goes, he cannot find peace’ – DSN

As discussed in §5.8.3, converbs such as *henna*, *manna* and *hekso* are non-finite.

1.4.3.3 Disjunction

Disjunction, defined by Crystal (1985: 97), as a process whose primary function is to mark a relationship of contrast or comparison between structures, using such disjunctive items as ‘or’ and ‘but’, has no native term. The Hindi disjunctive *या ja:*, which also occurs in interrogatives, as shown in (294):

- (293) ga:=∅ ai def=o homo ja: pə bɔjaŋ=∅ teotf=o tu-ti
1SG=ABS 1SG.POSS village=LOC three DISJ four year=ABS before=LOC come-PFV

‘I returned to my village three or four years ago’ – DSN

- (294) hojo=∅ k^he tyaraŋ=∅ ja: dumsa=∅
DEM.DIST=ABS what festival=ABS DISJ large gathering=ABS

‘Is that a festival or a meeting (large gathering)?’ – DSN

1.4.4 Case marking

Chhitkul-Rākchham has a set of case markers to code the relationship of government between head and dependent (Blake 1994: 1). The examples provided in this section are glossed based on the specific function case markers play in each utterance.

First, case makers are not highly selective with regard to their hosts, attaching to nouns, but also to pronouns, one numeral ('twenty'), adjectives and even participial phrases. In other words, they are not suffixes referring to Zwicky's so-called A criterion (1983: 503) since suffixes "exhibit a high degree of selection with respect to their stems". In addition, I use the term clitic rather than suffix based on their fixed syntactic position (as last constituents of NPs and participial phrases) and wide syntactic scope. The example below indicates the agent ablative =*tʃi* is a clitic because it occurs at the end of two coordinated NPs:

(295) anita tiŋ rakeʃ=tʃi piano=∅ zo-i bazea-∅ to-∅
 Anita CONN Rakesh=ERG piano=ABS good-MODIF play-PROG AUX.PEEX-3

'Anita and Rakesh are playing the piano well – DSN

Case marking is realized in Chhitkul-Rākchham by means of clitics (suffixes in Sharmā's (1992: 231) description) and postpositions. I claim we are dealing with clitics rather than suffixes based on two main criteria. If case markers can occur alone, I claim they are postpositions (*dau*, *u:*, *kal*, *po*, *pafo*, and *piŋā*). Among the remaining case markers, I apply a criterion of complexity, observing that disyllabic case markers tend to be adpositions. Thus, clitics attach to a phonological word because they are too small (monosyllabic) while the reverse situation is usually true for postpositions.

Table 132: the Chhitkul-Rākchham case markers

Case marker	Function
-∅	absolute
= <i>tʃi</i>	ablative (of place, agent, instrument, cause, etc.)
= <i>tiŋ</i> and = <i>da</i>	dative (comitative, associative)

=e	genitive
=o, =i, =du, =niŋ, and = mǎ	locative
pafo	allative
u:	inessive (governs the genitive)
dau	elative (governs the genitive)
tʰɛtiŋ	benefactive, purposive (governs the genitive)
kal	superessive/superlative (governs the genitive)
po	subessive/sublative (governs the genitive)
piŋǎ	a(pu)dessive (governs the genitive)
bi:tfo	intrative (governs the genitive)
teotfo	'in front of' (governs the genitive)
neotfo	'at the back of, behind' (governs the genitive)
fjana and djana	comparative

Postpositions govern either the absolutive or the genitive. They may be bound or free, simple or complex.

Borrowings from Hindi include the postpositions *mě* (LOC), *se* (ABL and INSTR), *kā/kī/ke* (POSS), which agrees in Hindi with the thing possessed, but the gender distinction is not strictly adhered to in Chhitkul-Rākchham. The locative =o is a borrowing from Kinnauri, invariably interchangeable with the native =niŋ. There are a few instances of case compounding involving a Chhitkul-Rākchham (or a Kinnauri) and a Hindi form: *skul-o mē* ('at school').

In case a noun takes the plural marker -tfaŋ, the case-marker suffix comes right after, thus *buzuruk-tfaŋ* 'elders' → *buzuruk-tfaŋ=tfi* (ABL of agent).

I follow in following sub-sections Blake's (1994: 34) distinction between 'core' and 'peripheral' cases, starting with syntactic alignment (§1.4.4.1), morphosyntactic marking of core (§1.4.4.2) and peripheral (§1.4.4.3) arguments before addressing case compounding (§1.4.4.4) and case markers borrowed from Hindi (§1.4.4.5).

1.4.4.1 Syntactic alignment

As shown in (296) and (297), Chhitkul-Rākchham exhibits most of the time a neutral alignment type where S, A, and P are coded identically. In (296), an intransitive construction, the crow takes the non-overtly marked absolutive = \emptyset (nominative in Sharmā 1992: 232)²²⁰, and so do A (the 1SG pronoun *ga:*) and P (*ka:* ‘the crow’) in (297):

(296) *ka:= \emptyset ro-i ra-i i: paŋ=e kal pɔs-i*
crow=ABS go-PFV go.REDUP-PFV one tree=GEN POST.SUPESS sit-PFV
pas-i
sit.REDUP-PFV

‘The crow went (away) and sat on a tree’

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(297) *i: deaŋ ga:= \emptyset zaŋgəl=o falea- \emptyset falea- \emptyset i: k^ha-i*
one day 1SG=ABS forest=LOC walk-PTCP walk-PTCP one black-MODIF
ka:= \emptyset taŋ-fi
crow=ABS see-PFV

‘One day, walking in the forest, I saw a black crow’

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A arguments – the most agent-like arguments of a transitive clause – exhibit a split and may take the ergative case. In the following example, A takes the clitic =*tʃi*, which in this specific past context serves an ergative function. In the second clause, the other A ‘God’ is this time marked with the absolutive = \emptyset . In both clauses, P is not overtly marked with the absolutive = \emptyset :

(298) *he rɔŋ=sea din= \emptyset taŋ-fi buzuruk-tʃaŋ=tʃi t^ha din= \emptyset de doba:ra:*
like SML day=ABS see-PFV elder-PL=ERG now day=ABS again again

b^hagwan= \emptyset ma-tu-si gin-aŋ
God=ABS NEG-bring-PFV need-INF

²²⁰ Sharmā (ibid, p. 232-3) mentions a nominative and an accusative case, although both are realized by - \emptyset .

'Elders saw such days, now God should not bring (these) days back again'

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1.4.4.2 'Core' cases

'Core' Chhitkul-Rākchham case markers include the ablative =*tʃi*, the absolutive = \emptyset and the dative =*tiŋ*. The ablative serves a variety of functions (of agent, place, instrument, cause, etc.) and the dative also serves as comitative. I treat all these markers as 'core' because their occurrence is determined by the semantics of the verb.

1.4.4.2.1 The ablative =*tʃi*

The clitic =*tʃi* marks the ablative. Referring to Jakobson's (1936) account of Russian, 'case syncretism' is a token of an underlying unitary semantic structure. Instead of using the term 'case syncretism' to refer to its agent (agentive) or instrumental function²²¹, I claim ablative is the underlying case in all instances. The characterization of =*tʃi* as ablative is consistent with the various functions observed in traditional grammars cross-linguistically (Latin, Sanskrit) and with the observation that ergative and agentive markers more often than not originate from ablatives (Heine and Kuteva 2002: 29-30).

The ablative of place expresses motion away from a location in Chhitkul-Rakchham ('from...to'). The suffix can attach to a noun, a personal pronoun, or a demonstrative (*diŋ=tʃi* 'after that') and may follow a locative (stative location). An example of the ablative =*tʃi* is provided below:

(299) teotʃ=o teotʃ=o ta man man to-a ba tʰa
before=LOC before=LOC COP.PE INT come-PROG PTCL.DEMEAN now

kim= \emptyset bəŋã tʰa ta ʃɾul=tʃi kaliŋ ne ɔm= \emptyset
house=ABS equal now COP.PE roof=ABL POST.LOC PTCL.ASS path=ABS

tʃatʃ-a he
make-PROG like

²²¹ The conflation of ablative, ergative and instrumental function refers to a common process of grammaticalization described by LaPolla (1994: 62) in the case of Tibeto-Burman languages.

‘Earlier there use to be much more (snow), equal to houses, one is making way up from the roof, it was like this’

TOP_cik11-BD1-2019-03-07-5

According to the morphosyntactic typology developed by Comrie (1978) and Dixon (1979), Chhitkul-Rākchham is ergative. A arguments – the most agent-like arguments of a transitive clause – occur in the agentive case in past, present and future as shown in (300), (301) and (302), which contradicts Sharmā’s (1992: 233) claim that “the ergative case is used with the subject of the transitive verb in the past”:

(300) ne-i ga:=tʃi homo patanj sat=∅ puza=∅ latʃ-i
yesterday-MODIF 1SG=ABL three time goddess=ABS worship=ABS do-PFV

‘I worshipped the goddess three times yesterday’ – DSN

(301) ram=tʃi a:m=∅ tʃul-a to-∅
Ram=ABL mango=ABS cut-PROG AUX.PEEX-3

‘Ram is cutting the mango’ – DSN

(302) ga:=tʃi ɛme tʃʰɛtiŋ kʰɔvra=∅ tiŋ tʃa:=∅ tu:-na-k
1SG=ABL 3SG.HON POST.BEN pʰuri:=ABS CONN tea=ABS bring-IRR.DUB-1SG

‘I will bring her/him phuri and tea’ – DSN

Note that in all three previous examples, the ablative marker is optional. This observation is consistent with McGregor (2010: 1610), who describes optional ‘ergative’ marking as a phenomenon by which ‘a case marking morpheme may be either present or absent from an NP without affecting the grammatical role borne by that NP’. The split between optional and obligatory ‘ergative’ marking is based on animacy of the noun phrase referent (see Silverstein’s 1979 hierarchy). The ergative marker is usually optional with first, second and third person pronouns, but obligatory with all other arguments.

Other factors in addition to animacy play a role in motivating optional ‘ergativity’, notably definiteness. Whereas the agentive obligatorily occurs with ‘someone’ and ‘the/this man’

as subject, it is optional in the case of ‘a man’. Thus, =*tʃi* is obligatory in (303) and (304), but optional in (305):

(303) su:=tʃi at-tʃaŋ=∅ ʃja-g-a ta
 someone=ABL child-PL=ABS look-E-PROG AUX.PE

‘Someone is taking care of the children’ – DSN

(304) bojiŋ=tʃi niʃ-i kita:b=∅ tsʰɔŋ-de-∅
 man=ABL two-MODIF book=ABS buy-IMPV-3

‘The man bought two books’ – DSN

(305) i: mi:=tʃi niʃ-i kita:b=∅ tsʰɔŋ-de-∅
 one man=ABL two-MODIF book=ABS buy-IMPV-3

‘A man bought two books’ – DSN

With some verbs (*huʃaŋ* ‘to learn’, *tʰuɾeŋ* ‘to run’, *nɔnaŋ* ‘to sleep’, *kamaŋ latʃaŋ* ‘to work’, *katʃaŋ* ‘to laugh’, *suʃaŋ* ‘to bath oneself’, *ʃiʃaŋ* ‘to die’, etc. the agentive cannot occur regardless of whether the subject is a pronoun, definite or indefinite. In other words, there are semantic restrictions to the use of the agentive form.

The non-occurrence or the optionality of the suffix =*tʃi* in its agentive function and the unmarked =∅ absolutive entail that in many instances Chhitkul-Rākchham exhibits a neutral alignment: S, A, and P (Comrie 1978) are coded identically, with the unmarked absolutive case.

The following example illustrates the instrumental function of the ablative =*tʃi*:

(306) ki-n kutsu=∅ kʰɔpo=tʃi za ja: kʰe ai=tʃi
 2SG.HON-2SG rice=ABS spoon=ABL.INSTR eat DISJ what other=ABL.INSTR

‘Do you eat rice with a spoon or with something else? – DSN

I address the ablative in its causal function in §1.6.3, see (369) for an example.

1.4.4.2.2 The absolutive =∅

In Chhitkul-Rākchham, the absolutive is not overtly marked, reason why I use =∅. Non-overt marking is in accordance with Dixon’s (1994) observation that “if any case has zero realization, or a zero allomorph, it will be absolutive or nominative”. Non-overt marking is also consistent with our characterization of the language as exhibiting a neutral alignment in most instances: as pointed out by Bickel and Nichols (2009: 13), this type of alignment most often involves zero morphological exponence”.

The absolutive most commonly marks the single argument of monovalent verbs, a noun or a pronoun. When fulfilling this function, it is associated with arguments assuming in most instances the semantic roles of agent, patient and experiencer, as shown in (296), (307) and (308):

(296) te ka:=∅ ro-i ra-i i: paŋ=e kal pɔs-i
 then crow=ABS go-PFV go.REDUP-PFV one tree=GEN POST.LOC sit-PFV
 pas-i
 sit.REDUP-PFV

‘Then the crow went away and sat at the top of a tree’

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(307) ga:=∅ sku:l=o=tʃi ɔn-i pʰɛ-t to-a ai ta
 1SG=ABS school=LOC=ABL get out-PFV send-ANTIC come-PROG CONN COP.PE

‘And I got kicked out of school’

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(308) tʰa ga:=∅ pɔstea-∅ sinda kʰe: grɛt=∅ ta-dɛ-k ba
 now 1SG=ABS repent-PROG vainly why song=ABS keep-IMPV-1SG PTCL.DMEAN
 na ai a:-r=o=tʃi matʰl-i:=∅ lo
 PTCL.QUER 1SG.POSS mouth-E=LOC=ABL fish-FEM.SG=ABS also
 pʰik-f-i-dɛ-k
 drop-MID-E-IMPV-1SG

‘Now I am repenting, why did I sing a song? The fish dropped from my mouth’

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As seen in §1.4.4.1, the absolutive = \emptyset may also mark both the subject and the object of a bivalent verb. Whenever S, A, and P are coded identically, it is with the unmarked absolutive. Whereas the absolutive possibly marks the subject (agent) in bivalent and trivalent constructions, the (direct) object in this context invariably takes = \emptyset , as shown in (297).

1.4.4.2.3 The dative =*tiŋ* and *da(tŋ)*

The dative =*tiŋ* occurs in bivalent clauses to mark patient arguments of a very limited number of verbs such as ‘to say’ (see also Sharmā 1992: 233) or ‘to love’. (309) is an example with *riŋ* ‘to say’ and (310)²²² with ‘to love’:

(309) su:=tŋi ga:=tiŋ riŋ-de- \emptyset ɛme= \emptyset zo-i mi:= \emptyset
someone=ABL.AGT 1SG=DAT say-IMPV-3 3SG.HON=ABS good-MODIF man=ABS

‘Someone told me he is a good man’ – DSN

(310) ga:= \emptyset ɛme=tiŋ bɛnaŋ= \emptyset latŋ-a tɔ-k
1SG=ABS 3SG.HON=DAT love=ABS do-PROG AUX.PEEX-1SG

‘I love her’ – DSN

As observed by Masica (2005: 160), ‘subjective experience’ in Tibeto-Burman languages does not result in a different case marking like it does for example in Hindi. Thus, in *ga: k^hrei tɔk*, ‘I am hungry’, the first person singular pronoun *ga:* is marked for the absolutive = \emptyset .

Possession never involves the dative case marker. Only the first person singular *ga:* has a suppletive form (*ai/a:*). Possession is expressed using a pronoun followed by the clitic =*da*, like in *ga: da kjalak^ha rupe to* ‘I have enough money’ in the case of alienable possession, and the suppletive 1SG form *ai*, as in *ai bodi ɔmetŋa matti* ‘I do not have many friends’

²²² *Benaŋ* is borrowed from Kinnauri.

with inalienable possession (kinship, body parts, friends, name, age, etc.). A specific category (hotels, buildings, shops) uses these two types of construction interchangeably. Sharmā (1992: 233) claims that *da* ‘of near’ “conveys the sense of Hindi phrase *ke pās*”, i.e. that its occurrence is restricted to possessive constructions. I claim this is only part of the story. A goal (animate) argument is marked by means of the postposition *da*, which invariably follows a noun or a pronoun, following a few verbs such as ‘to send to someone’, as in (311):²²³

(311) kin=∅ ga:=da tʃitt^h-i:=∅ p^he-a to-ĩ
 2SG.HON=ABS 1SG=DAT letter-FEM=ABS send-PROG AUX-2SGHON

‘You are sending me a letter’ – DSN

Paying a visit to someone also triggers the postposition *da*, thus *ga: hɔʃʃaŋ dɔktɔr da roi* ‘I just went to the doctor’; *ga: tɛt da roi*: ‘I went to see the sheep/goats’. *Da* may also occur when an animate is implied, as in *ga: hɔʃʃaŋ beɪkəri (da) roi* ‘I just went to the bakery’.

Chhitkul-Rakchham exhibits a ‘syncretism between’ comitative (associative in Sharmā 1992: 234-5) and dative. I argue the latter is the underlying case. (312) is an illustration of the dative of accompaniment. The clitic also occurs as a coordinative conjunction, as shown in (313) (see also §1.4.3.1) and may only follow animates (nouns and pronouns):

(312) i: atʃi=∅ ɛme ama=tiŋ garaŋ=e kinare=∅ jyn-a
 one child=ABS 3SG.HON.POSS mother=COM river=GEN side=ABS walk-PROG

to-∅

AUX.PEEX-3

‘A child walks to the river side with his mother’ – DSN

(313) i: mi=tʃi gita=∅ =tiŋ bansu:ri=∅ i: atʃi=∅ da:
 one man=ABL.AGT guitar=ABS =CONJ flute=ABS one child=ABS give.PROG

ta-se-∅

AUX.PE-IMPV-3

²²³ As mentioned earlier, *da* also denotes alienable possession.

'A man was giving a guitar and a flute to a child' – DSN

In (312) the noun phrase *i: atfi* is the topic of the sentence and the second noun phrase, *eme ama*, followed by *=tiŋ*, is the object. By comparison, *tiŋ* in (313) connects two noun phrases, *gita* and *bansu:ri*, into a single plural noun phrase.

(314) is an instance of case stacking involving *datfi*, which consist of the dative *=da* and the ablative *=tŋi*. The combination marks the animate source of a cognitive process, occurring twice in the following example:

(314) *ga:=∅ mi:=da=tŋi pəta lag-i-te zangəl=o ai*
1SG=ABS people=DAT=ABL know get-E-IMPV forest=LOC other

dʒanwar-tʃaŋ=da=tŋi pəta lag-i-te ka-n=∅ manman
animal-PL=DAT=ABL know get-E-IMPV 2SGNHON-2SG=ABS INT

zo-i grət=∅ ta-ts ta niŋ
good-MODIF song=ABS keep-HAB AUX.PE MOT.PTCL

'I learned from people and other animals in the forest that you are singing very beautifully'

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The combination *=da=tŋi* refers to an animate source in a general sense. (315) deals with the source of a fear:

(315) *ga:=∅ botək=da=tŋi bətt-a tɔ-k*
1SG=ABS spider=DAT=ABL be afraid-PROG AUX.PEEX-1SG

'I am afraid of spiders' – DSN

Note that in case the source of a fear is inanimate, the locative *=du* occurs instead.

1.4.4.2.4 The genitive =e

The genitive clitic =e may attach to plural possessive pronouns (*kjaŋsa:=e* 1PL.POSS.INCL; *emesa:=e* 3PL.HON, etc. see table 120), nouns, and infinitive (non-finite) verbal forms. In the latter case, it denotes a purposive function.

The main function of the clitic =e is to express possessive relationships. The suffix attaches to the possessor, as shown in (316):

(316) huju deari=∅ dea atji=e
 DEM.PROX diary=ABS male child=GEN

‘This diary is the boy’s’ – DSN

The genitive clitic =e more generally establishes a modifying semantic relationship between a dependent noun and a head noun.

As mentioned in §1.4.2, =e serves as adjectivizer, typically in the description of what some items are made of: *fiŋ* ‘wood’ → *fiŋ=e* ‘of wood, wooden’; *u:n* ‘wool’ → *u:n=e* ‘of wool, woolen’, etc.

As mentioned earlier in this section, postpositions may govern the genitive, the corpus is littered with examples of combinations GEN + POST. In (317), the combination of the genitive and the locative has the meaning of ‘inside of’ (inessive):

(317) kim=e u: meliŋ=∅ to-∅
 house=GEN LOC.INESS fireplace=ABS COP.PEEX-3

‘There is a fireplace inside of the house’ – DSN

A combinations GEN + POST result in various locative meanings: ‘under’, ‘at the top of’, ‘outside of’. I provide one example below with *kal* (superessive), where the genitive is optional:

(296) $\text{f}\epsilon\text{i}=\emptyset$ te ka:= \emptyset ro-i ra-i i: paŋ=e kal
fox=ABS then crow=ABS go-PFV go.REDUP-PFV one tree=GEN LOC.SUPRESS
 $\text{p}\omega\text{s-i}$ pas-i
sit-PFV sit.REDUP-PFV

‘The fox...then the crow went away and sat at the top of a tree’

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The clitic =e may also be involved in benefactive constructions. In that case too, the genitive is optional and followed by the postposition $\text{t}^{\text{h}}\epsilon\text{ti}\eta$, as shown in (318):

(318) $\text{g}\text{a}:=\emptyset$ ai bore=e $\text{t}^{\text{h}}\epsilon\text{ti}\eta$ $\text{c}\text{t}\text{j}=\text{i}$ kuɔn= \emptyset $\text{t}\text{a}\text{t}\text{j}-\text{a}$
1SG=ABS 1SG.POSS wife-GEN POST.BEN evening=LOC food=ABS cook-PROG
 $\text{t}\omega-\text{k}$
AUX.PEEX-1SG

‘I am cooking dinner for my wife – DSN

The genitive marker may attach to the infinitival form of a verb (non-finite). In that case, the combination $\text{V}_{\text{INF}-e} \text{t}^{\text{h}}\epsilon\text{ti}\eta$ often has a purposive meaning, as in (115):

(115) za-saŋ=e $\text{t}^{\text{h}}\epsilon\text{ti}\eta$ alu= \emptyset bra= \emptyset $\text{c}\text{g}\text{li}=\emptyset$
eat-INF=GEN POST.PURP potato=ABS bitter buck=ABS buckwheat=ABS
 $\text{t}\text{j}\text{a}=\emptyset$ $\text{j}\text{a}:=\emptyset$ $\text{t}\epsilon\text{la}\eta=\emptyset$ ma:r= \emptyset bod-i borte-a= \emptyset
barley=ABS meat=ABS oil=ABS ghee=ABS QNT-MODIF use-PROG
 $\text{t}\text{a}-\text{se}-\emptyset$
AUX.PE-IMPV-3

‘Potatoes, bitter buck, sweet buck, barley, meat, oil and ghee were commonly used to eat’

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Note that the combination $\text{V}_{\text{INF}=e} \text{t}^{\text{h}}\epsilon\text{ti}\eta$ may also have the meaning of ‘on the verge of’.

1.4.4.3 ‘Peripheral’ cases

‘Peripheral’ cases include the locative =*o*, =*niŋ*, =*du*, =*i*, =*mã*, the allative *pafo*, and the comparative *ŋjana/djana*. In addition, there is a string of locative distinctions expressed by means of the genitive =*e* (occurring optionally), followed by a postposition: *u*: (inessive), *dau* (relative), *po* (sublative), *kal* (superessive), and *tʰɛtiŋ* (benefactive and purposive), where the postposition governs the genitive.

1.4.4.3.1 The locative =*o*, =*niŋ*, =*du*, =*i*, =*mã*, *dau* and *u*:

The expression of location in Chhitkul-Rākchham involves both clitics and postpositions. The clitic =*o* is a borrowing from Kinnauri, where it serves as the only locative marker (Takahashi 2011: 348-9).

The clitic =*o* is typically denotes static locations, the exact extent of which remains to be investigated: *a:r-o* (‘in the mouth’), *def=o* (‘in the village’), *kjim=o* (‘at home’), etc., but it also occurs on temporal adverbs: *teotf=o* (‘after’), *neotf=o* (‘before’), *bɔʃaŋ=o* (‘yearly’), *kaʃaj=o* (‘never’), *tsʰaŋm=o* (‘in the morning’). The native suffix =*niŋ* is interchangeable with =*o* in the latter case, thus *djar=o* or *djar=niŋ* ‘daily’.

The clitic =*niŋ* is often interchangeable with =*du*, thus *ai djaŋ=niŋ* or *ai djaŋ=du* ‘in my body’; *eme raŋ=niŋ* or *raŋ=du huna* ‘(s)he lives in the mountains’ (*raŋ=o* in Kinnauri); *tʃa:=niŋ* or *tʃa:=du tʃini pʰeĩ* ‘put sugar in the tea’. I provide one glossed example below:

(319) *ga:=∅* *rəʃan=niŋ* / =*du* *kɔlf-aŋ* *ma-tsʰ-a:* *tɔ-k*
1SG=ABS Russian=LOC =LOC speak-INF NEG-know.PROG AUX.PEEX-1SG

‘I cannot speak Russian (lit. I do not know how to speak in Russian)’ – DSN

It is important to note that =*du* exclusively marks inanimates and never occurs with temporal expressions: *ɛ:k mahina:=niŋ* (*=*du*). With animates, =*niŋ* is the only possibility, as shown in (320), where the first person singular pronoun *ga:* bears the semantic role of theme:

(320) jo=∅ ga:=niŋ katʃ-a to-∅
 3SG.NHON=ABS 1SG=LOC laugh-PROG COP.PEEX-3

‘He is laughing at me’ – DSN

The previous claim contradicts Sharmā’s (1992: 225) observation that *du* occurs with animates and *niŋ* with inanimates.

The observed interchangeability between =*du* and =*niŋ* in the case of inanimates suggests one of these two case marker is a borrowing.

As shown in (317), the postposition *u:* invariably follows (and governs) the genitive =*e*, an instance of case compounding with the meaning ‘inside of’.

The occurrence of the clitic =*i* is limited to a few temporal expressions such as *gun=i* (‘during winter’), *mun=i* (‘at night’), *nir=i* (‘during the day’), and *ɔʃ=i* (‘in the evening’), but it does not cover the whole paradigm of seasons and temporal expressions: *ʃɔl=o* (‘during summer’), *ts^haŋm=o* (‘in the morning’).

The clitic =*mã* may attach to the locative =*o* described in §1.4.4.4: *teotʃ=o=mã* ‘before’, *def=o=mã* ‘in the village’ *kjim=o=mã* ‘in the house’ *ʃɔl=o* (or *ʃɔl*)=*mã* ‘during summer’, *paʃt=o=mã* ‘on back’, and *zaman=o=mã* (‘during (that) time’), etc. The previous examples suggest it serves both a spatial and temporal function with the English meaning ‘in’, ‘on’ and ‘during’. An interesting comparison is *kjim=o* ‘at home’ vs. *kjim=o mã* ‘in the house’, which adds specificity, vs. *kim=e u:* ‘inside of the house’.

The clitic =*mã* may also attach to the locative =*i*, as in *nir=i=mã* (‘during the day’), *gun=i=mã*, and temporal adverbials devoid of any case suffix: *t^ha=mã* (‘today’), *t^hantʃaŋ=mã* (‘nowadays’), etc.

Finally, =*mã* may follow geographical locations in a static context, thus, *Rampur=mã* ‘in Rampur’ *saŋla=mã* ‘in Sanglā’.

The postposition *mã* seems to be interchangeable with *bore* (‘when’): *ʃɔl=o* (or *ʃɔl*) *bore*. The same =*mã* is found in *hudu=mã* (‘there’), alternatively *hɔde=mã* or *hɔda*.

There are cases where the locative is zero-marked, typically with geographical names when a movement is implied. Thus, *ga: boseriŋ rəŋ gints*: ‘I have to go to Batseri’.

1.4.4.3.2 The allative *pafo*

The postposition *pafo* (‘in direction of, towards’) marks the allative case. *Pafo*, which consists of the base *paf* and the locative =*o*, expresses motion towards a goal. Its occurrence is obligatory in the case of animates, optional otherwise. *Pafo* governs the absolutive, as shown in (321):

(321) *eme=∅* *hame k^hui=∅* *paf=o* *ra:=∅* *p^hi-a* *bər-e*
 3SG.HON=ABS when dog=ABS POST.ALL=LOC stone=ABS throw-PROG CVB-IMPV
ga:=∅ *hək-so* *p^hoto=∅* *ɔn-ji*
 1SG=ABS CVB-PROSP picture=ABS rise-PFV

‘I took the picture exactly when he was throwing a stone at the dog’ – DSN

1.4.4.3.3 The sublative *po*

A directional term like *po* ‘under’ follows a noun inflected for the genitive =*e*, thus *paŋ=e po*: under the tree, as in the following example:

(247) *ʃja-ĩ* *ta* *hojo* *ʃɛli=∅* *ta* *te* *matʃ^hl-i:=∅*
 look-IMP.2SG.HON COP.PE DEM.DIST fox=ABS COP.PE then fish-FEM.SG=ABS

 za-i *zu-i* *njal kəʔea-∅* *paŋ=e* *po* *gɔlna* *ro-i*
 eat-PFV eat.REDUP.PFV well spend-PROG tree=GEN POST.SUBL posture go-PFV

 ru-i
 go.REDUP-PFV

‘Look! That fox is having fun, having eaten the fish, lying under the tree’

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Directional terms such as ‘at the top of’, ‘under’, ‘nearby’ consist of a noun inflected for the genitive followed by the relevant postposition: *paŋ=e kal* (‘at the top of the tree JAC-BSN2-20; JAC-YS1-35);

1.4.4.3.4 The superessive *kal*

The superessive postposition *kal* behaves like *po*, governing the genitive, as shown in the following example:

(322) *te likʃ-i lukʃ-i ro-de-∅ ro-a ro-a i:*
 then carry-PTCP carry.REDUP-PTCP go-IMPV-3 go-PROG go-PROG one

paŋ=e kal pɔs-i
 tree=GEN POST.SUPESS sit-PFV

‘Then he left (went) carrying it [the fish]; he was going, going and sat on top of a tree’
 JAC_cik05-YS1-2019-03-07-35

1.4.4.3.5 The benefactive and purposive *tʃʰɛtiŋ*

As mentioned in §1.4.4.1.3, the purposive and benefactive *tʃʰɛtiŋ*, which seems to include the date =*tiŋ*, governs the genitive.

An alternative to *da* involves *ai tʃʰɛtiŋ* (i.e. POSS + *tʃʰɛtiŋ*) and a verb compound involving *dasan* (‘to give’). The difference between *da* and *tʃʰɛtiŋ* is in terms of semantic roles: goal vs. benefactive:

(323) *ɛme=tʃi ai tʃʰɛtiŋ i: pakɛt=∅ da-i pʰɛ-te-∅*
 3SG.HON=ABL 1SG.POSS POST.BEN one packet=ABS give-PFV send-IMPV-3

‘He sent me a package’ – DSN

(115) is another example involving GEN + *tʃʰɛtiŋ* with a purposive reading. In that precise case, note that =*e* attaches to an infinitival form of the verb.

1.4.4.3.6 The comparative *jjana* and *djana*

The comparative case is expressed by means of the postposition *jjana*. The focus clitic =*o* may follow the adjective, as in the following example:

(324) *ʃimla:=∅ peo=∅ jjana te-i=o ta / tots*
 Shimlā=ABS Peo=ABS POST.COMP big-MODIF=FOC COP.PE COP.PEEX.ASS

‘Shimlā is bigger than (Reckong) Peo’ – DSN

To express ‘as...as’, a Chhitkul-Rākchham speaker uses the postposition *djana* instead.

1.4.4.4 Case compounding

As described in Noonan (2008), case-compounding may take many forms, restricted to four in the Bodic languages: 1/ ‘case-stacking’, the combination of two suffixes; 2/ ‘derivational’, where one case is the ‘founding form’ for another and cannot appear alone (Austin 1995); 3/ ‘simple headless adnominal’, or hypostasis (Plank 1995a), where “a headless possessor is marked with the genitive and also with the case indicating the grammatical function of the whole, headless NP within the clause”; and 4/ ‘complex attributive nominal’, where “a case-marked noun is further marked with a nominalizer-attributive affix”.

Chhitkul-Rākchham uses two of these strategies, namely 1/ and 3/. Case-stacking invariably involves the ablative of place =*tʃi* in second position, attaching to a clitic (=o and =*da*) or a postposition (*po, kal, u:, dau, pafo*). Sharmā (1992: 234) characterizes *datʃi* as “agentive” occurring in causative constructions whereas it actually designates, as shown in the table below, the animate source of a cognitive process (see (314) in §1.4.4.2.3):

Table 133: Instances of case stacking involving the ablative =*tʃi*

First case marker	Second case marker	Semantics
= <i>o</i>	= <i>tʃi</i>	From a static location
= <i>da</i>	= <i>tʃi</i>	Animate source of a cognitive process

In the example below, case stacking involves the locative =o and the ablative =tʃi:

(325) hojo ʃɛli=∅ matʃʰl-i:=∅ ta-ĩ tu-ĩ e
 DEM.DIST fox=ABS fish-FEM=ABS see-ACT see.REDUP-ACT 3SG.NHON.POSS

a:-r=o-tʃi ti:=∅ pʰikʃ-a
 mouth-E=LOC-ABL water=ABS drop-PROG

‘That fox, seeing the fish, her mouth is watering (lit. water is dripping from (in) her mouth)’

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In the case of *po=tʃi*, *kal=tʃi*, *u:=tʃi* and *dau=tʃi*, the whole phonological word governs the genitive, and instances where postpositions, simple or compound, govern the optional genitive are instances of a second strategy, ‘simple headless adnominal’, or hypostasis (Plank 1995a). The table below provides instances of compound postpositions:

Table 134: Instances of compound postpositions involving the ablative =tʃi

<i>po</i>	=tʃi	‘from under’
<i>kal</i>	=tʃi	‘from the top of’
<i>u:</i>	=tʃi	‘from inside of’
<i>dau</i>	=tʃi	‘from outside of’ → around
<i>paʃo</i>	=tʃi	perlative?

1.4.4.5 Borrowings from Hindi

Borrowings from Hindi include the postpositions *mẽ* (LOC), *nazdi:k* (ADESS), *se* (ABL), *a:spa:s* ‘around’, *kā/kī/ke* (POSS), which agrees in Hindi with the thing possessed, but there is no gender distinction in Chhitkul-Rakchham. *Mẽ* and *nazdi:k* govern the locative =o, as in *skul=o mẽ* and the genitive =e, as in *paŋ=e nazdi:k* ‘nearby the tree’ (JAC-SD1-6). Another borrowing from Hindi (intransitive case) is *bi:tʃo* ‘between’, as in *huju niʃi paŋe bi:tʃo* ‘between these two trees’, where *bi:tʃo* governs the genitive =e. *A:spa:s* also governs the genitive, thus *tʃɔreŋ=e a:spa:s* ‘around the temple’.

1.4.5 Position of the constituents vis-à-vis the head noun

As shown in table 135, Chhitkul-Rākchham is predominantly a head-final language. Case and number marking left aside, only the question particle *a* occur in post nominal (clause-final) position, and question words may precede or follow the head noun depending on which constituent is part of the noun phrase. All other NP constituents invariably occur in prenominal position:

Table 135: position of the constituents vis-à-vis the head noun in Chhitkul-Rākchham

Head noun	
Prenominal position	Postnominal position
Numerals	
Quantifiers	
Demonstratives	
Adjectives	
Intensifiers	
Genitive phrases	
Question words	Question words
	Plural marker
	Case suffixes
	Postpositions
	Question particle

1.5 Morphology of the verb phrase

Chhitkul-Rākchham has a complex verb morphology. I reproduce below table 5 (see §3.1), which provides the morphological template of a Chhitkul-Rākchham finite verb. My focus is on verb roots (§1.5.1), slot 1 (§1.5.2), 2 (§1.5.3) and 4 (§1.5.4) in this section. Slot 3, TAM inflection, is addressed in the introductory part of chapter 3 (in §3.1.1). I also provide additional information on mood in §1.5.5. Finally, I deal with causatives in §1.5.6.

Table 5: The morphological template of a Chhitkul-Rākchham finite verb (excluding the negative and prohibitive prefixes *ma-* and *t^ha-* and non-productive derivational morphology)

Root	Slot 1	Slot 2	Slot 3	Slot 4
	Transitivity markers	Inflectional suffixes		
	Middle class (reflexive -f) Transitive (-tʃ) Occurring on a limited set of verbs	Object agreement	Aspect (including assertive evidentiality) Mood	Subject agreement (person and number) – exclusively after IMPV and IRR.DUB

1.5.1 Lexical stems

Chhitkul-Rākchham verb stems may end in a consonant (a list is provided below), in a vowel (a, a:, e, e:, i, i:, u, u: and o) and in the vocalic sequences /ia/, /iu/, /ea/, and /eau/. Examples of verb stems ending in a vowel include *ta-saŋ* ‘to keep, put’, *o-aŋ* ‘to rise’, *suari-saŋ* ‘to repair’, *tu-aŋ* ‘to drink’, and *ɔmzɛ-ŋ* ‘to understand’. A verb stem may end in long unrounded vowels /a:/, /e:/, /u:/, and /i:/: *ta:-ŋ* ‘to see’, *kra:-ŋ* ‘to open’, *ra:-ŋ* ‘to sell’, *da:-saŋ* ‘to break –INTR’, *ʃja:-saŋ* ‘watch, look (at)’, *t^he:-saŋ* ‘to finish’; *tu:* (as in *tu:-ts* (HAB.ASS), from *tu-saŋ* ‘to bring’); *tʃi:-saŋ* ‘to bite, to get stung’. There is no verb stem ending in /o:/ in my database. Verb stems ending in /ea/ are invariably derived from Hindi: *bitea-saŋ* ‘to spend’, from *बिताना* (*bitānā*), *mɔnea-saŋ* ‘to celebrate’, from *मनाना* (*manānā*), etc.

