Language contact in Upper Mangdep

a comparative grammar of verbal constructions
Language contact in Upper Mangdep:
a comparative grammar of verbal constructions

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Abstract

Of the approximately 19 Tibeto-Burman languages spoken in Bhutan, only a handful has been closely studied. Although these represent a diverse range of subgroups, one subgroup, East Bodish, is almost completely unique to Bhutan. The national language, Dzongkha, along with a few other languages around the kingdom, is a representative of Tibetic, a widely spread clade whose members descend from Old Tibetan. East Bodish is local to the central and eastern parts of the country, and is internally divided into a Dakpa-Dzala subgroup and a Bumthangic subgroup. Two other languages, Chali and Upper Mangdep (variously known as Mangdebkha, ‘Nyenkha, Henke, and Phobjip in existing literature), have an unclear relative position (Hyslop 2013a).

The foundational goal of this work is to describe the structural and functional grammar of predication in Upper Mangdep. Despite the established placement of Upper Mangdep in the East Bodish group, this grammar superficially appears to share many similarities with Dzongkha (Tibetic). The existing phylogenetic placement is based on lexico-phonological study, and indeed a plurality of Upper Mangdep lexemes have an East Bodish etymology, including verb roots. Additionally, however, certain developments in Upper Mangdep and other East Bodish languages are strong evidence of a common origin. On the other hand, there are many examples of isomorphy (correspondence) between predicational constructions in Upper Mangdep and Dzongkha. That is, verbal constructions in the two languages, both transparent and opaque (non-compositional), often make use of similar structures, have similar functions, appear in similar distributions, and/or share conceptual paths to grammaticalisation.

This thesis shows that these similarities arise through contact-induced convergent developments, namely replication of grammaticalisation paths, and replication of morphological structure and/or function. This is demonstrated with a number of types of evidence. Firstly, it re-affirms the place of Upper Mangdep in East Bodish, also explicitly excluding it from Tibetic. Secondly, it is argued affirmatively that the similarities between certain constructions in the two languages are the result of language contact. This is achieved through comparative description of Upper Mangdep verbal constructions in
relation to Dzongkha and other East Bodish languages, notably Kurtöp, for which the most complete description exists (Hyslop, 2011a). Finally, this is corroborated with evidence of other contact phenomena in Upper Mangdep which are consistent with these developments, such as the replication of abstract phonological patterns.

This work also makes a few preliminary suggestions as to the socio-political and historical circumstances that have prompted contact-induced change in Upper Mangdep, with especial reference to differences between Upper Mangdep dialects. In particular, as this is one of very few studies demonstrating changes to grammatically-encoded epistemic modality by contact, the potential sociological impact on epistemic marking in the two major dialect groups is also discussed. It is suggested that changes in social organisation may have been partly responsible for the obsolescence of the epistemic contrast of egophoricity in the perfective aspect for speakers of the eastern dialect of the language.

This thesis is consequential as undoubtedly the second-most complete descriptive and historical study of an East Bodish language, and the only significant work on the Upper Mangdep language; but also as a thorough case study of what contact-induced changes to predication look like in a Tibeto-Burman language. The attempts to place the description within a sociological context make it an ideal case study of language contact phenomena, particularly with regard to epistemic modality.
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This thesis was also undoubtedly the largest project I’ve ever undertaken. For initiated academics, writing such a specialised work is perhaps unexceptional; but to most outside that bubble it seems to remain an exceedingly odd and quixotic task. Therefore, I thank my friends who provided personal support in one way or another during that time, especially Jay Ruttley, Brendan Wylie, Hayden Williams, and Cendel and Ken. Above all, I thank my parents, who have continued to sacrifice so much in their adopted country to see their children find happiness.

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1 Introduction

1.1 Outline of the Upper Mangdep language

Upper Mangdep is an unwritten Tibeto-Burman language of Bhutan¹, spoken in the eastern areas of 'Wangdi Phodrang district (dzongkha) and the western areas of Trongsa dzongkha in the central region of the Kingdom, centred on Tangsibji sub-district (geo).

![Map of Trongsa and surrounding districts with conservatively estimated (cf. van Driem and Tshering 1998:37; Hyslop 2011a:65; Dorji 2011:74) Upper Mangdep-speaking area highlighted. Villages/towns whence my consultants originated are marked.](image)

Figure 1: Map of Trongsa and surrounding districts with conservatively estimated (cf. van Driem and Tshering 1998:37; Hyslop 2011a:65; Dorji 2011:74) Upper Mangdep-speaking area highlighted. Villages/towns whence my consultants originated are marked.

¹ For details of the linguistic context of Bhutan and linguistic genealogy of Upper Mangdep, see §3.
Upper Mangdep speakers numbered around 10,000 people in the 1990s (Nishida 2011:77; van Driem and Tshering 1998:2), but has been quoted as low as 8,700 for 2010 (Dorji 2011:81). The language is variously known in existing literature as Mangdep, Mangsdebikha, Phobjip, 'Nyenkha, Henke, or some variant of these names. The term “Upper Mangdep” is newly introduced to the literature here, arising from the need for an unambiguous English term for the language. Speakers typically do not speak of the language in its entirety, but rather of the language as spoken in a given village, i.e. the name of the village, an area or its inhabitants comes to be applied to the language spoken there. This is the case for “Mangdep” and “Phobjip”, derived from names of regions plus the fossilised suffix -p ‘person from’, which is found across Bhutan. The name “Henke” is unknown to all contemporary speakers I have come across during my research, and “’Nyenkha” has only been proffered by one speaker from the Dangchu region. These terms are therefore not ideal for use, as it would likely be impossible to identify speakers with them. “Mangde” is the name of a river which flows down the centre of Trongsa district, and consequently comes to refer to the regions which surround it. Thus “Mangdep” refers to any person from this region. Although speakers of all dialects seem to accept and understand references to their language as ‘Mangdep’, the term is problematic because it includes speakers of other distinct languages within the Mangde region of Trongsa. Namely, speakers of Bumthangkha and Khengkha, two closely related languages spoken to the east of the Upper Mangdep speaking area, who live in Trongsa district often refer to themselves and their language as “Mangdep”.

The terms “Upper” and “Lower” Mangdep therefore come from the English terminology used to distinguish these groups by a small number of my consultants. They refer to their own language, spoken mostly on the north-western side of the rivers which converge in central Trongsa, as Upper Mangdep. “Lower Mangdep” then refers to speakers of those dialects of Khengkha and Bumthangkha spoken downstream from them in the region.

1.1.1 Internal diversity

As far as is clear from existing and current research, the language can broadly be divided into two dialect groups, western and eastern. The current research is too
preliminary to draw any precise boundary between them, but I estimate that the division is found somewhere in the vicinity of the border between the two districts (‘Wangdi Phodrang and Trongsa); cf. Figure 1.

My research has focused on two extremes of the Upper Mangdep-speaking area. In the west, consultants have been drawn from the sub-districts of Gangte and Dangchu in ‘Wangdi Phodrang, representing the dialects of Phobjip and Dangchup respectively. In the east, consultants hail from the villages of Tshangkha and Tangsibji in Tangsibji sub-district in Trongsa, and to a lesser extent, Taktse in the sub-district of Drakteng. The data from the western dialect group is preliminary compared to the far more substantial data collected from eastern dialects. One of the earlier phylogenetic trees for East Bodish presented by van Driem (1994:610) seems to suggest that the degree of variation within what is termed “Mangdep” may be more appropriately described as languages rather than dialects. For the purpose of this work, I refer to “dialect groups” but remain open to discussion over this definition.

There are many systematic differences between the two major dialect groups, many of which will be explored in this work. There are frequent differences in the lexicon and which lexemes have been replaced by Dzongkha borrowings. There are also differences in phonology, both synchronically and in diachronic development.

The majority of the data comes from the eastern dialect group. However, for reasons that will be called upon throughout this work, the data from the western dialect group often shows divergence which is analytically consequential.

1.2 Project background

This thesis comes out of fieldwork conducted for an ARC Discovery Project, entitled ‘Reconstructing eastern Himalayan histories: languages, plants, and people’, directed by Dr. Gwendolyn Hyslop and aimed at gathering a benchmark variety of data from the East Bodish languages, an under-studied Tibeto-Burman subgroup almost exclusive to Bhutan. The subgroup is thought to be a sister grouping to the more populous Tibetic languages (cf. §3.1.2). Apart from a handful of preliminary studies, the only grammatical description of an East Bodish language to date is of Kurtöp (Hyslop 2011a), produced as a PhD dissertation.

Under the supervision of its author, I began work on East Bodish in a Field Methods
class on Khengkha in 2013, presenting a paper on emotion semantics in the language at the 19th Himalayan Languages Symposium at the Australian National University. I began involvement in the ARC Discovery Project in 2014 collecting data from a speaker of Upper Mangdep and a speaker of Chali, both living in Canberra. Interest in the emerging intricacy of the Upper Mangdep verbal system led me to attempt to explore the realisation of epistemic modality in the language, forming the basis for fieldwork for my Honours degree in 2015. In the southern winter of that year, I conducted seven weeks of research in Bhutan. During this period, I undertook two short visits to Tshangkha village, the hometown of my original Upper Mangdep consultant, and one additional visit each to Phobjikha and Trongsa. Most of the fieldwork period was spent in Thimphu, the national capital, transcribing and analysing texts (cf. §1.4 below for a discussion of methodology).

As I worked to unpack the verbal paradigm, all the while continuing comparative reading and general literature review, I began to notice certain structural similarities between Upper Mangdep constructions and equivalent constructions in Dzongkha. This observation underlies the work produced in this thesis (cf. the abstract, §1.5).

1.3 Social context

I here make a few relevant remarks about the anthropological and sociolinguistic context my consultants find themselves in. As shown in Figure 1, the village of Tshangkha is found towards the north-eastern extreme of Tangsibji geo in Trongsa dzongkha. The village primarily grows maize as a cash crop, and inhabitants speak both Dzongkha and Upper Mangdep, and occasionally have some knowledge of ‘Lower Mangdep’. The village’s current inhabitants consist primarily of people middle-aged and upward, and the majority of their children have left the village to work in the modern economy in Thimphu or even further afield. Also symptomatic of this integration into a capitalist economy is the relative wealth of the village, with most houses ostensibly possessing indoor plumbing, vehicles, and satellite television; and many residents owning mobile phones. Notably, one of my older informants in this village, proficient in traditional singing, was able to recall two songs dating back to the reign of the first King and dedicated in his family’s honour. Trongsa, the

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2 As a result, much of the data presented in this thesis from Chali and Khengkha are also my own collection. Data from other languages of Bhutan comes from the ARC Discovery Project database.
administrative seat of the district, is roughly an hour away by road to the north-east, and is primarily inhabited by speakers of ‘Lower Mangdep’, although with some residents and business operators hailing from nearby Taktse, an Upper Mangdep-speaking village opposite the gorge to Tangsibji and a further half an hour by road to the south-west. The royal family of Bhutan originated from the governorship at Trongsa, a strategic powerhouse, and to this day the King retains the title of governor of Trongsa (cf. §3.1.4.2).

My consultants from Phobjikha all originated in Mol\(^1\), a distinct hamlet within the expansive villages that line the edges of the valley floor, not far from the small town centre at Gangte, situated at the northern end of the Phobjikha valley. The valley has mixed linguistic demography, with speakers in some hamlets speaking only Dzongkha, while speakers in others speak both Dzongkha and the local dialect of Upper Mangdep. The valley is well known for its potato output. By sharp contrast to Tshangkha, the demography of at least the hamlet of Mol is skewed towards much younger age groups. Residents are primarily young families with children of primary school age. This is again apparently symptomatic of less integration into the capitalist economy, as unlike Tshangkha, fewer locals have gone to work elsewhere, houses lack indoor plumbing and electrical appliances like televisions, fewer people own vehicles, the valley lacks telecommunication services, and cooking is done with firewood stoves.

As noted, inhabitants of all field locations were fluent in at least Dzongkha in addition to being native speakers of Upper Mangdep. There is thus far no evidence of any monolingual Upper Mangdep speakers. Importantly, it appears that in all locations the language is being maintained and transmitted to children. Those speakers who had both left their home villages and were young enough to have undergone modern, compulsory English-medium education also spoke English with high competency. Many such consultants, having also worked in the tourism industry, spoke English virtually fluently. If consultants spoke any other languages, they also spoke ‘Lower Mangdep’ i.e. Bumthap or Khengkha, and finally Nepali and/or Hindi. See Appendix G for consultant metadata.

\(^1\) I have some doubt about this transcription. I can only find reference to a village by the name ཀྲ་མྱིས། in the relevant geo in online government documents, but this may or may not be the same village.
1.4 Methodology

During the initial fieldwork period in which I took data from a consultant in Canberra, my first contact with Upper Mangdep grammatical analysis started with collecting a traditional narrative and transcribing it, segment by segment, digitally, with the speaker. The speaker was asked to repeat the utterance spoken in the segment, to provide a translation for the segment or sentence as a whole, and to provide translations for unknown words in the utterance. I also attempted to elicit a variety of verbal constructions based on just a few carrier sentences, and discussed the speaker’s opinion of the function of known constructions in English. Finally, I gathered several short films and video clips from YouTube to use as stimuli, in order to elicit more grammatical constructions and, crucially, epistemic contrasts that were not found in elicitation. Similarly, I attempted a form of the picture stimulus task designed by the Social Cognition and Language Project (outlined in (San Roque et al. 2012)), modified to account for access to only one speaker.

I undertook a diverse array of tasks with speakers during fieldwork in Bhutan in 2015. Participants were recruited through the social network of my original consultant in Canberra; and in Phobjikha, at random, asking locals for assistance. I constructed a list of the subset of basic vocabulary that tended to vary the most across linguistic groups in Bhutan and language-internally in my experience, and used this list in order to ensure participants spoke the correct language. Sessions with consultants based in Thimphu, most of whom spoke English well, were generally geared towards transcription of texts and other analytical work, such as elicitation and discussion of speakers’ semantic judgements. Trips to villages were primarily aimed at text collection. In addition to narratives and stimulus tasks of the variety described above, I also prioritised collection of naturalistic conversational data where I was not present. This was achieved by allowing the recorder to run in between stimulus tasks, with the consent of the speakers present. Finally, the corpus also includes a voice message sent by a consultant to a friend on the popular messaging app WeChat, and a small list of spontaneous utterances used by villagers attempting to communicate with me that I was able to transcribe with confidence.

Transcriptions have been completed collaboratively with native speakers, both those involved and uninvolved in producing the relevant text. In some cases, transcriptions
have been written ‘autonomously’, that is, by native speakers attempting to use the Roman orthography without my direct guidance. In these cases, speakers were instructed to transcribe the words being spoken and to approximate an English translation side-by-side. I would then be able to re-construct a working transcription, collaborating with other native speakers to create adequate glosses. A sample text used in this thesis is provided in Appendix H.

1.4.1 Theoretical foundation

The descriptive elements of this thesis do not assume any particular theoretical basis, but it should be noted that it is informed by the broad, functionalist-driven, empirical documentary tradition. My training in linguistics has been influenced by a wide range of syntacticians, particularly those working in the frameworks of Lexical-Functional Grammar and Construction Grammar. Importantly, however, I recognise that Upper Mangdep grammar, as with all languages, is not, and cannot be, merely a set of rules which assemble meaningful units of language. On the contrary, syntax and semantics are often inseparable, where pairing of a syntactic structure and its function comes to be arbitrarily, without regard to the individual form or function of its component parts.

The historical work done in this thesis is grounded in training with the Comparative Method. Specific background literature which provides the foundation for this work is covered in §2 and §3.

1.5 Objectives

The core descriptive purpose of this thesis since the inception of this project is the most extensive possible explication of the structural and functional features of clausal heads (i.e. verbs and predicates) in Upper Mangdep. The thesis utilises this descriptive work to argue for the presence of various language contact phenomena in the language and their analytical consequences. As such, there are two basic empirical questions that must be answered in order to achieve these objectives.

An early examination of Upper Mangdep grammar would superficially suggest a structural affinity with the Tibetic Dzongkha, rather than with existing descriptions of other East Bodish languages (cf. §3). Consider the following data. In Kurtöp, finite verbal
suffixes mark distinctions in aspect, not tense, as in (1).

(1) yampa ge-shang
    tomorrow go-PFV.EGO
    ‘Tomorrow (I) will have gone.’
    [Hyslop 2011:514]

However, in Upper Mangdep, the main contrast is by tense and not aspect (cf. §4.4.1.1) for the complete comparative discussion of finite verbal morphology in Upper Mangdep, Kurtöp, and Dzongkha), as shown by the unacceptability of (2) due to the inherent incompatibility of the suffix with future time.

(2) *nga nämä Trongsa=t thrak-shi
    1sg tomorrow Trongsa=LOC arrive-PST.DIR
    for ‘I will have arrived in Trongsa tomorrow.’
    [Elicitation]

Conversely, we can compare a sentence in Upper Mangdep and Dzongkha and find a one-to-one structural and functional correspondence (isomorphism), as in (3), in which example (a) is Upper Mangdep and (b) is Dzongkha.4

(3) (a) nga bö=t yi-shi
    1sg Tibet=LOC go-PST.DIR
    ‘I went to Tibet.’5
    [Elicitation]

4 Note that the Upper Mangdep locative suffix is a functionally restricted, reduced form of the dative =ta.

5 Readers familiar with Tibetic may recognise a formal similarity to the etymon of ‘Tibet’ itself, but indeed this dative enclitic is found on other place names in the corpus, and the word bö ‘Tibet’ has been elicited in isolation.
Note that the forms of the nominal morphology and the verb root in Upper Mangdep are not cognate with the forms in Dzongkha. However, not only do the direct past tense suffixes carry the same grammatical function in both languages, but they are likely also formally related. In Dzongkha, the direct past has two allomorphs, –yi and –ci. I suspect that Upper Mangdep –shi (often –sh in the western dialects) is a spirantised borrowing of the Dzongkha –ci allomorph — see §4.4.1.1.3 for more detail.

The verb root yi ‘go’ in Upper Mangdep is probably East Bodish in origin, with a cognate being found in Chali ‘i. Therefore, looking at these examples we formulate the initial empirical question of this thesis: is Upper Mangdep a Tibetic language that has undergone rellexification under influence from neighbouring East Bodish languages, or is Upper Mangdep an East Bodish language that has undergone contact-induced structural replication of Dzongkha, thereby exhibiting grammatical convergence?

In seeking to prove the latter, this thesis contains two types of evidence. The first is to re-affirm the existing view of Upper Mangdep as a basically East Bodish language (§3). The second is to then demonstrate affirmatively that the language has been undergoing grammatical convergence processes (§4 and §5).

1.5.1 Significance

This research achieves several things. Firstly, this thesis is the most advanced stage of language documentation for Upper Mangdep to date (cf. §3.1.1.2 for more on the current literature). In the rapidly changing landscape of Bhutanese society, the future of Bhutan’s indigenous, unwritten languages is uncertain. Secondly, it is one of very few studies known to me that demonstrates the behaviour of grammaticalised epistemic modality as a feature of language in language contact situations. It is also generally valuable as an in-depth account of language contact phenomena in a specific language and the analytical tension

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between understanding diachronic developments by phylogenetic descent against those occurring due to language contact. Thirdly, it provides a substantial synchronic and diachronic analysis of the Upper Mangdep verbal system, informing the new and developing understanding of the East Bodish subgroup, its external relations to Tibetic, and beyond into Tibeto-Burman.

1.6 Structure of this work

This thesis is structured as follows. In §2, I provide a foundation for the work in this thesis in contact linguistics and the theory behind it, and describe language convergence phenomena. In §3, I give an overview and critical reading of the existing literature on East Bodish and its historical relations. I will also provide new pieces of evidence justifying the working classification of Upper Mangdep within Tibeto-Burman subgroupings. In §4, I give a brief overview of Upper Mangdep grammar, and then go into substantial empirical detail about the functional and formal structure of the verbal complex, drawing comparisons between Upper Mangdep and exemplars of structures from Tibetic and East Bodish languages. In §5, I summarise the comparative argumentation for language contact processes in Upper Mangdep. I introduce some supporting evidence from outside the structure of the verbal system. Finally, I discuss the significance of this finding given the state of the literature described in §2, focusing on the consequences for East Bodish linguistics and for a typology of epistemic modality in contact situations.

1.6.1 Presentation

The examples presented in this work, in the interests of explanatory simplicity and space constraints, use a relatively deep level of morphological analysis. Although I represent allomorphy, both conditioned and random, as it was collected, idiosyncratic and infrequent phonetic variation is ignored. Allomorphs represented in examples will be listed with the relevant morphological forms under examination, demarcated with a tilde (~). Regular and consistent lexical variants, e.g. dialectal forms, will also be preserved. I prefer to avoid accommodating polysemy when determining lexical glosses; this allows for a consistent notation throughout the work as well as motivating more complete, unified glosses. A list of glossing abbreviations and conventions used in this thesis can be found in
Appendices A and B.
2 Foundations in contact linguistics

For the purposes of this work, it is necessary to establish a framework for analysing the significance of the language description presented. The literature background provided in this chapter paves the way for the analysis in the rest of this thesis, in particular §4 and §5. The issues discussed centre on the field of contact linguistics, essentially a typological examination of diachronic linguistic developments as a result of non-monolingual social environments.

This chapter is structured as follows. I first explain the mechanisms that motivate language change arising from contact, including those sociolinguistic and anthropological factors we understand to accompany it (§2.1). I then describe the nature of relevant language contact phenomena, i.e. the empirical linguistic changes that occur as a result of contact (§2.2). I describe the linguistic and non-linguistic factors that condition specific types of changes in §2.3. Finally, I examine especially how these phenomena manifest in grammars of epistemic modality in §2.4.

2.1 Mechanisms of contact

The basic force for language change by contact is naturally a non-monolingual speech situation (Matras 2009:1). The insights of language acquisition in a multilingual environment provide a perspective as to how language contact phenomena arise at the level of the individual speaker. This is demonstrated in detail in Matras (2009), who describes the features of a trilingual (Hebrew, German, English) child over a number of years. In this most extensive and quintessential kind of individual multilingualism, the speaker is required to select the appropriate linguistic resources for their social environment (Matras 2009:39). However, other motivations are at play: speakers will use those linguistic resources that are most associated with their expressive intentions. Extending on this cognitivist perspective of language use, Backus (2014:94) understands units of language as being more or less “entrenched” in the linguistic inventory (or “repertoire” by Matras). This entrenchment is a function of real, communicative language
usage: frequency of usage is an obvious example of how linguistic units may become more or less entrenched. Linguistic units also become entrenched for specific expressive intentions constrained by other sociolinguistic factors, e.g. a multilingual child’s preference for the linguistic units of the dominant institutional language for referents in that institutional context (Matras 2009:43).

These degrees of entrenchment, motivated by the sociolinguistic environment, engender the need for language mixing. If a language monopolises a specific sociolinguistic domain, this gives rise to the acquisition of linguistic resources for which no conceptual equivalent is acquired in the speaker’s other language(s) (Matras 2009:39). If such an equivalent is acquired, it is probably less entrenched than those resources of the dominant language. As a result, discourses conducted in the non-dominant languages must replicate some element of the linguistic resources of the dominant language in order to fully meet the communicative needs of the speakers.

Change actually occurs in language as a result of contact when it is shared widely enough to be considered part of the standard linguistic inventory of speakers of the language. Taking a cognitivist perspective, Backus (2014:94) points out that there is no one linguistic inventory of a language. Each speaker of the language has their own linguistic inventory, and what we call grammar is everything that is considered common to all of them. Thus that which is the entrenchment of linguistic units in the inventories of individual speakers can be spoken of as “conventionalisation” of linguistic structures across a language. In this way, individual variation as a result of non-monolingualism becomes what we understand as contact-induced language change.

The phenomenon of codeswitching, whereby speakers make use of linguistic resources from multiple languages within the same discourse and often within the same linguistic structures, is a step towards conventionalisation of new forms and structures. In order to diffuse imported elements of language throughout a speech community, a speaker presumably makes use of these elements in the native language discourses of that community (Matras 2009:110). Borrowed linguistic resources can therefore be described in terms of graded stages of their conventionalisation into the language. The change from appearing exclusively among bilingual to monolingual speakers of the language, the frequency of usage, structural integration into the language, etc. are all part of this process.
2.1.1 The sociolinguistic environment

As mentioned above, the sociolinguistic environment of individuals is an important force for contact-induced change. For non-monolingual individuals, different languages have asymmetric social positions (Matras 2009:47). Firstly, in multilingual social environments, different languages are associated with different activities, different interactions, and different social meanings. This is referred to as “domain specialisation”; a basic example is migrants’ usage of a different language in the home and in the workplace. Secondly, the multilingualism of communities is hierarchically, socio-politically asymmetric, in the sense that while more or less all speakers of a given language may be fluent in other languages, much fewer speakers of other languages are likely to be fluent in that language. This can be referred to as the “directionality” of multilingualism; an example is the linguistic pluralism of Wales, where while native speakers of Welsh are extremely likely to also speak English, few native English speakers become fluent in Welsh (Matras 2009:47).

We must also make a distinction between situations of language maintenance and language shift. In the former, more relevant to this work, a language may change under contact, but on the whole continues to be transmitted intergenerationally within a given speech community. In the latter, a speech community ultimately begins to use the new target language exclusively, but may incorporate features of their original language into their representation of the new language (Matras 2009:60).

2.2 Language contact phenomena

In this section, I will describe some of the types of contact-induced changes that will be described for relevant features of Upper Mangdep in this work. It is first important to establish the distinction between the borrowing (henceforth “replication”, following Matras (2009); Heine and Kuteva (2005)) of linguistic matter as opposed to linguistic patterns in contact phenomena. The former is defined in part by the replication of phonological form (Matras 2009:148), but in principle applies to any borrowing which is principally arbitrary and not dependent on systemic structural properties of language — essentially the borrowing of linguistic form. By contrast, the replication of patterns is defined by the replication of functional, systematic relationships between forms (Matras
Matras defines this opposition additionally in cognitivist terms, as the replication of word-forms against the replication of constructions.

The phenomenon of matter replication is relatively simple linguistically. In addition to the replication of forms, it is typically necessary to integrate those forms into the native structures of the language (Matras 2009:172). More pertinent to this work are pattern replication phenomena. I wish to point to a few essential such phenomena. The first is the replication of grammaticalisation paths. Speakers of the replica language are able to either proactively or retroactively replicate the conceptual path of a grammaticalisation in the model language by recognising accessible, active polysemy in the relevant lexemes. They identify some aspect of the semantic content of the lexeme and find an equivalent lexeme to which to apply the grammaticalisation path (Matras 2009:239). One example is the areal diffusion of the grammaticalisation of the respective words for ‘acquire’ to mean ‘to be able to’ in languages of South-East Asia (Matras 2009:247). When this change occurs after the original grammaticalisation in the source language, it is known as “polysemy copying”.

Secondly, pattern replication results in a number of linguistic outcomes. In some cases, patterns may result in re-ordering of elements, such that there is isomorphism (one-to-one structural correspondence between some of the functionally same or similar elements of the languages). Replication of this type involves feeding equivalent or isomorphic semantic information into constructions which are modelled structurally on the model language (Heine and Kuteva 2005:41). Perhaps more interestingly, paradigms of structure in a language may shift to match similar functions in the source language, i.e. reanalysis (Matras 2009:262; Curnow 2001:429). Matras (2009:263) gives the example of Romani dialects which have come into contact with Russian, which have come to distribute the oblique and the locative case in the same constructions as Russian’s accusative and genitive respectively.

Changes in the semantics of existing linguistic resources in the replica language can also be motivated in part by formal, phonological similarity with the target linguistic resources. Matras (2009:246) gives the example of a bilingual child using German denn ‘then’ to introduce an object of comparison, modelled on the phonological similarity with English than, instead of using standard German als for this function.
2.2.1 Language-wide changes in complexity

A long-discussed phenomenon in linguistic literature has been the apparent tendency of languages in persistent contact to lose their grammatical complexity, i.e. simplification. It is well recognised that languages which themselves arise from contact between different linguistic communities, i.e. pidgins and creoles, are observably simpler in their linguistic structures than other languages (Trudgill 2011:15). Trudgill (2011:17) additionally gives the example of the loss of inflectional morphology between Old English and Modern English due to substantial language contact and its role as a lingua franca.

Trudgill (2011:21) gives three basic structural changes that occur as part of the simplification process: regularisation, increase in transparency, and loss of redundancy. Trudgill notes the conceptual linkage between the first two. In regularisation, irregular paradigmatic forms (e.g. suppletion in a verbal category, or special morphophonological exceptions) are replaced by forms that are built on the existing structures that produce other, regular forms in the language. Similarly, transparency is increased when conventionalised linguistic resources are replaced by more compositional resources, i.e. those that would comprise conceptually related expressions in the absence of any exceptional expression, e.g. Trudgill’s example of English ‘twice’ coming to be expressed by ‘two times’, where there is comparatively no special words for ‘four times’, ‘five times’, etc. This could be summarised as a move towards “one function for one form”. Finally, Trudgill uses “redundancy” to refer not only to the elimination of functionally repetitive structures, but also to the elimination of linguistic structures that are not essential for communication on the whole, e.g. the loss of grammatical gender on common nouns in English.