1.5.1.1 Stem alternation

In the Trans-Himalayan family, stem alternations are documented in many subgroups, including Kiranti (Herce 2020), Kuki-Chin (Van Bik 2009), Northern Naga (Morey 2017), Rgyalrongic (Lai et al. 2020, Zhang 2018), and West-Himalayish (Widmer 2014). Among West-Himalayish languages, Chhitkul-Rākchham stands out in having a particularly elaborate system of alternations, involving irregular verbs. Chhitkul-Rākchham exhibits a

system of stem alternations based almost exclusively on augments: /n/, /ŋ/, /s/, /ʃ/, /t/, /ts/, /a/ and /u/. In addition, there are a few cases of vocalic alternation whereby /e/ (or [ɛ]) surfaces as /i/, followed by the augment /u/, and where /a/ and /u/ undergo lengthening.

The previous list of augments can be deduced from the second person singular non-honorific imperative form – see table 144 in appendix 1, §1.5.4.3.1. The investigation of causitivation – see table 142 in appendix 1, §1.5.2.3 – provides additional clues: imperative and causative stems differ in some instances.

In most cases, a Chhitkul-Rākchham verb has only one stem. In some others, however, a verb may have up to four different stems depending on TAM and causitivation²²⁴. Thus, |ro| is the only verb stem of *rɔŋ* ‘to go’, thus *ro-a* (PROG), *ro-i* (PFV), *ro-de* (IMPV), *ro-no* (IRR.DUB), *rɔ-ts* (HAB.ASS), *ro* (2SGNHON.IMP), *rɔ=maŋ* (CAUS) whereas *tuaŋ* ‘to drink’ has two stems, |tu|, as in *tu-ĩ* (PFV), and |tuŋ|, as in *tuŋ-ã* (PROG), *tuŋ-de* (IMPV), *tuŋ-no* (IRR.DUB), *tuŋ-ts* (HAB.ASS), *tuŋ* (2SGNHON.IMP), *tuŋ=maŋ* (CAUS).

Typically, the stems alternations are connected with valency-changing suffixes from a diachronic perspective (Michailovsky 1985). Synchronically, however, they usually do not have any grammatical value.

Table 136 provides a few examples where 2SGNHON.IMP is not identical to the infinitive verb stem.

Table 136: instances of 2SG.NHON imperatives involving augments²²⁵

INF verb stem	2SG.NHON.IMP	Gloss
tus-aŋ	kara ²²⁶	to bring
tɔ-ŋ	deja	to come
za-saŋ	zau	to eat

²²⁴ Kulung is a Kiranti language where most verbs have at least two, and sometimes more stems (Tolsma 1997; 1999).

²²⁵ Red: all imperative forms identical; green: same 2SGNHON, but different otherwise; purple: all imperative forms different; orange: all forms but 2PL different.

²²⁶ Referring to Meillet (1925: 25), *kara* and *deja* are archaisms. In the case of *tɔŋ*, the infinitive stem undergoes vowel alternation (o>u): compare *to-a* (PROG) and *tɔ-te* (AUX-IMPV) with *tu-ti* (IMPV), *tu-te* (IMPV), *tu-no* (IRR.DUB), *tu-ts* (HAB.ASS).

ta-saŋ	tau	to keep, put
fja-saŋ	fjau	to see
da-saŋ	dau	to give
p ^h i-saŋ	p ^h iu	to throw
fjɪ-saŋ	fju	to die
suari-saŋ	suariu	to repair
baŋzi-saŋ	baŋziu	to smell
k ^h ɔ-saŋ	k ^h ou	to reap
krɔ-saŋ	krou	to mix
tsu-saŋ	tsuu	to rot
tʃ ^h u-saŋ	tʃ ^h uu	to divide, distribute
batʃea-saŋ	batʃeau	to conserve, defend
mɔnea-saŋ	mɔneau	to celebrate
bitea-saŋ	biteau	to spend
tʃe-saŋ	tʃeu	to write
t ^h urɛ-ŋ	t ^h uriu	to run
sɔmzɛ-ŋ	sɔmziu	to understand
suntse-aŋ	suntsiu	to think
tʃja-saŋ	tjeu	to dance
fje-saŋ	fjeu	to recognize
kriŋ-f-aŋ	kriŋ	to shiver
dʒi-aŋ	dʒiũ ²²⁷	to howl
riŋ	riŋ	to tell
o-aŋ	ɔŋ	to rise, grow, come out
ts ^h o-aŋ	ts ^h ɔŋ	to buy
tu-aŋ	tun	to drink
as-aŋ	ass	to become, happen
li-saŋ	lits	to be able to
tsɔmkj-aŋ	tsɔmkit	to shine

²²⁷ *Dʒi-aŋ* 'to howl' is a special case. The second person singular non-honorific imperative follows a pattern of nasal harmony /u/ surfacing as /ü/ after /i/, thus *dʒiũ*. The verb stem *dʒi-* undergoing nasalization refers to the phonological process described in §3.1.2.2 whereby the same /i/ undergoes nasalization after the insertion of the euphonic glide /j/ (*dʒiji*) in its perfective form. Note that nasal harmony extends to the whole inflectional paradigm but the progressive (*dʒia*): imperfective *dʒiēte*, dubitative irrealis *dʒijino* and perfective *dʒiēji*. In addition, as shown in §1.5.7, the periphrastic causative construction involves the bare root of the main verb, which surfaces as *dʒiē/dʒiĩ* in this case. All these inflectional forms bear witness to a phonological system where no consonant may follow /i/, only /j/ (with /j/ realized as a short vowel), or /ē/.

rijuan and rijusan	riju	to ask
rijutjan	riju	to ask
puan	put	to sow
putjan	put	to sow
tʰan	tʰat	to beat, hit
tʰatjan	tʰat	to beat, hit
dean	dɛt	to carry
detjan	dɛt	to carry
lan	lot	to say, tell
lotjan	lot	to say, tell
huan	hut	to teach
hutjan	hut	to teach
san	sat	to kill
satjan	sat	to kill
pʰɛŋ	pʰɛt	to send
pʰɛtjan	pʰɛt	to send
njanan	njan	to hide
njantjan	njan	to hide
anan	ann	to get up, stand up
antjan	antj	to get up, stand up
lan	lat	to do
latjan	latj	to do
tan	tət	to make, build, cook
təntjan	tətj	to make, build, cook

A Chhitkul-Rākchham verb may have several stems depending on the phonological and morphological context. From a typological perspective, we may therefore draw a connection between Chhitkul-Rākchham and languages such as Athpariya, Yakkha and Chintang, from the Eastern branch of Kiranti.

1.5.1.1.1 The *-u* augment

The occurrence of the augment /u/ is restricted to 2SGNHON.IMP and phonologically conditioned, as it invariably follows an infinitive verb stem ending in /a/, /i/, /e/, /o/ or /u/,

or in the diphthong /ea/, and precedes the infinitive suffix *-saŋ*. *P^hi-saŋ* ‘to throw’ thus has two stems, [p^hiu], with 2SGNHON.IMP, and [p^hi] in all other environments. Verb stems ending in the triphthong [eau] with 2SGNHON.IMP have an alternative stem ending in [ea]²²⁸. All verb stems ending in /ea/²²⁹ are disyllabic and derived from Hindi: *batfeasaŋ* → बघाना (*batfānā*); *moneasaŋ* → मनाना (*manānā*); *biteasaŋ* → बिताना (*bitānā*).

In case the infinitive verb stem ends in /e/ with *-aŋ* or *-ŋ* as infinitive suffix, /e/ undergoes alternation (raising), surfacing as /i/, followed by the augment /u/. For those verbs, raising is part of most of their aspectual forms, thus *t^hure-ŋ* ‘to run’ → *t^hure-a* (PROG), but *t^huri-de* (IMPV), *t^huri-ti* (PFV), *t^huri-no* (IRR.DUB), *t^huri-ts* (HAB.ASS), *t^huri=maŋ* (CAUS), and *t^huri-u* (2SGNHON.IMP). ‘To run’ has thus three stems, [t^hure], [t^huri], and [t^huriu].

The occurrence of the *-u* augment invariably indicates the infinitive stem of the verb ends in a vowel and takes the *-saŋ* suffix. Alternatively, the *-u* augment is preceded by /i/, and we are dealing with a verb the stem of which is disyllabic, ending in /e/, with either *-ŋ* or *-aŋ* as infinitive suffix.

The predictability of stem alternation from a following infinitive suffix is also attested in Yakkha (Schackow 2016). Jacques (2010: 46) makes mention of *-a/-o* alternations in Kiranti, a phenomenon “widespread in the Sino-Tibetan family”. In fact, the a>o ablaut is notably found in the Tibetan imperative (Sprigg 1980: 110). Interestingly, Jacques (ibid) makes mention of an alternation between *-ja-u* (Proto-Tangut) and *-jo* (Attested Tangut), where **-u* would refer to a third person patient suffix. Stem alternation is usually associated with diachronic stability, hence the link with the Proto-language (Jacques 2012: 1127-8), especially when it is phonologically-conditioned.

In the case of *dzi-aŋ* ‘to howl’, the 2SGNHON.IMP is *dziĩ* and the causative involves the augment *-ũ* (*dziũ*). ‘To howl’ therefore has three stems, [dzi], [dziĩ], and [dziũ].

²²⁸ When [ea] is preceded by /n/, the diphthong turns into /i/, thus *monea-saŋ* ‘to celebrate’ → *mōni-de* (IMPV), with [mōni] as another verb stem.

²²⁹ Chhitkul-Rākchham thus borrows the Hindi verb stem – which one obtains by removing the infinitive *-nā*, and then replaces /ā/ by /ea/. In his sketch grammar of Rongpo, Sharmā (2001b: 220) describes a somewhat similar system by which Indo-Aryan roots ending in consonants add /-e/. See §1.5.1.2 for a more detailed description.

1.5.1.1.2 The *-a* augment

There is only one example of /a/ augment in my database. *Jyn-aŋ* 'to walk' has two stems: |jyn|, found in the infinitive and the imperative, but also in *jyn-a* (PROG), *jyn-de* (IMPV), *jyn-no* (IRR.DUB) and *jyn-ts* (HAB.ASS), and |jyan|, attested in *jyan=maŋ* (CAUS) and *jyan-i* (PFV). Judging by the inflectional paradigm of verbs such as *hun-aŋ* 'to live, stay', and *nɔn-aŋ* 'to sleep', a final *-n* root does not explain the insertion of /a/. Rather, it has to do with the concomitant occurrence of the glide /j/ - the glide equivalent of /i/- in initial position and the perfective marker *-i* in final position.

1.5.1.1.3 Vowel elongation (*a:* and *u:*)

Apophony also includes prosodic elements like vowel length. This process exclusively involves /a/, surfacing as /a:/ with progressive aspect and causativization, but only with a limited number of verbs. Like in the case of /u/, the occurrence of /a:/ is phonologically conditioned.

Monosyllabic verb stems ending in the vowel /a/ with *-ŋ* as infinitive suffix undergo elongation: *sa-ŋ* 'to kill' → *sa:* (PROG) vs. *sa-te* (IMPV); *laŋ* 'to do' → *la:* (PROG) vs. *la-te* (IMPV).

When the infinitive is *-saŋ* there are two interchangeable verb forms²³⁰ when the verb stem starts in the plosives /t/, /d/, the affricates /ts/, /tsʰ/ (but not /tʃ/, /tʃʰ/ and /ʃj/), or in the fricatives /s/ and /z/. According to the first pattern, /a/ in verb stem final position undergoes elongation. According to the second pattern, the epenthetic /g/ is inserted between the verb stem and the progressive suffix *-a*, hence the pairs *ta:* ~ *ta-g-a* 'keeping, putting' (vs. *ta-no* (IRR.DUB)); *da:* ~ *da-g-a* 'giving' (vs. *da-no* (IRR.DUB)); *tsʰa:* ~ *tsʰa-g-a* 'knowing' (vs. *tsʰa-no* (IRR.DUB)); *za:* ~ *za-g-a* 'eating' (vs. *za-no* (IRR.DUB)), etc. Note that /a:/ is also attested in causative – see table 142 in appendix 1, §1.5.2.3 – thus *za:=maŋ*; *ta:=maŋ*, etc. A verb like *za-saŋ* 'to eat' has three two stems: |za|, |za:|, and |zau|. The stem |za| occurs with progressive aspect only if the epenthetic *-g* is inserted between the stem and the progressive *-a*, |za:| in case there is no epenthetic *-g*, and |zau| with 2SGNHON.IMP.

²³⁰ According to my main consultant, these forms are in free variation.

In all other contexts, there is only one possible form, namely the second, hence *ƒja-saŋ* ‘to watch, look at’ → *ƒjaga*; *t^ha-saŋ* ‘to break – TR’ → *t^haga*.

Another case of vowel elongation involves /u/. *Tu-saŋ* ‘to bring’ has its IRR.DUB in *tu:-no* and its HAB.ASS in *tu:-ts*. This is a unique case in my database. It is motivated by the need to differentiate *tu:-no* from *tu-no*, the IRR.DUB form of *tɔŋ* ‘to come’, which has two stems, |to| and |tu|.

Apophony by means of vowel elongation is also attested in Kiranti languages, notably in Limbu (Jacques 2017: 22).

1.5.1.1.4 The -ŋ augment

Verbs with an infinitive stem ending in the back rounded vowel /o/ or /u/ followed by the infinitive suffix *-aŋ*, such as *o-aŋ* ‘to rise, grow, come out’, *ts^ho-aŋ* ‘to buy’ and *tu-aŋ* ‘to drink’ have their second person singular non-honirific imperative ending in /ŋ/, thus *ɔŋ*, *ts^hɔŋ* and *tuŋ* respectively. To take the example of *o-aŋ*, the *-ŋ* final root has its final *-ŋ* surface in the causative form too (*ɔŋ=maŋ*), in *ɔŋ-ã* (PROG), *ɔŋ-de* (IMPV), *ɔŋ-no* (IRR.DUB), and *ɔŋ-ts* (HAB.ASS), but not in *o-ĩ*²³¹ (PFV), which means, ‘to rise, grow, come out’ has two stems, namely |o| (infinitive and perfective stem), and |ɔŋ| in all other environments. *Ts^ho-aŋ* ‘to buy’ and *tu-aŋ* ‘to drink’ behave the same way: |ts^ho| and |tu| occur with past tense perfective in addition to the infinitive, thus *ts^ho-ĩ* and *tu-ĩ*, the stems |ts^hɔŋ| and |tuŋ| occurring otherwise, including the causative. The verb *ma-aŋ* ‘to dream’ behaves the same way. It also has two stems, |ma| in its infinitive and perfective (*ma-ĩ*) forms, and |maŋ| in the following environments: *maŋ-ã* (PROG), *maŋ-de* (IMPV), *maŋ-no* (IRR.DUB) and *maŋ-ts* (HAB.ASS).

In the case of *tuaŋ*, the *-ŋ* root arose from the need to differentiate 2SGHON.IMP (*tuŋĩ*) from the perfective (*tuĩ*). The distinction is less strict in the case of *ts^hoaŋ* and *maŋ* because there are two 2SGHON.IMP forms that occur in free variation, one of which identical to PFV: *ts^hoĩ~ts^hɔŋĩ* and *maĩ~maŋĩ*.

²³¹ The perfective suffix *-i* undergoes nasalization when the verb stem starts in a voiceless plosive, thus, *tu-aŋ* ‘to drink’ → *tu-ĩ*; *ts^ho-aŋ* ‘to buy’ → *ts^ho-ĩ* but *gu-aŋ* ‘to like’ → *gu-i*; *maŋ* ‘to dream’ → *ma-i*. The perfective *-i* is also nasalized in the unique case of *o-aŋ* ‘to rise, grow, come out’, where the verb stem only consists of |o| → *o-ĩ*.

Comparative data from Tibetan ('tshong btsongs', apparently borrowed from the present stem, and 'thung, btungs'), Khaling (the root |tun| and |mon|) and Bantawa |maŋ| (see Jacques (2017:5, 13), show that a -ŋ final root is not restricted to Chhitkul-Rākchham.

A verb like *ri-ŋ* also has two stems, |ri| in its infinitive form, |riŋ| in all other environments: *riŋ* (2SGNHON.IMP), *riŋ=maŋ* (CAUS), *riŋ-ã* (PROG); *riŋ-de* (IMPV), *riŋ-no* (IRR.DUB), and *riŋ-ts*. We may explain the /ŋ/ augment by the need to differentiate clearly 2SGNHON.IMP from 2SGHON.IMP (*rĩĩ*).

P^hε-ŋ 'to send' is the only verb in my database where the stem, monosyllabic, ends in /e/ in some environments (the infinitive form, but also *p^he-a* (PROG), *p^he-te* (IMPV), *p^he-no* (IRR.DUB), and *p^hε-ts* (HAB.ASS), and is followed by the infinitive suffix -ŋ. The 2SGNHON.IMP – see table 144 in appendix 1, §1.5.4.3.1 – indicates that there is an additional stem, namely |p^hεt|. Comparative evidence from Khaling, the root |p^hiŋ|, and from Tibetan *sprīŋ* (Jacques 2017: 33), suggests the stem has a *-ŋ. Another piece of evidence of *-ŋ is *ma-ŋ* 'to dream', which has a cognate in Bantawa |maŋ| and Khaling |moŋ| (Jacques 2017: 5). *P^hεŋ* belongs to a pair of verbs exhibiting morpho-semantic correspondence: the second verb is *p^hεt-f-aŋ*, which has a single root, |p^hεt| (2SGNHON.IMP) to which the reflexive/middle suffix -f attaches in all other environments, thus *p^hεt-f-a* (PROG) and *p^hεt-f-i* (PFV), *p^hεt-f-i-no* (IRR.DUB.), etc.

1.5.1.1.5 The -s augment

As-aŋ 'to become, happen' takes a /s/ augment in its 2SGNHON.IMP form (*ass*). This concretely means this verb has three different roots: |ass|, |as|, as in *as-a* (PROG), *as-i* (PFV), and *as-e* (IMPV), and finally |a:|, as in *a:=maŋ* (CAUS), *a:-no* (IRR.DUB) and *a:-ts* (HAB.ASS)²³². In the case of *a:=maŋ*, *a:-no*, and *a:-ts*, the deletion of /s/ is motivated by phonological considerations: there are no consonant clusters involving /sm/, /sn/, or /sts/ in my database. The deletion of /s/ results in the elongation of /a/. Another verb involving the -s augment is *li-saŋ* 'to be able to', that I discuss further in §1.5.1.1.9.

As seen in appendix 1, §1.3.3.2, the augment /s/ also occurs in some TAM contexts with a handful of verbs having their infinitive suffix in -saŋ, thus *tu-saŋ* 'to bring', but *tus-a*, *tus-i*,

²³² The root |a| exclusively occurs with the copula and auxiliary *a-no*.

tus-e, *ffe-saŋ* ‘to recognize’, but *ffes-a* (PROG) and *ffes-e* (IMPV, in free variation with *ffede*), *tʰe:-saŋ*, but *tʰes-i* (PFV), and *tʰɔ-saŋ* ‘to get ripe’, but *tʰɔs-i* (PFV).

Contrary to what is observed in Kiranti languages (Jacques 2017: 4), there is no trace of a causative *-s* suffix in Chhitkul-Rākchham (see table 142 in appendix 1, §1.5.2), which is consistent with our observations from appendix 1, §1.3.3.2, where /s/ occurs in stem coda position in a limited number of cases (see table 116) after /a/, /i/, /o/, /e/, and /u/.

Like with other augments, there is invariably an alternative stem devoid of /s/: *gis-aŋ* ‘to sneeze’ → *gi-no* (IRR.DUB), with |gi| as verb stem; *ɔs-aŋ* ‘to sit’ → *ɔ-no* (IRR.DUB) and *ɔ-ts* (HAB.ASS), with |ɔ| as verb stem, *nas-aŋ* ‘to be sick’ → *na:-no* (IRR.DUB), *na:-na* (COND) and *na:-ts* (HAB.ASS), with |na:| as verb stem. Note that the deletion of /s/ occurs in the conditional as well. Again, the deletion can be explained by the absence of the consonant clusters /sn/ and /sts/ in Chhitkul-Rākchham.

1.5.1.1.6 The *-f* augment

As we shall see in appendix 1, §1.5.2.1, Chhitkul-Rākchham has a few verbs the single stem of which ends in *-f*. A handful of verbs have *-f* as an augment. ‘To shiver’ provides an illustration of this phenomenon: the 2SGNHON imperative is *kriŋ*, but the infinitive is *kriŋf-aŋ*, one element of a verb pair which also includes *kri-aŋ*.

The former has one stem in |kriŋ|, as in the 2SG.NHON.IMP *kriŋ*, and in *kriŋ-de* (IMPV), and one stem in *kriŋf*, as in *kriŋf-aŋ* (INF) and *kriŋf-a* (PROG), where *-f* is an augment, i.e. it is not derivational. The latter has one stem in |kriu| (2SGNHON.IMP) and one stem in |kri|, as in *kri-a* (PROG)²³³.

In a similar way to the *-t* augment (see §1.5.1.1.8), the reverse phenomenon, the deletion of *-f*, takes place, but in a very special case. ‘To listen, wait’ has its 2SG.NHON imperative in *ruŋf* and makes use of this single stem with the whole TAM paradigm when the meaning is ‘to listen’. Whereas *ruŋ-de* is used for ‘waited’, *ruŋf-i-de* or *ruŋf-i-te* is used for ‘listened’.

²³³ Monosyllabic verb stems ending in /i/ and taking the infinitive *-aŋ* and *-ŋ* undergo a process of nasalization in the perfective, thus *kri-aŋ* ‘to shiver’ → *krĩ*. This phenomenon exclusively occurs when there is a transfer of nasality from a syllable-initial consonant cluster (consonantal onset) starting with a voiceless consonant.

1.5.1.1.7 The *-n* augment

A root augment, invariably *-n*, is also part of the conditional construction with monosyllabic verbs the stem of which ends in /o/ and /a/: *rɔ-ŋ* ‘to go’ → *rɔn-na*; *tɔ-ŋ* ‘to come’ → *tun-na*; *la-ŋ* (‘to do’) → *lan-na* – see (133). ‘To go’ therefore has two stems: |ro| and |ron|; ‘to come’ has three stems: |to|, |tu| and |tun|. We have so far identified three stems in the case of ‘to do’: |la|, |la:| and |lan|. As the next section will show, there is a fourth one, namely |lat|.

The /n/ augment arises in these very few instances from the need to distinguish between conditional and irrealis-dubitative²³⁴: *rɔn-na* vs. *rɔ-no*; *tun-na* vs. *tu-no*; *lan-na* vs. *la-no*.

Stem forms such as |la| and |lan| have either lost their codas (-t) or have undergone assimilation (-t>-n before *-na*). The second hypothesis is what seems to have taken place in the case of |lan| as the exact reverse process is found in *matti* (*man ti*) and *het ta* (*hen ta*) discussed in chapter 7. A consonant sequence such as [tn] cannot occur in Chhitkul-Rākchham.

There is one peculiar case where the augment /n/ is added to a *-n* final root with 2SGNHON.IMP, namely *ann*, from *an-aŋ* ‘to get up, stand up’ – see table 145 in appendix 1, §1.5.4.3.1. ‘To get up, stand up, wake up’ thus has two stems, |an|, found in *an-a* (PROG), *an-de* (IMPV), *an-fi* (PFV), *an-no* (IRR.DUB), *an-ts* (HAB.ASS) and *an=maŋ* (CAUS), and |ann| (2SGNHON.IMP). The pair *anaŋ* and *antfaŋ* behaves the same way as the pair *laŋ* and *latfaŋ*, the difference being whereas *laŋ* has lost its coda (-t) in all environments, imperative and causative excepted, *anaŋ* has lost (-n), because the consonant sequence [ntn] cannot occur in Chhitkul-Rākchham.

1.5.1.1.8 The *-t* augment

Causative and imperative forms provide ample evidence for a final *-t* part of the root. A *-t* final root is typically found in one of the verb pairs exhibiting morpho-semantic correspondence – see table 138 in appendix 1, §1.5.2. Table 141 also allows us to draw a connection between *-t* final roots and passive voice, which I discuss further in appendix 1, §1.5.2.2.

²³⁴ It must be borne in mind that *-nak* and *-nok* are in free variation with IRR.DUB.1SG.

La-ŋ ‘to do’ has its causative in *lat=maŋ* (see table 140) and its 2SGNHON.IMP in *lat* (see table 139), which means ‘to do’, as one verb of a pair exhibiting morpho-semantic correspondence, has four stems: |la|, |la:], |lan|, and |lat|. The second verb of the pair exhibiting morpho-semantic correspondence, *latf-aŋ*, has only one stem, |latf|, found in *latf-a* (PROG), *latf-e* (IMPV), *latf-i* (PFV), *latf-i-no* (IRR.DUB), *latf-i-ts* (HAB.ASS), *latf-i-na* (COND), *latf-i=maŋ* and *latf* (2SGNHON.IMP), with the epenthetic *-i* inserted in some cases, see appendix 1, §1.2.4.4. In other words, /t/ is not an augment in the case of *latf-aŋ*, because there is no alternative root.

The *-t* coda is also attested in the causative (*sat=maŋ*) and 2SGNHON.IMP (*sat*) of *sa-ŋ* ‘to kill’, which exhibits two alternative stems (see appendix 1, §1.5.1.1.3), namely |sa| and |sa:]. *Saŋ* is part of a verb pair exhibiting morpho-semantic correspondence. *Satf-aŋ* includes the verb root |sat| to which the reflexive/middle suffix *-f* attaches (see below), hence *satf-a* (PROG), *satf-i* (PFV), etc.

Additional verbs with a final *-t* root include *huaŋ* ‘to teach’ (*hut=maŋ* (CAUS) and *hut* (2SGNHON.IMP)); *puŋ* ‘to plow’ (*put=maŋ* (CAUS) and *put* (2SGNHON.IMP)); *deaŋ* ‘to carry’ (*dεt=maŋ* (CAUS), *dεt* (2SGNHON.IMP)).

Tsɔmkj-aŋ ‘to shine’ has its imperative 2SGNHON in *tsɔmkit*, where /j/ is replaced by its vowel equivalent /i/. The root |tsɔmkit| is otherwise attested in *tsɔmkit-i* (PFV). The *-t* augment in this precise case serves to indicate ‘to shine’ does not take the perfective suffix *-ti* but *-i*. It does so because ‘to shine’ differs from those disyllabic verbs stems ending in /ε/ with an infinitive marker in *-ŋ* or *-aŋ* and taking the marker *-ti*, where /ε/ undergoes a process of raising to /i/: *ɔmzεŋ* ‘to understand’ → *ɔmzi-ti*; *tʰurεŋ* ‘to run’ → *tʰuri-ti*; *suntseŋ* ‘to think’ → *suntsi-ti*.

Bεtt-aŋ ‘to be afraid’ is a peculiar case in that a reverse process is observed: instead of a *-t* augment, we are dealing with *-t* deletion with imperative and causative (*bεt*). A similar gemination process involving /t/ is found in Kiranti (see Khaling |blεtt| ‘tell, explain’ (Jacques 2017: 27).

The etymology of verbs with a final *-t* root is not always obvious. The root |lat| might be related to the Tibetan noun *las* ‘work, action’, alternatively to the verb *lɣt* ‘release, let

(auxiliary)' found in Japhug, with cognates in Kiranti (Khaling |let|)²³⁵. Jacques (2017: 27) claims that "there is some evidence that proto-Kiranti *ε before *-l and -t comes in part from a low vowel at an earlier stage"²³⁶. Evidence for a final -t root (*sat* 'kill') is also found in Khaling |set|, Limbu |set|, Japhug |sat| and Tibetan *gsod*, *bsad* (ibid).

If we now go back to the imperative forms of the list of verb exhibiting morpho-semantic correspondence (see table 137 in appendix 1, §1.5.1.1), three patterns emerge.

According to the first pattern, verb pairs such as *lan* vs. *latfan* 'to do', *tan* vs. *tatfan* 'to make, build, cook', and *anan* vs. *antfan* 'to get up, stand up' do not have the same 2SGNHON.IMP form. In that case, we have established that the most 'basic' infinitive verb forms (*lan* and *tan*) have one of their stems ending in -t whereas the second members of the verb pairs (*latfan* and *tatfan*) have a single root that includes /tʃ/, i.e. /tʃ/ is not a transitivity marker.

A second pattern is reflected in *puan* vs. *putfan* 'to sow', *lon* vs. *lotfan* 'to say, tell', *tʰan* vs. *tʰatfan* 'to beat, hit', *dean* vs. *detfan* 'to carry', *san* vs. *satfan*, and *pʰen* vs. *pʰetfan*, 'to send', where the verb pairs share the same imperative (and causative) root |put|, |lot|, |tʰat|, |det|, |sat| and |pʰet|, which means that in that case, -f in *putfan*, *lotfan*, *tʰatfan*, *detfan*, *satfan* and *pʰetfan* is a transitivity (middle voice) marker.

A third pattern is observable in the pairs *uran* vs. *urtfan* 'to wash' and *rijuan* vs. *rijutfan* 'to ask': the imperative (2SGNHON) and causative are identical, but -tf in *urtfan* and *rijutfan* is not part of the root, i.e. -tf is a transitivity (transitive) marker.

The occurrence of -f (MID) and -tf (TR) is therefore limited to a handful of verbs exhibiting morpho-semantic correspondence. As we shall see in §1.5.2.1, if the former is invariably part of a root synchronically (with more 'regular' verbs not occurring in pairs), there is evidence that it has not always been so. What /ʃ/, /tʃ/, and /s/ have in common is a split in their respective functions: part of the root or MID marker in the former case, part of root or transitive marker, and part of the root or part of the infinitive marker -san in the case of /s/.

²³⁵ See also Bantawa |lat| 'take out' (Jacques 2017: 28).

²³⁶ The final *-l (Jacques 2017: 2) is part of a few Chhitkul-Rākchham verb roots: *hul-an* 'to push', *sosol-an* 'to split', *pul-an* 'to take care', etc., and *-al is indeed attested in Chhitkul-Rākchham *pal-an* 'to rear'.

1.5.1.1.9 The *-ts* augment

Only one verb from my database, *li-saŋ* ‘to be able to’, has its second person singular non-honorific imperative in /ts/, namely *lits*. Referring to the inflectional paradigm introduced in table 60 (see §5.9), ‘to be able’ has thus three stems, |li|, |lis| and |lits|. The *-ts* augment arose from the need to distinguish 2SGNHON.IMP from *līi* (PFV).

1.5.1.1.10 Concluding remarks on stem alternation

The term augment used in this section is only valid from a synchronic perspective. Diachronically, further research will cast light on reconstructed roots. The *-n* augment discussed in §1.5.1.1.7 shows that |lat| is the morphological root in the case of *laŋ* ‘to do’ from which the alternative roots may be derived. The augment *-n* only occurred because the consonant cluster /tn/ is not attested in Chhitkul-Rākchham, and /t/ was thus replaced by /n/. We may therefore surmise that the forms that preserve the root most faithfully are imperative (2SGNHON) and causative, which means *-t*, *-ŋ* and *-f* final roots are the diachronic sources of a number of alternations. As discussed in appendix 1, §1.3.3.2, *-s* reflects past tense, and its occurrence as part of the stem is restricted to a few verbs only. Referring to our discussion from appendix 1, §1.5.1.1, comparative and diachronic evidence suggests that there is little doubt diphthongized roots ending in *-u* have been part of the Chhitkul-Rākchham verb stem repertoire from start.

The information provided in this section is very similar to stem alternations in Kiranti. Jacques et al. (2012: 1106) identify sixteen alternation sets of stem final consonants (fifteen with transitive verbs and eight with intransitives) in Khaling.

1.5.1.2 Borrowed verbs

Borrowing of verb stems is relatively common and concerns first of all Hindi and to a lesser extent Tibetan. Cognates of verb stems are notably found in Kiranti.

All verb stems ending in /ea/ are disyllabic and derived from Hindi: *batfeasaŋ* ‘to preserve, save’ → बचाना (*batfānā*); *moneasaŋ* ‘to celebrate’ → मनाना (*manānā*); *biteasaŋ* ‘to spend (time)’ → बिताना (*bitānā*); *k^huleaŋ* ‘to open’ → खोलना (*kholnā*) In this precise case, Chhitkul-Rākchham thus borrows the Hindi verb stem – which one obtains by removing the

infinitive *-nā*, and then replaces /ā/ by /ea/. In his sketch grammar of Rongpo, Sharmā (2001b: 220) describes a somewhat similar system whereby Indo-Aryan roots ending in consonants add /-ε/. All these verbs are not overtly marked for the progressive: *batfea-∅*, *mōnea-∅*, and *bitea-∅*. They invariably take the infinitive *-saŋ* and the perfective *-fi*, thus *batfea-saŋ* → *batfea-fi*; *bitea-saŋ* → *bitea-fi*; *mōnea-saŋ* → *mōnea-fi*, etc. Verbs such as *batfea-saŋ* ‘to preserve’, *bitea-saŋ* ‘to spend’, the stem of which ends in the diphthong [ea], derived from Hindi, invariably take *-de* → *batfea-de*; *bitea-de* in the imperfective and *-no* with irrealis-dubitative. When [ea] is preceded by /n/, the diphthong turns into /i/, thus *mōnea-saŋ* ‘to celebrate’ → *mōni-de* (IMPV) and *mōni-ts* (HAB.ASS). As seen in §1.5.1.1, this type of verb has two stems, one ending in the diphthong /ea/, the other in the triphthong /eau/.

There is no native verb for ‘to understand’ in Chhitkul-Rākchham. Instead, the choice is between a loan from Hindi, *śomze-ŋ*, and one from Tibetan, *hagoŋ-aŋ*. With the former, /ε/ often undergoes raising to /i/, thus *śomzi-ti* (PFV), *śomzi-de* (IMPV), *śomzi-no* (IRR.DUB), and *śomzi-ts* (HAB.ASS), while the progressive is regular: *śomze-a*. The imperative *śomziu* is an alternative stem. *Śomze-ŋ* is derived from Hindi समझना (*samajhnā*). The verb *hagoŋ-aŋ* often takes the epenthetic *-i* when inflecting for TAM categories: *hagoŋ-i-no* (IRR.DUB), *hagoŋ-i-ts* (HAB.ASS). Interestingly, the imperfective has two forms in free variation: *hago-de* and *hagoŋ-e*, the former having the exact same stem as Tibetan ha.go. The Chhitkul-Rākchham stem [hagoŋ] thus includes a frozen reflexive/middle /j/.

A similar strategy based on the insertion of the epenthetic *-i* is followed in the case of Hindi भागना (*b^hāgnā*) ‘to run’, where the stem ends in a consonant: *b^ha:g-i-ti* (PFV), *b^ha:g-i-de* (IMPV), *b^ha:g-i-no* (IRR.DUB), *b^ha:g-i-ts* (HAB.ASS). The glide equivalent of /i/ occurs with the progressive: *b^ha:g-j-a*, as in (257) and (258).

Another type of verb derived from Hindi is *puzi-saŋ* ‘to worship’, from Hindi पूजना (*pūjanā*)²³⁷, where contrary to the previous examples /i/ is part of the stem without any phonological change. The infinitive *-nā* is removed and /a/ undergoes raising to /i/. The inflectional paradigm is thus straightforward: *puzi-fi* (PFV), *puzi-de* (IMPV), *puzi-no* (IRR.DUB), and *puzi-ts* (HAB.ASS). The alternative (imperative) stem, ending in the diphthong [iu] (*puziu*) is entirely regular, since the infinitive marker is *-saŋ*. Whereas [ea] in

²³⁷ As mentioned in appendix 1, §1.2.1.1.3, [dʒ] and [z] are in free variation with loans from Hindi.

mɔneə-saŋ surfaces as /i/ in the environments mentioned earlier, the reverse process is observed with *puzi-saŋ*, /i/ surfacing as /e/ with progressive aspect → *puze-a*.

With *k^huleaŋ* ‘to open’ → खोलना (*kholnā*), the infinitive *-nā* is removed and /o/ undergoes raising to /u/. The inflectional paradigm involves an alternative stem ending in /i/: *k^huli-te* (IMPV), *k^huli-no*, *k^huli-ts* (HAB.ASS). An alternative stem is given by the 2SGNHON imperative *k^huleau*.

With *bodea-ŋ* ‘to increase’ → बढ़ना (*baḍ^hnā*), the infinitive *-nā* is removed and the epenthetic /i/ is inserted for example in the imperfective. According to whether retroflex ɖ undergoes deretroflexivization or not, the marker is *-te* or *-de* → *bodⁱ-de* in case it is pronounced as in Hindi, *bodⁱ-te* otherwise²³⁸.

When a verb borrowed from Hindi includes the retroflex /ʈ/, like *p^həṭeaŋ* ‘to burgeon, bloom’, the imperfective marker is invariably *-te*, regardless whether deretroflexivization takes place or not → *p^həṭⁱ-te*, or *p^həṭⁱ-te*.

When /t/ precedes /e/, the past tense form is invariably *-te*, regardless whether the past tense form retains /t/ or not, thus, *p^həṭeaŋ* ‘to burgeon, bloom’ → *p^həṭⁱ-te*, or *p^həṭⁱ-te*.

Verb stems borrowed from Hindi invariably have one of their two roots ending in either a diphthong [iu]²³⁹, or a triphthong [eau].

Chhitkul-Rākchham has verbs borrowed from Tibetan too. *Za-saŋ* ‘to eat’: *zau* (2SGNHON.IMP); *zaː-za-g-a* (PROG), *za-i* (PFV); *za-de* (IMPV); *za-no* (IRR.DUB). In Tibetan, this verb takes the past tense suffix, although with irregular vowel alternation (*za*, *zos*, *bza*’, *zo*). Interestingly, there is a variant to *za-de*, namely *zea*. The diphthong [ea] indicates, as in the verb root *mɔneə* discussed earlier, that we are dealing with a borrowed stem. There are cognates in Kiranti, for example in Khaling [dza] (Jacques 2017: 26).