Conversely, language contact can also cause an increase in the complexity of a language. In defining this complexity, we understand that languages in contact can gain new features from the source language rather than simply replacing existing features (Trudgill 2011:27). The process of complexification occurs with the reverse changes to those that occur in the process of simplification: irregularisation; increase in opacity; and increase in redundancy, including the addition of morphological categories (Trudgill 2011:62). One example given is the development of a unique pattern of vocalic mutation as a means of marking aspect distinctions on verb roots in Khalong Tibetan, a feature replicated from neighbouring rGyalrongic languages (Sun, in Trudgill 2011:31). Despite a tendency for
scholars to only focus on either simplification or complexification as the exclusive outcome of language contact in the literature, different types of contact situations lead to different contact phenomena. This will be discussed in the next section.

2.3 Typology of forces for contact-induced language change

In this section, I will discuss some of the existing typological claims about the linguistic and extra-linguistic conditions that give rise to the different language contact phenomena.

2.3.1 Typology of linguistic forces for contact phenomena: borrowability hierarchies

It is a well-established observation that some morphological categories are more or less likely to matter replicate than others. These measures of likelihood are typically expressed as hierarchies where the higher order elements are more likely to be borrowed. One example is Matras’ hierarchy (Matras 2009:157) based on the number of languages in a sample of 27 languages which demonstrate matter replication of the categories. It is reproduced in Figure 2.

nouns, conjunctions > verbs > discourse markers > adjectives > interjections > adverbs > other particles, adpositions > numerals > pronouns > derivational affixes > inflectional affixes

Figure 2: Matras’ frequency based borrowability hierarchy (Matras 2009:157).

Figure 2 shows that nouns are more likely to be borrowed than verbs, which are more likely to be borrowed than adjectives, etc. There are also hierarchies that apply to contact-induced phonological changes. Using Romani data, Matras (2009:232) notes that suprasegmental features such as prosody and stress are more likely to borrowed than vowels, and vowels more likely to be replicated than consonants. If a language has borrowed consonants, it has probably also borrowed prosody, etc.

There is less understanding about what grammatical patterns tend to be most frequently replicated. Matras (2009:244) suggests that since bilingual speakers seem to allocate much effort to organising discourses (hence the frequent acquisition of
conjunctions, discourse markers, etc. when matter replicating), we should expect that clause-level patterns are first to be replicated.

There are also other principles that may be indicative of the likelihood of replication. Matras (2009:160) finds that unmarked forms with a high number of possible inflections (e.g. realis verb forms) are replicated when they are in high frequency, but that conversely, marked forms with lower potential for inflection (e.g. morphological plurals) are replicated when it is efficient to syncretise the mental processes necessary to produce complex forms between two languages. Matras (2007:50–1) gives the example of numerals above ‘ten’, which are marked as they are usually polymorphemic. In many languages these are borrowed even where numerals under ‘ten’ are retained from the native lexicon. The reason numeral borrowing tends to affect these numerals rather than the more frequent lower numerals, is that they are likely to be restricted to specific institutional domains, such as commerce. In these domains it is likely that a dominant lingua franca takes hold, and as a result speakers streamline their cognitive processing, then always using the borrowed forms and abandoning the less useful native forms.

Transparency of form-meaning association (as in §2.2.1 above) also facilitates replication (Matras 2009:156). Matras (2009:211) cites the example of low borrowing of Arabic’s fusional morphology into Turkish and Persian, languages heavily influenced by contact with Arabic. By contrast, Iraqi Arabic borrowed significant amounts of Turkish agglutinative morphology.

2.3.2 Extra-linguistic typology

It is also interesting to consider the question of what sociological features of a speech community may be indicative of different language contact phenomena. In regards to the question of why some languages in contact undergo simplification while others undergo complexification (cf. §2.2.1), Trudgill (2011) makes a number of conclusions. For one thing, he notes a distinction between so-called “spread” and “residual” zones. In the former, there is low genetic diversity as well as low typological diversity; the languages in the zone have spread rapidly; and there is diffusion of a lingua franca. Thus linguistic clades are diffused or “spread” over a wide are: an example is western Europe. In the latter, there is a great deal of diversity, a greater number of language families, no common lingua franca,
etc. Thus the languages present are “residual” remnants of longer histories which generate more diversity: an example being New Guinea (Trudgill 2011:29). Highly complex languages tend to be found where there is greater linguistic diversity.

In addition, the nature of the multilingual situation also affects the simplification/complexification cline. Simplification occurs when speakers are learning the target language as an adult (or, after the “critical threshold”) (Trudgill 2011:40). At this stage language learners seem to have difficulty acquiring features that are irregular, opaque, or redundant. Conversely, childhood multilingualism tends to result in complexification. Not coincidentally, this kind of multilingualism is also often a feature of residual zones; it is characterised by smaller speech communities that tend to interact consistently in the long term, e.g. trade, intermarriage, etc.

In looking at more specific contact phenomena affected by non-linguistic typology, Thomason and Kaufman (1988:74) established a five-category hierarchy of the types of replication that were likely to occur given increasing degrees of contact. Unfortunately, the scale is in some places unclear about whether matter replication or pattern replication should be taking place. Nevertheless, this hierarchy accomplishes two things. First of all, although it provides no strict criteria for determining degrees of contact, it feeds into the discussion above about the kind of relationship between two linguistic communities that motivates particular tendencies in contact phenomena. Secondly, it provides a typology similar to the borrowing hierarchies above that sets out the kinds of replication that usually occur before others. A version of this hierarchy adapted from Matras (2009:156) is reproduced in Figure 3.
### Figure 3: Typology of likely replication given increasing degrees of contact intensity (Thomason and Kaufman 1988:74; Matras 2009:156).

<table>
<thead>
<tr>
<th>Intensity</th>
<th>Category</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casual contact</td>
<td>1</td>
<td>Non-basic lexical borrowing</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Function words, conjunctions, minor phonological and functional features</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Adpositions, derivational morphology, new phonemes; minor changes to syntax</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>New phonological features, word order changes, inflectional morphology</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Major syntactic changes resulting in typological change, changes to morphophonology, changes to morphosyntax</td>
</tr>
</tbody>
</table>

Asymmetries in the multilingual situation (cf. §2.1.1 above) also have some impact on the kinds of changes that are likely to occur in a given contact situation. Greater asymmetries between a dominant target language and a minority language, in terms of domain specialisation and the directionality of multilingualism, are supposedly more likely to induce borrowing of linguistic forms (Matras 2009:58). That is, the greater the socio-political power the dominant language has over a minority language (the fewer dominant language speakers speak the minority language, and the more institutions monopolised by the dominant language), the more likely it is the minority language will borrow linguistic forms. This tendency is explained by an asymmetry in the need for cognitive control over the use of lexical resources in different discourse environments. Bilinguals in a context of unidirectional bilingualism are required to exercise this cognitive control when speaking to native speakers of the dominant language, because the use of non-target lexemes (i.e. those from their native language) may not be communicatively effective with potential monolinguals (i.e. native speakers of the dominant language are unlikely to understand the minority language). Conversely, this control is less important in the native language environment because most or all members of the community are speakers of both languages, and are thus free to make use of linguistic resources from either language (Matras 2009:59).
The tendency for minority language speakers to borrow linguistic forms is also impacted by community attitudes, which may value the preservation of cohesive and conservative linguistic norms. In these cases, it is less likely that formal borrowing will take place, although structural convergence will still likely occur. It is asserted frequently by Matras (2009:32, 39, 59) that this is because speakers are far more cognitively aware of lexeme usage across languages and discourses than they are of any other linguistic structure, which are seen as more “universal”, or are at least less critical for communicative efficacy. Therefore, they are more aware of which linguistic forms are borrowed and can consciously avoid them in order to meet community standards of language use where these favour a distinct linguistic identity.

2.4 Epistemic modality in contact

In this section, I want to review some of the existing discussion on evidentiality in contact. I define the combined categories of evidentiality and other epistemic modalities in Upper Mangdep in §4.1.1.1. In part, this section examines a good case study for basic language contact phenomena, but it also addresses the changes that occur in the Upper Mangdep epistemic system as a result of language contact (cf. §5.3).

According to Aikhenvald and Dixon (1998:244), the widespread presence of evidentiality in a linguistic area is likely to be due to contact-induced diffusion rather than genetic descent, as it is a relatively “unusual” feature. In fact, it tends to cluster into linguistic areas (Aikhenvald in press). Going further, Aikhenvald (in press) states that due to their cultural salience and high communicative load, evidential markers are in fact especially prone to being affected by language contact.

Like other features of language, evidentials are subject to any number of replication processes. They may be matter replicated (“direct diffusion” by Aikhenvald) or pattern replicated (“indirect diffusion”), although the latter is more common. Aikhenvald (in press) gives the example of the direct borrowing of the Turkic indirect evidential form –miş into Tajik (an Iranian language) from Uzbek (a Turkic language). In this case, the grammatical category is borrowed with the form and the form continues to diffuse productively in the language. By contrast, the Tariana (Arawakan) inferred evidential marker – nhi developed from an aspect marker, but shifted its function under influence from neighbouring Tucano.
The aspect marker develops a secondary evidential sense and eventually grammaticalises as the inferred marker, but unlike in Tajik, the form itself is not borrowed (although its grammaticalisation may be promoted by formal similarity to forms in the source language.

Under contact, evidential systems are also known to undergo simplification. In these cases the number of evidential categories may decrease, and the grammatical status of the morphemes may change from obligatory to optional. One example is Retuarã (Tucanoan) in which there are only three optional categories after contact with Yucuna (Arawakan), compared to close relatives which have four or five obligatory categories (Aikhenvald in press). Yucuna has only an optional reported/non-reported distinction. Complete loss of evidentiality may result even where the native language is maintained on the whole, such as in Azeri, the national language of Azerbaijan, under influence of Persian. Aikhenvald (in press) also makes the point that categories shared by a dominant model language and a replica language are likely to be maintained, whereas unique categories not found in a dominant model language are likely to be lost (“negative borrowing”). This, as with other processes mentioned above, allows bilinguals to syncretise their language processing across languages. Interestingly, Aikhenvald (in press) also suggests that simplification can lead to a shift from contrasts in evidentiality to other epistemic contrasts. She cites the example of Wintu (a language isolate of California), for which a system of five evidential contrasts was described in the 1930s. Subsequent description in the 1950s revealed that the number of contrasts had been reduced to two, and that a semantic change towards a certainty/uncertainty distinction was underway.

Scholars have found that evidentiality seems to appear in very specific sociolinguistic environments. Trudgill (2011:180) notes the correlation between small-scale social organisation and languages with evidentials. Aikhenvald (2004:359) suggests that this is probably a function of the inherent nature of such a society, where evidentials fulfil the need to manage interpersonal discourses in order to avoid gossip, conflict, etc. I suspect this also extends to relationships with other neighbouring groups, with whom small-scale societies presumably negotiate for resources, etc. Aikhenvald (in press) indeed notes the convergence of evidential systems in languages with stable, long-term multilingualism. If social organisation predicts the development of systems of evidentiality, it may also predict the behaviour of these systems in language contact situations. Trudgill (2011:182) suggests
that the move from small-scale societies to global, urban capitalism is also a motivating factor in the simplification and loss of evidentiality in languages like Wintu, mentioned above.
3 Upper Mangdep in diachronic and synchronic context

Given that this research project raises challenges to the history of Upper Mangdep among the languages of Bhutan, it is important to review the current literature on the languages of Bhutan so as to understand how other pieces of historical linguistic evidence contribute to the conclusions of this thesis. Additionally, it is important to clarify the state of the literature in the interests of avoiding unjustified assumptions.

![Figure 4: A map of Bhutan, adapted from existing maps (cf. Hyslop 2011a; van Driem 2001a:806; Dorji 2011) with language names roughly laid over their respective areas. Central Bodish languages are coloured in orange, and East Bodish languages are coloured in violet. Other languages are the only representatives of their subgroups or families in Bhutan. Languages spoken by more than 100,000 people (within Bhutan) are in the largest font size (e.g. Dzongkha), languages spoken by more than 10,000 people are in the mid-size font (e.g. Bumthap), and languages spoken by more than 1000 people (e.g. Chali) are in the smallest font size.](image)
Dzongkha is the national language of Bhutan. It is a Tibetic language, and thus a member of the Tibeto-Burman language family. It is a politically dominant language spoken natively in the western part of Bhutan by in excess of 200,000 people. Tshangla, an unclassified Tibeto-Burman language, is spoken natively in the far east and in Arunachal Pradesh in India, and is a lingua franca of eastern Bhutan. In the subtropical southern areas of Bhutan, Nepali is spoken by relatively recent migrants from Nepal.

In the immediate geographical environment of Upper Mangdep (van Driem and Tshering 1998:21), local Dzongkha dialects are spoken to the west and north. To the south, in certain villages around the Black Mountains, an unclassified, critically endangered Tibeto-Burman language known as Black Mountain Mönpa or 'Olekha is found. To the east, dialects of Bumthap and Khengkha, of the Bumthangic subgroup, are spoken.

As discussed for the social environment of my consultants in §1.3, most people in Bhutan are multilingual, speaking the language of their neighbouring communities in addition to their own native language. This multilingualism has presumably embiggened in the modern economy with urbanisation, where many people have moved from their home villages to major towns (cf. Namgyel (2003:107)). Namgyel (2003:166) also notes the domain specialisation of minority languages, such as Upper Mangdep, to speakers’ personal social environment, i.e. the language is used mainly among family and friends. Many speakers are proud of their multilingualism and recognise the importance of maintaining their native language; many also believe that the national language is importance for national unity and communicative convenience (Namgyel 2003:145–7).

In this chapter, I will first overview the existing literature on Tibeto-Burman linguistics, and two relevant subgroups: East Bodish and Tibetic. It is in these contexts I discuss Upper Mangdep’s history (§3.1). Secondly, I will re-affirm the placement of Upper Mangdep in East Bodish (§3.2).

### 3.1 Linguistic and anthropological history

In this section, I examine the linguistic genetics of Upper Mangdep, its immediate relatives in East Bodish, and contrast them with Tibetic languages such as Dzongkha. I then situate these discussions within Sino-Tibetan linguistics, discussing the putative internal relationship between the Tibetic and East Bodish subgroups. Finally, I provide an overview
of the non-linguistic historical evidence that contributes to a contextual understanding of Upper Mangdep.

3.1.1 East Bodish

The first identifiable reference to an East Bodish language in Western literature appears in an 1853 article by British ethnologist Brian Houghton Hodgson, in which Hodgson provides comparative vocabulary for a variety of far-flung languages of the region, ostensibly including Uyghur and a number of Mongolic and Qiangic languages. Hodgson refers to a language he calls ‘Takpa’, suspecting that, based on Chinese accounts of the region’s geography and the political affiliation of the Tawang district (‘Towang Ráj’ by Hodgson), its speakers were ethnic Tibetans (Hodgson 1853:125). The apparent purpose of the comparative vocabulary is to demonstrate the heterogeneity of the Tibetan Plateau and the surrounding regions.

The language represented by the ‘Takpa’ vocabulary is quite evidently what is known today as Dakpa (and by a variety of other names in the literature, e.g. Tawang Monpa, mTsho-sna Monpa), spoken in far-eastern Bhutan and across the border in Tawang, Arunachal Pradesh. The Hodgson wordlist is consistent with Dakpa data collected in recent years by van Driem (2007) and Hyslop and Tshering (2008), e.g. the word for ‘air’, given by van Driem as hrót, found in Hodgson as rhót; ‘sun’ given by Hyslop and Tshering as plang, found in Hodgson as pláng, etc.

The next identifiable reference to an East Bodish language is also of Dakpa (referred to by the transliteration of its root ‘Dwags’), used in the first argument for the existence of an East Bodish subgroup in Shafer (1954). van Driem (2007:73) notes that Shafer mistakenly conflates Dakpa with the Tibetic Dakpo dialect (as does Hodgson). Nevertheless, the data presented is indeed Dakpa, and sound argumentation for an East Bodish subgroup, noting for example that Dakpa preserves the /l/ in pli ‘four’, comparable to other forms in Tibeto-Burman (Shafer 1954:350) and found as <bzhi> in Written Tibetan.

To my knowledge, the first published study on any other East Bodish language is Mikhailovsky and Mazaudon (1994), which provides comparative data establishing the Bumthangic subgroup, a grouping which holds to be valid today. It includes some data from Upper Mangdep with the qualification that the language is divergent and may not belong to
the Bumthangic subgroup.

Around this period in the early 1990s, George van Driem conducted the first linguistic survey of Bhutan at the direction of the Royal Government. In the 1992 edition of his Dzongkha grammar, van Driem first identifies the group of languages now known to comprise East Bodish, under the name of the ‘Bumthang group’. A tentative family tree is provided for the first time in van Driem (1994), but Black Mountain was not excluded from the subgroup until van Driem (2011:38), in which van Driem disavows his earlier classification of the language as East Bodish, acknowledging the advice of Gwendolyn Hyslop.

3.1.1.1 Internal relationships in East Bodish

van Driem (2007) establishes the second subgroup of East Bodish, generally referred to as Dakpa-Dzala after its constituent languages. From this point, Hyslop (2013) clarifies the internal phylogenetics of East Bodish by comparing innovations shared between particular East Bodish languages, suggesting the structure in Figure 5.

![Figure 5](image)

**Figure 5:** The internal phylogeny of East Bodish, adapted from Hyslop (2013), and modified so that all phyla are named. The name ‘Greater Bumthang’ is appropriated from van Driem (1994), and ‘Interior Bhutanese’ is my own creation, from the referent fact that the languages are all endemic to Bhutan. Hyslop cites Upper Mangdep as ‘Phobjip’, referring to the western dialect from which her data was collected.
Because Hyslop’s classification of Upper Mangdep and Chali is offered as a tentative solution, while the Bumthangic and Dakpa-Dzala groups are better established, I will briefly attempt to affirm Hyslop’s solution. Although I deal with the classification of Upper Mangdep itself in §3.2, assume for the purpose of this argument that Upper Mangdep should be classified among the East Bodish languages. The existing evidence for Upper Mangdep’s divergence from Bumthangic and Chali is as follows. Firstly, Hyslop offers a set of lexemes that, while transparently cognate to the forms in Bumthangic and Chali, have evidently undergone unique phonological and morphological developments, e.g. the word for ‘head’, given as /ɡuʃuŋ/ in all three Bumthangic languages and Chali, is /ɡunu/ in Phobjip. In the eastern dialect, I can confirm that the form is /ɡulu/, which is an additional example of Upper Mangdep’s exclusion from the Greater Bumthang /l/→/j/ sound change (the environment of the change is unclear). The implicit argument for excluding Chali from the Bumthangic group is its innovative vocabulary.

The influence of language contact here poses problems for analysis. A perfect example is the reflexes of initial consonant clusters, attested from Written Tibetan, internally in East Bodish, and elsewhere in Tibeto-Burman. Sound changes affecting these clusters do not consistently unify languages into groups (cf. Figure 6), and, presumably due to language contact (where there are no other conditioning factors), there are often multiple reflexes of the same cluster within a language.
Figure 6: Reconstructed Proto-East Bodish complex onsets and reflexes in modern East Bodish languages, demonstrating the inconsistent patterning of sound changes between putative subgroups for specific words, i.e. members of subgroups may share sound changes with languages outside of subgroups and/or apply different sound changes compared with other languages within their subgroup. Shading therefore indicates shared reflexes across languages for a given sound change. Note that the Upper Mangdep word for ‘brain’ may be a borrowing from Dzongkha. Most of the reconstructions come from Hyslop (2014a), but ‘brain’ and ‘moon’ are assumed due to their resemblance to the corresponding Written Tibetan forms.

For example, as noted in Figure 6, the Chali (and Kurtöp) word for ‘hair’ is /rá/, derived from /kra/, as attested from Bumthap; the high tone on the syllable compensates for the loss of the initial consonant. However, the Chali (and Kurtöp) word for ‘village’ is /tŋa/, derived from /kroŋ/, also attested from Bumthap. Despite historically sharing the same onset cluster, the two etyma have different synchronic outputs for that cluster, based on two entirely separate sound changes (Hyslop 2013a:15).

Note also that the effects of contact here are not at all direct. The Dzongkha word for ‘hair’ is /tʃa/ སྐྱ <skya>, which is related etymologically to /kra/ but has long ago
undergone its own set of phonological changes\(^7\). Nevertheless, the /kr/ → /t/ change in Chali and Kurtöp is not necessarily an independent innovation of the group, looking beyond the implausibility of the independence of the change doubly in each language across phyla (cf. Figure 5; i.e. the change is found only in Kurtöp among Bumthangic languages, but is found in sister branches). This is because the change is an analogical extension of those otherwise more sporadic Tibetic and East Bodish changes in which the deletion of /C/ in /CR/ (consonant + sonorant) clusters motivates high tone\(^8\).

Similarly, Dzongkha word for ‘village’ is /yː/ སྒཡུས་<g-yus>, and the East Bodish etymon has no extant reflex in Dzongkha. However, the /kr/ → /t/ change itself is a distinctly Tibetic process, found in Central Tibetan and by extension, the contemporary pronunciation of the liturgical language of Bhutan (Chöke\(^9\), or Classical Tibetan).

3.1.1.1.1 New evidence for internal phylogeny

While therefore, broadly speaking, it is extremely difficult to reduce East Bodish to a traditional phylogenetic model using comparative phonology, data collected by this author from Chali can provide more concrete support to the model in Figure 5. On the one hand, Chali is clearly more similar to Bumthangic languages, especially neighbouring Kurtöp, than is Upper Mangdep, both morphologically and phonologically. Apart from the /l/ → /j/ change identified by Hyslop, Chali also exhibits /Kw/ clusters as in the other Bumthangic languages, as well as changes from /mR/ clusters to /nj ~ ɲ/\(^10\). More significantly, Chali, although often divergent in vocabulary, appears to share more Bumthangic vocabulary than does Upper Mangdep, particularly, but not exclusively, considering the extensive relexification in Upper Mangdep’s western dialects. Examples are given in Figure 7.

\(^7\) Namely that Written Tibetan /Cr/ clusters became /Cj/ clusters in Dzongkha (evidenced by the written forms in Dzongkha), and eventually palatalised in modern spoken Dzongkha; cf. WT <skra> for ‘hair’.

\(^8\) Hyslop (2011:158) reserves judgment as to the motivating factors for tonogenesis in Kurtöp, but indeed suggests that contact could be an influence.

\(^9\) ཁོ་ཁར་<chos.skad>

\(^10\) With the intermediate step /mR/ → /mj/.
Chali also appears to have very similar verbal morphology, with at least three suffixes that are virtually identical in form and function to suffixes in Bumthap or Kurtöp, namely non-finite -si (Ku. -si), irrealis nominaliser -mala (Bu. -mala, Ku. -male), and conditional -nane (Ku. -nani). Finally, as in Kurtöp (Hyslop 2011a:510) and Khengkha, the verb ‘do’, marked with the non-finite suffix, is used as a quotative, namely yesi (compare Ku. ngaksi and Kh. buzì).

On the other hand, Chali exhibits a unique sound change that most likely represents the chronology of divergence from Bumthangic. Consider the word for ‘night’ across the East Bodish languages in Figure 8.

<table>
<thead>
<tr>
<th>English</th>
<th>Chali</th>
<th>Bumthangic</th>
<th>Upper Mangdep</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘finger’</td>
<td>prumaŋ</td>
<td>primaŋ (Bu.)</td>
<td>dzipju (E.)</td>
</tr>
<tr>
<td>‘shoulder’</td>
<td>poŋma</td>
<td>poŋma (Bu.)</td>
<td>sokp (E.)</td>
</tr>
<tr>
<td>‘village’</td>
<td>ʃoŋ</td>
<td>kroŋ (Bu.)</td>
<td>saʃ (E.)</td>
</tr>
<tr>
<td>‘wheat’</td>
<td>ɡo</td>
<td>ɡo (Ku.)</td>
<td>zë: (E.)</td>
</tr>
</tbody>
</table>

Figure 7: A selection of words across a few different semantic domains showing divergent vocabulary in Upper Mangdep (loanwords not included).

I tentatively reconstruct this word to Proto-East Bodish as *srunla, assuming that they are all cognate. Although this reconstruction is somewhat speculative, note also the Classical Tibetan word <srun> meaning ‘calm’, as possible evidence assuming a metaphoric semantic shift.\(^{11}\)

The argument for this reconstruction and its crucial timeline is as follows. In Tibetic, /sr/ clusters become /s/, e.g. Dzongkha /siːm/ ‘younger sister’, written <sriŋmo>. This sound change occurs independently in the Bumthangic branch and the Dakpa-Dzala branch

\(^{11}\) If this is correct I would suspect that the /la/ syllable is cognate with the Kurtöp “individualiser” -la (Hyslop 2011a:316), a kind of nominaliser of adjectives, i.e. *srun ‘calm’ → *srun-la ‘calm one’.
(represented by Kurtöp, Khengkha and Dakpa in Figure 8). The independence of the developments in each is corroborated by the Dakpa form, in which the first syllable also undergoes a common Tibetic vocalic change, whereby back vowels become front vowels before coronal codas. The change is found sporadically due to contact throughout East Bodish except in Upper Mangdep (cf. §5.1), where it is systematic. Because the rounded vowel /y/ is not native to Dakpa, the vowel loses its rounding to become /e/ (height alternation is also common, but is too complex to detail here).

In Upper Mangdep, the /sr/ onset cluster produces /r/ with a high tone on the syllable, parallel to similar sound changes affecting consonant-sonorant clusters. However, the remaining languages, assuming that they belong together due to the shared features distinct from Upper Mangdep detailed above, still retain the cluster at the point of Upper Mangdep’s divergence. In diverging from the Bumthangic languages, Chali undergoes the same /sr/→/t/ change independently. The /r/ eventually becomes /h/ through a sound change which is synchronically active, which is part of a tendency for a number of consonants to merge with /h/ in different environments, although somewhat sporadically, producing a proliferation of the consonant in Chali phonology as compared to the rest of East Bodish (note that /s/ is not one of them). One other example of /r/→/h/ is found in the word /tɕaha ~ tɕara/ ‘sweet buckwheat’. This evidence for the /sr/→/t/→/h/ sound change in Chali is compounded by the high tone of the syllable, originating from the loss of the initial consonant.

Finally, note that although the proposed Interior Bhutanese subgroup is not here demonstrated by shared innovations, the grouping is intended primarily as one of convenience to refer together to Upper Mangdep and Greater Bumthang, following Hyslop and by exclusion of Dakpa-Dzala. I suspect that this grouping can in fact be demonstrated, but the point is essentially analytically moot as it affects only one language (Upper Mangdep).

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12 Notably, this includes /s ~ z/ (e.g. /ahāmar/ ‘maize’, cf. Bu. /aʃam/; /ahāŋ ~ aəŋ/ ‘maternal uncle’, cf. Bu. /aʃaŋ/), possibly suggesting a bridging context in which it merges with the phonetically heightened allophone of /r/ /j/. In addition, /h/ is found synchronically as a lenited variant of the whole series of velar stops (e.g. /kuhaj ~ kukʰaj/ ‘betel nut’, cf. Bu. /guge/).

13 Compare with Kurtöp cara, Bumthap /tɕaraj/.

14 Interestingly, van Driem and Tshering (1998:22) makes reference to 14th century Tibetan records describing the Upper Mangdep area as being “part of Bumthang”, suggesting a historical affinity.
3.1.1.2 Existing literature

Only minimal data has been published for most East Bodish languages. To my knowledge, there is no published work on either Chali or Dzala exclusively. To my knowledge there are three works of linguistic inclination specifically on Khengkha: a masters thesis on the challenge to devise an orthography for the language using Tibetan script (Chamberlain 2004); an amateur language guide or workbook (Yangzom and Arkestijjn 1996); and an overview of Bhutanese oral literary tradition with a focus on Khengkha (Penjore 2009). There is a sketch grammar of Bumthap, originally published in 1995 by the Dzongkha Development Commission but re-released with minor edits in 2015 (van Driem 2015). Dakpa, having been the first language of the East Bodish group identified, is covered superficially in a number of publications both in English and Mandarin Chinese (Hammarström et al. 2016), some of which have been mentioned so far: Hyslop and Tshering (2008), Shafer (1954), van Driem (2007). Additional comparative work is done in Nishida (1988), and presumably in a number of Mandarin Chinese works that I have not been able to access. There is also a rare grammar sketch of the language of unknown nature (Wangchu 2002). In non-linguistic literature, the work of Toni Huber has extensively focused on the anthropology of religion in East Bodish areas.