The lexical verb *fjes-aŋ* ‘to recognize’ has its verb stem ending in /s/ (see table 116 in §1.3.3.2). In fact, /s/ is attested in *fjes-a* (PROG) and in the first imperfective variant *fjes-*

²³⁸ As shown in appendix 1, §1.2.1.1.1, ɖ^h has not phonemic status in Chhitkul-Rākchham.

²³⁹ In the case of *b^hagjaŋ* ‘to run’, /i/ is replaced by its glide equivalent: the 2SGNHON.IMP is *b^ha:gju*.

e~fje-de (whereas it is otherwise absent of the stem: 2SGNHON.IMP *fje-u*, *fje-fi* (PFV), *fje-no* (IRR.DUB). ‘To recognize’ has thus three stems: [ʃje], [ʃjeu] and [ʃjes]. A -s final root originates from Tibetan *shes*²⁴⁰. In other words, verb loans from Tibetan having /s/ in the past tense are mapped onto Chhitkul-Rākchham with /s/ as part of the stem too, and when /s/ is not attested, as in *ha.go* ‘understand’, Chhitkul-Rākchham may add the frozen reflexive/middle marker /ʃ/ → *hagof-aŋ*.

Chhitkul-Rākchham *ts^ho-aŋ* ‘to buy’ is a borrowing from Tibetan ‘tshong btsongs. ‘To buy’ has two stems: [ts^ho], found in the infinitive, and [ts^hɔŋ], found in the 2SGNHON.IMP, causative *ts^hɔŋ*, progressive *ts^hɔŋ-ã*, imperfective *ts^hɔŋ-de*, and irrealis-dubitative *ts^hɔŋ-no* (see tables 136 and 142 in appendix 1, §1.5.1.1 and §1.5.2.3). As mentioned in §1.5.1.1.4, ‘to buy’ has its perfective in *ts^hoĩ~ts^hɔŋĩ*. The loss of -ŋ is restricted to the infinitive and can be explained by the fact that in Chhitkul-Rākchham /ŋ/ is invariably part of the infinitive suffix, be it -ŋ, -aŋ, or -saŋ. The same phenomenon is observed with Chhitkul-Rākchham *tun* ‘to drink’, which has cognates in Tibetan ‘thung, btungs and Khaling [tun] (Jacques 2017: 13, 24). Note that with both ‘buy’ and ‘drink’ /ŋ/ is in most instances (except the infinitive) part of the stem, but /s/ is not.

Referring to table 116 in appendix §1, 1.3.3.2, *t^hɔ-saŋ* ‘to get ripe’ has two stems, namely [t^ho] and [t^hos], as reflected in the perfective *t^hos-i*. Again, comparative evidence supports the claim that this verb has a -s final stem: compare with Kiranti *[ts|s]os, Wambule |su| ‘be hot, spicy’, Khaling |tsu| ‘be spicy’, and Limbu |sos| ‘to be rich in taste (of pork, walnuts)’ (Jacques 2017: 12).

Jacques (2017: 18) establishes correspondences of *r* and *j* in Kiranti languages, but such a correspondence is not straightforward in Chhitkul-Rākchham, where both *r* and *j* occur in initial position – like in Khaling. When a verb stem starts with *j*, a quite rare phenomenon, it is invariably followed by a front vowel, as in *jynaŋ* ‘to walk’, *jytfaŋ* ‘to grind’, and *japaŋ* ‘to fly’. Both front and non-front vowels may follow a verb stem starting with *r*, as in *riŋ*²⁴¹ ‘to say, tell’, *rijuan* ‘to ask’, *raŋ* ‘to sell’, and *runfaŋ* ‘to listen, wait’.

²⁴⁰ See also Japhug *suɔz*, with a variant without -z in the irregular negative generic *mx-xsi* ‘one does not know’ (Jacques, personal communication).

²⁴¹ To be compared with Khaling [riŋ] ‘praise’, Bantawa [jiŋ] ‘say, tell’, and Limbu [iŋ] ‘become famous’ (Jacques 2017: 10).

Stem alternation in Chhitkul-Rākchham is to a large extent phonologically conditioned, which means it is closer to those Kiranti languages that belong to the East-Central branch. If, as pointed out by Gerber and Grollmann (2018: 141), non-Western Kiranti languages form a coherent group, “further subgrouping is ambiguous and allows for several solutions”. Their observation is all the more relevant that Chhitkul-Rākchham, as we shall see in the next section, departs from Kiranti in that the causative *-s* is not part of its repertoire.

1.5.2 Transitivity markers

All Chhitkul-Rākchham verbs belong to one of three transitivity classes: transitive, middle, and intransitive. As already emphasized by Sharmā (1992: 256-7), transitive verbs are in most cases distinguished from intransitive ones by the use of different stems, found in various syllable shapes.

Based on Widmer’s (2018: 86) comparative data, this way of distinguishing transitive verbs from intransitive ones clearly sets Chhitkul-Rākchham apart from other ‘West-Himalayish’ languages for which a full grammar is available (Bunan, Rongpo, Darma and Byangsi) and where the distinction is exclusively made by means of suffixes.

Sharmā (1988: 127-8) describes a similar system of transitive vs. intransitive distinction based on verb stems in Standard Kinnauri. He however does not formally identify a class of middle verbs.

Table 137 provides a few examples of transitive vs. intransitive roots with their infinitive marker. The verb stems *p^hɔ-*, *gin-*, *da-*, *sa-*, *k^hia- hul-*, *tus-*, *p^hi-*, *gua-*, *suari-*, *tsure-*, *ali-*, *baŋzi-*, *puzi-* and *t^ha-* are transitive whereas *ɔs-*, *ɔn-*, *k^has-*, *to-*, *kria-*, *hun-*, *ro-*, *tsɔmkj-*, *o-*, *tsu-*, *zul-*, *juni-*, *baŋde-*, *t^hure-* and *da:-* are intransitive:

Table 137: the transitive vs. intransitive stem-distinction in Chhitkul-Rākchham

Transitive verbs	Verb stem structure	Intransitive verbs	Verb stem structure
<i>p^hɔ-saŋ</i> ('to dry')	CVC	<i>ɔs-aŋ</i> ('to sit')	CVC

gin-aŋ ('to need')	CVC	nɔn-aŋ ('to sleep')	CVC
da-saŋ ('to give')	CV	k ^h as-aŋ ('to be cold')	CVC
sa-ŋ ('to kill')	CV	tɔ-ŋ ('to come')	CV
k ^h ia-ŋ ('to feed')	CVV	kria-ŋ ('to shiver')	CCVV
hul-aŋ ('to push')	CVC	hun-aŋ ('to stay, live')	CVC
tus-aŋ ('to bring')	CVC	rɔ-ŋ ('to go')	CV
p ^h i-saŋ ('to throw')	CV	tsɔmkj-aŋ ('to shine')	CCVCCC
gua-ŋ ('to like')	CVV	o-aŋ ('to rise, grow')	V
suari-saŋ ('to repair')	CCVCV	tsu-saŋ ('to rot')	CCV
tsurɛ-ŋ ('to brew')	CCVCV	zul-aŋ ('to bark')	CVC
ali-saŋ ('to invite')	VCV	ʃuni-saŋ ('to shout')	CVCV
banzi-saŋ ('to smell')	CVCCV	bande-saŋ ('to smell of something')	CVCCV
puzi-saŋ ('to worship')	CVCV	t ^h urɛ-ŋ ('to run')	CVCV
t ^h a-saŋ ('to break')	CV	da:-saŋ ('to break')	CV

As the previous table indicates, transitive and intransitive stems are in a few instances distinguished by phonological processes such as vowel elongation (*dasan* vs. *da:saŋ*) or aspiration (*p^hɔsan* vs. *pɔsaŋ*). A few ambitransitive forms (labile verbs: *ku-aŋ*, 'to boil', *za-saŋ*, 'to eat', *tu-aŋ*, 'to drink') can be used as transitives or intransitives without morphological derivation whereas other labile verbs (*t^ha-saŋ* vs. *da:-saŋ* 'to break') have alternative transitive and intransitive stems. In addition, if we compare the verb stems presented in the previous table, it is clear transitivity vs. intransitivity is not based on their phonological shape.

Note that there is a distinction based on animacy for a few unaccusative (intransitive) verbs, for example *beaŋ* (animates) and *da:ŋ* (inanimates) 'to fall', and a few unergative (intransitive) verbs, where a distinction is based on the type of external argument involved, for example *bazisaŋ* 'to play an instrument' vs. *hɛtfaŋ* 'to play (a game)'.

1.5.2.1 The reflexive/middle voice suffix -f

Chhitkul-Rākchham exhibits a few examples of morpho-semantic correspondence, the difference with Kinnauri (Nishi 1993, Sharmā 1988: 128; Takahashi 2001: 112-3) being

there is no such alternation mechanism as initial consonant devoicing, a common feature within the TB language family (Benedict 1972: 124), that is no longer productive in Tibeto-Burman languages in general (Lapolla 2003: 33) and within the ‘West-Himalayish’ subgroup in particular (Takahashi 2009: 40). Consider the following examples:

Table 138: Verbal morpho-semantic correspondence in Chhitkul-Rākchham

Alternations		Meaning
hʉtʃ-aŋ	hʉ-aŋ	‘to teach’
latʃ-aŋ	la-aŋ	‘to do’
putʃ-aŋ	pu-aŋ	‘to plow’
pʰɛtʃ-aŋ	pʰɛ-aŋ	‘to send’
urtʃ-aŋ	ur-aŋ	‘to wash’
tʰatʃ-aŋ~tʃutʃ-aŋ	tʰa-aŋ	‘to make, build, cook’
pɔntʃ-aŋ	pɔn-aŋ	‘to sew’
njantʃ-aŋ	njan-aŋ	‘to hide’
njektʃ-aŋ	njektʃ-aŋ	‘to hide’
tʰatʃ-aŋ	tʰa-aŋ	‘to beat, hit’
antʃ-aŋ	an-aŋ	‘to get up, stand up’
dɛtʃ-aŋ	dea-aŋ	‘to take, carry’
rijutʃ-aŋ	riju-aŋ	to ask

The verb pairs introduced in table 138 have their own tense and aspectual forms. For example, *latʃaŋ* vs. *laŋ*: ‘I am working’ → *ga: kamaŋ latʃa tɔk (latʃaŋ)* or *ga: kamaŋ la: tɔk (laŋ)*. These verbs also have their own imperfective, irrealis (dubitative) and habitual forms: *latʃe* vs. *late*; *lano* vs. *latʃino*; *lats* vs. *latʃits*. In addition, modal constructions involve both verbs, thus ‘I have to do this’: *ga: huju laŋ gints* or *ga: huju latʃaŋ gints*. Only verbs from the left column have a perfective form, however, for the reasons explained in §3.1.2.2.

Further, from table 136 it is clear the previously mentioned verbs exhibit four different types of patterns in the imperative: some pairs have all imperative distinctions identical, some share the same second person singular non-honorific form but differ otherwise, some have all distinct imperative forms, and finally some have all distinct imperative forms but second person plural.

Only verbs from the right column may however occur with the passive voice (see the next section) and in causative constructions, see §1.5.7. In the latter case, the imperative second person singular non-honorific (see table 146) serves as verb root. For example, the verb root of *laŋ* ‘to do’ in causative constructions is *lat*, and so it is with 2SGNHON.IMP.

As discussed in §1.5.1, *-tf* is in some cases (*latfaŋ* ‘to do’) is part of the root, but not always. *Urtfaŋ* ‘to wash’ and *ɸɔntfaŋ* ‘to sew’ having their causative and 2SGNHON.IMP in *ur* and *ɸɔn* respectively, it is clear *-tf* is not part of the root, i.e. is derivational (transitive, see §1.5.2.4). This does not explain why all the above verb pairs may occur in any tense or aspectual (but the perfective) context. I nevertheless provide a tentative explanation in §1.5.2.4.

Morpho-semantic correspondence is usually revealing when dealing with transitivity classes or related phenomena. Comparative evidence in ‘West-Himalayish (Widmer 2018) reveals that *-f* and *-tf* (alternatively *-ɕ* and *-tɕ* in Bunan) are markers of transitivity class. This is notably the case in Rongpo, Darma and Byangsi. Similar markers are part of the verbal apparatus of languages such as Kinnauri, Shumcho, Jangrami and Sunnami, where their true function has to date remained mysterious. If, in these languages, similarly to Chhitkul-Rākchham, the transitive vs. intransitive distinction is realized by means of verb stems, then it is likely *-f* and *-tf* have served a different function from a diachronic perspective.

From the previous table we may assume that the verb stems *hu-*, *la-*, *pu-*, *ɸ^hɛ-*, *ur-*, *ʈa-*, *ɸɔn-*, *njan-*; *njɛk-*; *t^ha-*; *an-*, *de/dɛ-* and *rju-* are not bound to one verb class, i.e. they may change class membership via a process of (de)affrication. It would seem the suffix *-tf* is (de)transitivizing. As we shall see, the reality is more complex.

As discussed in §1.5.1 and §1.5.5.1, the second person singular non-honorific imperative usually reveal the stem of a verb. Table 139 provides the imperative distinctions for the list of verb pairs from my database:

Table 139: imperative forms for the verbs exhibiting morpho-semantic correspondence

Infinitive form and gloss	2SGNHON	2SGHON	2SG extra HON	2PL
hufan (‘to learn, study, teach oneself’)	huf	hufi	hufi=ẽ	hufitj
huan (‘to teach’)	hut	huĩ	huĩ=ẽ	hutj~hutjitj
hutfan (‘to teach’)	hut	huĩ	huĩ=ẽ	hutj~hutjitj
sufan (‘to bath (oneself)’)	suf	sufi	sufi=ẽ	sufitj
njekfan (‘to hide oneself’)	njekf	njekfi	njekfi=ẽ	njekjitj
njektfan (‘to hide’)	njektj	njektfi	njektfi=ẽ	njektjitj
njanan (‘to hide’)	njan	njanĩ	njanĩ=ẽ	njanitj~njantjitj
njantfan (‘to hide’)	njan	njantfi	njantfi=ẽ	njantjitj
putfan (‘to sow’)	put	puĩ	puĩ=ẽ	putjitj
puan (‘to sow’)	put	puĩ	puĩ=ẽ	putjitj
latfan (‘to do’)	latj	latfi	latfi=ẽ	latjitj
lan (‘to do’)	lat	laĩ	laĩ=ẽ	latjitj
tʌtfan ²⁴² (‘to make, build, cook’)	tʌtj	tʌtfi	tʌtfi=ẽ	tʌtjitj
tʌn (‘to make, build, cook’)	tʌt	tʌĩ	tʌĩ=ẽ	tʌtjitj
urtfan (‘to wash’)	ur	urĩ	urĩ=ẽ	urtjitj
uran (‘to wash’)	ur	urĩ	urĩ=ẽ	uritj
pɔntfan (‘to sew’)	pɔn	pɔnĩ	pɔnĩ=ẽ	pɔnjitj
pɔnan (‘to sew’)	pɔn	pɔnĩ	pɔnĩ=ẽ	pɔnitj
pʰɛtfan (‘to send’)	pʰɛt	pʰɛtʃi	pʰɛtʃi=ẽ	pʰɛtʃitj
pʰɛŋ (‘to send’)	pʰɛt	pʰɛĩ	pʰɛĩ=ẽ	pʰɛtʃi
antfan (‘to get up, stand up, rise’)	antj	antfi	antfi=ẽ	antʃitj
anan (‘to get up, stand up, rise’)	ann	annĩ	annĩ=ẽ	annitj
tʰatfan (‘to beat, hit’)	tʰat	tʰaĩ	tʰaĩ=ẽ	tʰatʃ~tʰatʃitj
tʰan (‘to beat, hit’)	tʰat	tʰaĩ	tʰaĩ=ẽ	tʰatʃ~tʰatʃitj

²⁴² A variant is *tijutfan*.

rijuan/rijusan 'to ask'	riju	rijuĩ	rijuĩ=ẽ	rijutʃ
rijutʃan 'to ask'	riju	rijuĩ	rijuĩ=ẽ	rijutʃ
detʃan ('to take, carry')	dɛt	deĩ	deĩ=ẽ	dɛtʃ
dean ('to take, carry')	dɛt	deĩ	deĩ=ẽ	dɛtʃ

Further, 'I am sewing' vs. 'I am sewing a bag' can be expressed indistinctively by both verb forms: *ga: pɔntʃa/pɔna tɔk* vs. *ga: i bag pɔntʃa/pɔna tɔk*. A similar pattern is observed in the following examples: *ga: ai bɔŋ urtʃa/ura tɔk* ('I am washing my feet/foot') and *ga: i fiŋe kjim ʃatʃa/ʃa: tɔk* ('I am building a wooden house'). A verb as 'to hide' has not two but four different forms, three of which are perfectly acceptable in the following example: *ga: kita:b njektʃa/njana/njantʃa tɔk* ('I am hiding the book'), etc. These verb forms occur interchangeably in the past and future tense constructions as well. There is therefore no difference between these verbs in the active voice.

Morpho-semantic correspondence, a widely attested feature in Tibeto-Burman, is referred to as causative-intransitive alternation in Nishi (1993: 83) and Takahashi (2004, 2008, 2009: 39, 2012: 157-160). In Kinnauri, causative-intransitive alternation is usually realized by means of different morpho(phono)logical processes, the causative prefix *s-*, voicing alternation, i.e. two no longer productive mechanisms, and *-ši/-či*, a middle voice suffix which had been previously described as a passive marker in Sharmā (1988: 150). The same marker *-ʃ*, *-ʃɪ* or *-tʃi* is also present in Saxena's (2017: 14) description of Sanglā Kinnauri. This suffix has cognates in 'West-Himalayish' and in the Kiranti subgroup as well (LaPolla 2000). In all three accounts of Kinnauri, the middle voice marker serves a range of proto-typical functions – reflexive, reciprocal, collective plurality, intransitivization, and resulting states – an exhaustive list of which is provided in Kemmer's (1993) comparative study.

The investigation of a few reflexive constructions may provide some clues. Compare *ga: hindi hua tɔk* ('I am teaching Hindi') and *ga: hindi huʃa tɔk* ('I am learning Hindi' or 'I am teaching myself Hindi'). In the latter case, *huʃan* is used instead of *huan* to convey the sense of an action that the subject is performing himself. The 2SG.NHON imperative root is however *huʃ*, which means /ʃ/ is part of the root, not a middle voice marker.

Consider now *ga: ai bɔŋ urtʃa tɔk* ('I am washing my feet/foot') and *ga: suʃa tɔk* ('I am bathing (myself)'). In the latter case a different verb form altogether, *suʃan*, conveys

reflexivity (and a sub-domain of it referred to as ‘body action domain’ in Kemmer (1993: 41)). However, in this case too, the 2SGNHON imperative is *suʃ*, i.e. /ʃ/ is part of the verb root.

Further, observe the contrast between *ga: kita:b njektʃa/njana/njantʃa tɔk* (‘I am hiding the book’) vs. *ga: njektʃa tɔk* (‘I am hiding (myself)’), or *ga: kita:b njanʃi* (‘I hid the book’) vs. *eme pitanʃ neotʃo njektʃi* (he hid (himself) behind the door’). The previous example is peculiar: three interchangeable verb forms may occur when conveying the sense of hiding an object, but only one, *njektʃanʃ*, when hiding oneself, a contrast based on animacy. Again, the 2SGNHON imperative (and causative) is *njektʃ*, which indicates /ʃ/ is part of the root.

Consider now the following example: *ga: tʃittʰi pʰetʃa tɔk* (‘I am sending myself a letter’). Referring to table 139, *pʰeʃanʃ* and *pʰetʃanʃ* share the same causative and imperative (2SGNHON) root, namely *pʰetʃ*. In this precise case, *-ʃ* is therefore not part of the root and functions as middle voice marker. As seen in §1.5.1, ‘to send’ in its most basic form has two stems, [pʰe] and [pʰetʃ] (and *pʰeʃ), and the second member of the verb pair, found in *pʰetʃanʃ* (V_{ROOT}-MID-INF), *pʰetʃ-a* (V_{ROOT}-MID-PROG), *pʰetʃ-i-no-∅* (V_{ROOT}-MID-E-IRR.DUB-3), etc. has only one, namely [pʰetʃ]. Non-alternating *-t* final verb stems can probably be accounted for by analogical levelling.

The Chhitkul-Rākchham middle voice marker is *-ʃ*, but it is important to note its occurrence is extremely limited. It typically follows a *-t* final root from a verb part of a pair exhibiting morpho-semantic correspondence²⁴³. Instances with *-ʃ* as a MID marker include *putʃ-anʃ* ‘to sow’, *detʃ-anʃ* ‘to carry’, *tʰatʃ-anʃ* ‘to beat, hit’, and *lɔtʃ-anʃ* ‘to say, tell’.

Kinnauri has a similar middle voice marker *-ʃ(i)/-tʃ(i)* (Saxena 2017: 763). The middle voice marker *-ʃ(i)* has cognates in all the languages commonly assigned to the West-Himalayish subgroup, as shown in table 140, but not only: it is also attested in Dulong-Rawang (*-shi*), Kham (*-si*), and Kiranti (Limbu *-siŋ*, Khaling *-si*), see Jacques (2021: 437).

²⁴³ In this case, *-ʃ* is derivational because it attaches to a stem which already includes the augment *-t* discussed in §1.5.1.1.8.

Table 140: middle voice markers in West-Himalayish languages - based on Takahashi (2009:

38)

Gahri	Patni	Tinan	Kanashi	Kinnauri	Rongpo	Darma	Chaudangsi	Byangsi	Chhitkul-Rākchham
-ša	-či	-ši	-shi	-ši	-s	-či	-či	-fi	-f(i)

Regardless whether *-f* formally serves as middle voice marker or is part of the stem, as a frozen middle voice, the verb denotes reflexivity and reflexivity only in Chhitkul-Rākchham. In other words, it is much less productive than its equivalent in Kinnauri.

Here is a list of verbs the stem of which ends in *//j*²⁴⁴: *doiaf-aŋ* ‘to moo’; *hagof-aŋ* ‘to understand’; *kɔlf-aŋ* ‘to speak’; *laf-aŋ* ‘to wear’; *likf-aŋ* ‘to carry’; *mif-aŋ* ‘to desire, want’, *runf-aŋ* ‘to listen, wait’, *ranf-aŋ* ‘to sell’; *sɔf-aŋ* ‘to deteriorate, get damaged, decay’, *tʃʰukf-aŋ* ‘to meet’, *pʰikf-aŋ* ‘to drop’, *likf-aŋ* ‘to look like’, *kʰɔnf-aŋ* ‘to search’, *pʰaŋf-aŋ* ‘to lose’, *kuanf-aŋ* ‘to find’, and *naif-aŋ* ‘to take a holy bath’. Most of these verbs convey a clear sense of physical or psychological self-affectedness.

In a sentence like *kinsa: i ai (or nedze) madad latfa tɔtf* (‘you are helping each other’), reciprocity is not marked on the verb but expressed syntactically, with either the pronominal form *nedze* or the suppletive form *i ai*, both occurring before the verb. A *//j* final root does not express collective plurality either. Compare *ga: boseriŋ i kim tɔtf* (‘I am building a house in Batseri’) and *niŋsa: boseriŋ i kim tɔtf* (‘we are building a house in Batseri’). The only difference here is one of person; *-k* is the first person singular subject agreement marker, *-tf* the first and second person plural.

The occurrence of *-f* as reflexive/middle marker or in root coda position in Chhitkul-Rākchham is limited to situations where “the Initiator and Endpoint participant are the same entity” (Takahashi 2012: 167, referring to Kemmer 1993).

²⁴⁴ Also with 2SG.NHON.IMP. The alternative stem in this case is devoid of *//j*, for example *kɔl* ‘speak’ – see (291).

1.5.2.2 The passive voice, expressed by the bare root, and the applicative -t

Kemmer (1993: 148) mentions passive-like uses of middle voice. Whereas this observation applies to Kinnauri, there are no such uses in Chhitkul-Rākchham.

As mentioned in the previous section, among the verbs exhibiting morpho-semantic correspondence, only those from the right column in table 138 may occur in the passive. Passive constructions are realized by using the bare stem of the verb: *bijaŋ-∅ pu-a to* (or *ta*) (seeds-ABS sow-PROG AUX.PEEX) ‘the seeds are being sown’; *tʰali baʦi-∅ ur-a to* (or *ta*) (dishes-ABS wash-PROG AUX.PEEX) ‘the dishes are being washed’; *kim-∅ ʦa: to* (or *ta*) (house-ABS build.PROG AUX.PEEX) ‘the house is being built’.

The same is observed with a -f final root, for example *huf* ‘to be read’, as in *i: kita:b-∅ skul-o huf-a to* (or *ta*) (one book-ABS school-LOC read-PROG AUX.PEEX) ‘a book is being read at school’.

Passive voice may also be expressed by periphrastic constructions involving the bare root of the verb followed by an inflected form of *tɔŋ* ‘to come’ and possibly an auxiliary (*ta* or *to*). In that case, the verb root includes /t/, as shown in table 141, and the whole construction refers to an animate and highly affected patient. Compare *hindi-∅ skul-o hu-a ta* (or *to*) *hindi-ABS school-LOC teach-PROG AUX* ‘Hindi is taught at school’ and *ga:-∅ (eme-tʃi) hindi-∅ hu-t to-a to* (1SG-ABS (3SG-ERG) *hindi-ABS teach-APPL come-PROG AUX.PEEX*) ‘I am being taught Hindi (by him/her)’. In the latter case, the form *hut* is part of a periphrastic form which includes the present tense form *toa* (*tuti* in the past, *tuno* in the future) from the verb *tɔŋ* (‘to come’), possibly followed by *to* or *ta*. A periphrastic form involving *tɔŋ* as second verb is also a token of causative constructions (see §1.5.3 and §1.5.7).

All verbs from table 141 are members of a pair exhibiting morpho-semantic correspondence. In this context, -t is an applicative, usually preserved in Kiranti languages (Jacques 2017: 4). The added argument may be a patient or an experiencer.

There is no example of antipassive²⁴⁵ use of the reflexive/middle suffix *-f* in Chhitkul-Rākchham. Antipassive use of the reflexive/middle suffix is a feature attested in a handful of Kiranti languages (Khaling, Thulung and Limbu), typically with a transitive verb expressing a feeling (Jacques 2021: 437-8)²⁴⁶. In these languages, the *-si* suffix has additional uses alongside reflexive: reciprocal, autobenefactive and generic subject, none of them attested in Chhitkul-Rākchham.

Table 141: examples of passive voice expressed by means of periphrastic constructions in Chhitkul-Rākchham

Applicative -t	INF	Gloss	Source
ɦu-t toa	ɦuaŋ	'to get taught'	TOP_cik03-AS-2018-10-12- 23
tʰa-t toa	tʰaŋ	'to get beaten'	NDB_cik04-MK-SD1-2018-11-24- 94 and 174
pʰɛ-t toa	pʰɛŋ	'to be sent'	NDB_cik04-MK-SD1-2018-11-24-94, 96 and 97 AUT_cik01-RK-2018-10-08-5
dɛ-t toa	dean	'to be carried'	Elicited (DSN)
dʰaro la-t toa	laŋ	'to be married (by force)'	AUT_cik05-RD2-2018-11-21-3

1.5.2.3 The causative converb *maŋ*

Sharmā (1992: 272-4) discusses a 'causative subsystem', "derived by affixing the causative formative suffix *-maŋ* directly to the verb root itself", thus claiming that Chhitkul-Rākchham "exhibits the mechanism of forming causative stems from noncausative stems by means of suffixation". A first observation is that *maŋ* is a converb referring to Haspelmath's definition that I discuss in §5.7 and in §1.4.3.2. A second observation – and critic – of Sharmā's description is that *maŋ* is the infinitive of finite verb that is part of a periphrastic construction, see §1.5.7. In other words, causativization is not just expressed by means of the suffix *-ma* (ibid, p. 273). Sharmā also missed these cases of morpho-semantic correspondence mentioned earlier (table 138), hence his confusing account of a

²⁴⁵ A recent development "found in languages with polypersonal indexation and ergative case marking" (Jacques 2021: 427).

²⁴⁶ An example in Chhitkul-Rākchham is *ga:-∅ alu gobi-∅ palak pani:-∅r rukji=o gu-a tək* 1SG-ABS- alu gobi-ABS palak pani-ABS SML=FOC like-PROG AUX.PEEX-1SG 'I like like alu gobi as much as palak paneer'.

‘causative formative’ /-si/, supposedly “infixd in between the verb root and the formative suffix /maŋ/”.

Typically, a converb consists of a verb stem and a suffix. In table 140, *ma* is the stem and *-ŋ* the infinitive suffix. In most instances, *=maŋ* attaches to the main verb root, with *-i* inserted between the latter and *=maŋ* when the main verb root ends in the middle voice /j/ and the transitive /tj/. As table 142 demonstrates, *=maŋ* attaches to all types of verbs: intransitive, labile, middle, transitive and for those verbs exhibiting morpho-semantic correspondence. This, again, contradicts Sharmā’s (1992: 257) claim that *=maŋ* is a transitive suffix and that “the mechanism of transitive suffixation is identical with the mechanism of causativization”: in truth, *=maŋ* only marks causativization, that is, a valency increasing operation.

The examples provided in table 142 indicate the causative verb root, like the imperative (2SGNHON) root, is in most instances identical to the verb stem of an infinitive form. In most instances, causative and imperative roots are identical. As seen in §1.5.1, the causative root is sometimes identical to the progressive root. In the case of *zasanŋ* and *tasanŋ*, /a/ undergoes elongation when occurring as causative verb root and the same phenomenon takes place with the progressive aspect: *za:* (alternatively *zaga*) and *ta:* (alternatively *taga*) respectively. In a few other instances, the causative root is identical to the perfective root: the vowel /a/ is inserted between [y] and /n/ in the case of *jyan=maŋ* the same way it is inserted in the perfective *jyani*. Monosyllabic verb stems ending the back rounded vowels /o/ and /u/ and taking *-anŋ* as infinitive have *-ŋ* inserted before *maŋ*, the same way they have *-ŋ* inserted when they inflect for past (imperfective), irrealis-dubitative, and habitual-assertive. This also applies to *riŋ* the only monosyllabic verb the stem of which ends in /i/. Disyllabic verbs with a stem ending in /e/ (*t^hureŋ* for example) undergo raising the same way they do in the perfective, the habitual and with past (imperfective), irrealis-dubitative and habitual-assertive.

The few verbs discussed in §1.3.3.2 with an infinitive stem ending in /s/ exhibit an interesting pattern. Their causative roots never include /s/, which has a phonological explanation: like the consonant cluster [sn], [sm] is not attested in Chhitkul-Rākchham, a claim that is consistent with the data I provide in §1.2.5.2. In the case of *asanŋ*, /s/ is also deleted and /a/ undergoes elongation, as in *a:no* and *a:ts*.

Among the verb pairs exhibiting morpho-semantic correspondence, one set has its causative root identical to its second person singular non-honorific imperative (see table 139). Thus, *puan* → *put*; *lan* → *lat*; *dean* → *det*, etc. Regardless whether the other set has the same second person singular non-honorific imperative (*putfan* → *put*) or not (*latfan* → *latf*), the causative roots includes *-tf*. This clear distinction reflects a semantic one: whereas *put=man*, *lat=man* and *det=man* have the causative meaning of ‘to make plow’, ‘to make do’, and ‘to make carry’ respectively, *putf=man*, *latf=man* and *detf=man* have the meaning of ‘to allow plowing’, ‘to allow making’ and ‘to allow carrying’. In other words, verb pairs such as *puan* and *putfan* also reflect a semantic distinction with the causative.

Table 142: causativization in Chhitkul-Rākchham

Gloss	Infinitive	Causative construction	Causative meaning
‘to sleep’	nɔn-aŋ	nɔn=ma-ŋ	to allow
‘to walk’	jyn-aŋ	jyan=ma-ŋ	to allow
‘to play’	hɛtʃ-aŋ	hɛtʃ-i=ma-ŋ	to allow
‘to go’	rɔ-ŋ	rɔ=ma-ŋ	to allow
‘to push’	hul-aŋ	hul=ma-ŋ	to allow
‘to eat’	za-saŋ	za:=ma-ŋ	to allow
‘to keep, put’	ta-saŋ	ta:=ma-ŋ	to allow
‘to drink’	tu-aŋ	tun=ma-ŋ	to allow
‘to buy’	ts ^h o-aŋ	ts ^h ɔŋ=ma-ŋ	to allow
‘to say’	ri-ŋ	riŋ=ma-ŋ	to allow
‘to bath (oneself)’	suʃ-aŋ	suʃ-i=ma-ŋ	to allow
‘to tell’	ri-ŋ	riŋ=ma-ŋ	to allow
‘to howl’	dʒi-aŋ	dʒi=ma-ŋ	to allow
‘to chew’	bra:-saŋ	bra:=ma-ŋ	to allow
‘to catch’	tsum-aŋ	tsum=ma-ŋ	to allow
‘to run’	t ^h urɛ-ŋ	t ^h uri=ma-ŋ	to allow
‘to finish’	tʃ ^h e:-saŋ	tʃ ^h e:=ma-ŋ	to allow
‘to throw’	p ^h i-saŋ	p ^h i=ma-ŋ	to allow
‘to sit’	pɔs-aŋ	pɔ=ma-ŋ	to allow
‘to bring’	tus-aŋ	tu=ma-ŋ	to allow

'to become, happen'	as-aŋ	a:=ma-ŋ	to allow
'to watch, look (at)'	ʃja-saŋ	ʃja=ma-ŋ	to allow
'to repair'	suari-saŋ	swari=ma-ŋ	to allow
'to sacrifice'	ʃup-aŋ	ʃup=ma-ŋ	to allow
'to celebrate'	mɔnea-saŋ	mɔnea=ma-ŋ	to allow
'to kill'	sa-ŋ	sat=maŋ	to allow
'to scare'	bɛtt-aŋ	bɛt=ma-ŋ	to allow
'to study, learn, read'	ɦuʃ-aŋ	ɦuʃ-i=ma-ŋ	to allow
'to teach'	ɦu-aŋ	ɦut=ma-ŋ	to make
'to get up, wake up'	antʃ-aŋ	antʃ-i=ma-ŋ	to allow
'to get up, wake up'	an-aŋ	an=ma-ŋ	to make
'to carry, take'	detʃ-aŋ	detʃ-i=ma-ŋ	to allow
to carry, take'	de-aŋ	det=ma-ŋ	to make
'to plow'	putʃ-aŋ	putʃ-i=ma-ŋ	to allow
'to plow'	pu-aŋ	put=ma-ŋ	to make
'to do'	latʃ-aŋ	latʃ-i=ma-ŋ	to allow
'to do'	la-ŋ	lat=ma-ŋ	to make

Table 142 provides evidence for our claim from §1.5.1 that some Chhitkul-Rākchham verb roots end in /t/ and /ŋ/. We have for example established that 'kill' (INF *saŋ*) has three stems, |sa|, |sa:|, and |sat|, depending on the phonological and morphological context. The root |sa:| with the progressive, |sat| with 2SGNHON imperative, causative and in passive constructions, and |sa| otherwise. The other member of the verb pair is *satʃ-aŋ*, with a single root, namely |satʃ|.

From a comparative perspective, Chhitkul-Rākchham departs from most Kiranti languages in that these languages typically have a causative -s suffix (Jacques 2017: 4). Chhitkul-Rākchham thus behaves similarly to Khaling, where the -s merged with open syllable stems.

1.5.2.4 The transitive suffix -tʃ

As already mentioned in §1.5.1.1.6, the transitive marker -tʃ is only formally identifiable in a handful of verbs from my database, invariably a member of a pair exhibiting morpho-semantic correspondence: *ur-tʃ-aŋ* (wash-TR-INF) 'to wash', *ɔɔn-tʃ-aŋ* (sew-TR-INF) 'to sew',

hu-tf-aŋ (teach-TR-INF) 'to teach', and *riju-tf-aŋ* (ask-TR-INF) 'to ask', all having *-aŋ* as infinitive suffix. The same way *-f* is a frozen reflexive/middle suffix when it is part of the verb stem, *-tf* is a frozen transitive when it does so.

Among the verb pairs exhibiting morpho-semantic correspondence, the most basic forms never formally take any transitivity markers. The other member of the verb pair displays three patterns: *-tf* is part of the root (*latf-aŋ* 'to do'), *-tf* is a transitive marker (*ur-tf-aŋ* 'to wash'), or the root ends in *-t*, and the reflexive/middle marker *-f* attaches to it (*put-f-aŋ* 'to sow').

Cognates of *-tf* are found in Kinnauri, Shumcho and it seems in Jangrami and Sunnami as well (Huber, personal communication). In all these languages, we presume the function of *-tf* has to do with transitivity, but this point had so far remained unelucidated.

A mystery that remains about *laŋ* vs. *latfaŋ*, *uraŋ* vs. *urtfaŋ* and *puaŋ* vs. *urtfaŋ* is the possibility of their occurrence with for example the progressive: *la*: vs. *latfa*, *ura* vs. *urtfa*, and *pua* vs. *putfa*. The choice is obviously determined by semantic factors – see §6.3 for a discussion on *laŋ* vs. *latfaŋ*.

That *ura* and *urtfa* may occur in the same context when these two share the same root (*|ur|*) singles out *-tf* as a specific marker, and not an augment. Having in mind that *ura* would occur in a passive construction, I conclude *-tf* is a transitive marker.

1.5.2.5 Concluding remarks on transitivity

Referring to the previous considerations, *-s* is either part of a stem (possibly as augment) or part of the infinitive marker (*-saŋ*), *-tf* is either part of the stem or a transitive suffix, and *-f* is either part of the stem (possibly as augment) or reflexive/middle voice marker, but only after the *-t* final stem of verb exhibiting morpho-semantic correspondence.