By far the most extensively documented East Bodish language is Kurtöp, of which there is a reference grammar (Hyslop 2011a). Hyslop has also published numerous articles detailing various features of the language. Hyslop’s work also extends to the only in-depth historical studies of the East Bodish languages apart from van Driem’s work already noted. Notably this includes an early reconstruction of the Proto-East Bodish (Hyslop 2014a).

Apart from references to the Phobjip dialect in comparative work done by Hyslop and an unpublished field report (Hyslop 2014b), and references to ‘Mangdep’ in Michailovsky and Mazaudon (1994), there are two works dedicated to the Upper Mangdep language. Nishida (2011) is a slightly updated version of an earlier (2009) paper in Japanese, summarising the phonology of the eastern dialect and its current sociological state, noting that it risks endangerment and language shift of younger speakers to Dzongkha. The phonological overview provided is analytically incomplete, notably transcribing a /br/ cluster with a bilabial trill (/ʙ/). Nishida also analyses a series of voiceless nasals but does not provide evidence.
The second work is Dorji (2011), an amateur overview of the sociology and history of the language, written by the then-member for Trongsa in the Upper House (National Council) of the Bhutanese Parliament. The article contains some short wordlists comparing the vocabulary of the language with Kurtöp and Dzongkha, and a list of elicited sentences that correlates pronominal features with verb forms. Dorji suggests that the language retains suppletive verbs indexing subject number, but I have never found evidence to support this.

3.1.2 **Tibetic and other external relationships of East Bodish**

In this section, I will draw out the distinction between Tibetic languages and East Bodish languages, the former of which Dzongkha is a member and the latter of which Upper Mangdep is a member. The Tibetic grouping is also known as Central Bodish, and is one of the most thoroughly documented subgroups of Tibeto-Burman. This is due to the fact that the group presumptively includes all those languages descended from Old Tibetan, a language thought to be relatively closely attested from Classical Tibetan, which is preserved by literary tradition (Tournadre 2013:107). As a result, we have primary evidence for the development of Tibetic languages over the course of over 1400 years (Hill 2010:112).

Having discussed the phylogenetic uniqueness of East Bodish and Tibetic, and demonstrated the membership of Dzongkha in Tibetic, I will go on to summarise the theories of their genetic relationship in the frame of Tibeto-Burman linguistics.

Helpfully, the Tibetic languages have been thoroughly characterised by a series of shared lexical innovations, which are all exemplified by Dzongkha. As examples, Tibetic languages are said to uniquely share the second and third person singular pronouns *khyot and *kho (Thurgood 2003:10), found in Dzongkha as /ʃʰo/ ยา '<khyod>' and /kʰo/ ག་ '<kho>' respectively. By contrast, Hyslop (2014a:170) reconstructs the East Bodish second person singular as *i and the third person *kʰi. Tibetic languages also share the word for ‘seven’

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15 Hyslop explains the presence of onset glides in reflexes of the second person singular (e.g. Ku. wít) by innovations that occur independently in Bumthangic and Upper Mangdep, but I believe the more parsimonious explanation is to reconstruct *wi ~ *we. This is because a loss seems more likely to occur independently in some branches than an innovated insertion of unknown conditioning. More importantly, there are phonetic reasons to suspect a diachronic interplay between /j/ and /w/ — leading to /jé ~ je/ '2sg' in Upper Mangdep. Note for example East Bodish *kʰwi ‘dog’ corresponding with Tibetan *khyi (cf. Dzongkha /roʃʰi/ རོ<khyi> ‘dog’), a correspondence found by innovation in Upper Mangdep as chü /ʃʰy/ (note also *kʰwe ‘wa-
*bdun (Tournadre 2013:111), Dzongkha /dỳn/ \( ^{55} \)-<bdun>, where all East Bodish languages have a reflex of *nís (Hyslop 2014a:168). An example of a uniquely Tibetic phonological change is /ml/ → /md/ (Tournadre 2013:115), as in ‘arrow’, Dzongkha /d̀a/ \( ^{58} \)-<mda>-; cf. Figure 6 on East Bodish reflexes which reconstruct to *mla.

Hyslop (2013b), expanding on Michailovsky and Mazaudon (1994), also comparatively demonstrates differential reconstructions for words across many semantic domains in the two subgroups. It is also noted that Tibetic-like allomorphy in Kurtöp, previously identified by Scott DeLancey, must be a result of contact as it cannot be reconstructed for East Bodish. Common morphemes such as the ergative also exhibit much greater variation within East Bodish than Tibetan, although indeed the form /gi/, identical to the Tibetic form, is sometimes found. Noting that Bumthang exclusively uses the form /li/ (cf. also van Driem 2015:28\(^{16}\)), where this appears as one of several realisations of the ergative in Kurtöp, Hyslop posits that the common ancestor of Bumthangic probably had the ergative /li/ and that descendants borrowed /gi/ from Tibetan at a later point (Hyslop 2013b:228).

In placing Tibetic languages such as Dzongkha as separate to East Bodish languages in the Bhutanese context, there are also definite phonological differences. For example, while all East Bodish languages have a three-way contrast in onset voice-onset timing, Dzongkha, like Central Tibetan (Denwood 1999:73), has a four-way contrast (van Driem and Tshering 1998:71). In that phonological system, the reflexes of Written Tibetan voiced initials differ depending on the presence of a “pre-initial” consonant, producing a contrast in phonation or tone (the analysis varies by author), e.g. Dzongkha [b̀ɛː ~ bʱɛː] \( ^{55} \)-<bal> ‘wool’, vs. [bɛː] \( ^{55} \)-<ḥbal> ‘extract’ (van Driem and Tshering 1998:72)\(^{17}\).

In summary, there is good linguistic evidence to distinguish Tibetic languages and

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\(^{16}\) Transcribed as le.

\(^{17}\) Note that unlike most Tibetic languages, this development has not occurred in Chocangacakha of eastern Bhutan, according to preliminary data (Tournadre and Rigzin 2015:53). Chocangacakha therefore has a three-way VOT contrast, like East Bodish languages.
East Bodish languages. Importantly for the purposes of this thesis, Dzongkha quite easily, consistently, and uncontroversially meets the tests that mark it unmistakeably as Tibetic. Within Tibetic, Tournadre (2013:121) identifies eight “sections” or “geolinguistic continua”, based on both linguistic phylogenetics as well as geographical factors. Dzongkha is classified in the Southern section, along with most other Tibetic languages of Bhutan and Sikkimese. It is not clear if there are any linguistic factors that contributed to this classification, despite the close geographical association of the languages. Although Central Tibetan (Central section) and Dzongkha share many similarities, there are also regular phonological changes of the type Tournadre (2013:109) describes, e.g. /[stop]+r/ clusters merge with /[stop]+j/ clusters in the native lexicon so Classical Tibetan has /\dɛl/\(^{18}\) ཅ་<gral> ‘line’ where Dzongkha has /\gɛː/ ཅ་<gyal> (van Driem and Tshering 1998:101).

3.1.3 The relationships of East Bodish and Tibetic within Tibeto-Burman

There is no scholarly agreement as to the relationship between East Bodish and Tibetic, however, there seems to be a general consensus that the two subgroups, along with a number of other languages, are especially closely related among Tibeto-Burman languages.

The Tibeto-Burman languages are generally considered with two models. In one, Sinitic (Chinese) languages are classified as a sister group to a group including all other related languages (‘Tibeto-Burman’), forming the Sino-Tibetan language family. This is perhaps the most common model. In the other, Tibeto-Burman refers to the family as a whole, and Sinitic is one of its primary subgroups, along with all other primary subgroups. van Driem, a proponent of the latter model, argues that the Sino-Tibetan model lacks scientific validity in demonstrating shared innovative developments that characterise the model’s Tibeto-Burman clade (2001b:353). Rather, the model owes its placement of Sinitic to the historical prominence of the Sinitic languages in pre-linguistic philology and Western academia.

Given that authoritative sources on Tibeto-Burman historical linguistics such as Thurgood (2003) tend to assertively assume the popular model without discussion or evidence, I am inclined to prefer van Driem’s model. A third working model goes further,

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\(^{18}\) This is the contemporary Chöke pronunciation.
arguing for more cautious relationships, noting the lack of data on apparently isolated languages in the family (e.g. Black Mountain) as well as vast geographical areas such as North-East India (Blench and Post 2013). Under their phylogeny, there is a preference for many, smaller branches, including those comprised of single languages, as opposed to fewer, larger subgroups. Again in order to purify the phylogeny of non-linguistic historical privilege, Blench and Post use the term ‘Trans-Himalayan’ to describe the family at large. In principle, this cautious approach is certainly preferable to baseless assertions. For the purposes of this discussion, however, I recognise van Driem’s Tibeto-Burman model. This allows for discussion of other putative subgroups in the literature, and, furthermore, avoids entanglement in the complex phylogenetic tree provided by Blench and Post (2013:92).

Examining a less deep level, there are a number of issues in considering the external phylogeny of Tibetic languages. The first is that earlier literature tended to mischaracterise the internal structure of the Tibetic group. Namely, Central Tibetan, and presumably other Tibetic languages towards the east of the group’s geographical range, had been united under the name ‘Central Bodish’, while Tibetic languages in the west of both the innovative and archaic varieties (or Western and North-Western by Tournadre (2013)) were grouped under the term ‘West Bodish’. This out-dated notion can be rejected here without discussion; as in Hill (2010:111) these languages are generally considered to be descended from Old Tibetan and thus unified under Tibetan.

Secondly, researchers have differed as to how many external relationships they are willing to propose for Tibetan. The literature is fairly inconsistent in the use of terminology used in discussing tentative relationships. In general, the term ‘Bodish’ refers to Tibetic along with East Bodish and Tamangic languages (Hyslop 2014c:243), while ‘Bodic’ refers to those languages plus some number of other groupings. Although (Hyslop 2014c) compares ‘Bodic’ languages typologically, including the additional groups Kiranti, West Himalayish, Magaric, Newaric, Lhokpu, and Tshangla, she acknowledges that this Bodic grouping cannot be demonstrated thus far through shared innovation (Hyslop 2014c:262). Thurgood (2003:9)

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19 The phylogenetic tree provided by Blench and Post is itself not particularly intuitive to a reader familiar with Tibeto-Burman historical linguistics. Given the lack of discussion of other major branches of the family besides a host of North-East Indian languages, it is odd that the authors appear to group Sinitic, Bodish and Lolo-Burmese, while other languages typically discussed in tandem with Bodish such as Tamang are placed by many degrees of separation.
uses the term ‘Bodic’ to refer to what Hyslop calls ‘Bodish’, with the addition of Tshangla. This grouping, including Tibetic, Tamangic, East Bodish (as ‘Takpa’), and Tshangla, are supposedly unified by the shared innovation of ergative *-s. Curiously, this claim is derived from LaPolla (1995), who indeed refers to these languages plus ‘Himalayish’ as ‘Bodish’ (to which the reconstruction applies), and whose use of the term ‘Bodic’ more closely resembles that of Hyslop.

In any case, the substance of the claim for a shared ergative *-s is as follows. In Tibetic, where the ergative is found in Written Tibetan as <gis>, the onset and nucleus are grammaticalised from the genitive <gi> plus ergative –s, and thus the contemporary reflexes of the ergative in Tibetic derive from this combined morpheme. This argumentation is certainly strong internally to Tibetic, considering that on Central Tibetan open syllables, the ergative is not only written with simply a final –s, but that coda also produces the regular vowel mutation in contemporary spoken varieties (Denwood 1999:67); additionally archaic Tibetic languages such as Balti have ergative –si (Jones 2009). Expanding this argumentation to East Bodish, this would certainly lend support to Hyslop’s argumentation (as in §3.1.2 above) that the form /ki ~ gi/ in East Bodish languages is a recent borrowing from Tibetic. However, given the fact that the latter form cannot be reconstructed to proto-East Bodish, the fact that no Interior Bhutanese language demonstrates a reflex of *-s other than /ki ~ gi/, and the fact that Bumthap exclusively has /li/ (Hyslop 2013b:228), East Bodish poses a problem to the proposed reconstruction of historical *-s ergative to Bodic. To my knowledge, there is no additional evidence that would support a reconstruction of the East Bodish ergative as anything that represents *-s20.

Beyond this, it is not particularly easy on existing data to draw relationships between the supposed Bodish languages that can be conclusively attributed to genetic lineage and not simply contact. This is especially true for Tshangla, which appears to have undergone language contact developments from numerous sources, massively distorting any possible interpretation of its phylogenetic history (Hyslop, pc.). However, despite even the close affinity between East Bodish and Tibetic, no literature to my knowledge

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20 Ironically, LaPolla is quite transparently challenged by his Dakpa data (LaPolla 1995:194), in which the ergative is given as –te, describing it as a recent innovation — yet Hyslop (2013b:228) gives the Dakpa ergative as, in fact, –si.
conclusively demonstrates a genetic common ancestor by shared innovation, beyond what appears to be intuition. Hill (2010:111) gives a “judicious” phylogeny that represents ‘Bodish’ as comprised only of Tibetic and East Bodish, asserting that the relationship between Tshangla and Tamangic (‘Gurung’) to Tibetic is not proven. Although this is to be taken as a tentative hypothesis, Hill’s motivation for including East Bodish and excluding Tamangic is not clear.

3.1.4 Non-linguistic history of Bhutan

For the purposes of this work it is important to consider the history of Bhutan and the Upper Mangdep-speaking area itself to establish the anthropological, sociological, political and economic context for the discussion of linguistic evolution. Of particular relevance are the proposed timeline of migrations into Bhutan and the political history of the region. Unfortunately, there is fairly little literature on Bhutanese history, especially on the former. Existing histories tend to focus on that which is well documented by indigenous literature, namely the influence of Buddhist leaders. Hyslop (2011:77) gives a good overview, particularly of the state of archaeology in Bhutan.

3.1.4.1 History of settlement by East Bodish speakers

To the first issue of the timeline of migrations into Bhutan, Phuntsho (2013:70), citing van Driem (2001a), contends that East Bodish speakers descend from the second wave of migration out of the purported Tibeto-Burman homeland in contemporary Sichuan province in China. It is claimed that the inhabitation of Bhutan by East Bodish speakers must have preceded the recorded migration by Tibetic speakers into Bhutan by a number of centuries. Indeed, van Driem (2001a:872) makes what is probably the most unequivocal assertion of this nature in the literature. It is apparent that this understanding of Bhutanese pre-history, lamented for its current lack of archaeological support by Hyslop (2011), is somewhat speculative.

It seems, however, that insofar as the origin of East Bodish speakers in Bhutan is concerned, reasonable inferences are being made in the literature from more broadly supported assumptions about Bhutanese history in conjunction with linguistic evidence. Namely, the geographic location of speech communities of the so-called “Three Gems”
languages (Lhokpu, Black Mountain Mönpa, and Gongduk\(^{21}\)), all in remote areas of the southern half of Bhutan, in conjunction with their linguistic isolation and archaism, suggests that their speakers were displaced by more populous, more politically-organised groups from Tibet in the north. van Driem (2001a) also makes reference to a Gongduk substrate in Bumthangic languages but provides no evidence. In addition, it also seems to be the general consensus among all ethnic groups and communities in Bhutan that the speakers of these languages represent the indigenous, pre-Buddhist population of Bhutan. I can particularly corroborate this for the Black Mountain Mönpa, whom are frequently named by the Upper Mangdep speakers of Trongsa when asked about local history. The fact that what is now Bhutan is assumed to be the subject of references to the ‘Mon’ of the south in the Tibetan literary record, a term applied by Tibetans to non-Buddhist “uncivilised” peoples (Pommaret 1994), is probably also indicative of this origin.

By contrast, it is also implied that Tibetan historiography explains the migration of Tibetan Buddhists into Bhutan too late for it to provide for the diverse linguistic differences between Tibetic and East Bodish speakers, i.e. the migration of East Bodish speakers into Bhutan must precede that point in time. In speculating on the chronology of the first migration of Tibetic speakers, van Driem (2001a:872) explains that they may have settled the peripheral edge of their current extent in Bhutan “well before the beginning of the Christian era... or as late as the IXth [9\(^{th}\)] century”. Although van Driem cites a number of notable Buddhist diffusion events occurring in the centuries either side the 9\(^{th}\) century, the most popular traditional explanation is the arrival of the Tibetan ruler Songtsen Gampo (སྲོང་བཙན་སྒམ་པོ་<sroŋ.btsan.sgam.po>) recorded in the 7\(^{th}\) century (Aris 1979:3). The fact that this period is recorded at all — i.e. in Classical Tibetan — is presumably a testament to its succeeding the divergence of the Tibetic and East Bodish linguistic phyla. Also important is the arrival of Ngawang Namgyal\(^{22}\), known as the zh’apdrung in Bhutan, in the early 17\(^{th}\) century. Known as the founder of the modern Bhutanese nation-state, he is said to have established the initial network of fortresses (dzong), primarily in western and central Bhutan, in an effort to unify the area against the invasions that followed him from Tibet (c.f. Aris 1979:203)). It is interesting that Das (1974:12) identifies the century prior to this as

\(^{21}\) These three languages belong to three culturally distinct ethnic groups whose languages are unclassified within Tibeto-Burman.

\(^{22}\) /ˈŋawa ˈŋamgə/ བོད་སྲོང་པ་སྦྱར་ཡུལ་<ŋag.dban.rnam.rgyal>
a period of diffusion of Buddhism into eastern Bhutan. The implication of these events as heralding the beginning of a unified Bhutanese nation-state is that it was during this period when serious political and economic co-operation arose between the 'Ngalop (Tibetic speakers of western Bhutan) and the East Bodish speakers.

Admittedly, however, in considering the underlying assumptions of these discussions, van Driem (2001a) was still holding that Black Mountain Mönpa was an East Bodish language itself, a position he later abandoned (see above in §3.1.1). This potentially implies that he had never considered the possibility of this intermediate, separate migration into Bhutan by East Bodish speakers.

3.1.4.2 Political history of central Bhutan

The dzong of Trongsa is an important site in the recent history of centuries of civil conflict. This history is summarised by Das (1974:33). At a time when regional rulers struggled for influence in the recently-unified Bhutan, and when the southern border became porous to trade and diplomacy with India and the British, the penlop (governor) of Trongsa emerged as a particularly powerful figure. Eastern Bhutan was controlled from this strategic point, not far from Pele La, a mountain pass at which Tibetic speakers and East Bodish speakers are often said to be separated (van Driem 2015:19). Das (1974:35) notes, for example, that the governor of Trongsa often took a role above that of the Deb Raja (secular ruler of Bhutan), directly corresponding with British diplomats. The governor’s army also battled the British in eastern Bhutan until the formation of border treaties. Perhaps most importantly of all, the governorship of Trongsa was held by a family line that eventually went on to form the current hereditary monarchy of Bhutan in 1907. As mentioned in §1.3, at least one elderly singer in the village of Tshangkha, approximately five kilometres as the crow flies from Trongsa dzong, carries a song from this period dedicated to the First King.

3.2 The placement of Upper Mangdep

Thus far, I have assumed for the purpose of discussion that the existing classification of Upper Mangdep as an East Bodish language is accurate. However, recalling the first of the two major empirical questions of this thesis (cf. §1.5), I here provide new evidence which re-affirms the current placement of the language in East Bodish.
3.2.1 The evidentiary value of internal diversity

A common theme in the following evidence is the presence of internal diversity among East Bodish-derived forms as compared to Tibetic-derived forms across dialects in Upper Mangdep. Internal diversity is good evidence for a long, non-contact, shared history that is indicative of shared genesis. This is because it is assumed that internal diversity arises over time, with there being a correlation between time depth and the degree of diversity (Crowley and Bowern 2010:148). Consider an element of language that corresponds across dialects and is demonstrably East Bodish in origin. If that element has more formal variation across dialects than a similar element of Tibetic origin does, it can be argued that the element of East Bodish origin pre-dates the element of Tibetic origin, because there is the assumed correlation between time and degree of variation. In theory, this principle should apply to any linguistic structure, whether it is phonological, morphological, lexical, syntactic, or semantic.

3.2.2 Diachronic phonological evidence

Certain phonological features of Upper Mangdep are suggestive of native developments in its East Bodish lexicon, rather than what would be expected had that lexicon been the result of borrowing. For example, that Upper Mangdep has /l/ where it is /j/ in neighbouring Bumthap and Khengkha, e.g. gulu ‘head’, Greater Bumthang /gujun/; là ‘hand’, Kurtöp /jaː/; lang ‘five’, Greater Bumthang /jaːja/ (Hyslop 2013a:13), suggests that it is a retention, rather than an implausibly sporadic innovation. Although it is difficult to ascertain a possible timeline for the divergence of Greater Bumthang from the rest of East Bodish against the first appearance of Tibetic speakers in the area, it seems reasonable to expect that any such borrowing would have occurred after the sound change occurred in the source language (Greater Bumthang). This is because the Greater Bumthang languages occupy such a vast area to the east of the Upper Mangdep speaking area, making the possibility of contact with earlier stages of East Bodish, or with the Dakpa-Dzala branch, remote.

Secondly, the /kr/→/r/ change, discussed to some extent in §3.1.1.1, by similar logic, could not have been borrowed from neighbouring East Bodish languages. The change has not occurred in Bumthap and Khengkha, e.g. Upper Mangdep ’ra ‘hair’, Khengkha /kra/.
It is also unlikely that it would have occurred so sporadically in a Tibetic language. To my knowledge, no Tibetic language of Bhutan exhibits this change, including Chocangacakha, which has been substantially influenced by contact with neighboring East Bodish languages such as Kurtöp which do have the change, i.e. Chocangacakha /ta/, Kurtöp /rá/. It is more plausible that the /kr, kʰr, gr/ → /ʈ, ŭn, ɖ/ change in Upper Mangdep occurred sporadically under influence from Tibetic, given that Dzongkha speaking settlements directly interact with Upper Mangdep speaking settlements, e.g. Upper Mangdep dri ‘ask’, compare Khengkha /gri/. The consistency of phonological correspondences between Upper Mangdep and other East Bodish languages, compared with the inconsistency of phonological correspondences with Dzongkha and other Tibetan languages, indicates shared genesis with East Bodish languages and linguistic contact with Dzongkha.

Perhaps the strongest evidence for this history is found in allomorphy. In some relatively infrequent cases, nouns with historical /l/ codas manifest that coda with the ergative and the genitive, e.g. mā ‘house’, cognate with Khengkha /maj/ and therefore reconstructing to *mal, appears with the genitive enclitic as mā=le²³. Similarly, the word sā ‘prince’ appears in texts with the ergative enclitic as sā=li²⁴. This lexically-specific variation is suggestive of more diachronic phonological diversity.

3.2.3 Numerical distribution of etyma in the lexicon

A cautious comparison of basic lexical items across a number of semantic domains (cf. Appendix F for the wordlist) with the lexicons of other East Bodish and Tibetan languages of Bhutan shows the dominance of uniquely East Bodish etyma in Upper Mangdep. In order to quantify this, I selected those words from the largest semantic division.

²³ It sometimes appears as mā=de, either due to reanalysis of the historical coda as coronal /t/ or due to morphophonological fortition of /l/ to /d/; there is a lack of data to support either conclusion. Since the genitive appears with the second person singular pronoun as ’ye=de, there may be support for Bumthangic influence here. In that example, ’ye is reanalysed as having a historical /ʃ/ coda as in Bumthap. Alternatively, it may be a merger with the second person plural ’yet.

²⁴ Assuming that the word for ‘prince’ is historically identical to Dzongkha /sē/ סֶ <sras>, this may also (cf. footnote 23) be evidence for reanalysis of the diachronic coda, this time as /l/, from the lowered vowel quality of /s/ having been conditioned by coronal codas. However, this is equally strong evidence for the East Bodish origin of the language, as such a reanalysis would occur as a result of borrowing the word without an associated descendant allomorph to go with it.
domains that were unambiguously related to, or much more closely related to, cognates in either East Bodish or Tibetic. In all domains, East Bodish etyma are the majority, although there are significant Tibetic borrowings in the domains of “animals” and “body parts”.

The results are presented in Figure 9.

<table>
<thead>
<tr>
<th>Word</th>
<th>EB</th>
<th>Tb</th>
<th>Word</th>
<th>EB</th>
<th>Tb</th>
<th>Word</th>
<th>EB</th>
<th>Tb</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘one’</td>
<td>✓</td>
<td></td>
<td>‘cooked rice’</td>
<td>✓</td>
<td></td>
<td>‘rain’</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>‘two’</td>
<td>✓</td>
<td></td>
<td>‘cane’</td>
<td>✓</td>
<td></td>
<td>‘rainbow’</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>‘four’</td>
<td>✓</td>
<td></td>
<td>‘milk’</td>
<td>✓</td>
<td></td>
<td>‘know’</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>‘five’</td>
<td>✓</td>
<td></td>
<td>‘cheese’</td>
<td>✓</td>
<td></td>
<td>‘speak’</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>‘seven’</td>
<td>✓</td>
<td></td>
<td>‘tooth’</td>
<td>✓</td>
<td></td>
<td>‘keep’</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>‘nine’</td>
<td>✓</td>
<td></td>
<td>‘head’</td>
<td>✓</td>
<td></td>
<td>‘climb’</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>‘hen’</td>
<td>✓</td>
<td></td>
<td>‘nose’</td>
<td>✓</td>
<td></td>
<td>‘descend’</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>‘mouse’</td>
<td>✓</td>
<td></td>
<td>‘ear’</td>
<td>✓</td>
<td></td>
<td>‘come’</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>‘snake’</td>
<td>✓</td>
<td></td>
<td>‘forehead’</td>
<td>✓</td>
<td></td>
<td>‘arrive’</td>
<td>✓</td>
<td></td>
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<tr>
<td>‘ant’</td>
<td>✓</td>
<td></td>
<td>‘tongue’</td>
<td>✓</td>
<td></td>
<td>‘cross’</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>‘cat’</td>
<td>✓</td>
<td></td>
<td>‘stomach’</td>
<td>✓</td>
<td></td>
<td>‘sit’</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>‘mosquito’</td>
<td>✓</td>
<td></td>
<td>‘finger’</td>
<td>✓</td>
<td></td>
<td>‘sleep’</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>‘insect’</td>
<td>✓</td>
<td></td>
<td>‘chin’</td>
<td>✓</td>
<td></td>
<td>‘throw’</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>‘louse’</td>
<td>✓</td>
<td></td>
<td>‘heart’</td>
<td>✓</td>
<td></td>
<td>‘arrow’</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>‘ox’</td>
<td>✓</td>
<td></td>
<td>‘1pl’</td>
<td>✓</td>
<td></td>
<td>‘bow’</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>‘spider’</td>
<td>✓</td>
<td></td>
<td>‘3sg’</td>
<td>✓</td>
<td></td>
<td>‘house’</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>‘butterfly’</td>
<td>✓</td>
<td></td>
<td>‘3pl’</td>
<td>✓</td>
<td></td>
<td>‘fire’</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>‘tail’</td>
<td>✓</td>
<td></td>
<td>‘sand’</td>
<td>✓</td>
<td></td>
<td>‘tomorrow’</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>‘eagle’</td>
<td>✓</td>
<td></td>
<td>‘stone’</td>
<td>✓</td>
<td></td>
<td>‘day after tomorrow’</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>‘banana’</td>
<td>✓</td>
<td></td>
<td>‘water’</td>
<td>✓</td>
<td></td>
<td>‘three days from now’</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>‘potato’</td>
<td>✓</td>
<td></td>
<td>‘snow’</td>
<td>✓</td>
<td></td>
<td>‘four days from now’</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

Figure 9: Numerical distribution of etyma from different clades among basic vocabulary, grouped by semantic domain, in Upper Mangdep, showing that 49 are uniquely East Bodish words and 14 are uniquely Tibetic words. Note that this applies only to the eastern dialect of Upper Mangdep.
The results show that East Bodish etyma are represented in the Upper Mangdep lexicon by a ratio of almost 4:1 over Tibetic etyma, or about 78% to 22%. There are perhaps a few small biases in this sample. Firstly, East Bodish words may have been excluded because they underwent sound changes that resulted in a reflex too similar to Tibetic reflexes to definitively identify an etymology. However, conversely, some Tibetic words may have been excluded because their origin was obscured by being widely borrowed in other East Bodish languages. Finally, Figure 9 only quantifies the etyma of the eastern dialect for a lack of data from the western dialects, in which I suspect there is more Tibetic vocabulary. Nevertheless, it is clear that Tibetic etyma are sporadic in the lexicon and do not appear in stable lexical categories (cf. §2.3.1) such as personal pronouns, suggesting East Bodish origin for Upper Mangdep.