Transitivity is a complex phenomenon in which the number of arguments a verb can take is only one component among others. It is clear that components such as affectedness, animacy/individuation and agency play a distinctive role as well. Interestingly, in *ga:-∅ tfitt^h-i:-∅ p^het-f-a tɔ-k* 1SG-ABS letter-FEM-ABS send-MID-PROG AUX.PEEX-1SG ('I am sending myself a letter'), the subject *ga*: may take the ergative marker whereas it cannot

occur in *ga:-∅ hindi-∅ huf-a tɔ-k* 1SG-ABS hindi-ABS teach-PROG AUX.PEEX-1SG ('I am learning Hindi' and 'I am teaching myself Hindi'). These considerations suggest a scalar approach of transitivity in accordance with Hopper and Thompson's (1980: 252-3) seminal approach:

Table 143: transitivity as a scalar notion in Chhitkul-Rākchham

	Transitive	Middle	Intransitive
Morph. Marking	-tʃ	-ʃ	Verb stem
Semantic meaning	-	Reflexive/self-affectedness	-
Individuation	Individuated animate	Individuated animate	Individuated and non-individuated animate and inanimate
Agency	A high in potency	A high in potency A low in potency	A low in potency
Valency	Monovalent, bivalent and trivalent verbs	Bivalent verbs	Monovalent and bivalent verbs

The previous table suggests a close relationship between transitivity and voice in Chhitkul-Rākchham. Back to table 138, it is now clear that movement from the right to the left column, describes a gradual transitivization process. Since only the verb forms from the right column can be used with passive voice, they are intransitive (unmarked), and since verbs from the left column can only be used in the active voice, they are transitive (marked with -tʃ, alternatively /tʃ/ is part of the stem) or middle (marked with -ʃ, following a -t final root). Both verb forms occur in the active voice, which concretely means that some intransitive verbs may have the same degree of valency than transitive ones.

However, it is also clear that the verb pairs displayed in table 138 and the type of alternation – middle – that can be derived from intransitive forms have actually more to do with voice than transitivity. As transitivity refers to verbs that may be monovalent, bivalent or trivalent, we may question the straightforward relationship made in the case of

neighbouring languages between other types of alternation, say voicing alternation, and transitivity, as Hill (2014) does in the case of Tibetan.

The pair *njekf-an* vs. *njektf-an* 'to hide', although it does not display any transitivity marking as such (the verb roots are [nɛkʃ] and [nɛktʃ] respectively) suggests there was an additional derivational pathway in addition to the derivation of transitive verbs from intransitive ones, namely derivation of transitive verbs from middle ones as well. A surmise is that a verb like *suf-an* 'to bath (oneself)' was previously a member of a pair involving *sutf-an*.

There was an additional derivational pathway from intransitive *tas-an* (which has *tau* as 2SG.NHON.IMP) to reflexive/middle *tatf-an* (which has *tat* as 2SG.NHON.IMP).

The triplet *hu-an* 'to teach' vs. *huf-an* 'to learn, read, study, teach oneself' vs. *hutf-an* 'to teach' – the only one in my database – showcases a full derivational pathway intransitive-middle-transitive, with a fourth verb root in [hut]. Three roots [hu], [hut]²⁴⁷ and [huʃ] may occur in passive constructions, one ([hut]) with the causative and 2SGNHON imperative, [hu], [huʃ] and [hut] in other TAM contexts.

The account of transitivity provided in this section nevertheless suggests transitivity classes are a (relatively) recent innovation. Verb classes were originally based on an alternative semantic criterion. In addition, the combination of morphological transitivity, restricted to a handful of cases only, with frozen transitivity, sheds light on a process whereby transitivity distinctions are disappearing.

1.5.3 Object agreement

Contrary to subject agreement and middle voice marking, object agreement is a rarity in the languages commonly assigned to the 'West-Himalayish' subgroup. With the exception of Shumcho (Huber 2013), this grammatical phenomenon has not been investigated thoroughly. Its absence in most of the languages commonly assigned to the subgroup may

²⁴⁷ As in *ga:-∅ hindi-∅ hut to-a to* 1SG-ABS Hindi-ABS hut come-PROG AUX.PEEX ('I am being taught Hindi'), and *eme-tʃi ga:-∅ hindi-∅ teach to-a to* 3SG-ERG 1SG-ABS Hindi-ABS teach come-PROG AUX.PEEX ('he/she is teaching me Hindi'), to be compared with *ga:-∅ eme-∅ hindi-∅ hu-a t-ɔk* 1SG-ABS 3SG-ABS Hindi-ABS teach-PROG AUX.PEEX-1SG ('I am teaching him/her Hindi'); *hut toa* is also found with the causative 'to make', the periphrastic causative form *mat* is added to it, with the suffix *-t* in *mat* marking the object a second time (in addition to the use of a periphrastic construction): *eme-tʃi ga:-∅ hut ma-t toa to* 3SG-ERG 1SG-ABS teach CAUS-OBJ.1.2 come-PROG AUX.PEEX ('he/she is making me teach').

find its confirmation in future studies, but it can also be the result of obsolescence, or it yet has to be uncovered.

1.5.3.1 Scarce data within ‘West-Himalayish’

The latter hypothesis is relevant considering the Chhitkul-Rākchham case, a language that encodes more than one argument on the verb, in addition to the grammatical subject. Object agreement in Chhitkul-Rākchham is realized by means of periphrastic constructions, but also suffixes and vowel elongation. Further, object agreement occurs with all aspects, with finite and non-finite verbs, in the imperative mood and in causative constructions. Chhitkul-Rākchham provides evidence for what we may otherwise infer from a review of the available literature on West-Himalayish: object agreement is a much more complex feature than previously thought, being conditioned by an array of semantic factors that includes animacy and affectedness. I provide a brief account in Chhitkul-Rākchham below.

In the so-called Eastern branch, only Bunan would exhibit one marker (*-ku*) of an object agreement system that has become obsolete (Widmer 2014: 574). In the so-called Western branch, Huber (2013: 239-254) describes at length a system of object agreement in Shumcho, realized by means of a single suffix (*-s/-ts^h*). The suffix distinguishes the interlocutors from more peripheral participants. The marker can occur in a wide range of configurations: with finite and non-finite verb forms, optionally with converbs, often accompanied by verb reduplication, it can occur with all tenses, in the (interrogative) imperative form of the verb, and in complement clauses as well. Conversely, object marking does not occur in reflexive constructions. Interestingly, Huber suggests (*ibid*, p. 244) that object agreement has a pragmatic function in that it is obligatory in some cases and optional in some others, with affectedness possibly being the defining factor of its occurrence. Further, object agreement can encode either the direct or the indirect object.

An object agreement system has also been described in the case of Kinnauri (Sharmā 1988: 134; Saxena 1995: 272-4; Takahashi 2001: 111-2; Takahashi 2011: 343-8), where first and second person are marked by means of the suffix *-č*. Whereas Sharmā (*ibid*) contends third person would be marked as well (with the suffix *-t*), both Saxena and Takahashi (*ibid*) are adamant that there is no agreement marker for third person objects. Saxena makes

another interesting observation. The verb ‘to give’ exhibits a different pattern with the use of an alternative verb stem instead of the suffix -č.

Sharmā (1989: 232) describes a similar pattern in Gahri (otherwise called Bunan), but this is not part of Widmer’s (2017) subsequent description. Sharmā (1989: 365) argues that a system of object agreement is also a feature of Kanashi. Referring to the Linguistic Survey of India (LSI), he nonetheless only briefly hints at remnants of a system of suffixes. Finally, with regard to Chhitkul-Rākchham, Bailey (1920: 80) was the first to identify the suffix -c (-*tf*) as second person object marker (as in Standard Kinnauri). Bailey (ibid) also notes that “the *s* in *das*, ‘give’, may also have a special meaning. Sharmā (1992: 260) refers to object suffixes “infixes in between the verb stem and the tense-person markers [...] attested in a few sporadic cases only”. Only one suffix form, the same one as in Bailey, is provided, for example in *taŋ-c-i* (‘I saw you’, -*c* being the object suffix, and -*i*, a past tense marker). In addition, based on an earlier observation from Bailey (1920: 80), Sharmā mentions second person imperative forms having the same suffix. As we shall see, however, the suffix -*tf* is indeed used in Chhitkul-Rākchham with second person plural imperative forms, but the marker refers to the first and second person plural subject – and not object – agreement marker.

It follows from the above considerations that object agreement markers, mostly suffixes, typically mark first person or first and second person, i.e. the interlocutors, but not third. They occur on a limited set of verbs after the stem and before aspect markers. What remains virtually unknown is their exact scope and the pragmatic factor(s) that trigger their occurrence.

1.5.3.2 Morphosyntactic coding and triggering factors

Dealing now with how object agreement is encoded in Chhitkul-Rākchham, one would expect to find one or more suffix markers. The assumption is correct, but consider first the following examples:

ga:-∅ kin=tiŋ riŋ-ã tɔ-k 1SG-ABS 2SG.HON=DAT tell.OBJ.2-PROG AUX.PEEX-1SG (‘I am telling you’)

ga:-∅ eme=tiŋ lo-a (alternatively la:) tɔ-k 1SG-ABS 3SG.HON=DAT tell.OBJ.3-PROG
(alternatively tell.OBJ.3.PROG) AUX.PEEX-1SG ('I am telling him/her')

ga:-∅ kinsa:=tiŋ riŋ-ã tɔ-k 1SG-ABS 2PL.HON=DAT tell.OBJ.2-PROG AUX.PEEX-1SG ('I am
telling you' – PL)

ga:-∅ emesa:=tiŋ lo-a (alternatively la:) tɔ-k 1SG-ABS 3PL.HON=DAT tell.OBJ.3-PROG
(alternatively tell.OBJ.3.PROG) AUX.PEEX-1SG ('I am telling them')

The verb *riŋ* occurs with second person objects whereas *lɔŋ* goes hand in hand with third person ones. Irrespective of subject forms, this sharp distinction applies to present and future (*riŋnɔk* vs. *lɔnɔk*) temporality, to the imperative (*rĩ* vs. *lɔĩ*), and to non-finite construction like the conditional. Non-honorific objects are not part of the previous paradigm as the pattern is the same. Since *riŋã* is also used with first person objects (*kin ga: tiŋ riŋã toĩ*, 'you are telling me'; *emesa: ga: tiŋ riŋã to*, 'they are telling me'), a distinction is operated between the interlocutors and third person. A similar pattern, *rəŋmu* with 1st and 2nd person objects vs. *lɔnmu* with 3rd person objects, is described by Saxena (2017: 770) in Kinnauri. Now consider the following examples in a past tense context:

eme-tŋi ga:=tiŋ riŋ-de-∅ 3SG.HON-ERG 1SG=DAT tell.OBJ.1-IMPV-3 ('he told me')

eme-tŋi kin=tiŋ rĩ 3SG.HON-ERG 2SG.HON=DAT tell.OBJ.2.PFV ('he told you')

eme-tŋi eme=tiŋ lɔ-te-∅ (alternatively lɔt-f-i) 3SG.HON-ERG 3SG.HON=DAT tell.OBJ.3-IMPV-
(alternatively tell.OBJ.3-MID-IMPV) ('he told him/her')

eme-tŋi niŋ-sa:= tiŋ riŋ-de-∅ 3SG.HON-ERG 1PL.EXCL-PL=DAT tell.OBJ.1-IMPV-3 ('he told
us')

eme-tŋi kin-sa:=tiŋ rĩ 3SG.HON-ERG 2PL.HON-PL=DAT tell.OBJ.2.PFV ('he told you' – PL)

eme-tŋi eme-sa:=tiŋ lɔ-te-∅ (alternatively lɔt-f-i) 3SG.HON-ERG 3PL.HON-PL=DAT tell.OBJ.3-
IMPV-3 (alternatively tell.OBJ.3-MID-IMPV) ('he told them')

In this case, first, second and third person have distinct verb forms. This pattern is only observable with third person subjects. With other subjects, the distinction is limited to the interlocutors. We notice however, that *riŋde* and *rĩ* originate from the same verb form, *riŋ*. The former is the imperfective form, the latter the perfective one. In other words, the distinction is less sharp between first and second person objects than it is between first and second person on the one hand and third person objects on the other. The important point is that whereas there is a distinction between the interlocutors and third person in

present and future tense constructions, the distinction is finer in the past (between first, second and third person objects). This tripartite distinction is only attested once in my data. In all the other instances, the distinction is either between the interlocutors and more peripheral participants or between 1st person objects on the one hand and 2nd-3rd person objects on the other. In the conditional, the same distinction between between *riŋ* (used with first and second person objects) and *loŋ* (use with third person objects) applies. Note that in ‘I will tell you’ and ‘you will tell me’, the verbal form differs as well, just like in the past:

eme-∅ ga:=tiŋ riŋ-na ga:-∅ kin=tiŋ riŋ-no-k 3SG.HON-ABS 1SG=DAT tell.OBJ.1-COND 1SG-ABS 2SG.HON-DAT tell.OBJ.2-IRR.DUB-1SG (‘if he/she tells me, I will tell you’)

eme-∅ kin=tiŋ riŋ-na kin-∅ ga:=tiŋ rĩ 3SG.HON-ABS 2SG.HON=DAT tell.OBJ.2-COND 2SG.HON-ABS 1SG=DAT tell.OBJ.1-2SG.HON.IMP (‘if he/she tells you, you will tell me’)

eme-∅ eme=tiŋ lon-na ga:-∅ kin=tiŋ riŋ-no-k 3SG.HON-ABS 3SG.HON=DAT tell.OBJ.3-COND 1SG-ABS 2SG.HON=DAT tell.OBJ.2-IRR.DUB-1SG (‘if he/she tells him/her, I will tell you’)

Further, in the example below, a periphrastic form of the verb *hulaŋ* (‘to push’), consisting of the bare stem of the verb, the finite form of the verb *toŋ* ‘to come’ (*to-a* in the present, *tu-ti* in the past, *tu-no* in the future) and the auxiliary form (inflected for person) occurs with 1st and 2nd person objects. This applies to all subjects and all tenses. For 3rd person objects, the verb form consisting of the usual sequences V-ASP (AUX-IMPV-AGR), V-IMPV-AGR, or V-ASP (AUX-AGR) occurs instead (the sequential patterns are described in the next section). The difference between the two verbal constructions is that we understand we are dealing with present tense by looking at the second verb verb form (*toa*) in the former case whereas we obtain the same information by looking at the auxiliary form in the latter case:

eme-∅ ga:-∅ hul to-a to-∅ 3SG.HON-ABS 1SG-ABS push come.OBJ.1-PROG AUX.PEEX-3 (‘he/she is pushing me’)

eme-∅ kin-∅ hul to-a to-∅ 3SG.HON-ABS 2SG.HON-ABS push come.OBJ.2-PROG AUX.PEEX-3 (‘he/she is pushing you’)

eme-∅ eme-∅ hul-a to-∅ 3SG.HON-ABS 3SG.HON-ABS push-PROG AUX.PEEX-3 (‘he/she is pushing him/her’)

eme-∅ niŋ-sa:-∅ hul to-a to-∅ 3SG.HON-ABS 1PL.EXCL-PL-ABS push come.OBJ.1-PROG
AUX.PEEX-3 ('he/she is pushing us')

eme-∅ kin-sa:-∅ hul to-a to-∅ 3SG.HON-ABS 2PL.HON-PL-ABS push come.OBJ.2-PROG
AUX.PEEX-3 ('he/she is pushing you')

eme-∅ eme-sa:-∅ hul-a to-∅ 3SG.HON-ABS 3PL.HON-PL-ABS push-PROG AUX.PEEX-3
(‘he/she is pushing them’)

Periphrastic constructions seem to be the most productive way to mark animate objects in Chhitkul-Rākchham. The verb *huaŋ* undergoes a similar alternation between 1st/2nd person objects and 3rd: *ga: eme hindi hua tək* ('I am teaching him/her Hindi') vs. *eme(tfi) ga: hindi hut toa to* ('he/she is teaching me Hindi'), and so does the verb *antfaŋ* ('to wake someone up'): *eme ga:/kin an toa to* (he is waking me/you up') vs. *eme eme ana to* ('he/she is waking him/her up').

When considering the first example and looking back at §1.3.3.3, we can make the interesting observation that *eme(tfi) ga: hindi hut toa to* means both 'he/she is teaching me Hindi' and 'I am being taught Hindi (by him/her)', that is, the DOI construction is the same as the passive one. As we have seen in the previous section, the suffix *-t* occurs in a few passive constructions where the patient is highly affected, affectedness being central in differential object indexing as well.

Yet, another pattern emerges when considering the verb *dasan* ('to give'), the verb root of which is *da* and the infinitive is *-san*. As the following examples demonstrate, object marking is realized in the imperative by means of the suffix *-s* as already emphasized in Bailey (1920: 80). In the present tense, two alternative verb forms inflected for the progressive (*-sa* vs. *-ga*) occur: *dasa* with 1st and 2nd person objects, and *da:* or *daga* with 3rd:

eme-tfi ga:-∅ kuɔn-∅ da-s-a to-∅ 3SG.HON-ERG 1SG-ABS food-ABS give-OBJ.1-PROG
AUX.PEEX-3 ('he/she is giving me food')

eme-tfi kin-∅ kuɔn-∅ da-s-a to-∅ 3SG.HON-ERG 2SG.HON-ABS food-ABS give-OBJ.2-PROG
AUX.PEEX-3 ('he/she is giving you food')

eme-tʃi eme-∅ kuɔn-∅ da: (alternatively daga) to-∅ 3SG.HON-ERG 3SG.HON-ABS food-ABS
give.PROG AUX.PEEX-3 (‘he/she is giving him/her food’)

eme-tʃi niŋ-sa:-∅ kuɔn-∅ da-s-a to-∅ 3SG.HON-ERG 1PL.EXCL-PL-ABS food-ABS give-OBJ.1-
PROG AUX.PEEX-3 (‘he/she is giving us food’)

eme-tʃi kin-sa:-∅ kuɔn-∅ da-s-a to-∅ 3SG.HON-ERG 2PL.HON-PL-ABS food-ABS give-OBJ.2-
PROG AUX.PEEX-3 (‘he/she giving you food’)

eme-tʃi eme-sa:-∅ kuɔn-∅ da: (alternatively daga) to-∅ 3SG.HON-ERG 3PL.HON-PL-ABS
food-ABS give.PROG AUX.PEEX-3 (‘he/she is giving them food’)

kuɔn-∅ da-s-ĩ food-ABS give-OBJ.1-2SGHON.IMP (‘give me/us food!’)

kuɔn-∅ da-ĩ food-ABS give-2SGHON.IMP (‘give him/her/them food!’)

The occurrence of two alternative verb forms inflected for the progressive depending on which object is encoded is found in a few verbs like *dasan* the stem of which ends in the vowel /a/ and the infinitive marker of which is *-san*. Consider *ʃja-san* (‘to look at someone’): *eme ga:/kin/niŋsa:/kinsa: ʃja toa to* (‘he/she’ is looking at me/you/us/you – PL’) vs. *eme eme/emesa: ʃjaga to/ta* (‘he/she is looking at him/her/them’). *Za-san* ‘to eat’ behaves in a somewhat similar way, the difference being the choice of verb forms is limited to *za:* vs. *zaga*, thus, *ga: za:~zaga tɔk* (‘I am eating’), *zasa* being unattested. Unsurprisingly, an inanimate object is not marked in the future tense: *ga: kwan zanɔk* whereas an animate one is by means of a periphrastic construction: *ga: kin za: tunɔk* (‘I will eat you’).

Interestingly, the same form, *dasa*, occurs when the recipient is definite, but inanimate: *ga:/kin/eme huju tʃʰetiŋ dza taim dasa tɔk/toĩ/to* (‘I am giving a lot of time to this’).

In future tense constructions, object marking shows yet another pattern. Compare *emetʃi ga:/kin/niŋsa:/kinsa: da:no* (‘he/she will give me/you/us/you – PL’) with *emetʃi eme/emesa: dano* (‘he/she will give him/her/them’). Here, 1st and 2nd person objects are distinguished from 3rd ones by vowel elongation, but it doesn’t apply to the other future form of the verb, *dats*, which remains the same with all persons as objects.

In the past, the same verb distinguishes this time between 1st person objects vs. 2nd and 3rd ones by means of different verbal forms: *emetfi ga: dase* ('he/she gave me') vs. *emetfi kin/eme deja* ('he/she gave you/him/her'). In this precise case, object marking is therefore realized differently from what was observed in the case of *riŋ* vs. *lŋ*, but what both cases have in common is that the usual distinction between 1st/2nd person objects on the one hand and 3rd person objects on the other hand is replaced by another. In other words, aspect seems to distort the usual distinction between interlocutors and 3rd person objects.

Object marking alignment is skewed by aspect as well as in the past progressive a first person object is marked differently from a third one (*emetfi ga: dasa tase* 'he/she was giving me' vs. *emetfi ga: da: tase* 'he/she was giving him/her') with the second person object either marked as the first or as the third.

With conditional mood, object marking is realized by augment: *ga: kin huju dana kin kamaŋ lanoĩ* ('if I give you this, you will do the job') vs. *ga: eme huju danna, eme kamaŋ lano* ('if I give him/her this, he/she will do the job').

The verb 'to give' therefore behaves differently in Chhitkul-Rākchham than it does in Kinnauri, where a different stem altogether is used in the past and future and where the distinction is consistently between first/second person objects and third person ones (Saxena 1995: 273; Takahashi 2011: 347).

Further, object marking applies to causative constructions. In the following example, the first person object is marked differently (with a different aspectual form) from second and third: *emetfi t^han ts^haŋmo ga: ɔfa an tute* ('he/she made me get up early this morning') vs. *emetfi t^han ts^haŋmo kin ɔfa an tuti/anfi*; ('he/she made you get up early this morning') and *emetfi t^han ts^haŋmo eme ɔfa anfi* ('he/she made him/her get up early this morning'). Again, aspect leads to a different alignment pattern.

1.5.3.3 Further considerations

From the previous examples we understand that object marking in Chhitkul-Rākchham is obligatory, marked on verbs, object (direct or indirect) agreement exclusively occurs with

personal pronouns ²⁴⁸ and is realized by means of the suffix *-s* and *-t*, but also the augment *-n* (in the conditional mood), suppletion, periphrastic constructions, and vowel elongation, i.e. different phonological, morphological and syntactic means. Further, object marking occurs in all temporal contexts, with finite and non-finite verb forms, and in causative constructions as well. The same way some verbs exhibit a pattern of object marking, some others do not. Contrary to Kinnauri, ‘to bring’ in Chhitkul-Rākchham does not discriminate between objects, and so is the case for ‘to send’, ‘to write’, and ‘to meet’. In the case of ‘to send’ and ‘to write’, the presence of a higher-ranked argument (a recipient) is not relevant. It seems reasonable to assume, like Widmer (2018: 96) does, that one triggering factor of object agreement is “a comparatively high degree of transitivity”. However, as we have seen earlier, *p^hεη* (‘to send’) is a transitive verb, but the same form, *p^hεa*, occurs with all objects. Takahashi’s observation (2011: 346) that verbs exhibiting object marking denote “a pattern of movement” into and away from the deictic center is not helpful, at least in Chhitkul-Rākchham, for it does not seem to have any explanatory power in the case of ‘to see’, ‘to look at’ and ‘to know’. Besides, such an approach does not account for why ‘to give’ triggers object marking when ‘to bring’ does not. Instead, what can be inferred from the available data is that animacy and affectedness (the object is more affected when considering ‘to give’, ‘to be taught’, ‘to look at’, ‘to push’ compared with ‘to bring’, or ‘to meet’) are more defining triggering factors while tense and aspect influence alignment patterns to some extent.

Furthermore, if one assumes that Chhitkul-Rākchham belongs to the ‘West-Himalayish’ subgroup, Widmer’s (2018: 97) claim that “all WH languages for which object agreement has been described only retain object markers that index speech act participants” is not entirely accurate. Interlocutors and participants that are more peripheral may just be marked differently in Chhitkul-Rākchham, as shown in *daga* vs. *dasa* and *dase* vs. *dafi*. It is correct, however, that when object marking is realized by means of periphrastic constructions, which seems to be the most common pattern in Chhitkul-Rākchham, the distinction is between 1st-2nd person objects and 3rd person objects, with 3rd person objects remaining unmarked.

Aspect clearly influences where the distinction is made in terms of object marking between first, second and third person objects. As mentioned earlier, ‘to tell’ shows a tripartite

²⁴⁸ See the definiteness scale proposed by Haspelmath (2008).

distinction; ‘to give’ displays a distinction between 1st person objects on the one hand and 2nd and 3rd on the other (the same pattern is observed in the case of ‘to see’), that is, contrary to Kinnauri (Takahashi 2007: 344), a distinction between first and second person objects may be made in Chhitkul-Rākchham. ‘To wake someone up’ exhibits another pattern: the distinction here is between 1st and 2nd person objects on the one hand and 3rd on the other. All types of configuration seem possible in a past context: in the case of ‘to see someone’, when the subject is first person singular, there is no distinction between first, second and third person objects, the verbal form being invariably *tanji*, with *-ji* as the perfective suffix, which means both Bailey and Sharmā were wrong when claiming that in *tanj-c-i -c* is the second person object suffix, and *-i*, the past tense marker. Intriguingly, there is no mention of an ‘aspectual effect’ in the case of Kinnauri. Why aspect would trigger alternative patterns of alignment is a novelty from a cross-linguistic perspective and certainly needs further research.

In terms of possible sources for object agreement markers, it may seem appropriate to consider the correspondence observed, in some languages, between independent personal pronoun forms and verbal person agreement. According to this view, full object pronouns are shortened and become marked on verbs, just like subject agreement markers are. The hypothesis is nonetheless doubtful as there is no direct relationship between the suffixes identified in this section and the first and second personal pronoun forms *ga:* and *kin* (or *kan*) and the first and second pronouns agreement markers *-k* and *-n*. Further, postulating a pathway between subject and object marking amounts to saying they work the same way cross-linguistically, which is at odds with recent findings I mention below.

In an attempt to identify cognate morphemes between Eastern and Western Himalayan varieties, Widmer (2018: 96) notes that Kinnauri “has an object agreement marker [-tɕ] that is phonologically reminiscent of the transitive class marker found in Bunan and Rongpo [-tɕ/-c]”. While object marking in Chhitkul-Rākchham may be realized by means of causative constructions, that is, by means of a pathway to transitivity, the transitive marker *-tʃ* is in no way related to any of the object markers outlined earlier.

Referring to our observations from appendix 1, §1.3.3.2, there is a possible connection between the suffix *-s* found at the end of a handful of verb stems and the middle voice marker *-f*. If such is the case, the next step is to posit that the middle/reflexive suffix is

related to the object suffix -s identified in this section (in the imperative of *dasan* ‘to give’ *das̃* ‘give me, us’). This is what Jacques (2021) proposes in the case of the Shumcho object suffixes -s/-ts^h. However, this lead is inconclusive in Chhitkul-Rākchham, where /s/ in *dasan* ‘to give’ is not part of the verb root. Arguably, /ʃ/ occurs in the perfective (*dafi*), but it does only so to contrast with the perfective of *da:san* ‘to break – INTR’ (*da:i*), see table 116 in appendix 1, §1.3.3.2.

Object marking in Chhitkul-Rākchham is too versatile to be ascribed to a unique source. A purely grammatical approach, notably the grammaticalization of personal pronouns towards agreement (Siewierska 1999) is bound to fail short of any tangible explanatory power. As pointed out by Haig (2018), a unified approach on grammaticalization fails to account for why subject agreement markers in the world’s languages tend to be obligatory when object agreement markers generally do not, plateauing at an “attractor state” characterized by stability from a diachronic perspective. Hence, what truly makes the specificity of the phenomenon is its conditionality, reason why I use the term Differential Object Indexing (DOI, see lemmolo and Klumpp 2014, Sinnemäki 2014).

From this perspective, semantic factors such as animacy, topicality, focus, definiteness and affectedness are in dire need of investigation. Considering, in the case of the verb ‘to tell’, the fine-grained distinction operated between all person objects, which obviously reflects a need to be more specific when using past reported speech, a link with evidentiality – a semantic-conceptual domain – can also be established. The close relationship observed between aspect with regard to both DOI and evidentiality is also noteworthy.

1.5.4 TAM morphology

The distribution of TAM markers is phonologically conditioned.

1.5.4.1 Tense morphology

As mentioned in §3.1.1.1, there is no tense marking in Chhitkul-Rākchham.

1.5.4.2 Aspectual morphology

A Chhitkul-Rākchham verb may inflect for four types of aspect: perfective, imperfective, progressive, and habitual.

1.5.4.2.1 The perfective tense markers *-i*, *-fi* and *-ti*

The plain suffix *-i* follows verb stems ending in post-alveolar consonants: *kɔlf-aŋ* ‘to speak’ → *kɔlf-i*; *latf-aŋ* ‘to do’ → *latf-i*, and verb stems ending in the voiceless alveolar /s/: *pɔs-aŋ* → *pɔs-i*; *as-aŋ* → *asi*.

When the infinitive verb stem The plain suffix *-i* also attaches to monosyllabic verb stems ending in the back rounded vowels /u/ and /o/ having *-aŋ* as infinitive marker. The perfective suffix *-i* undergoes nasalization when the verb stem starts in a voiceless plosive, thus, *tu-aŋ* ‘to drink’ → *tu-ĩ*; *ts^ho-aŋ* ‘to buy’ → *ts^ho-ĩ*; but *gu-aŋ* ‘to like’ → *gu-i*; *maŋ* ‘to dream’ → *mai*. The perfective *-i* is also nasalized in the unique case of *oaŋ* ‘to rise, grow, come out’, where the verb stem only consists of *o* → *o-ĩ*.

Finally, the suffix *-i* also attaches to verb stems ending in /n/ and starting with a voiced consonant: *nɔn-aŋ* ‘to sleep’ → *nɔni*; *gin-aŋ* ‘to need’ → *gini*; *hun-aŋ* ‘to live, stay’ → *huni*. *Jyn-aŋ* ‘to walk’ is a special case in that /a/ is inserted between [y] and /n/ → *jyani*²⁴⁹.

The suffix *-fi* attaches to verb stems ending in bilabial /p/ and /m/: *supaŋ* → *supfi*; *rumaŋ* → *rumfi*, and to verb stems ending in /n/ starting with a voiceless consonant, as in *pɔnaŋ* ‘to sew’ → *pɔn-fi*.

The suffix *-fi* also attaches to verb stem ending in the back rounded vowels /o/ and /u/ when the infinitive marker is *-saŋ*, thus *k^hɔ-saŋ* ‘to reep’ → *k^hɔ-fi*; *krɔ-saŋ* ‘to mix’ → *krɔ-fi*; *k^hju-saŋ* ‘to scratch’ → *k^hju-fi*; *tu-saŋ* ‘to bring’ → *tu-fi*, etc. Two exceptions to the pattern are *t^hɔ-saŋ* ‘to get ripe’ → *t^hɔs-i* and *tjo-saŋ* ‘to weep’ → *tjo-i*. A surmise is that these two verbs being very similar, there is a need to make them clearly distinct in the perfective.

²⁴⁹ The progressive and future tense forms are regular: *jyna* and *jynno* respectively. We may therefore surmise the insertion of /a/ is due to the concomitant occurrence of the glide /j/ - the glide equivalent of /i/- in initial position and of the perfective marker *-i* in final position.

All verbs the stem of which ends in /ea/, invariably derived from Hindi, also take the perfective *-fi* in case the infinitive is *-saŋ*, thus *batfea-saŋ* → *batfea-fi*; *bitea-saŋ* → *bitea-fi*; *mɔnea-saŋ* → *mɔnea-fi*, etc.

Verb stems ending in /a/ with an infinitive in *-saŋ* take the perfective suffix *-fi*, thus *da-saŋ* 'to give' → *da-fi*; *ts^ha-saŋ* 'to know' → *ts^ha-fi*. A first exception is *za-saŋ* 'to eat' → *zai*. In this case, we may surmise the perfective marker is not *-fi* because 'to eat' exhibits irregular patterns in Tibetan, from which it is borrowed. A second exception is *fja-saŋ* 'to watch, look (at)' → *fjas-i*. A surmise is that there is a need to make a clear distinction between *fje-saŋ* 'to recognize' → *fje-fi* and *fjas-i* in the perfective.

Verb stems ending in /a:/ when the infinitive marker is *-saŋ* invariably take the perfective suffix *-fi*, thus *ta:-saŋ* 'to allow' → *ta-fi*; *bra:-saŋ* 'to chew' → *bra-fi*. *Da:sanŋ* 'to break – INTR' → *dai* is an exception which can be explained by the need to distinguish it from *dafi* (from *dasanŋ* 'to give').

Verb stems ending in /a:/ with *-ŋ* as infinitive marker undergo alternation, taking the augment *-ŋ*. The perfective marker is invariably *-fi*, thus *ta:-ŋ* 'to see' → *taŋ-fi*; *za:-ŋ* 'to show' → *zaŋ-fi*. Note that in both cases, the vowel undergoes a process of shortening.

Verb with a stem ending in /e/ and taking the infinitive *-saŋ* take *-fi*, thus *baŋde-saŋ* 'to smell of' → *baŋde-fi*; *tje-saŋ* 'to write' → *tje-fi*; *fje-saŋ* 'to recognize' → *fje-fi*.

Disyllabic verbs with a stem ending in /i/ and taking the infinitive *-saŋ* also take *-fi*, thus *puzi-saŋ* 'to worship' → *puzi-fi*; *kɔli-saŋ* 'to feel' → *kɔli-fi*; *funi-saŋ* 'to shout' → *funi-fi*.

Monosyllabic verb stems ending in /i/ and taking the infinitive *-aŋ* and *-ŋ* undergo a process of nasalization. The verb stem final /i/ becomes nasalized when the infinitive is *-aŋ*, thus *kri-aŋ* 'to shiver' → *krĩ*. This phenomenon exclusively occurs when there is a transfer of nasality from a syllable-initial consonant cluster (consonantal onset) starting with a voiceless consonant.

The verb *dzi-aŋ* 'to howl' → *dzijĩ* is yet another case. The verb stem is unchanged, but the perfective suffix *-i* becomes nasalized, not because of the initial consonant cluster, which,

contrary to /kr/, cannot trigger nasalization transfer, but as a result of the insertion of the euphonic glide /j/ between the stem and the perfective suffix *-i*.

When the infinitive is *-ŋ*, the verb stem remains unchanged, but the perfective marker *-i* undergoes nasalization, as in *riŋ* 'to say' → *riĩ* 'told', the only example from my database.

In comparison, there is no nasalization in the case of disyllabic verb stems ending in /i/ and taking the infinitive *-saŋ* because /s/ is inserted between /i/ and the final nasal /ŋ/. This is why nasalization is entirely absent in the perfective forms of monosyllabic verb stems ending in /i/ taking *-saŋ* as infinitive: *ʃi-saŋ* 'to die' → *ʃi-i*; *li-saŋ* 'to be able to' → *li-i*; but *p^hi-saŋ* 'to throw' → *p^hi-ʃi*.

Disyllabic verb stems ending in /ε/ with an infinitive marker in *-ŋ* or *-aŋ* take the marker *-ti*, /ε/ undergoing a process of raising to /i/: *sɔmzεŋ* 'to understand' → *sɔmzi-ti*; *t^hurεŋ* 'to run' → *t^huri-ti*; *suntseŋ* 'to think' → *suntsi-ti*.

It is important to note that verb pairs exhibiting morphological correspondence (see table 138 in appendix 1, §1.5.2) only have one perfective form. Thus, *latʃi* is the perfective form of *latʃaŋ* 'to do', but *laŋ* does not have any perfective form. The same applies to *putʃi*, the perfective of *putʃaŋ* (*ri*: *putʃaŋ* → 'to plow the field'), whereas *puŋ* does not have any perfective form, and to *p^hεtʃi*, the perfective of *p^hεtʃaŋ* 'to send' vs. *p^hεŋ*, which has no perfective. This is so because, based on the previously mentioned rules, *laŋ* and *p^hεŋ* would otherwise have the same perfective form as *latʃaŋ* and *p^hεtʃaŋ*, and *puŋ* would have a perfective form, *puĩ*, identical to the second person singular honorific imperative (see table 146 in appendix 1, §1.5.7).

1.5.4.2.2 The imperfective tense markers *-e*, *-te* and *-de*

The plain suffix *-e* occurs after stems (and derivational morphology) ending in alveolar and post-alveolar consonants: *ga*: *kamaŋ latf-ε-k* ('I did the work'); *pɔsaŋ* 'to sit' → *ga*: *pɔs-ε-k*. *Gis-aŋ* 'to sneeze' is a special case. As with all verb stems ending in the post-alveolar /s/, the past tense form is *-e* → *gise*, but there is an alternative form in *gisite* where /i/ is inserted between the stem and the marker *-te*²⁵⁰.

²⁵⁰ Both forms seem to be in free variation, but further research will confirm or disprove this hypothesis.

The suffix *-de* occurs with stems ending in a stop consonant: *hunəŋ* ('to live, to stay') → *eme hun-de*; *ruməŋ* ('to count') → *eme rum-de*; *supəŋ* ('to sacrifice') → *eme sup-de*, and after liquids: *urəŋ* ('to wash') → *eme ur-de*; *huləŋ* ('to push') → *eme hul-de*.

The suffix *-de* also occurs after verb stems ending in /i/, /a/, /e/, /o/ and /u/ when the infinitive form is *-saŋ*: *suari-saŋ* 'to repair' → *suari-de*; *ji-saŋ* 'to die' → *ji-de*; *za-saŋ* 'to eat' → *za-de*; *dasəŋ* 'to give' → *da-de*; *ts^hasaŋ* 'to know' → *ts^ha-de*; *tfe-saŋ* 'to write' → *tfe-de*; *tʃ^he:-saŋ* 'to finish' → *tʃ^he:-de*; *tjo-saŋ* 'to weep' → *tjo-de*; *krɔ-saŋ* 'to mix' → *krɔ-de*; *k^hju-saŋ* 'to scratch' → *k^hju-de*, etc. This rule applies regardless of the infinitive marker in the case of /i/, but only when the infinitive marker is *-saŋ* with /a/, /e/, /o/ and /u/.