Other groups of lexemes that are otherwise difficult to place in this paradigm, such as colour terms, also exhibit typically East Bodish features. Colour terms in both East Bodish and Tibetic have what appear to be fossilised formative suffixes, -po ~ -mo in Tibetic and -ti in East Bodish. Although in many cases the root word is the same, the reflexes in each clade formally differ based on this morphology, shown in Figure 10.

25 This holds considering only those three that have definitive etymologies. The first person singular pronoun is identical in both families and is thus excluded. The Upper Mangdep second person pronouns are very difficult to place. On the one hand, the forms (‘ye ‘2sg’; ‘yet ‘2pl’) exhibit sound changes that are regular in the language for native East Bodish vocabulary (cf. footnote 15). On the other hand, it is not inconceivable that the forms are reflexes of the Tibetic forms, *khyot ‘2sg’ and *khyet ‘2pl’, discussed above in §3.1.2. Under this analysis, *khyot undergoes an irregular but analogic (i.e. to similar /CR/ onsets) change, /kʰj/ → /j/; the vowel fronts as in Dzongkha to /a/ but then unrounds to /e/, a common process in Upper Mangdep, particularly among frequent lexemes. This would explain both the coda /j/ on ‘yet and the =de allomorph of the genitive found when it is cliticised to ‘ye. However, it is important to note that even if this etymology is correct, the pronominal paradigm would be split in terms of etymologies, as the third person pronouns (khi ‘3sg’; bō ‘3pl’) and the first person plural (nā) are distinctly East Bodish (cf. Hyslop (2014a:170)). Although this would mean more pervasive language contact than is argued for in this work, this evidence alone cannot prove the direction of language contact, as there is presumably an equal probability for the pronoun to be borrowed from either subgroup.
Figure 10: A comparison of common colour terms across Dzongkha, Upper Mangdep, and Kurtöp, showing the similarity in fossilised formative morphology between the Upper Mangdep and Kurtöp words for 'white', 'red', and 'yellow'. The internal morphology in Upper Mangdep 'nakke' 'black' is not known, nor in 'ngum' 'blue', although they may have historical nominalisers *-ki (cf. §4.4.2.2.4) and *-mo respectively. Note also that a reflex of the East Bodish root for 'blue' is found in Dzongkha in /ŋó/ <ŋo> 'blue-green'.

Although there are variations in the words for 'black' and 'blue' across all three languages, there are clearly commonalities between Upper Mangdep and Kurtöp for 'white', 'red', and 'yellow'. In Upper Mangdep, the second syllable loses its nucleus and thus a relic of the derivational morpheme is found in coda /t̪/ (cf. §5.1).

3.2.4 Diversity of verbal morphology across dialects

Although this thesis will show that the dialects often diverge quite radically from each other in verbal morphology for a variety of reasons, there is at least one case in which this divergence is conclusively due to non-contact innovations of East Bodish origin.

In the eastern dialects of Upper Mangdep, the form of the indirect past tense suffix is -na, compared to the western dialects' -hön (sometimes -ho). The eastern form is not unexpected, and in fact could conceivably be related to similar forms in either Dzongkha or East Bodish, and either through genetic descent or through contact. The equivalent Dzongkha morpheme is -nu <nug>. Kurtöp has a mirative perfective -na, grammaticalised from the existential copula26 (Hyslop 2011a:518); this is also found in other

26 Hyslop (2011a:464) ultimately traces the etymology of the Kurtöp existential copula to Proto-Tibeto-Burman *(g-)na(-s) ‘be, live, stay’, and also notes that its reflex nak is still a lexical verb in dialects of Bumthap (Hyslop 2013a:105); although indeed the Bumthap existential copula is also /ŋa/ (van Driem 2015:40). It is also worth noting that Balti has the mirative existential copula /naŋ/, for which Jones (2009:51) offers the etymology of Classical Tibetan <snaŋ.ba> ‘to appear, to be seen’.

<table>
<thead>
<tr>
<th>Dzongkha</th>
<th>Upper Mangdep</th>
<th>Kurtöp</th>
</tr>
</thead>
<tbody>
<tr>
<td>'white'</td>
<td>/ká:p/ &lt;dkarpo&gt;</td>
<td>/kaʃ/ kat</td>
</tr>
<tr>
<td>'red'</td>
<td>/má:p/ &lt;dmarpo&gt;</td>
<td>/ʒiŋtʃ/ zhint</td>
</tr>
<tr>
<td>'yellow'</td>
<td>/sé:p/ &lt;serpo&gt;</td>
<td>/sɨtʃ/ sit</td>
</tr>
<tr>
<td>'black'</td>
<td>/ná:p/ &lt;gnagpo&gt;</td>
<td>/nák.ke/ ‘nakke’</td>
</tr>
<tr>
<td>'green/blue'</td>
<td>/høm/ &lt;honmo&gt;</td>
<td>/ŋum/ ‘ngum’</td>
</tr>
</tbody>
</table>
Bumthangic dialects. Indeed, the existential copula in the eastern dialect of Upper Mangdep is \( nā \), often \( nāng \) and among some older speakers, \( naha \) (cf. §4.5.2 for more details).

The western form for the indirect past –\( hōng \), however, cannot be traced to any verbal morpheme in either other Tibetic or East Bodish languages. However, the western form of the existential copula also differs from the eastern form, surfacing variously as \( nā \), \( noho \), and \( nohōng \). It is clear from this evidence that the dialects once shared an existential copula, perhaps of the reconstructed form *\( nahōng \), which grammaticalised as the indirect past tense suffix in all dialects, but ultimately having adopted different phonological forms. In both dialects, the copula undergoes the common Upper Mangdep process of word-internal vocalic assimilation (cf. Appendix D), and, in the case of eastern \( nāng \), syllabic fusion.

Because the western form of the suffix cannot be traced in Tibetic and is not found in other East Bodish languages, neither Tibetic descent nor East Bodish relexification is a plausible explanation for the development of this verbal morphology. However, the common path of grammaticalisation from existential copula to an epistemically-marked suffix of perfective aspect and/or past tense in East Bodish offers a clear explanation for the East Bodish origin of the suffix. The evidence for a proto-East Bodish construction which would precipitate this grammaticalisation is also apparent in Kurtöp, in which perfective-marked verbs can be subordinated by the existential copula without an apparent special meaning (Hyslop in press). Conversely, if one were to take Upper Mangdep as a Tibetic language, one would need an explanation for how its western dialects recently innovated the suffix during a period of presumed relexification from East Bodish. There is no evidence available that would suggest an origin for such an innovation.

3.2.5 Grammaticalisation of the Interior Bhutanese dative in Bumthangic

Personal pronouns in Kurtöp and Bumthap are unique for having an innovative coda /\( ŋ/\) to mark absolutive case, e.g. ngat ‘1sg.\( \text{ABS} \)’ (both languages). In pointing not only to the absence of this coda on personal pronouns in other East Bodish languages, but to its

---

\( ^{27} \) van Driem (2015:38) describes –\( na \) for the Chogor and Chunmat dialects of Bumthap, under the term ‘inferred past tense’, to which my ‘indirect past’ applies for all intents and purposes.

\( ^{28} \) Dzongkha, like other Tibetic languages, has /\( ỳː \)/ ་ྱོད་ ‘egophoric existential copula’ and /\( ðː \)/ ་འདུག་ for alphophoric existential copulae respectively.
absence across cognates throughout Tibeto-Burman, Hyslop (2011:370) describes this pronominal absolutive marker as a recent innovation. She proffers the “ergative -t” in Upper Mangdep as evidence for a possible reanalysis, citing discussions with Fuminobu Nishida. Upper Mangdep in fact has an ergative =k, but no ergative =t.

Upper Mangdep does however have a locative =t, a semantically-restricted form of the dative =ta ~ =da (cf. examples (1) and (2)). The dative functions as a general marker of obliques, in some cases marking patients (e.g. with verbs of impact such as ‘hit’), and the marker of subjects in the construction of possession with the existential copula, as in (4) and (5).

(4) nga=ta tiru nā
    1sg=DAT money COP.EX
    ‘I have money.’
    [Elicitation]

(5) dzinin khi ye=ta 'ngen mü cā-sahan
    and.then 3sg 2sg=DAT spouse NEG.COP.EX signify-CND
    ‘And then she (says), “if you’re saying you don’t have a wife...”’
    [KT_SS]

Indeed, neither Chali nor Upper Mangdep (nor presumably Khengkha) have the absolutive -t on pronouns29. In fact, Upper Mangdep and Chali notably also have dative =ta30. By contrast, Bumthangic has two oblique markers, =na and =ro, which can both serve the functions of the Upper Mangdep dative =ta, although with pragmatic differences (Hyslop 2011:413)31. The morpheme =ro cannot be reconstructed to East Bodish and due to its

29 One possible exception to the absence of a -t coda is the Upper Mangdep second person pronouns, c.f. footnote 25.
30 There is some internal diversity in Upper Mangdep, with the dative =lok being found in western dialects, possibly borrowed from Dzongkha (cf. Dzongkha dative =lu) — note also Tibetan <logs> (Karma Tshering, pc.). Interestingly the dative is still found in its fossilised form in the western dialect, as in 'uda 'where' (compare Kurtöp ’a; Upper Mangdep 'unda 'where.ABL' comprised of the unattested *u root and the productive ablative enclitic =nda).
31 There is insufficient evidence to ascertain the Dakpa-Dzala oblique markers.
allomorphy is suspected to have been borrowed from Tibetan (Hyslop 2013b:228). The morpheme \(=na\) is a grammaticalisation of the periphrastic locative still realised synchronically in Upper Mangdep, from the nominal \(nang\) as a dependent of a genitive-marked noun phrase, as in (6).

\[
(6) \quad \text{kiši\, cual=de\, ge\, nang\, dzii\, bu-s\, ni-phal\, ne}
\]

3sg shade=ONE=GEN inside enter do-NF,PST sit-NMZ,PST COP,EQ,MIR

‘He has gone and stayed in a shady place.’

[DDRD_PT1]

This process is also attested from Tibetic languages such as Dzongkha, where the same morpheme \(=na\) is spelt \(ནང་\) \(<na\, ŋ>\). This encliticisation process is incipient in Upper Mangdep, as shown in (7).

\[
(7) \quad \text{tsongbä\, nang\, nya\, zong\, chu-den}
\]

stream=inside fish catch go.away-CTM

‘...while they were away fishing in a stream,’

[Dr_GD]

The more archaic oblique marking in Upper Mangdep indicates that the presence of dative \(=ta\), which is not found in Tibetic, is also the more archaic form in Interior Bhutanese and is probably the native morpheme. The differential marking of patients still present in Kurtöp and other East Bodish languages (Hyslop 2011a:413) provides a bridging context whereby the original dative grammaticalised as a marker of the absolutive case on patientive pronominal arguments. Since neighbouring Bumthangic languages do not retain this dative, its preservation in Upper Mangdep is suggestive of a time depth that is inconsistent with external borrowing (i.e. a Tibetic origin for Upper Mangdep).
4 Comparative grammar of verbal constructions

This chapter will provide the evidence for the contact phenomenon of pattern replication in Upper Mangdep, by producing the first description of predicates, the structural heads of clauses in Upper Mangdep grammar. It will be presented with regard to historical and comparative evidence, such that it will be made clear where and how forms diverge from a typical East Bodish profile, and converge with the structure of Dzongkha.

The chapter is structured as follows. In §4.1, I will give a brief overview of the general structure of the grammar insofar as it is relevant to the chapter’s overall purpose, and explain the functions of the unusual epistemic distinctions found. In §4.2 and §4.3, I will describe the broader structures of predication and describe the more peripheral features found in predicates, again insofar as these things are important to a complete understanding of the verbal system. These are forms which form paradigms of their own, mostly independent from the majority of verbal features, which are marked with suffixes and higher-order predicate heads (i.e. copulae and auxiliaries). §4.4, §4.5, and §4.6 are substantive and systematised descriptions of the paradigm of verbal inflection, starting with realis and irrealis finite verb forms, then covering non-finite forms, then the copulae, and finally complex predicates.

4.1 Grammar overview

Like most Tibeto-Burman languages, Upper Mangdep is verb-final and agglutinating. Arguments are frequently omitted, including either the subject, object, or even both. Upper Mangdep varies between head-marking and dependent-marking. Verbal features tend to be marked with suffixes, whereas nominal features tend to be marked with enclitics. Like other East Bodish and Tibetic languages, Upper Mangdep lacks morphological valence-change (cf. Hyslop (2011a:460) on Kurtöp). Instead, transitivity is a construction of nominal morphology and the lexicalised patterns of the verb. Again like other East Bodish and Tibetic languages, historically productive valence-changing morphology has produced lexicalised pairs of verbs which differ in transitivity, e.g. pcong ‘take out’ vs. bjong ‘come
out/emerge’, where the two verbs are differentiated by the syllable onset, as the result of phonological changes to a diachronic marked transitive prefix (cf. Vollmann 2008:166 for Central Tibetan).

Once again like other Bodish languages, Upper Mangdep is superficially ergative, as demonstrated with a canonical ergative agent in (8), but there is debate among scholars as to the use of this terminology (cf. Tournadre (1996); Vollmann (2008; 2010) on Tibetic languages for which the phenomenon is best described). More accurately, the Bodish ergative, manifested in Upper Mangdep by the enclitic =yi ~ =i ~ =li or sometimes =k32, marks semantic causes as in (9), including instrumental adjuncts.

(8) pra=yi khaw=ata zhego ma-rök ne
monkey=ERG hen=DAT meal NEG.PFV-bring.NF COP.EQ.MIR
‘The monkey wasn’t bringing the chicken her meal.’
[KT_HM]

(9) nā phala mō-ze ge dönda=k
1pl conversation say-NMZ.NPST COP.EQ purpose=ERG
‘...in order to make us talk.’
[DDRD_PT1]

Although A-arguments, i.e. transitive subjects are indeed marked in this way, the presence of the ergative is only mandated by the neutralisation of a natural animacy hierarchy (i.e. consider an event with two human participants) and pragmatics. As a result, S-arguments, i.e. intransitive subjects, can also be marked by the ergative as an attribution of some especial volition to that argument (cf. DeLancey (1990:308) on Tibetan; Hyslop (2010:20) on Kurtöp). Verbs, then, are generally flexible in transitivity and valence is limited only by the inherent semantic event structure of the verb.