With verbs the infinitive stem of which ends in /o/, /u/ and /i/ (with *-aŋ* as infinitive marker) stem alternation takes place. A stem taking the velar nasal augment /ŋ/ is then followed by the past tense *-de*, thus *ts^ho-aŋ* 'to buy' → *tsɔŋ-de*; *tu-aŋ* 'to drink' → *tun-de*; *kri-aŋ* 'to shiver' → *kriŋde*, see appendix 1, §1.5.1.1.4. The same pattern applies to infinitive verb stems ending in /a:/ (with *-ŋ* as infinitive marker), thus *ta:-ŋ* to see → *taŋ-de*.

Verbs such as *batfeə-saŋ* 'to preserve', *biteə-saŋ* 'to spend', the stem of which ends in the diphthong [ea], derived from Hindi, invariably take *-de* → *batfeə-de*; *biteə-de*. When [ea] is preceded by /n/, the diphthong turns into /i/, thus *mɔneə-saŋ* 'to celebrate' → *mɔni-de*.

The verb *rɔŋ* 'to go', where the verb stem ends in /o/, followed by the infinitive marker *-ŋ* has a past tense marker in *-de*, thus *rode*. The other verb in this case, *tɔŋ* 'to come' exhibits stem alternation, having its past tense form in *tute*, distinct from its past tense form as auxiliary, namely *tɔte*.

The suffix *-te* occurs with monosyllabic infinitive forms ending in the vowel /a/, thus *laŋ* 'to do' → *la-te*, *ʃaŋ* 'to make, build, cook' → *ga: ʃa-ʃe*; *sa-ŋ* 'to kill' → *sa-te*.

Disyllabic verbs such as *suntse-aŋ* 'to think', *bođe-aŋ* 'to increase', the stem of which ends in /e/ and taking the infinitive *-aŋ* have their past tense forms in *-te*. /e/ undergoes raising, surfacing as /i/ in the process, thus *suntsi-te* and *bođi-te*.

Disyllabic verbs with a stem ending in /e/ and an infinitive in -ŋ undergo a process of raising, from /e/ to /i/. The past tense suffixes -te and -de are in free variation when /e/ is preceded by a voiced alveolar, thus *sɔmzɛ-ŋ* ('to understand') → *ga: sɔmz-i-dɛ-k*, or *ga: sɔmz-i-tɛ-k*. In the case of an unvoiced alveolar, free variation is between -te and -∅, as in *suntse-aŋ* 'to think': *ga: sunts-i-tɛ-k* or *ga: sunts-ɛ-k*. The past tense marker is otherwise -de, as in *tʰurɛ-ŋ* 'to run' → *ɛme tʰur-i-de*; *pɔrɛ-ŋ* 'to get' → *ɛme pɔri-de*. Monosyllabic verbs take -te, thus *pʰɛ-ŋ* 'to send' → *ɛme pʰete*.

To refer to an event that took place regularly in the past, but no longer in the present, a speaker uses the progressive marker, suffixed to the main verb, which is then followed by an auxiliary carrying (past) tense and subject agreement. An example is given in (5): V-(OBJ)-ASP AUX-IMPV-AGR. Alternatively the simple auxiliary form *tɔts*, as in (7): V-(OBJ)-ASP AUX-ASP.

Tables 6, 7, 8 and 9 provide the imperfective paradigm for *hun-aŋ* 'to live, stay', *pɔs-aŋ* 'to sit', *tsum-aŋ* 'to catch, hold', and *suntse-aŋ* 'to think'.

1.5.4.2.3 The progressive -a

The progressive -a, found on most verbs, attaches to verb stems ending in a consonant, thus *huf-aŋ* 'to learn, study, read' → *huf-a*; *hun-aŋ* 'to live, stay' → *hun-a*; *tsum-aŋ* 'to catch' → *tsum-a*; *tful-aŋ* 'to cut' → *tful-a*, *gis-aŋ* 'to sneeze' → *gis-a*, etc. The suffix -a also attaches to verb stems ending in the back rounded vowels /o/ and /u/ when the infinitive marker that follows is -saŋ, hence *krɔ-saŋ* 'to mix' → *krɔ-a*; *kʰɔ-saŋ* 'to reep' → *kʰo-a*; *tsu-saŋ* 'to rot' → *tsu-a*; *tʃjuti-saŋ* to squeeze → *tʃjuti-a*. In addition, the suffix -a attaches to verb stems ending in /o/, when the infinitive is -ŋ: *rɔ-ŋ* 'to go' → *rɔ-a*; *tɔ-ŋ* 'to come' → *tɔ-a*.

With verbs having their stem ending in the velar nasal /ŋ/, the progressive -a undergoes nasalization, thus *tsʰo-aŋ* 'to buy', but 'buying' → *tsɔŋ-ã*; *tu-aŋ* 'to drink, but 'drinking' → *tʉŋ-ã*²⁵¹. With those monosyllabic verb stems ending in /a:/, invariably taking the infinitive marker -ŋ, an alternative stem in the progressive also includes the velar nasal /ŋ/. In that case /a:/ undergoes shortening and the progressive -a becomes nasalized, thus *ta:-ŋ* 'to see' → *taŋã*; *za:-ŋ* 'to show' → *zaŋã*. *Ri-ŋ* 'to tell' follows the same pattern → *riŋã*.

²⁵¹ One exception is *gu-aŋ* 'to like', which takes the progressive -a with no nasal velar /ŋ/ inserted. This is because no verbal form with a monosyllabic verb stem may include two velar consonants.

Monosyllabic verb stems ending in the vowel /a/ with *-ŋ* as infinitive undergo elongation: *sa-ŋ* 'to kill' → *sa:*; *maŋ* 'to dream' → *ma:*; *laŋ* 'to do' → *la:*. When the infinitive is *-saŋ* there are two interchangeable verb forms²⁵² when the verb stem starts in the plosives /t/, /d/, the affricates /ts/, /ts^h/ (but not /tʃ/, /tʃ^h/ and /tʃj/), or in the fricatives /s/ and /z/. According to the first pattern, /a/ in the verb stem final position undergoes elongation. According to the second pattern, the epenthetic /g/ is inserted between the verb stem and the progressive suffix *-a*, hence the pairs *ta:~ta-g-a* 'keeping, putting'; *da:~da-g-a* 'giving'; *ts^ha:~ts^ha-g-a* 'knowing'; *za:~za-g-a* 'eating', etc. In all other contexts, there is only one possible form, namely the second, hence *ʃja-saŋ* 'to watch, look at' → *ʃja-g-a*; *t^ha-saŋ* 'to break – TR' → *t^ha-g-a*.

With verb stems ending in /i/ not preceded by an alveolar consonant, the progressive marker is *-a*, thus *p^hi-saŋ* 'to throw' → *p^hi-a*; *kri-aŋ* 'to shiver' → *kri-a*; *tʃ^hi:-saŋ* 'to bite' → *tʃ^hi:-a*; *dʒami-saŋ* 'to taste' → *dʒami-a*. However, in the special case of disyllabic verb stems where an alveolar consonant precedes /i/, as in *suari-saŋ* 'to repair' and *baŋzi-saŋ* 'to smell – TR', *ali-saŋ* 'to call, invite', a process of vowel lowering /i/ → /e/ takes place, the progressive forms being *sware-a*, *baŋze-a* and *ale-a* respectively. One exception to the rule is /n/, as in *ʃuni-saŋ* 'to shout' → *ʃunia*.

With verb stems ending in /e/, a relatively rare phenomenon, the progressive marker is invariably *-a* in case the infinitive is *-ŋ* or *-aŋ*: *ʃɔmzε-ŋ* 'to understand' → *ʃɔmze-a*; *p^hε-ŋ* 'to send' → *p^he-a*; *baŋde-saŋ* 'to smell of' → *baŋde-a*; *suntse-aŋ* → *suntse-a*. *Tʃe-saŋ* 'to write' is the only one verb from my database with a verb stem ending in /e/ and with two progressive forms: *tʃe-a* and *tʃa-g-a*, where /e/ undergoes vowel lowering, surfacing as /a/ and the epenthetic /g/ is inserted between the two /a/.

There are a handful of cases where the verb stem starts in a consonant cluster consisting of the affricate /tʃ/ and the glide /j/. In those cases, the infinitive marker is invariably *-saŋ*, and the epenthetic *-j* is inserted between the stem and the progressive marker *-a*, as in *tʃja-saŋ* 'to dance' → *tʃe-ja* (alternatively *tʃe-ga*); *tʃ^hje:-saŋ* 'to finish' undergoes the same process: → *tʃ^he:-ja*, but *tʃo-saŋ* 'to weep' → *tʃo-a*.

²⁵² According to my main consultant, these forms are in free variation.

All verb stems ending in /ea/²⁵³ are disyllabic and derived from Hindi: *batfeasaŋ* → बचाना (*batfānā*) *mɔneasaŋ* → मनाना (*manānā*); *biteasaŋ* → बिताना (*bitānā*). All these verbs are not overtly marked for the progressive: *batfea-∅*, *mɔnea-∅*, and *bitea-∅*.

1.5.4.2.4 The habitual -ts

The habitual (assertive) *-ts* attaches to stems ending in bilabial (/m/ and /p/), and voiced alveolar (/n/, /r/, /l/), thus *tsum-aŋ* ‘to catch’ → *tsum-ts*; *sup-aŋ* ‘to sacrifice, slaughter’ → *sup-ts*; *hun-aŋ* ‘to live, stay’ → *hun-ts*; *ur-aŋ* ‘to wash’ → *ur-ts*, *hul-aŋ* ‘to push’ → *hul-ts*. The habitual *-ts* also attaches to the velar /ŋ/, part of the stem in some TAM environments (when the verb takes *-aŋ* as infinitive suffix), thus *ts^ho-aŋ* ‘to buy’ → *ts^hɔ-ŋ-ts*; *tu-aŋ* ‘to drink’ → *tu-ŋ-ts*; *ta:-ŋ* ‘to see’ → *ta-ŋ-ts*, etc.

The epenthetic vowel /i/ may follow the stem, its occurrence being phonologically conditioned: /i/ occurs after verb stems ending in post-alveolar /ʃ/ and /tʃ/ and voiceless alveolar /s/, thus *huf-aŋ* → *huf-i-ts*; *latf-aŋ* → *latf-i-ts*; *pɔs-aŋ* → *pɔs-i-ts*. In the case of *tsɔmkj-aŋ* ‘to shine’, the glide /j/ undergoes deletion and is replaced by its vowel equivalent, thus *tsɔmki-ts*.

Verbs with a stem ending in /e/ and taking the infinitive marker *-ŋ* and *-aŋ* undergo raising: /e/ surfaces as /i/ before *-ts*, thus *sɔmze-ŋ* → *sɔmzi-ts*; *t^hure-ŋ* → *t^huri-ts*; *suntse-aŋ* → *suntsi-ts*. Monosyllabic verbs with a stem ending in /e/ take *-ts*, thus *p^hε-ŋ* ‘to send’ → *p^hε-ts*.

Before *-ts*, as before all nasals, voiceless plosives, voiceless fricatives, and other voiceless affricates, /e/ and /o/ undergo laxing, thus *tfe-saŋ* ‘to write’ → *tfe-ts*; *tjo-saŋ* ‘to weep’ → *tjɔ-ts*.

Note that *tɔŋ* ‘to come’ and *tus-aŋ* ‘to bring’, both irregular verbs, are distinguished by vowel length, *tu-ts* and *tu:-ts* respectively.

²⁵³ Chhitkul-Rākchham thus borrows the Hindi verb stem – which one obtains by removing the infinitive *-nā*, and then replaces /ā/ by /ea/. In his sketch grammar of Rongpo, Sharmā (2001b: 220) describes a somewhat similar system by which Indo-Aryan roots ending in consonants add /-ε/.

1.5.4.3 Mood

Chhitkul-Rākchham has three different moods: imperative (and prohibitive), hortative and irrealis. Consultative mood is a sub-type of imperative.

1.5.4.3.1 Imperative and prohibitive

As table 139 and 144 show, the second person singular honorific and the second person plural forms are realized by adding the suffixes *-ĩ* and *-tʃ* respectively to the stem. As mentioned in §3.1.3, most verbs have the bare root as second person non-honorific imperative. I discuss most exceptions in this section. I also claim in §3.1.3 that the second person singular extra-honorific is realized by adding the clitic = *ẽ* to the second person singular honorific form.

Table 144: imperative distinctions for a few verbs in Chhitkul-Rākchham

INF and meaning	2SGNHON	2SGHON	2SG extra HON	2PL
hʉn-aŋ 'to stay', live'	hʉn	hʉnĩ	hʉnĩ=ẽ	hʉnitʃ
rɔ-ŋ 'to go'	rɔ	rɔĩ	rɔĩ=ẽ	rɔtʃ
ur-aŋ 'to wash'	ur	urĩ	urĩ=ẽ	uritʃ
hʉfaŋ 'to learn, read, study'	hʉf	hʉfĩ	hʉfĩ=ẽ	hʉfitʃ
sufaŋ 'to bath oneself'	suf	sufĩ	sufĩ=ẽ	sufitʃ
pɔs-aŋ 'to sit down'	pɔs	pɔsĩ	pɔsĩ=ẽ	pɔsitʃ
gis-aŋ 'to sneeze'	gis	gisĩ	gisĩ=ẽ	gisitʃ
nas-aŋ 'to be sick, get sick'	nas	nasĩ	nasĩ= ẽ	nasitʃ
as-aŋ 'to become, happen'	ass	asĩ	asĩ=ẽ	asitʃ
sa-ŋ 'to kill'	sat	saĩ	saĩ=ẽ	satʃ
nɔn-aŋ 'to sleep'	nɔn	nɔnĩ	nɔnĩ=ẽ	nɔntʃ
tɔ-ŋ 'to come'	deja	deĩ	deĩ=ẽ	detʃ
tu-saŋ 'to bring'	kara	karĩ	karĩ=ẽ	karitʃ
ri-aŋ/ri-ŋ 'to tell'	riŋ	rĩ	rĩ=ẽ	riŋtʃ

o-aŋ 'to rise', get out'	oŋ	oĩ	oĩ=ě	oŋitʃ
tu-aŋ 'to drink'	tuoŋ	tuoŋĩ	tuoŋĩ=ě	tuoŋitʃ
ts ^h o-aŋ 'to buy'	tsuoŋ	tsoĩ/tsuoŋĩ	tsoĩ=ě	tsuoŋitʃ
za-saŋ 'to eat'	zau	zaĩ	zaĩ=ě	zatʃ
ta-saŋ 'to put', keep'	tau	taĩ	taĩ=ě	tatʃitʃ
suari-saŋ 'to repair'	suariu	suarĩ	suarĩ=ě	suaritʃ
ʃi-saŋ 'to die'	ʃiu	ʃĩ	ʃĩ=ě	ʃitʃ
ʃja-saŋ 'to look'	ʃjau	ʃjeaĩ	ʃjeaĩ=ě	ʃjatʃ
suntse-aŋ 'to think'	suntsiu	suntsĩ	suntsĩ=ě	suntsitʃ
t ^h urɛ-ŋ 'to run'	t ^h uriu	t ^h urĩ	t ^h urĩ=ě	t ^h urĩʃitʃ
da-saŋ 'to give'	dau	daĩ	daĩ=ě	datʃ
batʃeasaŋ 'to preserve'	batʃeau	batʃeaĩ	batʃeaĩ=ě	batʃeatʃ
suneasaŋ 'to narrate'	suneau	suneaĩ	suneaĩ=ě	suneatʃ
dzi-aŋ 'to howl'	dziũ	dziĩ	dziĩ=ě	dziĩtʃ~dziĩʃitʃ

Table 145: Imperative forms for verbs exhibiting morpho-semantic correspondence

INF and meaning	2SGNHON	2SGHON	2SG extra HON	2PL
ɦuʃaŋ 'to learn, read, study'	ɦuʃ	ɦuʃĩ	ɦuʃĩ=ě	ɦuʃitʃ
ɦuaŋ 'to teach'	ɦut	ɦuĩ	ɦuĩ=ě	ɦutʃ/ɦutʃitʃ
njekʃaŋ 'to hide oneself'	njekʃ	njekʃĩ	njekʃĩ=ě	njekʃitʃ
njektʃaŋ 'to hide'	njektʃ	njektʃĩ	njektʃĩ=ě	njektʃitʃ
njanaŋ 'to hide'	njan	njanĩ	njanĩ=ě	njanitʃ~njantʃitʃ
njantʃaŋ 'to hide'	njan	njantʃĩ	njantʃĩ=ě	njantʃitʃ
putʃaŋ 'to sow'	put	puĩ	puĩ=ě	putʃitʃ
puaŋ 'to sow'	put	puĩ	puĩ=ě	putʃitʃ
latʃaŋ 'to do'	latʃ	latʃĩ	latʃĩ=ě	latʃitʃ
laŋ 'to do'	lat	laĩ	laĩ=ě	latʃitʃ
tatʃaŋ ²⁵⁴ 'to make, build, cook'	tatʃ	tatʃĩ	tatʃĩ=ě	tatʃitʃ

²⁵⁴ An alternative form, *tjutʃaŋ*, can also be used.

taŋ 'to make, build, cook'	tat	taĩ	taĩ=ě	tatʃitʃ
urtʃaŋ 'to wash'	ur	urĩ	urĩ=ě	urtʃitʃ
uraŋ 'to wash'	ur	urĩ	urĩ=ě	uritʃ
pɔntʃaŋ 'to sew'	pɔn	pɔnĩ	pɔnĩ=ě	pɔnʃitʃ
pɔnaŋ 'to sew'	pɔn	pɔnĩ	pɔnĩ=ě	pɔnitʃ
pʰɛtʃaŋ 'to send'	pʰɛt	pʰɛtʃĩ	pʰɛtʃĩ=ě	pʰɛtʃitʃ
pʰɛŋ 'to send'	pʰɛt	pʰɛĩ	pʰɛĩ=ě	pʰɛtʃi
antʃaŋ 'to get up, stand up'	antʃ	antʃĩ	antʃĩ=ě	antʃitʃ
anaŋ 'to get up, stand up'	ann	annĩ	annĩ=ě	annitʃ
tʰatʃaŋ 'to beat'/'to hit'	tʰat	tʰaĩ	tʰaĩ=ě	tʰatʃ~tʰatʃitʃ
tʰaŋ 'to beat/to hit'	tʰat	tʰaĩ	tʰaĩ=ě	tʰatʃ~tʰatʃitʃ
rijuan~rijusan 'to ask'	riju	rijuĩ	rijuĩ=ě	rijutʃ
rijutʃaŋ 'to ask'	riju	rijuĩ	rijuĩ=ě	rijutʃ
dɛtʃaŋ 'to carry'	dɛt	dɛĩ	dɛĩ=ě	dɛtʃ
dean 'to carry'	dɛt	dɛĩ	dɛĩ=ě	dɛtʃ
lotŋ 'to say, tell'	lot	lotĩ	lotĩ=ě	lotʃ
lotʃaŋ 'to say, tell'	lot	lotĩ	lotĩ=ě	lotʃ

One must consider the whole set of distinctions to identify the verb stem:

As mentioned in §1.5.1.1, Chhitkul-Rākchham has four imperative forms, one of which, the non-honorific form, consists in most instances of the bare root of the verb with some intonation. Going back to tables 14, 136 and 139, imperative forms highlight derivational morphology. For example, the non-honorific form of *suʃaŋ* 'to bath oneself', is *suʃ*, with *-ʃ* as the middle voice (reflexive) marker. In the same vein, imperative forms revealing what the bare root is, they allow us to pinpoint at some variation in the infinitive marker. Thus, the infinitive marker is *-saŋ* in *ʃʃasaŋ* 'to look', but *-aŋ* in *pɔsaŋ* 'to sit down'.

The four-fold imperative distinction is based on honorificity and number. The second person singular honorific imperative *-ĩ* is identical to the second person singular honorific

subject agreement marker. The clitic =*ẽ* is added to *-ĩ* to convey heightened politeness. There is not a single example in the corpus, possibly because it is reserved to high-ranked community members (elders and members performing ritualistic functions). The second person plural imperative marker, *-(i)tʃ*, is also identical to the first and second person plural subject agreement marker.

A clitic or a particle denoting heightened politeness in the imperative is certainly not an isolated case from a cross-linguistic perspective. Jeffers and Zwicky (1980: 56) allude to non-pronominal clitic particles marking the imperative in Tagalog. Referring to Lizu, Chirkova (2015: 20) contends, “an imperative can be made more polite by adding the particle /me/ after the verb”.

tɔŋ ‘to come’ and *tusaŋ* ‘to bring’ have irregular imperative forms. *asaŋ* ‘to become, happen’ has an irregular second person singular non-honorific form, /ass/ (see table 144). A few lexical verbs the stem of which ends in a front unrounded vowel, /i/, /a/, and /ɛ/, have an irregular second person singular non-honorific form as well, as discussed in §1.3.3.1: *suarisaŋ* → *suariu*, *tasaŋ* → *tau*, *tʰureŋ* → *tʰuriu*, *suntseaŋ* → *suntsiu* (see table 136).

Interestingly, the Chhitkul-Rakchham copula verbs *to* (from *tɔŋ*), *ta* (from *tasaŋ*), and *a:* (from *asaŋ*), described in chapter 4 (see §4.1.3), have at least one irregular imperative form.

In comparison, Sharmā only identified two imperative forms, one singular (the verb root) and one plural, marked with the suffix *-tʃ*, providing the following example: *ɛme tiŋ* (*ek^he*) *rotʃ* ‘go with him/her’. Consequently, his description of infinitives becomes too simplistic as well (see §1.3.3.2): “the verb root is the imperative singular which is, normally, obtained by dropping the infinitive marker suffix /aŋ/-ŋ. It can end in a vowel or a consonant” (1992: 255).

The prohibitive is formed by placing an alternative negative prefix, *tʰa-*, on the verb stem. The prefix marks prohibitive commands with the four types of imperative forms discussed previously, thus *tʰapɔs* ‘don’t sit’ - 2SGNHON; *tʰapɔsĩ* - 2SGHON; *tʰapɔsĩ=ẽ* - 2SG extra-honorific; *tʰapɔsitʃ*.

1.5.4.3.2 Hortative

The hortative is formed by the combination of an imperative converbal form, *patf*, the root of which is /pa/ - and a verb inflected by *-e -te*, or *-de*. *Patf* has a similar meaning to Hindi *tʃalo* 'let's go'. I cannot connect the verb stem /pa/ with any lexical verb from my database. The suffixes *-e*, *-te* and *-de* are the imperfective markers discussed in chapter 3 (see §3.1.2.3). Thus, *patf ʃatrændʒ hətʃe* 'let's go playing chess'; *patf boseriŋ rote* 'let's go to Batseri'; *patf nɔnte* 'let's go sleeping', *kɔʃif latʃite* 'let's try', etc. Some non-finite verbs take either one or the other suffix with the epenthetic /i/ inserted between the verb stem and *-te* when the verb stem ends in an alveolar or post-alveolar consonant. Thus, free variation characterizes the pairs *hufe~hufite*; *latʃe~ latʃite*; *tʃʰukʃe~ tʃʰukʃite*, etc.

1.5.4.3.3 Irrealis

Irrealis mood is marked by either *-no* (dubitative and simultaneous temporality) or *-na* (conditional). I deal with the later in §1.6.2.

The epenthetic vowel /i/ may follow the stem, its occurrence being phonologically conditioned: /i/ occurs after verb stems ending in the sibilant fricatives *-ʃ*, *-s*, and *-tʃ*, thus *huf-aŋ* → *huf-i-no*; *pɔs-aŋ* → *pɔs-i-no*; *latʃ-aŋ* → *latʃ-i-no*.

Disyllabic verbs with a stem ending in /e/ and taking the infinitive marker *-ŋ* and *-aŋ* undergo raising: /e/ surfaces as /i/ before *-no*, thus *sɔmze-ŋ* → *sɔmzi-no*; *tʰurɛ-ŋ* → *tʰuri-no*; *suntse-aŋ* → *suntsi-no*, but *pʰɛ-ŋ* 'to send' → *pʰeno* since the verb is monosyllabic.

When the verb stem ends in the back rounded vowels /u/ and /o/ with an infinitive marker in *-saŋ*, the nasal velar *-ŋ* is inserted between the stem and *-no*, thus *tsʰo-aŋ* 'to buy' → *tsʰɔ-ŋ-no*, *tu-aŋ* 'to drink' → *tu-ŋ-no*. This applies to *ri-ŋ* 'to tell' as well → *ri-ŋ-no*, and to monosyllabic verb stem ending in /a:/, the long vowel undergoing shortening, thus *ta:-ŋ* 'to see' → *ʃa-ŋ-no* (but *tas-aŋ* 'to keep, put' → *ta-no*).

Note that *tɔŋ* 'to come' and *tusaŋ* 'to bring', both irregular verbs, are distinguished in the dubitative irrealis by vowel lengthening, *tu-no* and *tu:-no* respectively.

Dubitative mood may be marked on one of the three units within the ‘main verb complex’ discussed in chapter 5, by means of the irrealis-dubitative *-no* on main verbs, second verbs, on the copulas *ano*, *a:no* and *hunno*, and on the auxiliary *ano*. As mentioned in §1.3.4, a few monosyllabic adjectives can also take the suffix *-no*. Dubitative mood conveys a sense of doubt to the proposition, in all tense constructions. In negative constructions, the prefix *ma-* attaches to the verb or the adjective form and the suffix *-no* remains. (140) is an illustration of the irrealis *-no* occurring in a context of temporal simultaneity. I provide additional examples in §1.6.4.

Sharmā (1992: 283) uses the term “potential” mood to characterize *ano*, a type of mood giving “a sense of probability and presumption, with inferred certainty”. While *ano* may indeed denote an inference, based on whether its occurrence relies on perceptual evidence (see §4.3.2), I find the term “potential” inappropriate, proposing dubitative instead.

1.5.4.3.4 Consultative

Consultative mood is formed by means of the second person singular honorific imperative. This type of mood in Chhitkul-Rākchham covers English ‘may’ and ‘should’. I provide an example below:

(326) *ga:=∅ huju kuɔn=∅ za-ĩ ã*
 1SG=ABS DEM.PROX food=ABS eat-IMP.2SG.HON QP

‘May/should I eat this food?’ – DSN

Most verbs follow the same pattern:

ga: tʰitkul roĩ ã ‘may I go to Chhitkul?’

ga: ɛme tiŋ loĩ ã ‘may I tell him/her?’

ga: hoja i kim tətʃĩ ã ‘may I build a house here?’

ga: tʃa: tãĩ ã ‘may/should I make tea?’

ga: tivi jeãĩ ã ‘may I watch TV?’

ga: huju huʃĩ ã ‘may/should I read this?’

16 describes the agreement system found in Chhitkul-Rākchham. The markers are the same in copula and non-copula constructions. Like most languages commonly assigned to the West-Himalayish subgroup (but not Kinnauri), the Chhitkul-Rākchham subject agreement system rests upon a distinction between overt marking of first and second person (locuphoric) and the non-overt marking of third person (aliophoric). ‘Pronominalization’ (Hodgson 1847), the use of a personal pronoun as a subject agreement marker, is only attested for first and second person singular.

Person indexation is realized by means of suffixes occurring in a systematic fashion on the last slot of the verbal form. An honorific distinction is only attested in the case of second person singular. Further, verbal agreement markers may only attach to the imperfective markers: *-e*, *-te* or *-de*, to the dubitative irrealis *-no*, alternatively right after the copula base in present tense constructions (*tɔ-k*). Under no circumstances can verbal agreement suffixes attach to aspect markers, all occurring after the verb stem in non-copula constructions. No subject agreement marker may attach to the conditional marker *-na* either. Person indexation occurs with both transitive and intransitive verbs. The ergative case in does not impair the occurrence of agreement markers, as in Bunan, Manchad and Tinan (Sharmā 1996: 95).

Comparing the pronouns and agreement in some West-Himalayish languages (Kinnauri and Chhitkul-Rākchham not being part of the study), Sharmā (1996: 81) contends that “languages like Byangsi and Rongpo which are in close contact with Indo-Aryan have a kind of asymmetrical system of pronominalization”. There is a close language contact between Chhitkul-Rākchham and Hindi too, however recent from an historical perspective. The agreement system found in Chhitkul-Rākchham is nonetheless somewhat symmetrical. It also has to be borne in mind that language contact includes Tibetan and, most importantly, Kinnauri, not just Hindi. Kinnauri appears to have a symmetrical system as well, but based on the occurrence, in both Chhitkul-Rākchham and Kinnauri, of *-n* as second person²⁵⁵ subject and agreement marker, Bauman’s (1975) seminal findings that a pronominalization system may be reconstructed for proto-TB has more weight than language contact. I reproduce below table 16 (see §3.1.4):

²⁵⁵ Not the second person singular in Kinnauri (Takahashi 2009: 23).

Table 16: Subject agreement suffixes in Chhitkul-Rākchham

	SG	DU-PL
1	-k	-tʃ
2HON	-ĩ	
2NHON	-n	
3	-∅	

As shown in table 16, a verbal form is marked for subject agreement with no marker following the stem in the case of third person. Verbal agreement is found in the fashion described in table 15: it always immediately follows COP-IMPV or COP-IRR in copula constructions and V AUX, V AUX-IMPV, or V AUX-IRR in non-copula constructions. As already mentioned in §3.1.4, the second person singular honorific and the first and second person plural subject agreement markers are identical to the imperative.

Table 15: Verbal agreement (AgrS) configurations

V-IMPV-AGR

V-(OBJ)-ASP (AUX-(IMPV)-AGR)

V-(OBJ)-IRR.DUB-(AGR)

Imperative²⁵⁶: VERB-(OBJ)-AgrS (AUX)

In comparison with the pronominal system described previously, the person indexation system is much easier to comprehend as honorific distinctions are limited to second person singular and the person markers are found to be identical for dual and plural, with no clusivity distinction. The fundamental distinction is between singular and dual/plural. Like in Kinnauri, the suffixes for the first and second person differ in the singular, but are identical in the plural.

Bailey (1920: 81) seems to imply that the first person singular suffix *-k* also applies to first person plural and that the second person singular *-n* also marks second person plural, but this is completely at odds with my data. The markers found in Sharmā (1992: 259) are

²⁵⁶ The occurrence of subject agreement suffixes in the imperative is also a feature of Kinnauri (Konow 1905: 124).

identical with those in my description, including the honorific distinction for second person singular.

As an alternative to the second person honorific suffix *-ĩ*, Sharmā (ibid, p. 271) mentions *-ŋi*, but this form is not attested in my data. With regard to third person, Sharmā (ibid, p. 259) claims in the first instance that “the absence of any person marker represents the third person, both singular and plural”, but he subsequently identifies a third-person singular honorific suffix *-f* (ibid, p. 263, 271) which is not present either in my data. The suffix would be borrowed from Kinnauri, where only the non-honorific form is unmarked (Sharmā 1988: 133; Saxena 1995: 261 referring to Standard Kinnauri, Takahashi 2001: 109; 2009: 23; Saxena 2017: 765 referring to Sanglā Kinnauri).

Contrary to Kinnauri, there is no distinction based on honorificity with regard to first person plural in Chhitkul-Rākchham. Again, this may be the result of a system in obsolescence: the forms described here are likely to be the last remnants of a fully-fledged agreement system the reconstruction of which is arduous in the absence of (almost) any data in Bailey’s (1920) sketch. Finally, the suffix *-tʃ* applies to third person plural as well in a few instances in my elicited corpus, only one of which including the non-honorific form. A third person plural honorific suffix *-ɕ* is found in Standard Kinnauri and in Shumcho, based on the comparative table provided in Huber (2008).

The pronominal element representing 1SG is the velar stop *-k*, also attested in Standard Kinnauri, but also Jangrami and Shumcho (Huber 2008). According to Saxena (1997: 92), *-k* is “a cognate of the older agreement marker”. The second person singular non-honorific form *-n* is consistently described (see Saxena 1997, DeLancey 2014: 5) as a well-retained feature of Proto-Tibeto-Burman in West Himalayan languages, although the idea that an agreement system may be reconstructed for PTB, supported by most scholars (Henderson 1957, Bauman 1975, DeLancey 1980, Van Driem 1993) is still in debate for other forms than first and second person singular. The co-occurrence of a velar stop (unvoiced *-k*) as first person singular agreement marker and as first person singular pronoun (voiced /*g*/) and the co-occurrence of *-n* as subject honorific agreement marker for second person singular and as second person singular pronoun marker resembles Hodgson’s (1847: 120) description of Dhimál, where conjugational affixes are copies of pronominal forms, a seminal discovery which lead to the division of TB languages into two groups, “simple or

non-pronominalized” languages and “complex or pronominalized” ones (Hodgson 1880: 105). The sibilantic or sibilantic-affricatic first and second-person marker *-tʃ* is a feature of Kinnauri, Jangrami and Shumcho as well. The occurrence of the second person singular honorific form *-ĩ* is however only found in Jangrami.

Subject agreement marking is entirely absent from some future constructions. If agreement markers are used, they immediately follow the verb stem and the irrealis marker *-no*, which indicates that the speaker is rather uncertain that the event denoted by the verb will take place. Conversely, in forms without subject agreement, the suffix *-no* is replaced by the habitual suffix *-ts* which is by contrast assertive (and can also be negated). A somewhat similar situation is described in Shumcho, but with a reverse situation: “if agreement markers are used, the speaker is rather certain that the event denoted by the verb will take place” (Huber 2013: 235). Further, in Chhitkul-Rākchham, the suffix *-ts* cannot be used with first person singular, which means that in future constructions only the subject agreement form *-nɔk* can occur.

1.5.6 Verb valency

A few Chhitkul-Rākchham verbs have more than one valency. *Kwaŋ* ‘to boil’, *zasaŋ* ‘to eat’, *tuəŋ* ‘to drink’ and *hətʃaŋ* ‘to play’ may have one or two arguments depending on context without any morphological derivation. I provide one illustration of this phenomenon below. In (329), *hətʃaŋ* has only one argument, *niŋsa:*, whereas it has two arguments in (330). Note that there is an alternative verb for ‘to play an instrument’, namely *bazisaŋ*.

(329) niŋ-sa:=∅ tʰan dau hətʃ-a
 1PL.EXCL-PL=ABS today POST.LOC play-PROG

‘Today, we are playing outside’ – DSN

(330) ai teotʃ=o kjaŋ-sa: mi:-∅ san=o ro-a
 CONN before=LOC 1PL.INCL.POSS-PL people-ABS temple=LOC go-PROG
 tʃʰarka=∅ hətʃ-a na=e
 ‘five balls’=ABS play-PROG PTCL.QUER=HSY

‘And before we people used to go to the temple courtyard and play ‘five balls’, isn’t that right?

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1.5.7 Causatives

Causatives are expressed through syntactic means in Chhitkul-Rākchham. As mentioned in §1.5.2.3, *maŋ* is a causation converb attaching to the bare root of the verb, thus *za-saŋ* ‘eat’, but *za:=maŋ*²⁵⁷. *Maŋ* has the ‘traditional’ causative meaning of ‘to make’ with the additional argument fulfilling the role of causer, but also the permissive meaning of ‘to allow’.

What distinguishes *maŋ* from other converbs (*henna*, *manna*, *hekso*) is that in addition to the infinitive, it takes aspect, tense, subject agreement, and, as we shall see, object marking morphology. *Maŋ* is therefore a finite verb, but as discussed in §5.8.3 and in §1.4.3.2, and referring to Haspelmath’s (1995: 3-4) approach of converbs, finiteness or non-finiteness are not “definitional criteria”. *Maŋ* adds only a bit of information to the main verb and does not refer to a verb occurring independently outside of causative constructions, reasons why I do not treat it as a serial verb, again based on Haspelmath’s criteria (see §5.1.2.1).

As a valency-increasing operation, causativization involves object agreement since the latter typically occurs with predicates taking an object argument. In this regard, we have established in §1.5.3 that object marking is often realized by means of periphrastic constructions, where an inflected form of the second verb *toŋ* ‘to come’ follows the bare root of the main verb. As shown in (14), which I reproduce below, *hul toa* marks first and second person objects. In comparison, a more regular inflected main verb form (*hula*, with *-a* as the progressive marker) involves a third person object. Note that periphrastic constructions like (14) invariably mark first and second person objects:

²⁵⁷ Note that in this precise case, the causative root *za:* differs slightly from the non-causative root *za*. In a majority of cases, both forms are identical, see table 140 in §1.5.2.3. In addition to *maŋ*, Sharmā (1992: 273) mentions a “causative formative” *-sí* in the case of transitive verbs, notably found in *zasimaŋ*, but this is not part of my data. However, the epenthetic *-i* is attested and phonologically determined regardless of transitivity class, see table 140 in §1.5.2.3.

(14) $\epsilon me = \emptyset$ $ga : = \emptyset$ hul $to - a$ $to - \emptyset$
 3SG.HON=ABS 1SG=ABS push come.OBJ.1.2-PROG AUX.PEEX-3

‘He (or she) is pushing me’ DSN (SKG)

A similar pattern applies to causative constructions, reason why *maŋ* takes different shapes: *mã* (PRS) *ma-te* (IMPV), *ma-tji* (PFV), *ma-no* (IRR.DUB) and *ma-ts* (HAB) on the one hand, *ma to-a* (PRS), *ma tu-te* (IMPV), *ma tu-ti* (PFV), *ma tu-no* (IRR.DUB) and *ma tu-ts* (HAB) on the other. The latter list marks first and second person objects. It is part of a quaternary verb construction: $V_1 V_2 (mã) V_3 (tɔŋ)$ (AUX).

With regard to the first set, *maŋ* may inflect for tense and subject agreement, as in (331), otherwise tense and subject agreement are marked on the auxiliary, as in (332) and *mã* bears the aspectual (progressive) distinction. With a second person subject, *mate* follows the verb root in both present and past contexts.

(331) $kin = \emptyset$ $\epsilon me = \emptyset$ $dʒĩĩ$ $ma - te - ĩ$
 2SG.HON=ABS 3SG.HON=ABS cry CVB.CAUS-IMPV-2SG.HON

‘You make/made him/her cry’ – DSN

(332) $kin = \emptyset$ $\epsilon me = \emptyset$ $dʒĩĩ$ $mã$ $to - ĩ$
 2SG.HON=ABS 3SG.HON=ABS cry CVB.CAUS.PROG AUX.PEEX-2SG.HON

‘You are making him/her cry’ – DSN

Note that in both (343) and (344), the verb root of *dʒiaŋ* ‘to howl’ is *dʒĩĩ*, see table 142 in §1.5.2.3.

The following example involves the causative verb root of *zasan* ‘to eat’, namely *za:*. With a first person subject, *matji* follows the verb root in both present and past contexts, indicating the action of the main verb is completed. Like in the case of (332), the verb root bears the aspectual (progressive) distinction in (334). There is no object marking either in these two examples:

(333) *ga:=∅* *εme=∅* *i:* *pa:l=∅* *za:* *matf-i*
 1SG=ABS 3SG.HON=ABS one apple=ABS eat CVB.CAUS-PFV

‘I make/made him/her eat an apple’ – DSN

(334) *ga:=∅* *εme=∅* *i:* *pa:l=∅* *za:* *mã* *tɔ-k*
 1SG=ABS 3SG.HON=ABS one apple=ABS eat CVB.CAUS.PROG AUX.PEEX-1SG

‘I am making/I was making him/her eat an apple’ – DSN

With regard to the second set, *mã* does not bear any aspectual distinction; the second verb *tɔŋ* does. Tense is marked on *tɔŋ* or on the auxiliary. In (335), (336) and (337), the object is double marked: the occurrence of *tɔŋ* as a second verb marks first and second person objects by means of periphrasis and so does the suffix *-t* attached to the converb *maŋ*. Subject agreement is marked on the auxiliary or on *tɔŋ* in case there is no auxiliary. Note that the ergative marker is optional. Note that *ta* cannot occur as auxiliary in (339) because *to* ‘agrees’ with the first person object *ga:*

(335) *εme=tfi* *ga:=∅* *dʒĩĩ* *ma-t* *to-a* *to-∅*
 3SG.HON=ERG 1SG=ABS cry CVB.CAUS-OBJ.1.2 come.OBJ.1.2-PROG COP.PEEX-3

‘(S)he is making me cry’ – DSN

(336) *kin=∅* *ga:=∅* *za:* *ma-t* *tu-te-ĩ*
 2SG.HON=ABS 1SG=ABS eat CVB.CAUS-OBJ.1.2 come.OBJ.1.2-IMPV-2SG.HON

‘You make me eat’ – DSN

(337) *kin=∅* *ga:=∅* *za:* *ma-t* *to-a*
 2SG.HON=ABS 1SG=ABS eat CVB.CAUS.OBJ.1.2 come.OBJ.1-PROG

to-ĩ

AUX.PEEX-2SG.HON

‘You are making me eat’ – DSN

In comparison, as already shown in (331), there is no object marking if we replace the first person object in (336) by a third person object. The same applies to (338), where there is no periphrastic construction including a second verb and *maŋ* does not take the suffix *-t*:

(338) kin=∅ ɛme=∅ za: mā to-ĩ
 2SG.HON=ABS 3SG.HON=ABS eat CVB.CAUS AUX.PEEX-2SG.HON

‘You are making him/her eat’ – DSN

As discussed in §1.5.2.1 (table 138), a few verb pairs exhibit morpho-semantic correspondence. One set has its causative root identical to their second person singular non-honorific imperative. For the sake of clarity, I provide in the table below the perfective, consultative and causative forms for a few verb pairs. All pairs share the same perfective. As shown in §1.5.5.1, *laŋ/latfaŋ* and *taŋ/tatfaŋ* have different consultative and causative (imperative) forms. In the case of *p^hɛŋ/p^hɛtfaŋ* the consultative forms differ, but the causative are identical whereas all forms are identical in the case of *puaŋ/putfaŋ*. There is no case in my database where a pair of verbs would share the same consultative, but where their causative would differ:

Table 146: Perfective, consultative and causative forms for verb pairs exhibiting morpho-semantic correspondence

Infinitive	Perfective	Consultative mood (2SG.IMP.HON)	Causative
laŋ ‘to do’	latʃi	laĩ	lat (IMP.2SG.NHON)
latfaŋ ‘to do’	latʃi	latʃĩ	lat
taŋ ‘to make, build, cook’	tatʃi	taĩ	tat (IMP.2SG.NHON)
tatfaŋ ‘to make, build, cook’	tatʃi	tatʃĩ	tat
p ^h ɛŋ ‘to send’	p ^h ɛtʃi	p ^h ɛĩ	p ^h ɛt (IMP.2SG.NHON)
p ^h ɛtfaŋ ‘to send’	p ^h ɛtʃi	p ^h ɛtʃĩ	p ^h ɛt
puaŋ ‘to plow’	putʃi	puĩ	put (IMP.2SG.NHON)
putfaŋ ‘to plow’	putʃi	puĩ	put

In (339) and (340), the verb root is *lat*, identical to the second person singular non-honorific imperative. This is consistent with the data provided in table 138: with a verb pair such as *latfaŋ* and *laŋ*, only the latter is involved in a periphrastic construction the meaning of which is causative. In (340) and (341), the causative construction includes the progressive form of the second verb *təŋ*, namely *toa*. Again, the suffix *-t* on the converb *maŋ* marks first and second person objects. Note that *to* cannot occur as auxiliary in (340) because it ‘agrees’ with the second person object *kin*:

(339) $\epsilon me=tʃi$ $\epsilon me=\emptyset$ $intəza:r$ *lat* $mã$ $to-\emptyset$ /
 3SG.HON=ABL 3SG.HON=ABS waiting do.IMP.2SG.NHON CVB.CAUS COP.PEEX-3
 ta
 COP.PE

‘(S)he makes him/her wait/(s)he is making him/her wait’ – DSN

(340) $\epsilon me=tʃi$ $ga:=\emptyset$ $intəza:r$ *lat* $ma-t$ $to-a$
 3SG.HON=ABL 1SG=ABS waiting do.IMP.2SG.NHON CVB-OBJ.1.2 come-PROG

 $to-\emptyset$ / ta
 COP.PEEX-3 COP.PE

‘(S)he makes me wait/(s)he is making me wait’ – DSN

(341) $\epsilon me=\emptyset$ $kin=\emptyset$ $intəza:r$ *la-t* $ma-t$
 3SG.HON=ABS 2SG.HON=ABS waiting do-IMP.2SG.NHON CVB-OBJ.1.2

 $to-a$ ta
 come-PROG COP.PE

‘(S)he is making you wait’ – DSN

The following example involves the causative root of *tatfaŋ* ‘to make, build, cook’, namely *tat*. The causative converb *maŋ* inflects for irrealis-dubitative. Note that with first person singular, *-na* is a variant of *-no*:

(342) te ʃɛli=∅ suntsi-ti jara=∅ ga:=∅ kʰe na kʰe ja
 then fox=ABS think-PFV friend=ABS 1SG=ABS what PTCL.QUER what DISJ
 gret=∅ ʈat ma-na-k ja kʰe la-na-k
 song=ABS make.IMP.2SG.NHON CVB-IRR.DUB-1SG DISJ what do-IRR.DUB-1SG
 taki dʒo hɛ: ki ka:=∅ hɛ: kal=tʃi matʃʰ-i:=∅
 CONJ that COP.3SG COMP crow=ABS COP.3SG above=ABL fish-FEM=ABS
 pʰikʃ-i pʰakʃ-i a:=∅ a:-r=∅ tu-no-∅
 drop-PFV drop.REDUP-PFV mouth=ABS mouth-E=LOC come-IRR.DUB-3

‘Then the fox thought: “friend, I will do something or other, or I will make (him) sing a song so that it will come to my mouth once the fish is released from the crow, from above’

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With causative construction, negation is marked on the converb *maŋ* by means of the prefix *ma-*. Thus, *kinsa: ɛme i: pa:l za: mamã tɔʃ* ‘you (PL) do not make him/her eat an apple’.

1.6 Major clause types

This section deals with complex clauses. I do not include reported speech, which I addressed in §6.1. I discuss adverbial clauses in §1.6.1, provide an overview of conditionals in §1.6.2 and deal with nominalisations in §1.6.3. The next two sections address complementation (§1.6.4) and clause chaining (§1.6.5). Finally, I provide an outline of relative clauses in §1.6.6.

1.6.1 Adverbial clauses

1.6.1.1 Temporal markers of adverbial subordination

Chhitkul-Rākchham exhibits a few constructions with temporal markers of adverbial subordination, notably *neotʃo* ‘after’, and *teotʃo* ‘before’²⁵⁸, both occurring after a non-

²⁵⁸ As mentioned in §1.4.4, both adverbs also have a spatial reading, ‘behind, at the back of’ and ‘in front of’ respectively, after a noun marked for the genitive =e.

finite verb, possibly reduplicated. The relevant verbs inflect for the perfective in the case of *neotfo* ‘after’ since the perfective marks the completion of an action, and for the infinitive in the case of *teotfo* ‘before’. As mentioned in §1.3.5, the locative =o attaches to both adverbs. These come at the end of the subordinated clause, as shown in (343) and (344):

- (343) he lbt-i neotf=o ka:=tʃi grɛt ta-saŋ a:=∅ kra-ĩ ʃɛli=∅
 like tell-PFV after=LOC crow=ERG song keep-INF mouth=ABS open-PFV fox=ABS
 si:dʰa matʃʰ-a=∅ si:dʰa po ʃɛli=e a:-r=o ro-de-∅
 directly fish-MASC.SG=ABS directly down fox=GEN mouth-E=LOC go-IMPV-3
 ‘Having said (like) this, the crow opened the mouth to sing a song; the fish went
 straight down into the fox’s mouth’
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- (344) ga:=∅ ɛme=∅ tɔ-ŋ teotf=o kuɔn=∅ tʃatʃ-i
 1SG=ABS 3SG.HON=ABS come-INF before=LOC food=ABS cook-PFV
 ‘I had cooked food before he came’ – DSN

Example (15), which I replicate here, includes a reduplicated form of the non-finite verb. In this example, *te* ‘then’ replaces *neotfo*. Both adverbs are interchangeable. Note that in (15), *teotfo* (the ablative =tʃi being optional) expresses duration (‘for’):

- (15) ga:=∅ ŋã bɔʃaŋ teotf=o=tʃi mǎ mǎ mɛhnat latʃ-i lutʃ-i te
 1SG=ABS five year for=LOC=ABL INT hard do-PFV do.REDUP-PFV then
 saukar as-ɛ-k
 rich become-IMPV-1SG

‘I became rich after working very hard for the past five years’ – DSN

I provide here additional examples that include *neotfo* and *te*. *Latʃi lutʃi neotfo/te*: ‘after doing’; *paĩ puĩ neotfo/te*: ‘after weighing’; *roi rai neotfo/te*: ‘after going’; *ɛkʰe asi usi neotfo/te*, ‘after getting together’, *kroi krei neotfo/te*, ‘after mixing (liquid things), etc.’²⁵⁹

²⁵⁹ Reduplication is not obligatory: *latʃi neotfo*, *pai neotfo* and *roi neotfo* are grammatically correct.

Whereas *neotfo* invariably follows a non-finite verb inflected for the perfective, *teotfo* ‘before’ follows an infinitive verbal form. The comparative *jjana* may occur before the infinitive and *teotfo*, as shown in (345):

(345) *ʃimla:=∅ rɔ-ŋ ʃjana teotf=o kin=∅ kamaŋ=∅ tʃʰe:-saŋ*
 Shimlā=ABS go-INF COMP before=LOC 2SG.HON=ABS work=ABS finish-INF
 gin-ts
 need-HAB

‘Before going to Shimlā, you must finish your work’ – DSN

It is important to note that both *neotfo* and *teotfo* may mark the temporal order of an event within a narrative structure without occurring in a subordinate clause. In the following example, the speaker uses *neotfo* after the demonstrative *do* ‘after that’ (*hojo neotfo* is an alternative) to introduce a new temporal distinction in the narrative:

(346) *do neotf=o tse pɔŋ=∅ ɔ:l indja=∅ dʒese kjaŋ*
 DEM.DIST after=LOC QNT place=ABS QNT India=ABS like 1PL.POSS.INCL
laddakʰ=∅ kaʃmir=∅ wɛst bangal=∅ arunatʃal pradɛʃ=∅ huɖu
 Ladakh=ABS Kashmir=ABS West Bengal=ABS Arunachal Pradesh=ABS there

mã tse nokri=∅ latʃ-i
 LOC QNT service=ABS do-PFV

‘After that, (I) served in all places in India, like Ladakh, Kashmir, West Bengal, and Arunachal Pradesh’

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Another important observation is that there is an alternative construction describing a temporal succession of events with the meaning of ‘after’ that does not involve *neotfo*, but *te*. The latter adverb precedes the subordinate clause verb, as shown in (347). All verbs inflect for the perfective:

(347) ne=i ga:=∅ p^hoga=∅ ur-tf-i ətsə kuɔn=∅ za-i te
 yesterday=LOC 1SG=ABS clothes=ABS wash-TR-PFV small food=ABS eat-PFV then
 nɔn-i
 sleep-PFV

‘Yesterday, I wash the clothes, ate lightly and went to bed’ – DSN

‘At the time’ or ‘when’ is expressed by means of the simultaneous irrealis *-no*, attached to the non-finite verb, which may be followed by the converb *bɔre*. *Bɔre* conveys a specific meaning compared to the more general question word *hame*. (17) provides a first illustration. In the following example, *laŋ* takes the simultaneous irrealis suffix *-no*, thus surfacing as *lano*.

(348) ladak^h=o dju:ti=∅ la-no bɔr-e damaro k^hat-i nir=i lo
 Ladakh=LOC duty=ABS do-IRR.SIM CVB-IMPV excess cold-MODIF day=LOC also
 ɔtʃ=i lo
 evening=LOC also

‘When serving in Ladakh, it was extremely cold, day and night’

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An alternative construction also involves *bɔre*, but with a non-finite verb inflected for the present participle (progressive) *-a*. In the following example, both *jynaŋ* ‘to walk’ inflected for the progressive *-a* and *jynaŋ* inflected for the simultaneous *-o* are grammatically correct:

(349) ga:=∅ jyn-a / jyn-o bɔr-e za: tɔ-k
 1SG=ABS walk-PTCP walk-SIMUL CVB-IMPV eat.PROG AUX.PEEX-1SG

‘I am eating while walking’ – DSN

Like *neotfo* and *teotfo*, *bɔre* is not necessarily part of a subordinate clause. Whereas *teotfo=tʃi* typically expresses a duration (‘for’), *bɔre* may occur in propositions providing the precise date of occurrence of an event, as in (350). In addition, it also has the meaning of ‘during’, as in (32):

(350) $\epsilon me = \emptyset$ do hozar gjara b \bar{r} -e ma-hun-i / ji-i
 3SG.HON=ABS two thousand eleven CVB-IMPV NEG-live-PFV die-PFV

‘(S)he died in 2011’ – DSN

(32) ni η -sa:= \emptyset $\epsilon ts\bar{a}$ b \bar{r} -e t \bar{h} ul de \bar{f} =o s $\bar{a}d\bar{a}k = \emptyset$
 1.PL.EXCL.-PL=ABS small CVB-IMPV Chhitkul village=LOC road=ABS
 mat ti
 CVB.NEG COP.PE

‘During our childhood, there was no road in Chhitkul village’

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1.6.1.2 Manner adverbs

Manner in Chhitkul-Rākchham is expressed by means already mentioned in §4.3.1 and §6.2, namely *he* ‘like’, *r η sea* ‘similar’, *rukji ta*. Note that the manner adverb *he* may combine with *r η sea* or *rukji ta*, thus achieving an emphasis effect ‘so it seems’, as shown in (98) and (111). As discussed in §6.2, *he* fulfils the functions of manner adverb, quotative and complementizer. Example (121) ‘it has to be told like this’ provides an illustration of the subordinated manner adverb *he*. The following two examples involve *rukji ta*:

(351) jo= \emptyset pala-t \bar{f} i= \emptyset rukji ri:-t \bar{f} a η =ni η b \bar{h} a $\bar{t}k$ -a ta
 3SG.NHON=ABS shepherd-AGT=ABS similar field.PL=LOC wander-PROG COP.PE

‘He wanders in the fields like a shepherd’ – DSN

(352) huju= \emptyset ra:d \bar{z} a=e saza:= \emptyset rukji ta
 DEM.PROX=ABS Raja=GEN sceptre=ABS similar COP.PE

‘It is like a sceptre (of a Raja)’ – DSN

1.6.2 Conditionals

Conditionals are typically formed by adding the conditional suffix *-na* to the verb in the protasis clause. The epenthetic *-i* is inserted between the verb stem and *-na* in the exact

same environments as for the dubitative (irrealis) *-no* – see §3.1.1.3. I argue in the same section that both *-no* and *-na*, which are intriguingly close from a morphological perspective, are part of the same semantic domain of irrealis, both referring to a hypothetical or doubtful world.

Referring to Longacre and Hwang (2007: 255-60), conditional clauses belong to three main categories: assumed conditionality, hypothetical conditionality, and counterfactuality, a typology reflecting a decreasing amount of certainty. While V-PFV *henna* is one valid type of construction in the case of assumed conditionality, it is entirely absent of hypothetical conditionality and conversely the only possibility with counterfactuality.

The following examples illustrate assumed conditionality, which describes a condition that generally holds true. In that case, the main clause denotes assertiveness, as in (353) and (91), where the main verb inflects for the future-assertive *-ts*, and in (354), where the auxiliary *tɔts* follows an infinitive verbal form, an illustration of ‘programmatically future’, see table 46 in §5.4). In all the examples below, the proposition in the main clause will not be true unless the condition from the conditional clause is satisfied. As shown in (353), the verb from the conditional clause may take the conditional marker *-na*. An alternative construction is a verb inflected for the perfective followed by the converb *henna*, as in (354). Note that a construction like V-PFV + *henna* occurs in both past and present tense contexts. We may argue that in (353) and (354) we are dealing with a consecutive temporal pragmatic context where we may gloss *-na* as CONSEC instead of COND:

(353) hame taŋ ga:=∅ zo-i ma-huʃ-i-na /
 when up to 1SG=ABS good-MODIF NEG-study-E-CONSEC
 ma-huʃ-i hɛn-na ga:=∅ hindi=∅ zo-i
 NEG-study-PFV CVB-CONSEC 1SG=ABS hindi=ABS good-MODIF
 ma-ts^ha-ts
 NEG-know-HAB.ASS

‘So long/unless I do not study hard, I will not master Hindi’ – DSN

(91) kjaŋ=∅ tsutsina i: zag-o pɔs-i hun-na te k^hɛts=o
 1PL.INCL=ABS silently one place-LOC sit-PRS.PTCP keep-COND then QNT=FOC

ma-a:ts ta
 NEG-happen.HAB.ASS AUX.INFR.PE

‘If we keep sitting down silently in one place, then nothing will happen’

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(354) ga:=∅ kin=∅ madad=∅ ma-da-fi hɛn-na kin=∅
 1SG=ABS 2SG.HON=ABS help=ABS NEG-give-PFV CVB-CONSEC 2SG.HON=ABS

imtihan=∅ pa:s ma-la-ŋ tɔ-ts
 exam=ABS pass NEG-do-INF AUX.PEEX-HAB.ASS

‘If I do not help you, you will not pass your exams’ – DSN

Hypothetical conditionality expresses conditions that one does not hold as true as in the case of assumed conditionality. In that case, a most regular construction is one where the verb inflects for the conditional *-na*. The only alternative is a construction like V-PROG *hɛnna* (*ta:ŋna*). Contrary to assumed conditionality, the verb cannot inflect for the perfective:

(355) kin=∅ nako=∅ ron-na / ro-a hɛn-na huju
 2SG.HON=ABS Nako=ABS go-COND go-PROG CVB-COND DEM.PROX

saɾak=tfi=o rɔ-ŋ gin-ts
 road=INSTR=FOC go-INF need-HAB.ASS

‘If you go to Nako/if you are going to Nako, you must take this road’ – DSN

The syntactic doubling *ta:ŋna*, from *ta:ŋ* ‘to see’, may follow the verb inflected for the conditional, as shown in (356), but again, a verb inflected for the perfective would be ungrammatical:

(356) he ma-gja-na ta:ŋ-na hojo mi:=∅ kjaŋ=∅
 like NEG-to be willing-COND see-COND DEM.DIST man=ABS 1PL.INCL=ABS

zurman-a:=∅ p^hɛ-ŋ=sea
 fine-MASC.SG=ABS send-INF=NOMI

‘If these people are not willing to do so, we should give (them) a fine’

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With both assumed and hypothetical conditionality, another possible construction involves a verb inflected for the progressive and followed by *ta:ŋna* (alternatively *henna*, or both):

(357) ã mā kat=∅ ta p^he-a ta:ŋ-na hojo=∅
INTERJ REFL language=ABS COP.PE send-PROG see-COND 3SG.NHON=ABS

zo-i ro-ts ne hojo=∅ ã
good-MODIF go-HAB.ASS PTCL. 3SG.NHON=ABS INTERJ

‘Yes, if (one) is using (one's) own language, then it will be good, indeed’

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A V-PFV + *henna* construction is the only one possible in the case of counterfactuality, or “unreality conditionals” (Longacre and Hwang 2007: 255). In the following example, the conditional clause refers to an “imaginative conditional”, that is, an event that may have happened in an alternative world:

(358) te ka:=∅ bitjara nejaŋ ε:k paŋ=du pɔs-i pas-i suntse-a
then crow=ABS poor again one tree=LOC sit-PTCP sit.REDUP-PTCP think-PROG
ka:ʃ ga:=∅=e gos-a:=du ma-p^hɔs-i-ti hɛn-na
alas 1SG=ABS=HSY conversation-MASC.SG=LOC NEG-catch-E-PFV CVB-COND

‘Then the poor crow is thinking, sitting on a tree: “alas! If only I had not been caught by (his) words!”’

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There are conditional constructions that include an interrogative pronoun to which the indefinite clitic =*lo* is attached. In that case, the interrogative has an indefinite reading (*k^he=lo* → whatever; *go=lo* ‘wherever’; *su=lo* ‘whoever’; *hame=lo* ‘whenever’, etc.). The conditional clause thus conveys a sense of vagueness. Another illustration is (359). Again, both V-COND and V-PROG *henna* are perfectly acceptable:

(359) $\epsilon me = \emptyset$ $k^h e = lo$ $latj-i-na$ / $latj-a$ $h\epsilon n-na$ $feil = \emptyset$
 3SG.HON=ABS what=INDF do-E-COND do-PROG CVB-COND failure=ABS

as-a

become-PROG

‘Whatever (s)he does/whatever (s)he is doing, (s)he fails’ – DSN

Yet another type of conditional construction is modal. In that case, the non-finite verb inflects for the infinitive and the converb *henna* follows. If we go back to (355), *kin nako rɔŋ henna* has the meaning of ‘if you want to go to Nako’.

Negation in conditional clauses is expressed by means of two alternative strategies: the negative prefix *ma-*, attached to the non-finite verb inflected for the conditional *-na*, or the negative converb *manna* (‘if not’) as antonym of *henna* ‘if so’, with a preceding verb inflected for the conditional or for the perfective. In (139), an alternative to the prefix *ma-* in *marunji henna* is *runji manna*:

(139) $ga:-\emptyset$ da $ʃ\epsilon li-e$ $gosa:-\emptyset$ $ma-runj-i$ $h\epsilon n-na$
 1SG-ABS POST.DAT fox-GEN conversation-ABS NEG-listen-PFV CVB-COND

ta $ga: = \emptyset$ $a:ra:m=tʃi$ ai $kuɔn = \emptyset$ $za-saŋ$ $tɔ-ts$
 AUX.PE 1SG=ABS ease=INSTR 1SG.POSS food=ABS eat-INF AUX.PEEX-HAB.ASS

‘Had I not listened to the fox’s words, I would have eaten my food comfortably’

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Going back to (357), the negative prefix *ma-* may attach to *p^hea* or to *ta:ɲna*, thus *map^hea ta:ɲna* or *p^hea mata:ɲna*.

Sharmā (1992: 303-4) never formally identifies the suffix *-na* as conditional, nor *henna* as conditional conjunction.

1.6.3 Nominalizations

Referring to earlier seminal studies (Matisoff 1969, 1972), DeLancey (2002) observes an “impressive typological consistency” in terms of nominalization in the Bodic languages. One important shared feature is the complex of functions that the most prominent nominalizer, be it a suffix, a clitic or a particle, may serve. Matisoff (1972), in his *Grammar of Lahu* lists the functions of complementizer, relativizer, genitive marker, etc. To illustrate the “convergence of syntactic functions”, Bickel (1999) proposes to use the acronym SSTN (Standard Sino-Tibetan Nominalization). Another important characteristic is that nominalization in a Tibeto-Burman language is often realized by means of more than one marker.

Still according to Matisoff (1972: 248), “as a general rule of thumb applicable throughout the Tibeto-Burman family, whenever one discovers the particle used in verb citation, one can be sure of having discovered the most important nominalizer of the language”. As the following examples indicate, the infinitive, *-aŋ* in (360), (361), and both *-aŋ* and *-ŋ* in (362) have a nominalizing function:

(360) *gun=i=du zinda=∅ hun-aŋ tʃʰeŋiŋ garam pʰɔga=∅ gin-aŋ*
winter=LOC=LOC life=ABS stay-*INF.NOMI* PURP warm clothes=ABS need-*INF*

‘One needs warm clothes to survive during winter’ – DSN

(361) *kuɔn=∅ tətʃ-aŋ tʃʰeŋiŋ zo-i baniŋ=∅ gin-aŋ*
food=ABS make-*INF.NOMI* PURP good-MODIF utensils=ABS need-*INF*

‘To cook, one needs good utensils’ – DSN

(362) *eme=tʃi riŋ-de-∅ tʰuɾe-ŋ pedal jyn-aŋ jjana*
3SG.HON=ABL say-*IMPV-3* run-*INF.NOMI* on foot walk-*INF.NOMI* COMP

zo-i

good-MODIF

‘(S)he said that running is better than walking’ – DSN

In (360) and (361), the infinitive form of the verb is followed by *tʃʰetiŋ*. A noteworthy characteristic of *tʃʰetiŋ* is its connection with the case-marking system. In (360) and (361), the genitive =*e* may attach to the infinitive form of the verb (see §1.4.4.3.1).

In §1.3.2.1.1, I ascribe the clitic =*sea* a range of functions in Chhitkul-Rākchham: attributive, as in *homo bɔŋ=sea kʰui* ‘three-legged dog’, relativizer, as in *hojo mi: rofan min=sea rode* ‘the man whose name is Roshan left’, adverbializer, as in *ʃeki=sea* ‘proudly’, with *ʃeki* meaning ‘proud’.

Another function served by =*sea* is agent nominalization, a process whereby the subject is relativized, as in *ga:di: motɔr=sea* ‘vehicle owner/the ones who own a vehicle’. In the same vein, *ʃeli=sea* in (363) literally means ‘as for the one who is the fox’ and *ka:=sea* ‘as for the one who is the crow’:

(363) te ʃeli=∅=sea po=tʃi ro-a=o hun-i
 then fox=ABS=AGT.NOMI below=ABL go-PROG=FOC keep-PFV

‘Then the fox kept going (following) from below’

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(364) baki ka:=∅=sea gamna hojo=∅ as-i
 CONN crow=ABS=AGT.NOMI with surprise 3SG.NHON=ABS become-PFV

us-i te ʃeli=∅ zangal=o ta
 become.REDUP-PFV then fox=ABS forest=LOC COP.PE

‘And as for the crow, he got surprised, then the fox in the forest...’

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The following is an example where =*sea* attaches to the demonstrative pronoun *hojo* with the resulting meaning ‘that which you just said’:

(365) hojo=∅=sea baɽʰija: no hojo=∅ lo baɽʰija: ta
 DEM.DIST-ABS-NOMI good PTCLASS DEM.DIST=ABS also good COP.PE

hojo=∅ he a:-na baṛ^hija: kjaŋ b^ha:j^h-a:=∅
 DEM.DIST=ABS like happen-COND good 1PL.INCL.POSS language-MASC=ABS

seif hun-ts hojo rekɔ:rd=du age se age ro-ts
 safe stay-HAB.ASS DEM.DIST record=LOC further ahead go-HAB.ASS

‘That which (you just said) is good, if it happens like this, then it is good, our language will stay safe, that recording will be passed on (from one person to another)’

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Alternatively to =*sea*, the comparative postposition *fjana* may occur, as in (366), with the resulting meaning of ‘as for the one who is me’:

(366) ga:=∅ fjana teotf=o ka:=∅ ro-i ra-i hojo
 1SG=ABS NOMI.REL before=LOC crow=ABS go-PFV go.REDUP-PFV DEM.DIST
 matf^hli:=∅ likf-i o-ĩ ro-de-∅ hě
 fish=ABS carry-PTCP come out-PTCP go-IMPV-3 INTERJ

‘Before me, the crow left, carrying that fish, and went away’

JAC-cik04-BSN2-2019-03-06-29

The clitic =*sea* is also involved in verb complementation. In the following example, the nominalized clause is the complement of the verb:

(367) te at-tjaŋ=∅ to i: i: g^hanṭ-a:=∅ pantfajat=o
 then child-PL=ABS AUX.PEEX one one hour-MASC=ABS Panchayat=LOC
 hun-na te kjaŋ kat=∅ lupt ma-a:-no-∅
 teach-COND then 1PL.INCL.POSS language=ABS lost NEG-become-IRR.DUB-3
 te tse huɸ-i-no-∅ dhjian hojo=∅ da-saŋ=sea ta
 then QNT learn-E-IRR.DUB-3 carefully 3SG.NHON=ABS give-INF=NOMI AUX.PE

‘If they are all taught one hour at the Panchayat, then our language will not become extinct; and that everyone will learn, this should be taken care of’

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Relativization usually represents a subcategory of clausal nominalization within the Tibeto-Burman language family. Interestingly, the following example, which includes a relative clause, indicates that *=sea* is actually a shortening of *rɔŋsea*, an observation discussed in §5.8.3. Thus, a construction such as *he rɔŋsea ta/to* as a complement clause added to a description, which conveys an emphatic function, consists of the complementizer *he* and the nominalizer *rɔŋsea*, which, as discussed in §5.8.3, serves a relator function (with the copula) in this specific context. In (368), the relativizing nominalizer surfaces in its full form, *rɔŋsea*:

(368) *ga:=∅ tʃʰul=∅ taŋ-tʃi rɔŋsea uts=∅ kʰuɔŋf-a*
 1SG=ABS Chhitkul=ABS see-PFV RELV.NOMI flower=ABS search-PROG
 tɔ-k
 AUX.PEEX-1SG
 ‘I am looking for the flower that I saw in Chhitkul’ – DSN

We shall see in §1.6.6 that in addition to (*rɔŋ*)*sea*, Chhitkul-Rākchham also makes use of an Indo-European type of relative pronoun constructions.

Matisoff (1972) establishes a connection between the Lahu nominalizer and genitive case. Whereas there is no syncretism between *=sea* and the genitive *=e* in Chhitkul-Rākchham, the ablative case marker *=tʃi* (see §1.4.4.2.1) serves as nominalizer in the specific context of causal clauses, as shown in (369), where it follows a participle:

(369) *appuʈi ʃaŋ=∅ to-a=tʃi tʰa tʰaniŋ ta zolo tsoro*
 excess snow=ABS come-PTCP.PRS=ABL.NOMI now this year COP.PE excess QNT
 ʃaŋ=∅ tu-te-∅ tʰa
 snow=ABS come-IMPV-3 now
 ‘Due to (recent) heavy snowfall, snow came very much in excess this year’
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On a comparative note, we cannot help but notice *sea* is phonologically very close to the local nominalizer *-sa* found in some Tibetic languages, for example Kurtöp (Hyslop 2011a:

426), Kyirong Tibetan (Huber 2003: 2), where *sā* is used “with head-nouns that are locations, sources, goals, and recipients”, and Classical Tibetan, where it refers to a noun meaning ‘earth, ground’²⁶⁰. The nominalizer is also attested in Melamchi Valley Yolmo (Hari 2010: 34). Referring to Takahashi (2011), Kinnauri has *-tseyā* and *-seyā*, but the only locative function we can ascribe to these is that of static state: *-sa* in *dumsa* ‘large gathering/meeting’ has a somewhat similar meaning.

Sea may also serve a static state function in Chhitkul-Rākchham in addition to a variety of other functions (semblative, agentive, adverbializer, etc.). Among these, a noteworthy one is that of mood marker. It must be borne in mind that *sea* may be followed by an auxiliary expressing an evidential distinction²⁶¹.

1.6.4 Complementation

Complement clauses are usually defined as ‘the syntactic situation that arises when a notional sentence or predication [a subordinate (verbal) clause] is an argument of a predicate’ (Noonan 2007: 52). An issue with Noonan’s approach is that it presupposes embedding (Foley and Van Valin 1984) when this is not attested in all languages. A more functional approach is Cristofaro’s (1998: 17): a complement relation “links two states of affairs one of which, namely the main or pivotal one, entails that another one, the dependent one, is referred to”. Dixon (2006: 15) operates a distinction between complement clauses and ‘complementation strategies’, the latter referring to constructions that are not core arguments of the matrix verb – the main verb of the matrix clause – or to constructions that do not have a full argument structure (see also Croft [2001] 2009: 216-218). ‘Complementation strategies’ include nominalizations, relative clauses, serial verb constructions and clause linking, all of which I treat separately from this section.

A large majority of complement clauses in Chhitkul-Rākchham are non-finite constructions. Finite complement clauses (‘sentential complements’ according to Givón 1980 and Noonan 1985) are first and foremost found with reported speech, which I addressed in §6.1. It must be borne in mind that reported speech constructions may or may not be introduced by the

²⁶⁰ In Classical Tibetan, *sa* would also have the meaning of ‘place’ (Tournadre 2013: 113).

²⁶¹ As pointed out by Tournadre (2013: 115), “the field of evidentiality in relation to nominalization has not been explored sufficiently”.

complementizer *he* ‘like, so’. (184) illustrates finite complement clauses introduced by *he* outside of reported speech. I provide one additional example below, with the finite verb in the complement clause taking the second person singular honorific *-ĩ*:

(370) $\varepsilon me=tʃi$ $ga:=\emptyset$ $ra:tʃ^h um=\emptyset$ $ro-ĩ$ $riŋ-de-\emptyset$
 3SG.HON=ERG 1SG=ABS Rakchham=ABS go-IMP.2SG.HON say-IMPV-3

‘He told me to go to Rakchham’ – DSN

Non-finite complementation constructions do not include any complementizer. *कि* (*ki*) sometimes introduces complement clauses, but this is a borrowing from Hindi. There are two different types of non-finite complement clauses in Chhitkul-Rākchham. The first type is based on an infinitive verb, as in (371), the second on active participles, as in (372):

(371) $ã$ $gun=i$ $haŋ=\emptyset$ $tu-no$ $bɔre=ma$ $at-tʃaŋ=\emptyset$ $hu-aŋ$
 INTERJ winter=LOC snow=ABS come-IRR.SIM when=LOC child-PL=ABS teach-INF
 $baʃa baʃi$ $bikt-a:$ $k^h at-i$ $a:-na$ $lau=\emptyset$ $bɔŋ=\emptyset$
 INT difficult-MASC.SG cold-MODIF become-COND hand=ABS feet=ABS

$tɔrka$ $at-tʃaŋ=\emptyset$ lo $huʃ-aŋ$ $tear-i:$ $ma-as-a$
 numb child-PL-ABS also study-INF preparation-FEM.SG NEG-become-PROG

‘Yes, during winter, when snow is falling, and when it gets cold, teaching children is very difficult; hands and feet get numb and children cannot get ready to learn’

AUT_cik02-RK-2018-10-08-1

(372) $nailɔn$ $t^h uŋ=\emptyset$ $laʃ-a$ $laʃ-a$ $bɔŋ-niŋ-tʃi$ $p^h ɔla=\emptyset$
 nylon shoes=ABS wear-PROG wear-PROG feet-LOC-ABL blood=ABS

$ɔŋ-a$ $tɔ-ts$ no
 come out-PTCP AUX-PEEX.ASS PTCL.ASS

‘Feet were bleeding of wearing nylon shoes’

AUT_cik01-RK-2018-10-08-10

There are various instances where the non-finite complement clause is based on an infinitive form of a verb. I list most of these instances below:

A Chhitkul-Rākchham copula may take a complement clause, as shown in (373). The verb of the complement clause invariably inflects for the infinitive:

(373) tʃʰul kat-∅ huʃ-aŋ a:sa:n to-∅
 Chhitkul language-ABS learn-INF easy COP.PEEX-3

‘Learning Chhitkul-Rākchham language is easy’ – DSN

The following example involves the ability verb *lisaŋ* ‘to be able to’ and the cognitive verb *tsʰasaŋ* ‘to know’. These two verbs are interchangeable in the context of (374), both following an infinitive form. However, I do not treat (374) as an instance of complement clause. Instead, I claim that like in (92), we are dealing with a serial verb construction. The same reasoning applies to *ginaŋ* ‘to need’, which may convey a sense of obligation, as in (13) *ga: tʃʰitkul rəŋ gints* ‘I have to go to Chhitkul’:

(374) ɛme=∅ angrɛzi=du kɔʃ-aŋ ma-tsʰa-ts /
 3SG.HON=ABS English=LOC speak-INF NEG-know-HAB.ASS
 ma-li-ts
 NEG-be able-HAB.ASS

‘(S)he cannot speak English’ – DSN

However, *ginaŋ* may take an infinitival complement clause of the purposive type, as shown in (375), which involves *zaruri:*, a borrowing from Hindi:

(375) hɔt=∅ ʈatʃ-aŋ tʃʰɛtiŋ brɛt=∅ zaruri: gin-aŋ
 chilta=ABS make-INF POST.PURP flour=ABS necessary need-INF

‘Flour is necessary to cook chilta’ – DSN

In addition, in the case of ‘to be forced to’ or ‘to be obliged to’, the verb in the complement clause is in the infinitive form, as shown below:

(376) $\epsilon me = \emptyset$ ϵme $kjim = \emptyset$ $ra : -\eta$ / $ra\eta t\check{f} - a\eta$ $mazbu : r$
 3SG.HON=ABS 3SG.HON.POSS house=ABS sell-INF sell-INF compelled
 as-i
 become-PFV

‘(S)he was forced to sell his/her house’ – DSN

Complements of cognition verbs also have an infinitival verb form, as show in (377):

(377) $\epsilon me - sa : = \emptyset$ $ma - ts^h a - g - a$ $huju = \emptyset$ $hale$ $ta - \eta$ / $ta\eta t\check{f} - a\eta$
 3SG-PL=ABS NEG-know-E-PROG DEM.PROX=ABS how make-INF make-INF

‘They do not know how to cook this’ – DSN

There is also one specific type of construction where the verb is in the infinitive in the complement clause, constructions involving ‘useful’, invariably followed by the habitual form of the verb $t\eta$ ‘to come’:

(378) $m\epsilon sa\eta = \emptyset$ $m\check{e} = \emptyset$ $t\check{f}\check{t}\check{f} - a\eta$ $kama\eta$ $tu - ts$
 match box=ABS fire=ABS light-INF useful come-HAB

‘Match boxes are useful to lit a fire’ – DSN

Complements of perception verbs such as $ta : \eta$ ‘to see’ have their verbs in their present participial form, as in (379):

(379) $ga : = \emptyset$ $\epsilon me = \emptyset$ $d^h u : p = \emptyset$ $t\check{f}\check{t}\check{f} - a$ $tja : = \emptyset$ $ta\eta t\check{f} - a$
 1SG=ABS 3SG.HON=ABS incense=ABS light-PRS.PTCP tea=ABS make-PROG

 $ta\eta - \check{a}$ $t\check{c} - k$
 see-PROG AUX.PEEX-1SG

‘I see him/her lighting incense and making tea’ – DSN

There is no verb in Chhitkul-Rākchham with the meaning of ‘to want’. Instead, $gina\eta$ ‘to need’ or $gana\eta$ ‘to like’ occur interchangeably. The following example is peculiar in that the verb in the complement clause takes the simultaneous suffix *-no*:

(380) $\epsilon me = \emptyset$ $mun = i$ dau $fun - no$ he $ga : = \emptyset$ $ma - gu - a$ /
 3SG.HON=ABS night=LOC outside stay-IRR.SIM like 1SG=ABS NEG-like-PROG

$ma - gin - a$
 NEG-need-PROG

‘I do not want him/her to stay outside at night’ – DSN

As mentioned in §1.6.3, causal complement clauses are marked by means of the nominalizer =*tʃi*, which also serves as ablative marker. In (369), the verb in the complement clause, *toa*, is marked for the present participle *-a*. In a past context, the same nominalizer =*tʃi* may follow a verb inflected for the past participle.

1.6.5 Clause chaining

Chhitkul-Rākchham exhibits two types of clause chaining constructions. The first type is an adverbial clause, the morphology of which I discussed in §1.6.1. An adverbial clause invariably involves a non-finite verb, possibly reduplicated, and some temporal markers of adverbial subordination. Chhitkul-Rākchham speakers make extensive use of this type of clause chaining to form complement clauses. A second type involves a string of finite verbs with no additional morphology but the adverb *te* ‘then’, occurring before the last verb of a series. (381) illustrates this second type:

(381) $ne = i$ $ga : = \emptyset$ $p^hoga = \emptyset$ $ur - tʃ - i$ ətsə $ku\text{ɔ}n = \emptyset$ $za - i$ te
 yesterday=LOC 1SG=ABS clothes=ABS wash-TR-PFV small food=ABS eat-PFV then
 $n\text{ɔ}n - i$
 sleep-PFV

‘Yesterday, I wash the clothes, ate lightly and went to bed’ – DSN

There is no additional morphology either in similar constructions with a different tense distinction. Thus, *tʰanmuni ga: pʰoga urtʃinɔk, ətsə kwan zanɔk te nɔnnak* ‘tonight I will wash the clothes, eat lightly and go to bed’.

1.6.6 Relative clauses

There are three ways to form relative clauses in Chhitkul-Rākchham. The first is a combination of the active participle and the relativizing nominalizer $=(\text{r}\text{o}\eta)\text{sea}$ discussed in §1.6.3 – a most common strategy found in the Himalayan region (DeLancey 2002).

In the second type, there is no nominalizer, replaced by the demonstrative *hojo*, which goes with the head noun. Relative clauses occur in prenominal position. They are formed via the gap strategy, where there is no overt case-marked reference to the head noun (Comrie and Kuteva 2013).

As mentioned in §1.3.2.2.2, *hojo* is a distal deixis demonstrative pronoun consisting of the deictic root *ho-* and the suffix *-jo*. From a cross-linguistic perspective, personal pronouns often stem from demonstratives, and this is also the case in Chhitkul-Rākchham, where *hojo* serves as third person singular non-honorific.

(382) kin= \emptyset tuŋ-ã hojo ti:= \emptyset zo-i ti:= \emptyset
 2SG.HON=ABS drink-PRS.PTCP DEM.DIST water=ABS good-MODIF water=ABS

‘The water that you drink is pure’ – DSN

(383) tjo-g-a hojo atji= \emptyset ai ətsə baja= \emptyset hən
 weep-E-PROG DEM.DIST child=ABS 1SG.POSS small brother=ABS COP.EMPH

‘The child who is weeping is my little brother’ – DSN

In the following example, the verb in the relative clause, *runṭfi*, inflects for the perfective, but it has a progressive (imperfective) value. *Runṭfaŋ* belongs to the subset of stance, position, or posture verbs (see §3.1.1.1) taking the perfective instead of the progressive:

(384) ram=e tʃ^hεtiŋ runṭf-i hojo mi:= \emptyset devender= \emptyset
 Ram=GEN POST.PURP wait-PFV DEM.DIST person=ABS Devender=ABS
 hən
 COP.EMPH

‘The person who is waiting for Ram is Devinder’ – DSN

The active participle also indicating a completed action, both relative-clause verbs in (382) and (383) may inflect for the perfective instead of the progressive. In (384), whether *runṭfi* indicates an ongoing or a completed action is inferred contextually.

As shown in (385), a relative clause may be headless, or that at least one that does not include a head noun:

(385) kin=∅ k^he taŋ-fi hojo ga:=∅ za:-ŋ de-ĩ
 2SG=ABS what see-PFV DEM.DIST 1SG=ABS show-INF give-IMP.2SG.HON

‘Show me what you saw’ – DSN

Yet, as shown in (385), there is a third type of relative clause in Chhitkul-Rākchham, namely correlative. We may surmise this type of relative construction is the result of language interference with Hindi (McGregor 1977: 46-7). An interesting feature shown in (386) is the presence of the auxiliary *tɔk* in the initial proposition and *ta* in the second one, which means correlative clauses include some evidential distinctions. The correlative construction involves the correlator ‘who’ (*su:*) and *hojo*, which I gloss in (386) as a personal pronoun – remember the non-honorific third person singular and the distal demonstrative both surface as *hojo*. Note that in the case of correlative constructions, the verb in the initial clause may take any TAM inflection:

(386) ga:=∅ su: mi:=tiŋ kamaŋ=∅ latf-a tɔ-k hojo=∅
 1SG=ABS who man=COM work=ABS do-PROG AUX.PEEX-1SG 3SG.NHON=ABS

mã mã zo-i ta
 INT good-MODIF COP.PE

‘The man with whom I am working is very kind’ – DSN

An alternative to (387) is still a correlative construction, but one where both the correlator and *hojo* occur before the subject, as shown in (387):

(387) hojo mi:=∅ su:=tiŋ ga:=∅ kamaŋ=∅ latf-a tɔ-k
 DEM.DIST man=ABS who=COM 1SG=ABS work=ABS do-PROG AUX.PEEX-1SG

mã mã zo-i ta
INT good-MODIF COP.PE

‘The man with whom I am working is very kind’ – DSN

1.7 Speech formulas

In this section I provide a short list of the most common ‘speech formulas’ (Amery 2009: 138) in use in Chhitkul-Rākchham. By doing so, I remain consistent with my own view of language as a social phenomenon (see §2.4.2.3). A language is more than the sum of its phonological, morphological and syntactic components.

holase ‘thank you’ (said all over Kinnaur)

ɔtʃe ‘please’

obi nəŋ tʃʰukʃe lit. ‘let’s meet tomorrow’

obi kɔʃite lit. ‘let’s talk tomorrow’

dukaŋ talatʃi ‘do not worry’

gora ‘where are you going’

nəŋ bəraŋ tʃʰukʃaŋ ‘see you later’

zanie ‘I do not know’

huju hun maĩ, huju ba:re lɔtʃʃi ‘let it be, forget about it’

kin hale toĩ ‘how are you?’

kin kʰe latʃa toĩ ‘what are you doing?’

patʃ zasaŋ/tuaŋ tʃʰɛtiŋ kʰe kʰe to ‘let’s have something to eat/drink’

kʰe asa: to/ta ‘What is going on?’

kʰe ase ‘what happened?’

kĩ swagat to ‘you’re welcome’

kʰɛtso man ba ‘no problem’

hɛt ta ai paʃaŋ ‘maybe next time’

patʃ santo rote ‘let’s go to the temple’

ga: kin kʰe rutʃijã/ga: kin kʰe riu dei ã ‘may I ask you something?’

ga: kĩ madad gini tɔk ‘I need your help’

ga: hale/kʰe madad daĩ ‘how can I help’

u: deĩ ‘come in!’

tʃʰul deʃo swagat to ‘welcome to Chhitkul village’

sanĵla tʃʰɛtiŋ ai bas kʰe taimo tuts 'what time is the next bus to Sanglā?'
 bas stand go/goda koʃo 'where is the bus stand?'
 hɔja ruŋʃi 'wait here'
 ga: ɔʃa pɔlʃiti tunɔk 'I'll be back soon'
 ga: masɔmzitek 'I do not understand'
 ga: anɡrezi do kɔlʃaŋ matsʰa: 'I do not speak English'
 ai kʰati toa to/ga: kʰasa tɔk 'I am cold'
 ga: bet ta tɔk 'I am scared'
 ga: suʃaŋ miʃa tɔk 'I need a bath'
 ga: zoi kɔleja matɔk 'I do not feel well'
 ga: kī madad laŋ miʃa/suntsea tɔk 'I wish I could help you'
 huju hanaŋ mɔlaŋ 'how much does this cost?'
 kin kʰe gini toī a 'do you need anything?'
 patʃ halifaŋ/gumeŋ rote 'let's go for a walk'
 obi ʃjana halta zoi 'better now than tomorrow'
 kī fon nambar kʰe 'what is your phone number?'
 nambərkaŋ teotʃo kjaŋ da hanaŋ taim to 'How much time do we have before nightfall?'
 tse zoi asi ginaŋ 'all the best'
 zoi hunī/hunitʃ 'keep safe'
 kin tʃʰukʃi ga: man man/mã mã zoi kɔlidek 'I am glad to see you'
 hɛt ta obi njaŋ tʃʰukʃe 'I hope to see you tomorrow'
 dʒã deĵarotʃi matʃʰukʃi 'long time no see'
 tʰan man man/mã mã kʰati 'it is so cold today!'
 man man/mã mã la:n ta 'it is very windy'
 tse zoi a:ts ta 'everything is gonna be alright'
 zoi pɔsitʃ/zoi hunitʃ 'have a good day'

Appendix 2: list of recordings

The lists below provide information (file name, speech genre, speaker(s) and segment) about the recordings mentioned within this thesis. The first list deals with evidentiality and the second list with the sketch grammar (see appendix 1). The whole corpus of recordings is available on the following link: <https://www.elararchive.org/dk0544>. As discussed in §2.5, those examples that stem from elicitation sessions are available on request.

List 1: evidentiality

Gloss	File name	Speech genre	Seg.	Speaker(s)
(1)	JAC_cik05-YS1-2019-03-07-24	Jackal and the Crow (picture-based)	24	YS1
(2)	TRD_cik03-JL-2018-11-25-20	Traditional (narrative)	20	JL
(3)	DEB_cik04-CRN-YS1-2018-11-22-16	Conversation (debatable topic)	16	CRN and YS1
(4)	TOP_cik10-DSN-2018-12-14-30	'Monologue' (topic)	30	DSN
(5)	TOP_cik10-DSN-2018-12-14-16	'Monologue' (topic)	16	DSN
(6)	AUT_cik03-RLN-2018-10-12-2	'Monologue' (autobiographical)	2	RLN
(7)	TOP_cik03-AS-2018-10-12-51	'Monologue' (topic)	51	AS
(8)	DEB_cik08-RKKF-SS3-2019-05-27-74	Conversation (debatable topic)	74	RKKF and SS3
(10)	DEB_cik08-RKKF-SS3-2019-05-27-3	Conversation (debatable topic)	3	RKKF and SS3
(19)	DEB_cik08-RKKF-SS-2019-05-27-75	Conversation (debatable)	75	RKKF and SS3
(24)	DEB_cik01-RK- BSN1-2018-10-15-75	Conversation (debatable)	75	RK and BSN1

(25)	TRD_cik07-MSN-2019-03-09-9	Traditional (procedural)	9	MSN
(32)	AUT_cik01-RK-2018-10-08-4	'Monologue' (autobiographical)	4	RK
(39)	AUT_cik9-YS1-2018-11-22-31	'Monologue' (autobiographical)	31	YS1
(41)	JAC_cik05-YS1-2019-03-07-1	Jackal and the Crow (picture-based)	1	YS1
(64)	TRD_cik01-RK-2018-10-08-4	Traditional (procedural)	4	RK
(72)	AUT_cik9-YS1-2018-11-22-31	'Monologue' (autobiographical)	31	YS1
(75)	TOP_cik10-DSN-2018-12-14-13	'Monologue' (topic)	13	DSN
(91)	DEB_cik01-RK-BSN1-2018-10-15-44	Conversation (debatable topic)	44	RK and BSN1
(92)	DEB_cik01-RK-BSN1-2018-10-15-46	Conversation (debatable topic)	46	RK and BSN1
(93)	AUT_cik06-SB1-2018-11-21-5	'Monologue' (autobiographical)	5	SB1
(94)	JAC_cik05-YS1-2019-03-07-22	Jackal and the Crow (picture-based)	22	YS1
(95)	TOP_cik10-DSN-2018-12-14-9	'Monologue' (topic)	9	DSN
(99)	AUT_cik03-RLN-2018-10-12-5	'Monologue' (autobiographical)	5	RLN
(100)	AUT_cik09-YS1-2018-11-22-15	'Monologue' (autobiographical)	15	YS1
(101)	AUT_cik12-JC-2018-11-25-5	'Monologue' (autobiographical)	5	JC

(102)	AUT_cik14-BSN2-2018-12-18-19	'Monologue' (autobiographical)	19	BSN2
(103)	DEB_cik04-CRN-YS1-2018-11-22-2	Conversation (debatable topic)	2	CRN and YS1
(104)	TRD_cik10-SS1-2019-04-11-7	Traditional (procedural)	7	SS1
(105)	DEB_cik07-RKKF-SS3-2019-05-27-41	Conversation (debatable topic)	41	RKKF and SS3
(106)	AUT_cik08-CRN-2018-11-22-17	'Monologue' (autobiographical)	17	CRN
(108)	DEB_cik01-RK-BSN1-2018-10-15-63	Conversation (debatable topic)	63	RK and BSN1
(110)	NDB_cik05-BD1-BD2-2019-03-07-82	Conversation (non- debatable topic)	82	BD1 and BD2
(112)	DEB_cik07-RKKF-SS3-2019-05-27-7	Conversation (debatable topic)	7	RKKF and SS3
(114)	TOP_cik07-MK-2018-11-27-9	'Monologue' (topic)	9	MK
(115)	TOP_cik10-DSN-2018-12-14-18	'Monologue' (topic)	18	DSN
(116)	TOP_cik10-DSN-2018-12-14-22	'Monologue' (topic)	22	DSN
(117)	TOP_cik10-DSN-2018-12-14-30	'Monologue' (topic)	30	DSN
(118)	TOP_cik10-DSN-2018-12-14-32	'Monologue' (topic)	32	DSN
(119)	DEB_cik04-CRN-YS1-2018-11-22-28	Conversation (debatable topic)	28	CRN and YS1
(121)	DEB_cik01-RK-BSN1-2018-10-15-20	Conversation (debatable topic)	20	RK and BSN1
(125)	JAC_cik05-YS1-2019-03-07-15	Jackal and the Crow (picture- based)	15	YS1

(126)	TOP_cik09-KCN-2018-11-27-13	'Monologue' (topic)	13	KCN
(127)	JAC_cik08-JC-2019-03-09-3	Jackal and the Crow (picture- based)	3	JC
(128)	JAC_cik05-YS1-2019-03-07-59	Jackal and the Crow (picture- based)	59	YS1
(129)	JAC_cik09-MSN-2019-03-19-3	Jackal and the Crow (picture- based)	3	MSN
(130)	NDB_cik06-BS1-AD-2019-03-07-41	Conversation (non- debatable topic)	41	BS1 and AD
(131)	NDB_cik06-BS1-AD-2019-03-07-14	Conversation (non- debatable topic)	14	BS1 and AD
(132)	TOP_cik09-KCN-2018-11-27-7	'Monologue' (topic)	7	KCN
(133)	TOP_cik02-RK-2018-10-08-24	'Monologue' (topic)	24	RK
(136)	NDB_cik04-MK-SD1-2018-11-24-18	Conversation (non- debatable topic)	18	MK and SD1
(138)	TOP_cik11-BD1-2019-03-07-15	'Monologue' (topic)	15	BD1
(139)	JAC_cik05-YS1-2019-03-07-23	Jackal and the Crow (picture- based)	23	YS1
(140)	JAC_cik10-SD1-2019-03-10-34	Jackal and the Crow (picture- based)	34	SD1
(141)	JAC_cik09-MSN-2019-03-09-22	Jackal and the Crow (picture- based)	22	MSN
(142)	JAC_cik09-MSN-2019-03-09-31	Jackal and the Crow (picture- based)	31	MSN

		based)		
(143)	DEB_cik07-RKKF-SS3-2019-05-27-23	Conversation (debatable topic)	23	RKKF and SS3
(144)	TOP_cik09-KCN-2018-11-27-11	Monologue' (topic)	11	KCN
(145)	AUT_cik13-SB2-2018-11-25-4	'Monologue' (autobiographical)	4	SB2
(146)	AUT_cik03-RLN-2018-10-12-9	'Monologue' (autobiographical)	9	RLN
(149)	TOP_cik11-BD1-2019-03-07-12	'Monologue' (topic)	12	BD1
(150)	DEB_cik01-RK-BSN1-2018-10-15-2	Conversation (debatable topic)	2	RK and BSN1
(152)	TOP_cik03-AS-2018-10-12-2	'Monologue' (topic)	2	AS
(153)	TOP_cik03-AS-2018-10-12-1	'Monologue' (topic)	1	AS
(163)	NDB_cik01-VKN-NB1-2018-11-21-5	Conversation (non- debatable topic)	5	VKN and NB1
(164)	NDB_cik04-MK-SD1-2018-11-24-118	Conversation (non- debatable topic)	118	MK and SD1
(173)	JAC_cik06-BS1-2019-03-07-15	Jackal and the Crow (picture- based)	15	BS1
(181)	TOP_cik07-MK-2018-11-27-8	'Monologue' (topic)	8	MK
(183)	NDB_cik01-VKN-NB1-2018-11-21-24	Conversation (non- debatable topic)	24	VKN and NB1
(184)	TRD_cik01-RK-2018-10-08-16	Traditional (procedural)	16	RK
(204)	NDB_cik05-BD1-BD2-2019-03-07-74	Conversation (non- debatable topic)	74	BD1 and BD2
(205)	NDB_cik05-BD1-BD2-2019-03-07-64	Conversation (non- debatable topic)	64	BD1 and BD2

(206)	NDB_cik05-BD1-BD2-2019-03-07-71	Conversation (non-debatable topic)	71	BD1 and BD2
(207)	TRD_cik04-GD-2018-11-26-26	Traditional (procedural)	26	GD
(208)	DEB_cik07-RKKF-SS3-2019-05-27-56	Conversation (debatable topic)	56	RKKF and SS3
(209)	TOP_cik09-KCN-2018-11-27-11	'Monologue' (topic)	11	KCN
(210)	DEB_cik07-RKKF-SS3-2019-05-27-73	Conversation (debatable topic)	73	RKKF and SS3
(211)	DEB_cik01-RK-BSN1-2018-10-15-75	Conversation (debatable topic)	75	RK and BSN1
(212)	NDB_cik01-VKN-NB1-2018-11-21-52	Conversation (non-debatable topic)	52	VKN and NB1
(213)	NDB_cik06-BS1-AD-2019-03-07-155	Conversation (non-debatable topic)	155	BS1 and AD
(214)	NDB_cik04-MK-SD1-2018-11-24-152	Conversation (non-debatable topic)	152	MK and SD1
(215)	DEB_cik01-RK-BSN1-2018-10-15-58	Conversation (debatable topic)	58	RK and BSN1
(216)	TOP_cik01-RK-2018-10-08-8	'Monologue' (topic)	8	RK
(217)	DEB_cik01-RK-BSN1-2018-10-15-64	Conversation (debatable topic)	64	RK and BSN1
(218)	DEB_cik01-RK-BSN1-2018-10-15-39	Conversation (debatable topic)	39	RK and BSN1
(219)	TRD_cik09-SS1-2019-04-11-21	Traditional (description)	21	SS1
(220)	TOP_cik02-RK-2018-10-08-9	'Monologue' (topic)	9	RK
(221)	AUT_cik10-JL-2018-11-25-4	'Monologue' (autobiographical)	4	JL
(222)	AUT_cik10-JL-2018-11-25-11	'Monologue' (autobiographical)	11	JL

(223)	NDB_cik04-MK-SD1-2018-11-24-30	Conversation (non-debatable topic)	30	MK and SD1
(224)	JAC_cik06-BS1-2019-03-07-13	Jackal and the Crow (picture-based)	13	BS1
(225)	NDB_cik04-MK-SD1-2018-11-24-14	Conversation (non-debatable topic)	14	MK and SD1
(226)	NDB_cik04-MK-SD1-2018-11-24-33	Conversation (non-debatable topic)	33	MK and SD1
(227)	NDB_cik04-MK-SD1-2018-11-24-3	Conversation (non-debatable topic)	3	MK and SD1
(228)	NDB_cik04-MK-SD1-2018-11-24-10	Conversation (non-debatable topic)	10	MK and SD1
(229)	JAC_cik03-NB2-2019-03-06-4	Jackal and the Crow (picture-based)	4	NB2
(230)	JAC_cik06-BS1-2019-03-7-20	Jackal and the Crow (picture-based)	20	BS1
(231)	JAC_cik10-SD1-2019-03-10-16	Jackal and the Crow (picture-based)	16	SD1
(232)	JAC_cik08-JC-2019-03-09-20	Jackal and the Crow (picture-based)	20	JC
(233)	JAC_cik01-DSN-2018-12-29-31	Jackal and the Crow (picture-based)	31	DSN
(234)	JAC_cik10-SD1-2019-03-10-33	Jackal and the Crow (picture-based)	33	SD1
(235)	JAC_cik07-RK-2019-03-09-25	Jackal and the Crow (picture-based)	25	RK

(236)	NDB_cik04-MK-SD1-2018-11-24-13	Conversation (non-debatable topic)	13	MK and Sd1
(237)	JAC_cik07-RK-2019-03-09-14	Jackal and the Crow (picture-based)	14	RK
(238)	NDB_cik04-MK-SD1-2018-11-24-24	Conversation (non-debatable topic)	24	MK and SD1
(240)	JAC_cik09-MSN-2019-03-09-10	Jackal and the Crow (picture-based)	10	MSN
(241)	JAC_cik09-MSN-2019-03-09-21	Jackal and the Crow (picture-based)	21	MSN
(242)	JAC_cik01-DSN-2018-12-29-30	Jackal and the Crow (picture-based)	30	DSN
(243)	JAC_cik03-NB2-2019-03-06-4	Jackal and the Crow (picture-based)	4	NB2
(244)	JAC_cik04-BSN2-2019-03-06-35	Jackal and the Crow (picture-based)	35	BSN2
(245)	JAC_cik06-BS1-2019-03-07-1	Jackal and the Crow (picture-based)	1	BS1
(246)	JAC_cik07-RK-2019-03-09-19	Jackal and the Crow (picture-based)	19	RK
(247)	JAC_cik03-NB2-2019-03-06-17	Jackal and the Crow (picture-based)	17	NB2

List 2: sketch grammar (see appendix 1)

(256)	NDB_cik04-MK-SD1-2018-11-24-155	Conversation (non-debatable topic)	155	MK and SD1
(296)	JAC_cik04-BSN2-2019-03-06-20	Jackal and the Crow (picture-based)	20	BSN2
(297)	JAC_cik07-RK-2019-03-09-1	Jackal and the Crow (picture-based)	1	RK
(298)	TOP_cik03-AS-2018-10-12-48	'Monologue' (topic)	48	AS
(299)	TOP_cik11-BD1-2019-03-07-5	'Monologue' (topic)	5	BD1
(307)	NDB_cik04-MK-SD1-2018-11-24-97	Conversation (non-debatable topic)	97	MK and SD1
(308)	JAC_cik03-NB2-2019-03-06-18	Jackal and the Crow (picture-based)	18	NB2
(314)	JAC_cik05-YS1-2019-03-07-41	Jackal and the Crow (picture-based)	41	YS1
(321)	JAC_cik03-NB2-2019-03-06-17	Jackal and the Crow (picture-based)	17	NB2
(322)	JAC_cik05-YS1-2019-03-07-35	Jackal and the Crow (picture-based)	35	YS1
(325)	JAC_cik03-NB2-2019-03-06-3	Jackal and the Crow (picture-based)	3	NB2
(330)	NDB_cik04-MK-SD1-2018-11-24-86	Conversation (non-debatable topic)	86	MK and SD1

(342)	JAC_cik04-BSN2-2019-03-06-11	Jackal and the Crow (picture-based)	11	BSN2
(343)	JAC_cik08-JC-2019-03-09-7	Jackal and the Crow (picture-based)	7	JC
(346)	AUT_cik03-RLN-2018-10-12-4	'Monologue' (autobiographical)	4	RLN
(348)	AUT_cik03-RLN- 2018-10-12-11	'Monologue' (autobiographical)	11	RLN
(356)	DEB_cik01-RK-BSN1-2018-10-15-16	Conversation (debatable topic)	16	RK and BSN1
(357)	DEB_cik07-RKKF-SS3-2019-05-27-51	Conversation (debatable topic)	51	RKKF and SS3
(358)	JAC_cik05-YS1-2019-03-07-47	Jackal and the Crow (picture-based)	47	YS1
(363)	JAC_cik04-BSN2-2019-03-06-21	Jackal and the Crow (picture-based)	21	BSN2
(364)	JAC_cik02-PC-2019-03-06-12	Jackal and the Crow (picture-based)	12	PC
(365)	DEB_cik04-CRN-YS1-2018-11-22-24	Conversation (debatable topic)	24	CRN and YS1
(366)	JAC-cik04-BSN2-2019-03-06-29	Jackal and the Crow (picture-based)	29	BSN2
(367)	DEB_cik07-RKKF-SS3-2019-05-27-52	Conversation (debatable topic)	52	RKKF and SS3
(369)	TOP_cik11-BD1-2019-03-07-8	'Monologue' (topic)	8	BD1
(371)	AUT_cik02-RK-2018-10-08-1	'Monologue' (autobiographical)	1	RK

(372)	AUT_cik01-RK-2018-10-08-10	'Monologue' (autobiographical)	10	RK

Appendix 3: list of speakers

The list below provides information (name, gender, age, current place of residence, khandan) about the participants of the previously listed recordings.

Name	Gender	Age	Place of residence	Occupation
YS	M	39	Rakchham	Teacher
JL	M	86	Chhitkul	Former Oracle of <i>Mata Devī</i>
CRN	M	52	Rakchham	Principal
DSN	M	62	Reckong Peo	Former Principal, shopkeeper
RLN	M	70	Chhitkul	Retired from Indian Army
AS	M	69	Chhitkul	Former farmer
RKKF	M	47	Rākchham	Vice-president Rakchham's Panchayat; farmer
SS3	M	53	Rākchham	Member of Rakchham's Panchayat, farmer
RK	M	48	Chhitkul	Teacher
BSN1	M	43	Chhitkul	Farmer
MSN	M	61	Chhitkul	Farmer
SB1	F	85	Rākchham	Housekeeper
JC	M	72	Chhitkul	Former ITBP, mechanic and farmer
BSN2	M	58	Rākchham	Farmer
SS1	M	58	Rākchham	Interpreter (of Rakchham's deities), shepherd
BD1	F	67	Rākchham	Housekeeper
BD2	M	65	Rākchham	retired from government service
MK	F	35	Rākchham	Housekeeper
SD1	F	33	Rākchham	Housekeeper
KCN	M	46	Rākchham	Hotel manager
AD	F	51	Rākchham	Housekeeper
BS1	M	52	Rākchham	Shopkeeper, farmer
VKN	M	66	Rākchham	Shopkeeper, former member of Rakchham's Panchayat

NB1	M	†	Rākchham	Former bank manager in Sanglā
DS1	F	36	Rākchham	Housekeeper
NB2	F	56	Rākchham	Housekeeper
GD	F	-	Chhitkul	Housekeeper
PC	M	50	Rākchham	Unemployed

Appendix 4: Chhitkul-Rākchham to English wordlist

ae pro. my	baraŋ/beraŋ n. time
ai pro. my pro. other adv. also adv. next	barea n. day after the day after tomorrow
aja n. grand-mother (father side)	batan n. thing
alag asaŋ v. to get separated	batʃeasaŋ v. to preserve
ali adj. sweet	bazgi n. music
alisaŋ v. to call, invite	bazisaŋ v. to play an instrument
alu n. potato	bā mā int. very
anaŋ v. intr. to stand up, get up, wake	ba:ləŋ n. sand
antʃaŋ v. tr. to stand up, get up, wake	beaŋ v. to fall (animates)
ama n. mother	bei adj. thin (not spherical or round)
api n. grand-mother	bensa n. pain
aruŋ n. downhill migration (any season)	bəŋā adj. equal
asagi adv. via	benaŋ laŋ/latʃaŋ v. to love
a:sa:n adj. easy	bəŋkar n. Tibetan sheep
asaŋ v. to become, happen, take place	bəŋryt n. Tibetan goat
ase n. teasing	bəŋtu n. Tibetan goats and sheep
aselaŋ v. to vomit	bəttan v. to fear
asma:ni adj. blue	b^hanza n. nephew
aʃaraŋ n. mid-June mid-July	b^hɛʃakaŋ n. mid-April mid-May
aʃo n. mirror	bijaŋ n. seed
ata n. elder sister	bindra n. Vrindavan
ate n. elder brother	biteasaŋ v. to spend
atiŋ ʃatiŋ n. rites	bitiŋ n. wall
atʃi n. child, son	bjaŋsaŋ v. to have the habit of/to be used to
attʃaŋ n. children	bodi qnt. many/most
att^ha interj. good, really, I see	bəʃiŋ n. man
aʃaŋra: n. big stone	bəŋ n. foot/leg (lower part)
au n. father	bəŋtʃaŋ n. feet
a: conj. and n. mouth	bəre cvb. when; n. wife
badelisaŋ v. to change	bərtəaŋ v. to use
badraŋ n. mid-August mid-September	bəsaŋ n. dust
baisa n. brother-in-law/sister-in-law	bəʃaŋ n. year
bak n. mask	bəʃaŋniŋ adv. yearly
bak^hraŋ n. goat	bəʃək n. spider
baki conn. and	bədean v. to increase/to go up
balia n. kidney bean	bəniŋ n. fodder
band ptcp. closed	bəseriŋ n. Batseri (village)
bandre adj. brown	bra(su) n. bitter buck
baŋiŋ n. pot	bra:saŋ v. to chew
bant^hini adj. beautiful	brastʃisaŋ n. bitter buck flour
baŋ adj. full	breme n. yak
baŋzisaŋ v. intr. to smell (of something)	brət n. flour
bapu n. uncle	brin rəŋ v. to lie
baraboiri n. enemy	buat n. skin (of fruits and potatoes)

bunaŋ v. to burn	dzã teotfo adv. a long time ago
bufaŋ n. rope	dzeleaŋ v. to holy visit
butse n. worm	dzeftʰaŋ n. mid-May mid-June
buzuruk n. elder	dzĩaŋ v. to howl
bultsʰa n. rock salt	dzilaŋ n. root
da post. used for alienable possession	dzo dem. that (borrowed from K)
dama n. cow	dzoa adv. there
dan n. stomach	dzu dem. this (borrowed from K); n. cloud
danaŋ n. fine	dzua adv. here
dapaŋ v. to pull, pick up	dzui adj. cloudy
dari n. beard	dzulariŋ n. fog
dartjuot n. flag	qomaŋ n. blacksmith
dasanŋ v. to give	eaŋaŋ n. inauguration of the sowing season
dafiŋ n. Dhangdhangshi	ekʰe adv. together
dau post. outside	ekʰe latfaŋ v. to collect
da:ŋ v. to fall (inanimates)	ətsə adj. small, short
da:sanŋ v. intr. to break	earaŋ v. to hunt
de adv. again	ənaŋ v. to hear
deanŋ v. intr. to carry	galaŋ v. to blow
dear n. day	galeŋ v. to chase
defaŋ n. village	gamaŋ adj. warm
detfaŋ v. tr. to carry	garaŋ n. river
dʰaneanŋ v. to thank	ga:tri n. Gangotri
dʰaŋ n. attention	gerifaŋ v. to surround
dʰaro n. marriage	gelaŋ v. to win
dʰarofar n. heritage	ginaŋ v. to need
dʰarti n. earth	gisaŋ v. to sneeze
dʰeaŋ n. body	go pro. where
dʰupaŋ n. incense	goeniŋ n. rain
dikaŋ v. to agree, match	gojo pro. which
dileasaŋ v. to provide	golaŋ n. Adam's apple
dimi n. key	gol n. month
dea~dja adj. male	golniŋ adv. monthly
djaŋ n. body	golband n. scarf
doiafaŋ v. to cry	gorkaŋ v. to be late
dək dək adj. thick (books, pillows, blankets)	gorki adj. late
dəŋer n. Brahma Kamal (flower)	gret n. song
dərniŋ n. rainbow	gret laŋ/latfaŋ v. to sing
dəjaŋ n. curd	grifi kat n. Kinnauri language
dukan n. shop	groktsu n. Oracle
dumsa n. large gathering	gualtsaŋ n. moon
dumtʰan n. meeting place	guaŋtʰraŋ n. urine
dunaŋ v. to burn by accident (food)	guaŋ v. to like
dusti oanŋ v. to sweat	gui num. nine adj. whole
dzaraŋ adj. dumb and deaf	gulaŋ v. to cough
dzã qnt. (too) many	gumeŋ v. to go for a walk

gumifaŋ v. to wander	hulaŋ v. to push
gun n. winter	hunəŋ v. to live, stay
gunsa: (aruŋ) n. winter downhill migration	huja atfi n. student
guɔlda n. kite bird	hufaŋ v. mid. to learn, read, study
guɔrbɔŋ n. property	huji adj. educated
gupt adj. invisible	ina ina adv. sometimes
gupto rəŋ v. to enter into meditation	indərmaŋ~indraŋ n. mid-Sep. mid-October
hã interj. yes, indeed	ja disj. or
ha:l n. situation, condition	ja:d n. remembrance
hagoŋ v. to understand	ja:d laŋ/latŋ v. to remember
hale pro. how	jalaŋ adj. tiring
halta adv. right now	jali adj. tired
halta lo adv. still	jaŋ adv. again
hame pro. when	jaŋtsə n. bee
hame hame pro. how often	jaŋ v. to fly
hamefa adv. always	jynaŋ v. to walk
hanəŋ pro. how much, how many	jyt n. dry fried barley wheat
haŋ n. snow	jytŋ v. to grind
harəŋ n. bone, joint	kaddu: n. pumpkin
hataləŋ n. palm (hand)	kal post. up, at the top of
hatfi adv. next year	kalaŋ n. neck
he adv. like, so	kaliŋ adv. uphill
hədaŋ adv. here	kamaŋ n. work
həɔŋ adv. there	kar n. star
henna cvb. if so	kat n. language, voice
hekso cvb. as soon as	katəŋ n. mid-October mid-November
hetŋ v. to play	katŋ v. to laugh
het ta adv. maybe	ka: n. raven, crow
hime ama n. mother-in-law	ka:r n. sheep, ritual
holase interj. thank you	kentŋ n. fingers
hojo dem. that	kəmeatŋ v. to earn
homo num. three	k^haba adj. Tibetan
hozar num. thousand	k^hadu n. sheep (male)
hɔda adv. there	k^hai adj. black
hɔdne adv. at that time	k^hamaŋ n. darkness
hɔja adv. here	k^handan n. clan
hɔŋ v. to leave	k^hane qnt. some
hɔrki adj. far	k^hapo n. spoon
hɔsjaŋtsə n. honey-bee	k^hasaŋ v. to be cold
hɔt n. chilta	k^hati adj. cold (weather)
hɔtpikŋ v. to lose	k^he pro. what
hɔtŋ adv. just	k^he: pro. why
huanəŋ v. to teach	k^he k^he pro. something or other
hudu adv. there	k^heraŋ n. milk
hui dem. this	k^hets adv. alone
huju dem. this	k^hiaŋ v. to feed

k^hjusaŋ v. to scratch	lageaŋ v. to cross
k^hɔla n. Khrogla (subdivision Rākchham)	laŋ v. intr. to do
k^hɔlaŋ v. to peel	lafaŋ v. mid. to wear
k^hɔbra n. phuri	lat n. rope
k^hɔjaŋ adj. left	lau n. wrist, hand
k^hɔjaŋ pafo n. west	lau kamaŋ n. handy work
k^hɔsaŋ v. to reep	la:r n. saliva
k^hre n. hunger	la:go n. monastery
k^hrei adj. hungry	lei n. tongue adj. yellow
k^hui n. dog	likfaŋ v. to carry (on one's back)
k^hul n. animal skin	lim paŋ n. kail tree (pinus wallichiana)
k^hurki n. leg (upper part)	lisaŋ v. to be able to
k^hutfaŋ v. to steal	lo adv. also, already
kim~kjim n. house	loktfaŋ v. to burn
kinɔriŋ n. Kinnaur	lonjaŋ n. garlic
kir kir adj. flat and round	loŋ v. intr. to say, tell
kira n. aubergine	lotfaŋ v. tr. to say, tell
kjal paŋ n. deodar tree	lottfaŋ v. to forget
kjalak^ha qnt. enough	mahuji adj. illiterate
kjok^hui n. dog (male)	maĩ adj. red
kjopiji n. cat (male)	maĩ kutsu n. brown rice
kjoraŋ n. horse (male)	man man int. very
kju n. chest	manna cvb. if not
kjusu n. pocket	maŋ v. to dream, cvb. CAUS
kɔlisaŋ v. to feel	majare adj. ugly, bad (FEM)
kɔlfaŋ v. to speak	mafo adj. ugly bad (MASC)
kɔnaŋ v. to dig	matja aja n. grand-mother (mother side)
kɔnea n. three days after tomorrow	matja tete n. grand-father (mother side)
kra: n. hair	ma^ha n. Interpreter
kra:ŋ v. to open (TR)	ma^hiŋ n. soil
kramal paŋ n. poplar tree	ma:sea adv. lonely
kramtfaŋ v. to bind	ma:seasaŋ n. loneliness
krifaŋ v. to shiver	ma:ŋ n. mid-January mid-February
krɔsaŋ v. to mix (liquids)	ma:r n. Indian ghee (clarified butter)
kruts n. elbow	mã pro. self post. in
kuaŋ^he n. necklace (sandal wood)	mã mã int. very
kuaŋ v. to boil	mã mã teotfo adv. a long time ago
kuatsaŋ v. to master	mě n. fire
kukuri n. chicken	meliŋ n. fireplace
kulaŋ n. canal	mesaŋ n. slow
kum n. cushion	mesaŋ mesaŋ adv. slow
kuɔn n. food	mets n. tail
kuɔnfaŋ v. to look for	mez n. table
kuɔstaŋ adj. difficult	mi n. eye
kuɔ^hal n. deity's sword	mi: n. human being, people, person, man
kutsu n. rice	miktsal n. eyebrow

min n. name	obi adv. tomorrow
miji adj. thirsty	ok^ho adv. only
mona: n. Kamru (village)	ɔgli n. buckwheat
mɔneasaŋ v. to celebrate	ɔk^ha ɔk^ha n. predicament
mɔktjaŋ v. to clip, shave	ɔlaŋ n. shadow
mɔlaŋ n. cow dung price, cost	ɔlea adj. poor
mɔrda/mɔrt^ha n. corpse	ɔm n. path
mɔriŋ n. woman	ɔme n. friend
mɔk^haŋ n. mouth	ɔnaŋ v. to pluck
mɔk^hiraŋ n. mid-November mid-December	ɔrea n. carpenter
mukaŋ n. face	ɔja adj. quick
mun n. night	ɔja ɔja quickly
murat n. cow (female)	ɔtja n. evening
mutse n. moustache	pak^haŋ n. feather (bird)
mu: n. wild mushroom	pala n. shepherd
nabliŋ adv. last year	palajaŋ v. to rear
naifaŋ v. mid. to take a holy bath	palisaŋ v. to maintain, take care of
naki adj. thin, slim (spherical and round)	pan paŋ n. pine tree
naki kientjaŋ n. pinky (baby finger)	pantjaŋ v. to spin, weave
naŋ adv. opposite side	par aja n. great-great-grand-mother
nasajaŋ v. to be sick	par tete n. great-great-grand-father
nasi adj. sick	pafo n. side, direction
nat n. disease	patalajaŋ n. sole
nei adv. yesterday	patraŋ n. leaf
neotjo adv. after, behind	pa:l n. apple
nemja n. daughter-in-law	pa:niŋ n. drinking technique (p ^h asur)
neŋjaŋ v. to fight	pa:paŋ n. hardship
nimbu n. lemon	pa:tso ku:tso n. grand-children
nimi adj. tasty	penea n. four days after tomorrow
nirea n. day after tomorrow	peraŋ n. family
nisa/niza num. twenty	perantjaŋ n. relatives
ni: n. sun, sunlight	p^haŋnaŋ n. mid-February mid-March
ni: oajaŋ v. to rise (sun)	p^haŋjaŋ v. to lose
ni:ri adv. during the day	p^hasur n. alcohol (ritual)
ni:ri kuɔn n. lunch	p^hatsniŋ n. woolen bag (usef for trade)
ni: rijaŋ v. to set (sun)	p^həteajaŋ v. to burgeon, bloom
njanaŋ v. to hide	p^heŋ v. to send
njanro adv. on the following day	p^hikjaŋ v. to drop
njekjaŋ v. mid. to hide	p^hisaŋ v. to throw
nɔnaŋ v. to sleep	p^hoi adj. dry
nuaŋ v. to gulp	p^hɔga n. clothes
nui adj. new	p^hɔk n. shawl
num n. Kinnaurese hat	p^hɔla n. blood
nupstaŋ v. to return	p^hɔlaŋ n. fruit
nuri adj. soft	p^hɔsəl n. crop
oajaŋ v. to rise, grow up, come out	p^hɔsi adj. dried

p^huri kjɛntʃaŋ n. thumb	rɔlfʃaŋ v. to cooperate
p^hutubrea n. day before the d. before yest.	rɔmaŋ n. goat's hair
piŋã adv. near	rɔŋ v. to go
piŋli n. mollet	rɔŋ tɔŋ v. to go back and forth
pifi n. cat (female)	rɔŋsea adj. similar
pitaŋ n. door	rɔtʃo n. horn
pitʃa n. head	rijuan v. intr. to ask
po post. down, below	rui adj. tall, long
poareŋ n. deity's lower part structure	rukʃi adj. similar
pɔnaŋ v. intr. to sew	rumaŋ v. to count
pɔntʃaŋ v. tr. to sew	runʃaŋ v. to listen, wait
pɔsaŋ v. to sit	rijutʃaŋ v. to ask
pɔʃ n. dried leaves of pine trees	ryt n. goat
pɔʃaŋ n. mid-December mid-January	ru: n. father-in-law
puan v. intr. to sow	santaŋ n. temple area
pura: laŋ/latʃaŋ v. to complete	saŋ v. to kill
p^huri adj. thick	saŋtʃaŋ v. to fill
puʃ n. knee	saŋtubrea adv. three days before yesterd.
putʃaŋ v. tr. to sow, harvest	sapa n. snake
puzisaŋ v. to worship	sat n. god, goddess
rakʃaŋ v. to soak	sat^hər n. snow leopard
ranaŋ v. to weave	sa:saŋ tutʃaŋ v. to breathe, inhale
randju n. widow	sã qnt. some
rán n. mountain	sã sã qnt. a little bit
ràn n. horse (male)	se n. apple
raŋmu n. morel	senatʃaŋ n. elders
raŋtʃaŋ v. tr. to sell	sɛmtʃɛn n. animal (of a certain size)
rapja n. bird	sigit num. eleven
raʃaŋ pa:ni: n. foodstuffs	siman n. boundary
rat n. animal (bovine)	soa n. tooth
ra: n. stone, num. one hundred (i: ra:)	soi adj. cold
ra:ŋ v. intr. to sell	sosolaŋ v. to split
reatan n. marriage	sɔrea num. eighteen
rɛ num. eight	sɔruk num. sixteen
rek n. wild peach	sɔrum num. thirteen
rɛnam n. summer start	sɔʃʃaŋ v. mid. to get damaged, decay
rim n. nose	sɔmdaran n. sea
riŋ v. to tell, say	sɔmzɛŋ v. to understand
ritaŋ n. season	sɔnij num. twelve
ri: n. field	sɔŋã num. fifteen
ri: putʃaŋ v. to harvest	sɔrɔk n. heaven, paradise
ri:sur n. avalanche	sɔstif num. seventeen
rijutʃaŋ v. tr. to ask	sɔtiŋ n. spiritual power
rots n. ear (human being)	sɔzgui num. nineteen
rɔktʃaŋ v. to graze	sualbɔŋ num. half
rɔlaŋ v. to quarrel	sualgaŋ n. sky

suarisaŋ v. to repair	tasəŋ v. to keep, put
suneasaŋ v. to narrate	taɬʰəra adj. hot (food, water)
suntseəŋ v. to think	ta:ŋ v. to see n. view
susaŋ v. to rot	te adv. then
susi adj. rotten	tei adj. big
sufaŋ v. mid. to bath (oneself)	tei ate n. elder brother
sutʰaŋ n. woolen grey trouser	teotʃo adv. before, in front of
su: pro. who, whose	terea adv. two days after tomorrow
ʃamaŋ n. knife	tefi adj. mashed
ʃare adj. beautiful (FEM)	tete n. grand-father (father side)
ʃaro adj. beautiful, handsome (MASC)	telaŋ n. oil
ʃa: n. meat	tət n. goats and sheep
ʃeki adj. proud	tʰi: adj. wet
ʃeli n. fox	tʰogələ n. ankle
ʃəŋ n. life	tʰopaŋ pʰisaŋ v. to spit
ʃiŋ n. wood	tʰolda n. rainbow
ʃiŋe adj. wooden	tʰuŋ n. shoe
ʃiŋʃaŋ v. to declare	tʰureŋ v. to distribute
ʃiŋtʃə n. nail	tiŋ conn. and
ʃi: adj. dead n. death	tiɬʰaŋ n. pilgrimage
ʃi:ntʃa n. liver	ti: n. water
ʃi:ʃaŋ v. to die	ti: pjaŋ v. to water, irrigate
ʃi:ʃuŋ n. birth	tĩ adj. green
ʃjana post. COMP	tjasəŋ v. to dance
ʃjaŋ n. mustard	tjosəŋ v. to weep
ʃjaŋ telaŋ n. mustard oil	tjutisaŋ v. to squeeze
ʃjasaŋ v. to look, watch	tŋ v. to come
ʃjesəŋ v. to recognize	tŋǎl n. heel
ʃjel n. medicine	tŋŋaŋ v. to take a nap
ʃɔl n. summer	tresəŋ v. to mix
ʃɔnaŋ v. to dance (in group)	tsako n. knife
ʃɔʃa n. heart	tsam n. wool
ʃranaŋ n. ice	tse qnt. all
ʃranimaŋ v. to freeze	tsʰa n. salt
ʃrɔul n. roof	tsʰaĩ adj. white
ʃruɔnaŋ n. jaw	tsʰalia n. corn, maize
ʃrupaŋ v. to wipe	tsʰam n. bridge
ʃuaŋaŋ n. mid-July mid-August	tsʰama n. aunt
ʃunisaŋ v. to shout	tsʰaŋ n. morning
ʃupaŋ v. to slaughter, sacrifice	tsʰaŋ gret n. narrative told all night long
ʃureŋ v. to turn	tsʰaŋna n. morning light
ʃu: n. deity	tsʰaŋpʰuliŋ n. breakfast
ʃu:kud n. invitation (extended to the deity)	tsʰarm n. autumn
tanaŋ n. ornament	tsʰasaŋ v. to know
taŋ post. up to	tsʰoaŋ v. to buy
taneəfaŋ v. to hang	tsʰoa n. bush

tsoro n. deity's sceptre	t^hureŋ v. to run
ts^haka qnt. some, a few	tɔlaŋ n. household
tsɔmkjaŋ v. to shine	tuaŋ v. to plant
tsuĩ n. tailor	umaleŋ n. necklace (made of nuts)
tsumaŋ v. to catch	uɔs n. honey
tsupaŋ v. to shiver	uraŋ v. intr. to wash
tsuri n. single women	urtsu n. wooden storage unit (crops)
tsusaŋ v. to divide	urtjaŋ v. tr. to wash
tjamaŋ n. chamang, weaver	usko n. Flower Festival
tja: n. plain tea	uts n. flower
tje n. lips	u: post. inside (of)
tjesaŋ v. to write	va:pas tɔŋ v. to come back
tj^hesaŋ v. to bask	zagjaŋ v. to protect
tj^hetraŋ v. mid-March mid-April	zak^haŋ pafo adj. East
tj^hili n. money	zaŋ n. gold
tj^hitkulmets n. female member of Chhitkul	zasaŋ v. to eat
tj^hitkulpa n. male member of Chhitkul	zasaŋ tuaŋ n. eatables
tj^hoa n. grain	za:ŋ v. to show, point
tj^hɔsaŋ v. to get ripe	zo n. cross-breeding of a yak and a cow
tj^hɔsi adj. ripe	zoi adj. good
tj^hulaŋ v. to peel	zomaŋ v. to get together
tj^huli n. wild apricot	zomreŋ v. to be born
tj^husaŋ v. to touch	zɔŋ n. peak, pyramide
tji adj. young	zaŋ adv. this side
tji: n. grass	
tji:saŋ v. to bite	
tjolo n. dice	
tjɔtkaŋ n. chin	
tjɔtjaŋ v. to light	
tjulaŋ v. to cut	
tjunaŋ v. to tie	
tjupaŋ v. to suck	
tuaŋ v. to drink	
tubrea n. day before yesterday	
tusaŋ v. to bring	
tyaraŋ n. festival	
tj^hukjaŋ v. mid. to meet	
tjaŋ v. intr. to make, build, cook	
tatjaŋ v. tr. to make, build, cook	
t^ha adv. now	
t^han adv. today	
t^haniŋ adv. this year	
t^hanmuni adv. tonight	
t^hantjaŋ adv. nowadays	
t^haŋ v. to hit, beat n. black tea	
t^hate laŋ/latjaŋ v. to tease	

Appendix 5: English to Chhitkul-Rākchham wordlist

Adam's apple n. golan	bind v. kramtʃaŋ
after/behind adv. neotʃo	bird n. rapja
again adv. njaŋ~jaŋ~nejaŋ	birth n. ji:ʃuŋ
agree/match v. dikan	bite v. tʃi:saŋ
alcohol (ritual) n. p ^h asur	bitter buck n. bra(su)
a little bit qnt. sã sã	black adj. k ^h ai
all qnt. tse	blue adj. asma:ni
alone adv. k ^h ets	blow v. galaŋ
a long time ago adv. mā mā teotʃo	body n. ɖeaŋ
a long time ago adv. dʒã teotʃo	boil v. kuaŋ
also adv. lo	Brahma Kamal (flower) n. dɔŋɛr
always adv. hameʃa	break v. intr. da:saŋ
and conn. baki/a:/tiŋ	breakfast n. ts ^h aŋp ^h uliŋ
animal (bovine) n. rat	breathe, inhale v. sa:saŋ tutʃaŋ
animal (of a certain size) sɛmtʃɛn	bridge n. ts ^h am
animal skin n. k ^h ul	bring v. tusaŋ
ankle n. t ^h ogələ	brother-in-law/sister-in-law n. baises
apple n. pa:l/se	brown adj. bandre
ask v. intr. rijuaŋ	brown rice n. maĩ kutsu
ask v. tr. rijutʃaŋ	boundary n. simaŋ
as soon as adv. hɛkso	buckwheat n. ɔgli
attention n. d ^h aŋ	burgeon, bloom v. p ^h əʃeaŋ
at that time adv. hɔdne	burn v. bunaŋ
aubergine n. kira	burn v. lɔktʃaŋ
aunt n. ts ^h ama	bush n. ts ^h oa
autumn n. ts ^h arm	buy v. ts ^h oaŋ
avalanche n. ri:sur	call, invite v. alisaŋ
bask v. tʃ ^h esaŋ	canal n. kulaŋ
bath (oneself) v. mid. suʃaŋ	carpenter n. ɔrea
batseri (village) n. bɔseriŋ	carry v. tr. detʃaŋ
become, happen, take place v. asaŋ	carry (on one's back) v. likʃaŋ
be able to v. lisaŋ	cat (female) n. piʃi
beard n. dari blue adj. asma:ni	cat (male) n. kjopiʃi
beautiful adj. bant ^h ini	catch v. tsumaŋ
beautiful adj. ʃare (FEM)	celebrate v. mɔneasaŋ
beautiful, handsome adj. ʃaro (MASC)	chamang, weaver n. tʃamaŋ
be born v. zɔmrɛŋ	change v. badelisaŋ
be cold v. k ^h asaŋ	chase v. galaŋ
bee n. jaŋtsə	chest n. kju
before, in front of adv. teotʃo	chew v. bra:saŋ
be late v. gɔrkaŋ	chicken n. kukuri
be sick v. nasaŋ	child, son n. atʃi
big adj. tei	children n. attʃaŋ
big stone n. aŋaŋra:	chilta n. hɔt

chin n. tʃɔtkəŋ	dig v. kəŋəŋ
clan n. kʰandan	disease n. nat
clip, shave v. məktʃəŋ	distribute v. tʰuɾəŋ
closed ptcp. band	divide v. tsusaŋ
clothes n. pʰɔga	dog n. kʰui
cloudy adj. dʒui	dog (male) n. kjokʰui
cold adj. soi	door n. pitəŋ
cold (weather) adj. kʰati	down, below post. po
collect v. ekʰe latʃəŋ	downhill migration (any season) n. aruŋ
come v. tɔŋ	downhill migration (winter) n. gɯnsa:
come back v. va:pas tɔŋ	dream v. cvb. (CAUS) məŋ
COMP post. fjana	dried adj. pʰɔsi
complete v. pura: laŋ/latʃəŋ	dried leaves of pine trees n. pɔʃ
cooperate v. rɔʃəŋ	drink v. tuaŋ
corn, maize n. tsʰalia	drop v. pʰikʃəŋ
corpse n. mɔrda/mɔrtʰa	dry adj. pʰoi
cough v. gulaŋ	dry fried barley wheat n. jyt
count v. rumaŋ	dumb and deaf adj. dʒaraŋ
cow n. dama	dust n. bɔsaŋ
cow (female) n. murat	ear (human being) n. rots
cow dung, price, cost n. mɔlaŋ	earn v. kəmeatʃəŋ
crop n. pʰɔsəl	Earth n. dʰarti
cross v. lageaŋ	East adj. zakʰəŋ paʃo
cross-breeding of a yak and a cow n. zo	easy adj. a:sa:n
cry v. doiaʃəŋ	eat v. zasaŋ
curd n. dɔʃəŋ	eatables n. zasaŋ tuaŋ
cushion, pillow n. kum	educated adj. huʃi
cut v. tʃulaŋ	eight num. rɛ
dance v. tjaŋəŋ	eighteen num. sɔrea
dance (in group) v. ʃɔnaŋ	elbow n. kruts
darkness n. kʰamaŋ	elder n. buzuruk
daughter-in-law n. nɛmʃa	elder n. sena
day n. dear	elder brother n. ate
day after tomorrow n. nirea	elder sister n. ata
day before yesterday n. tubrea	eleven num. sigit
day after the day after tom. n. barea	enemy n. baraboiri
day bef. the day bef. yest. n. pʰutubrea	enter into meditation v. gupto rɔŋ
dead, death adj. ʃi:	equal adj. bəŋã
declare v. ʃiŋʃəŋ	evening n. ɔtʃa
deity's lower part structure n. poareŋ	eye n. mi
deity's sceptre n. tsoro	eyebrow n. miktsal
deity's sword n. kwɔtʰal	face n. mukaŋ
deodar tree n. kjal paŋ	fall (animates) v. beaŋ
dice n. tʃolo	fall (inanimates) v. da:ŋ
die v. ʃi:ʃəŋ	family n. pɛraŋ
difficult adj. kuɔstaŋ	far adj. hɔrki

father n. au	goat's hair n. rɔmanɔ
father-in-law n. ru:	go back and forth v. rɔŋ tɔŋ
fear v. bettaŋ	god, goddess n. sat
feather (bird) n. pak ^h aŋ	go for a walk v. gumɛŋ
feed v. k ^h iaŋ	gold n. zaŋ
feel v. kɔlisaŋ	good, really, I see interj. att ^h a
feet n. bɔŋtʃaŋ	good adj. zoi
female memb. of Chhitkul n. tʃ ^h itkulmets	grain n. tʃ ^h oa
festival n. tyaraŋ	grand-children n. pa:tso ku:tso
field n. ri:	grand-father (mother side) n. matʃa tete
fifteen num. sɔŋã	grand-father (father side) n. tete
fight v. nɛŋʃaŋ	grand-mother n. api
fill v. saŋtʃaŋ	grand-mother (mother side) n. matʃa aja
fine n. danaŋ	grand-mother (father side) n. aja
fingers n. kentʃaŋ	grass n. tʃi:
fire n. mɛ	graze v. rɔktʃaŋ
fireplace n. mɛliŋ	great-great-grand-mother n. par aja
flag n. dartʃuot	great-great-grand-father n. par tete
flat and round adj. kir kir	green adj. tʃi
flour n. brɛt	grind v. jytʃaŋ
flower n. uts	gulp v. nuaŋ
Flower Festival n. Usko	hair n. kra:
fly v. japaŋ	half num. sualbɔŋ
fodder n. bɔniŋ	handy work n. lau kamaŋ
fog n. dzulariŋ	hang v. taŋɛaŋ
food n. kuɔn	harvest v. ri: putʃaŋ
foodstuffs n. raʃan pa:ni:	have the habit of/be used to v. bjaŋ
foot, leg (lower part) n. bɔŋ	head n. pitʃa
forget v. lottʃaŋ	heart n. ʃɔʃa
four days after tomorrow n. penea	heaven, paradise n. sɔrɔk
fox n. ʃɛli	heel n. tɔŋal
freeze v. ʃranimaŋ	here adv. dzua
friend n. ɔme	here adv. hɛdaŋ
fruit n. p ^h ɔlaŋ	here adv. hɔja
full adj. baŋ	heritage n. d ^h arohar
Gangotri n. ga:tri	hide v. njanaŋ
garlic n. lɔnʃaŋ	hide v. mid njekʃaŋ
get damaged, decay v. mid. sɔʃʃaŋ	hit, beat v. black tea n. t ^h aŋ
get ripe v. tʃ ^h ɔsaŋ	holy visit v. dzɛleaŋ
get separated v. alag asaŋ	honey n. uɔs
get together v. zɔmaŋ	honey-bee n. hɔsjaŋtsə
give v. dasaŋ	horn n. rɔtʃo
go. v. rɔŋ	horse (male) n. kjoaraŋ
goat n. ryt	horse (male) n. rãŋ
goat n. bak ^h raŋ	hot (food, water) adj. ta ^h ɛra
goats and sheep n. tet	how pro. hale

howl v. dʒiːŋ	life n. fəŋ
how much, how many pro. hanaŋ	light v. tʃɔtʃaŋ
how often pro. hame hame	like, so adv. he
house n. k(j)im	like v. guaŋ
household n. tɔlaŋ	lips n. tʃe
human b., people, person, man n. mi:	listen, hear v. ɛnaŋ
hunger n. kʰre	live, stay v. hunaŋ
hungry adj. kʰrei	liver n. ʃi:ntʃa
hunt v. earaŋ	left adj. kʰɔjaŋ
ice n. ʃranaŋ	leg (upper part) n. kʰurki
if not cvb. manna	lemon n. nimbu
if so cvb. henna	loneliness n. ma:seasaŋ
in post. self pro. mā	lonely adv. ma:sea
incense n. dʰupaŋ	look at, watch v. ʃjaŋaŋ
Indian ghee (clarified butter) n. ma:r	look for v. kuɔŋjaŋ
illiterate adj. mahufi	lose v. hɔtpikʃaŋ
inauguration sowing season n. eaŋaŋ	lose v. pʰaŋjaŋ
increase, go up v. bɔdeŋ	love v. bɛnaŋ laŋ (or latʃaŋ)
inside (of) post. u:	lunch n. ni:ri kuɔŋ
Interpreter n. matʰa	maintain, take care of v. palisaŋ
invisible adj. gupt	make, build, cook v. intr. ʃaŋ
invitation (deity) n. ʃu:kud	make, build, cook v. tr. ʃatʃaŋ
jaw n. ʃɔunaŋ	male adj. dea, dja
kail tree (pinus wallichiana) n. lim paŋ	male member of Chhitkul n. tʃʰitkulpa
Kamru (village) n. monā	man n. bɔjiŋ
keep, put v. tasaŋ	many, most qnt. bodi
key n. dimi	(too) many qnt. dʒā
Khrogla (subdivision Rākchham) n. kʰɔla	marriage n. dʰaro
kidney bean n. balia	marriage n. reataŋ
kill v. saŋ	mashed adj. teʃi
Kinnaur n. kinɔriŋ	master v. kuatsaŋ
Kinnaurese hat n. num	maybe adv. hɛt ta
Kinnauri language n. griʃi kat	meat n. ʃa:
kite bird n. guɔlda	medicine n. ʃjel
knife n. ʃamaŋ	meet v. mid tʃʰukʃaŋ
knife n. tsako	meeting place n. dumtʰan
know v. tsʰasaŋ	mid-January mid-February n. ma:ŋ
language, voice n. kat	mid-February mid-March n. pʰaŋnaŋ
large gathering n. dumsa	mid-March mid-April n. tʃʰɛtraŋ
last year adv. nabliŋ	mid-April mid-May n. bʰɛʃakaŋ
late adj. gɔrki	mid-May mid-June n. dʒɛʃtʰaŋ
laugh v. katʃaŋ	mid-June mid-July n. aʃaraŋ
leaf n. patraŋ	mid-July mid-August n. ʃuanaŋ
learn, read, study v. mid. huʃaŋ	mid-August mid-September n. badraŋ
leave v. hɔŋ	mid-September-Oct. n. indərmaŋ, indraŋ
lie v. briŋ rɔŋ	mid-October mid-November n. kateŋ

mid-November-December n. məkfiraŋ	Oracle n. grəktsu
mid December mid-January n. pəfaŋ	ornament n. tanaŋ
milk n. k ^h eraŋ	outside post. dau
mix v. tresəŋ	pain n. bensa
mix (liquid things) v. krəsəŋ	palm (hand) n. fatałaŋ
mollet n. piŋli	path n. ɔm
monastery n. la:go	peak, pyramide n. zɔŋ
money n. t ^h ili	peel v. k ^h ɔlaŋ
month n. gɔl	peel v. t ^h ulaŋ
monthly adv. gɔlniŋ	phuri n. k ^h ɔbra
moon n. gualtsəŋ	pilgrimage n. ti ^h aŋ
morel n. raŋmu	pine tree n. paŋ paŋ
morning n. ts ^h aŋ	pinky (baby finger) n. naki kjeŋtfaŋ
morning light n. ts ^h aŋna	plain tea n. tja:
mother n. ama	plant v. t ^h uaŋ
mountain n. ráŋ	play v. hətfaŋ
moustache n. mutsə	play an instrument v. bazisaŋ
mouth n. mək ^h aŋ	pluck v. ɔnaŋ
mother-in-law n. hime ama	pocket n. kjusu
music n. bazgi	poor adj. ɔlea
mustard n. fjaŋ	poplar tree n. kramal paŋ
mustard oil n. fjaŋ telaŋ	pot n. baniŋ
nail n. fiŋtʃə	potato n. alu
name n. min	predicament n. ɔk ^h a ɔk ^h a
narrate v. suneasaŋ	preserve v. batfeasaŋ
narrative told all night long n. ts ^h aŋ gret	property n. guɔrbɔn
near adv. piŋã	protect v. zagjasaŋ
neck n. kalaŋ	proud adj. fɛki
necklace (made of nuts) n. umalaŋ	proudly adv. fɛkisea
necklace (sandal wood) n. kuant ^h e	provide v. dileasaŋ
need v. ginaŋ	pull, pick up v. dapaŋ
new adj. nui	pumpkin n. kaddu:
next year adv. hatji	push v. hulaŋ
night n. mun	quarrel v. rɔlaŋ
nine num. whole adj. gui	rain n. goeniŋ
nineteen num. sɔzgui	rainbow n. t ^h ɔlda
nose n. rim	raven, crow n. ka:
now adv. t ^h a	rear v. palaŋ
nowadays adv. t ^h antfaŋ	recognize v. fjesaŋ
oil n. telaŋ	red adj. maĩ
also, already adv. lo	reep v. k ^h ɔsaŋ
only adv. ok ^h o	remember v. ja:d laŋ (or latfaŋ)
on the following day adv. njaŋro	remembrance n. ja:d
open v. tr. kra:ŋ	relatives n. pəraŋtfaŋ
opposite side adv. naŋ, neaŋ, njaŋ	repair v. suarisəŋ
or disj. ja	return v. nupstaŋ

rice n. kutsu n. rice	similar adj. rukji
right now adv. halta	sing v. gret laŋ (or latjaŋ)
ripe adj. tʰɔsi	single women n. tsuri
rise (sun) v. ni: oaŋ	sit v. pɔsaŋ
rise, grow up, come out v. oaŋ	situation, condition n. ha:l
rites n. atiŋ fatiŋ	skin (of fruits and potatoes) n. buat
river n. garaŋ	sky n. sualgaŋ
rock salt n. bultsʰa	slaughter, sacrifice v. fupaŋ
roof n. fɔul	sleep v. nɔnaŋ
root n. dzilaŋ	slow adj. mɛsaŋ
rope n. bufaŋ	slowly adv. mɛsaŋ mɛsaŋ
rot v. susaŋ	small, short adj. ətsə
rotten adj. susi	smell (of something) v. intr. banzisaŋ
run v. tʰuɛŋ	snake n. sapa
saliva n. la:r	sneeze v. gisaŋ
salt n. tsʰa	snow n. faŋ
sand n. ba:lɛŋ	snow leopard n. saʰtʰər
say, tell v. intr. lɔŋ	soak v. rakjaŋ
say, tell v. tr. lɔtjaŋ	soft adj. nuri
scarf n. gɔlband	soil n. maŋiŋ
scratch v. kʰjusaŋ	sole n. patalaŋ
sea n. sɔmdaran	some qnt. kʰane
season n. ritaŋ	some qnt. sã
see v. view n. ta:ŋ	some, a few qnt. tsʰɔka
seed n. bijaŋ	something or other pro. kʰe kʰe
self pro. in post. mǎ	sometimes, often adv. ina ina
sell v. intr. raŋ	song n. gret
sell v. tr. raŋtjaŋ	sow, harvest v. intr. puanaŋ
send v. pʰɛŋ	sow, harvest v. tr. putjaŋ
set (sun) v. ni: rijaŋ	speak v. kɔljaŋ
seventeen num. sɔstij	spider n. bɔtɔk
sew v. intr. pɔnaŋ	spiritual power n. sɔtiŋ
sew v. tr. pɔntjaŋ	spit v. tʰopaŋ pʰisaŋ
shawl n. pʰɔk	spend v. biteasaŋ
sheep, ritual n. ka:r	split v. sosolaŋ
sheep (male) n. kʰaɖu	spoon n. kʰapo
shine v. tsɔmkjaŋ	stand up, get up, wake up v. intr. anaŋ
shiver v. krinaŋ	stand up, get up, wake up v. tr. antjaŋ
shiver v. tsupaŋ	star n. kar
shoe n. tʰuŋ	steal v. kʰutjaŋ
shop n. dukan	still adv. halta lo
shout v. funisaŋ	stone n. one hundred num. ra:
show, point v. za:ŋ	student n. huja atji
sick adj. nasi	suck v. tʰupaŋ
side, direction n. pafo	summer n. ʃɔl
similar adj. rɔŋsea	summer start n. renam

sun, sunlight n. ni:	time n. barəŋ, berəŋ
sweat v. dusti oəŋ	tired adj. jali
sweet adj. ali	tiring adj. jaləŋ
tail n. mɛts	today adv. tʰan
tailor n. tsuĩ	together adv. ekʰe
take a holy bath v. mid. naiŋəŋ	tomorrow adv. obi
take a nap v. tənŋəŋ	tongue n. yellow adj. lei
tasty adj. nimi	tonight adv. tʰanmuni
teach v. huaŋ	tooth n. soa
tease v. tʰate laŋ (or latŋəŋ)	touch v. tʃʰusaŋ
teasing n. ase	turn v. ʃurəŋ
technique to drink (pʰasur) n. pa:niŋ	twelve num. sɔnif
tell, say v. riŋ	twenty num. nisa, niza
temple area n. santəŋ	two days after tomorrow adv. terea
thank v. dʰaneəŋ	ugly, bad adj. maʃare (FEM)
thank you interj. holase	ugly, bad adj. maʃo (MASC)
that dem. hojo	uncle n. bapu
that (borrowed from K) dem. dʒo	understand v. haŋoŋəŋ
then adv. te	understand v. sɔmzəŋ
there adv. dʒoa	up, at the top of post. kal
there adv. hɛdɔŋ	uphill adv. kaliŋ
there adv. hɔda	up to post. taŋ
there adv. huɔu	urine v. ɡuaŋtʰraŋ
thick (books, pillows) adj. dɔk dɔk	use v. bɔrteəŋ
thick adj. pʰuri	very int. bǎ mǎ
thin, slim (sph. and round) adj. naki	very int. man man
thin (not sph. or round) adj. bei	very int. mǎ mǎ
thing n. batəŋ	via adv. asagi
think v. suntseəŋ	village n. deŋəŋ
thirsty adj. miʃi	vomit v. aseŋəŋ
thirteen num. sɔrum	Vrindavan n. bindra
this dem. cloud n. dʒu	wait, listen v. ruŋŋəŋ
this dem. prox. hui	walk v. jynaŋ
this dem. prox. huju	wall n. bitiŋ
this side adv. ʒəŋ	wander v. ɡumiŋəŋ
this year adv. tʰaniŋ	warm adj. ɡamaŋ
thousand num. hozar	wash v. intr. urəŋ
three num. homo	wash v. tr. urtŋəŋ
three days after tomorrow n. kɔnea	water n. ti:
throw v. pʰisaŋ	water, irrigate v. ti: pjaŋ
thumb n. pʰuri kjeŋtŋəŋ	wear v. mid. laŋəŋ
Tibetan adj. kʰaba	weave v. ranaŋ
Tibetan goat n. beŋryt	weep v. tʃosəŋ
Tibetan goats and sheep n. beŋtu	west n. kʰɔjaŋ paʃo
Tibetan sheep n. beŋkar	wet adj. tʰi:
tie v. tʃunaŋ	what pro. kʰe

when pro. wife n. fame	
when cvb. bɔre	
where pro. go	
which pro. gojo	
white adj. ts ^h aĩ	
who, whose pro. su:	
why pro. k ^h e:	
widow n. randju	
wild apricot n. tʃ ^h uli	
wild peach n. rɛk	
wild mushroom n. mu:	
win v. gelaŋ	
winter n. gun	
woman n. mɔriŋ	
wood n. fiŋ	
wooden adj. fiŋe	
wooden storage unit (crops) n. urtsu	
wool n. tsam	
woollen bag (used for trade) n. p ^h atsniŋ	
woollen grey trouser n. su ^h an	
worm n. butsə	
work n. kamaŋ	
worship v. puzisaŋ	
wrist, hand n. lau	
write v. tʃesaŋ	
yak n. brɛme	
year n. bɔʃaŋ	
yearly adv. bɔʃaŋniŋ	
yes, indeed interj. hǎ	
yesterday adv. nei	
young adj. tʃi	

Appendix 6: a short biography of Dhian Singh Negi

This thesis, and the documentary corpus on which it largely relies, would not have seen the light of day without the enormous contribution of Dhian Singh Negi, during my ten-month field trip, and long after. Dhian, this thesis is also yours. I provide some elements of biography below.



Dhian was born in Chhitkul village on the 4th of March 1958. He is married to Nirmla Devi. They have one son, Vivek Negi, and one daughter, Nidhi Negi, aged 32 and 28 respectively. Dhian was formerly Principal at Industrial Training Institute in Reckong Peo. He is now the owner of Negi Electronics. Dhian went to school in Sanglā (Kinnaur District) and holds a Bachelor of Arts in Hindi, English and Political Science from Shimlā University. In addition to Chhitkul-Rākchham, the native tongue of both his mother and father, Dhian speaks Hindi, Kinnauri, Pahari and English. Since his wife does not speak Chhitkul-Rākchham and his children have left the house, Dhian rarely speaks his mother tongue and misses the language. Dhian's main residence has been Reckong Peo, the

headquarters of Kinnaur, since 1986 (Chhitkul Bhawan, main street). He also owns two houses in Chhitkul village. Dhian's son, Vivek, is Principal at Industrial Training Institute in Reckong Peo and Dhian's daughter, Nidhi, is pursuing medical studies in New Delhi.

Pic 7: Dhian Singh Negi in his shop – Negi Electronics – in Reckong Peo (Chhitkul Bhawan)