32 =k seems to be found more commonly in the speech of the elderly, suggesting it has been falling out of use. The ergative is often marked differently on pronouns.
In (10)(a), the verb is transitive. The default animacy hierarchy applies and makes the use of the ergative redundant. In (10)(b), however, the use of the indirect past (cf. §4.4.1.1.3) with the first person in elicitation, where it is not usually expected, is an indication that nga ‘1sg’ is not intended as the subject of the sentence, but rather is the possessor of go ‘door’. The use of the indirect past also suggests that the possessor did not witness the event of the door being closed, and therefore could not have actually completed the action themselves33.

Word order to some extent also plays a role in identifying grammatical relations, as Upper Mangdep has a canonical SOV order. Where information structural alternatives exist, such as OVS, the subject is typically marked by the ergative, and the construction serves to focalise non-subject arguments and adjuncts, as in (11).

(11) les=e kōnda da shā ma-mō nyī
work=GEN topic well.now what NEG.PFV-say 1sg.ERG
‘I said nothing about your work.’
[PW_VM]

---

33 Note that (10)(a) was uttered by a speaker of the eastern dialect, and (10)(b) by a speaker of the western dialect.
4.1.1 **Functional and structural categories**

Due to space constraints, I generally assume the common understanding of linguistic categories typically expected across linguistic theories, e.g. for tense, aspect, etc. To a limited extent, the specific usage of terminology will be explained in the relevant sections. However, it is important to cover some of the pervasive categories that readers may be less familiar with, and/or the language-specific terminology associated with them.

4.1.1.1 Epistemic modality

While acknowledging that they are established categories independently (Aikhenvald 2004:7), I subsume evidentiality and other epistemic categories under the term “epistemic modality”, following many authors, e.g. Hyslop (2014d). This recognises the fact that other epistemic contrasts, namely those which concern the subjective evaluation of some aspect of the speaker’s knowledge, e.g. certainty, expectedness, probability, etc., are often associated with evidential contrasts either semantically or structurally (Aikhenvald 2004:6).

4.1.1.1.1 Evidentiality

Evidentiality is a grammatical category which marks the manner in which the speaker has come to know the information expressed in a proposition (Aikhenvald 2004:1). Aikhenvald makes it explicit that in discussing evidentiality she is referring to grammatical systems in which the speaker is obliged to express the information source for their proposition. That is to say, all well-formed declarative sentences carry a restricted set of evidential meanings as part of their semantics. This contrasts with “evidential strategies”, the extension of non-evidential elements of grammar to evidential meanings (Aikhenvald 2004:11), and similarly lexical strategies for evidentiality, which are optional free lexemes used to remark on the speaker’s information source.

Paradigms of evidentiality differ in the number of contrasts they make and the semantic scope of those contrasts. Aikhenvald (2004) devotes a chapter to comparing the different systems across languages. A simplified comparative example is reproduced in Figure 11, with the Upper Mangdep categories added for illustration.
Figure 11: Diverse examples of evidential paradigms in various languages of the world, adapted from Aikhenvald (2004:29, 43, 57, 60, 65). The maximal contrast in Upper Mangdep evidential categories is also represented for comparison; note that categories in parentheses are not obligatorily distinguished, at least in most contexts.

<table>
<thead>
<tr>
<th>Language</th>
<th>Visual</th>
<th>Sensory</th>
<th>Inferred</th>
<th>Assumed</th>
<th>Hearsay</th>
<th>Quotative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abkhaz</td>
<td>firsthand</td>
<td>non-firsthand</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shasta</td>
<td>direct</td>
<td>inferred</td>
<td></td>
<td>reported</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cora</td>
<td>direct</td>
<td>inferred</td>
<td></td>
<td>reported</td>
<td></td>
<td>quotative</td>
</tr>
<tr>
<td>Tariana</td>
<td>visual</td>
<td>non-visual</td>
<td>inferred</td>
<td>assumed</td>
<td>reported</td>
<td></td>
</tr>
<tr>
<td>Upper Mangdep</td>
<td>direct</td>
<td>indirect</td>
<td>inferred</td>
<td>assumed</td>
<td>(reported)</td>
<td></td>
</tr>
</tbody>
</table>

It is important to note that evidential categories interact heavily with other grammatical categories. In many languages, there are fewer evidential distinctions in non-past tenses and non-perfective aspects (Aikhenvald 2004:261). If languages do have evidential categories in other tenses, they may be rarer; and other epistemic senses may arise — Aikhenvald (2004:261) cites the sense of certainty that occurs with the use of the direct evidential in the future tense in Shipibo-Konibo. The logic behind these interactions with tense/aspect categories is straightforward: the range of evidence for an uncompleted event that is conceivably available to a given speaker is limited by nature; e.g. no-one has access to evidence that a future event will actually happen, etc.

In Upper Mangdep, the evidential system represented in Figure 11 is only strictly applicable (i.e. obligatory) to the past tense, as will be demonstrated below. It is not clear from current data if the indirect evidentiality (also known as “inferred” elsewhere in the literature) applies to non-visual sensory evidence as well as strictly inferential contexts, but I suspect it does. Writing on Lhasa Tibetan, DeLancey (1990:302) summarises the Tibetan inferential category, relative to the conceptual semantics of Tibetan event structure, as perceptual evidence of the result of an event.

An interesting question, however, is the treatment of recounts of dreams in the evidential paradigm. Cross-linguistically, recounting dreams requires the use of varying evidentials. In some languages with two-category systems like Abkhaz (mentioned in Figure 11 above) the “non-firsthand” evidential is used (Chirikba, in Aikhenvald 2004:222); but conversely by the firsthand evidential in Jarawara (Aikhenvald 2004:158) and by the direct
evidential in Amdo Tibetan (Sun, in Aikhenvald 2004:345). Tariana uses the non-visual sensory (i.e. ordinarily used for direct auditory evidence, etc.) evidential (Aikhenvald 2004:225). Non-shamanic dreams are recounted in Shipibo-Konibo, however, with the reported evidential (Aikhenvald 2004:346). Indeed, the indirect past suffix is found in Upper Mangdep when discussing dreams, although it can be overridden by dubitative constructions (see below in example (22)). The equivalent of the indirect past suffix in Dzongkha is also used to describe dreams (van Driem and Tshering 1998:275). In Kurtöp, either the inferential perfective or the mirative perfective is used in this context (Hyslop 2014e:114).

More broadly, then, I define the Upper Mangdep direct evidentiality to apply to any knowledge that the speaker attests from visual perception, or through their own volitional actions. By contrast, indirect evidentiality applies to knowledge obtained through non-visual perception, deductive reasoning, or any other medium other than the speaker themself. The hearsay category is not obligatory and typically subsumed under the indirect category and other epistemic categories (cf. §4.3.3.1).

4.1.1.1.2 Non-evidential categories: the dubitative

There are a number of categories in Upper Mangdep that, although not evidential in the sense that they lack claims about information source, clearly involve epistemic meanings at some level. For the purposes of this work, this includes any categories that express other claims about the speaker’s evaluation of or relationship with knowledge. The first and most obvious of these is uncertainty/certainty distinction. A speaker’s certainty in the truth-value of a proposition can be explicitly marked (cf. §4.3.3) but is generally unmarked. There are numerous ways to mark uncertainty in Upper Mangdep, most importantly the auxiliary ra (§4.6.5). Such markers indicate that the speaker has doubt as to whether or not the information they are expressing is true; for this reason I use the term “dubitative” to describe this category.

4.1.1.1.3 Egophoricity

One category that straddles the boundary between evidential and epistemic is egophoricity. Widely referred to as “conjunct-disjunct systems”, the feature is described for
numerous Tibeto-Burman languages and a sporadic few languages elsewhere (e.g. Tsafiki, a Barbacoan language of Ecuador (Dickinson 2000)). The basic syntactic observation that underlies the conjunct-disjunct analysis is that in declarative sentences, one verbal marker co-occurs with first person subjects while another co-occurs with second and third person subjects. However, the markers are more or less inverted in interrogative sentences (Hale, in Dickinson 2000:383), except for third person subjects. Additionally, when verbs such as those of speech acts take complements, the conjunct form is used when the subject of the complement and the matrix verb are the same. Dickinson (2000) also describes inversions of conjunct-disjunct marking in Tsafiki, for example, to contrast unintentional action with intentional action, mediated evidentiality with firsthand knowledge, and unexpected information with expected information.

Suffice it to say it has been recognised that this kind of pattern goes well beyond a form of agreement marking, and should not be considered structural at its foundation. DeLancey (1990:300) observes that the so-called conjunct forms in Lhasa Tibetan are restricted to contexts in which the subject is acting volitionally, giving examples where the conjunct forms are ungrammatical even in first person with verbs such as ‘die’ and ‘be sick’. In Lhasa Tibetan, the so-called conjunct-disjunct contrast is also linked to mirativity (see the next section below). In trying to reduce these facts to an analysis consistent with other parts of the evidential paradigm, DeLancey (1990:302) explains the volitionality feature as marking the speaker’s evidence of a specific point in Tibetan event structure semantics in which the agent of an event is aware of their own intentional action. Thus there is a contrast in whether the speaker has knowledge of an event from having been aware of the volition that initiated it, or has knowledge of an event only from having perceived it. Where the speaker has knowledge of the volitional act, the verb is marked with the conjunct form.
Figure 12: The evidential features of the basic verbal paradigm of Lhasa Tibetan, adapted from DeLancey (1990:303). The terminology applied for clarity is from my own interpretation of his analysis, in which he describes the evidential features as marking knowledge or lack thereof of three stages of Tibetan event structure semantics.

This is broadly consistent with the definition of Tournadre and LaPolla (2014:243), who, using the term “egophoricity” for the category to replace “conjunct-disjunct”, describe the contrast as one of “self-awareness” or access to “personal knowledge”\(^{34}\). The definition is also helpful in understanding why conjunct-disjunct forms are usually inverted in the interrogative. If the subject of the interrogative clause is the second person, the speaker expects that their interlocutor (i.e. the subject) has volitional knowledge of the event. Conversely, if the subject is the first person, the speaker is asking a question of themselves which presumes that they do not have knowledge of the volitional act (DeLancey 1990:303).

In the present analysis of Upper Mangdep, this category (egophoricity) applies only to suffixal aspect morphology. In my usage of terminology, the “egophoric” refers to the “conjunct” forms of the literature, those forms which mark personal knowledge or knowledge of volition; the “alterphoric” refers to the “disjunct” forms, those which mark

\(^{34}\) However, Tournadre and LaPolla misapply this distinction. In their terms “self-awareness” refers to awareness of one’s own sensations and applies to the disjunct marker, not the conjunct form. This is to explain why the disjunct form is used with mental experiences such as emotions and physical sensations. In DeLancey’s terms we would say that these experiences are events that are not volitional and therefore the speaker has no knowledge of the action that causes them. Tournadre and LaPolla’s analysis is problematic in the context of the debate over mirativity (covered in §4.1.1.1.4) because it assumes that the disjunct forms are in fact the direct sensory evidentials, when in fact the disjunct forms extend to demonstrably indirect evidential forms such as inferentials, etc.
the lack of the speaker’s personal knowledge of volition. Note that this may differ to the use of these terms for other authors, notably Kurtöp. Hyslop (2014d) uses “egophoric” to refer to a demonstrably different category which, although unlike the traditional conjunct-disjunct opposition, I suspect may be a sub-sense of Upper Mangdep egophoricity as well (cf. (50)). In Kurtöp, there is a category that marks the speaker’s expectation that their interlocutor is aware of a proposition, or by contrast, the expectation that their interlocutor is unaware of the proposition. Hyslop refers to the expectation that a proposition is new information for the interlocutor as “egophoric”. Notably, the Kurtöp contrast does not seem to follow the conjunct-disjunct structural tendency to co-occur differentially with the person feature of the agent.

4.1.1.1.4 Mirativity

There is one final epistemic category that is important for analysis. The mirative canonically expresses that the information contained in a proposition is “surprising”, unexpected, and/or new to the speaker (Aikhenvald 2012:437). One example from Kurtöp is given in (12). In that example, the referent has arrived unexpectedly as the speaker has not seen them since they were a child.

(12) yala wo onga tshò thrak-na wai
    god DM,PRX child here arrive-PFV,MIR WOW
    ‘Oh my god... this child has arrived! Wow.’
    [Hyslop 2011b:50]

However, the realisation of this category in Upper Mangdep grammar, as in the grammars of other East Bodish and Tibetic languages, is complicated. In arguing against the validity of mirativity as a linguistic category, Hill (2012:403) describes the concept as an inadequate for describing the Tibetic existential copula <ḥdug> on the basis that its usage is often temporally displaced from the acquisition of the knowledge, making it impossible that the knowledge is conceptualised as new every time the speaker repeats the knowledge. For DeLancey, it seems that this is merely a question of terminology. In responding to Hill, he contends that while Tibetan <ḥdug> has other senses as a result of its place in the conjunct-
disjunct paradigm of Tibetan, its most frequent usage expresses the novelty of information, as opposed to old or generic knowledge (DeLancey 2012:554); i.e. it is simply that this is the most salient sense.

Hill’s (2012) preferred analysis, that <ḥdug> is a direct sensory evidential, is problematic for the same logic, however. An important context to consider here is the appearance of <ḥdug> and related forms in narratives in Tibetic languages. Indeed, information in narratives is not new as argued by Hill (as above); but this information is equally not directly perceptible to the speaker (cf. DeLancey (2012:543)). There are several reasons why we find what are termed “miratives” including <ḥdug> in a narrative context, even if they lacked secondary alterphoric meanings as <ḥdug> does. Firstly, to the extent that <ḥdug> has sensory perception evidential feature, it is mirative in the sense that it denotes immediate perception (DeLancey 2012:554). Secondly, it is easy to understand the use of the mirative rhetorically in narratives, in that the information contained in them is both new to the audience and new in the embedded temporal scope of the narrative itself (Hyslop, pc.). Similarly, as in English, storytellers may use the present tense in narratives in Tibetic languages, as a means of representing events as part of an abstract temporal structure contained in the narrative (Zeisler 2000:44).

Finally, <ḥdug>, in the innovative verbal complex of some Tibetic languages has grammaticalised as a marker of alterphoricity or inferred evidentiality (DeLancey 2012:555–6). The conceptual path from new knowledge to indirect knowledge is clear, as we can understand that nothing marked as new knowledge could have occurred as the result of an event initiated with the volition and knowledge of the speaker, as per the Tibetan event structure framework established by DeLancey (1990). It is much harder, however, to construct a link between Hill’s analysis of <ḥdug> as a direct sensory evidential (Hill 2012), and the conventionalisation of <ḥdug> as an indirect evidential marker; Hill does not attempt such an analysis. The same issue applies for a similar analysis accepted by Tournadre and LaPolla (2014).

For the purposes of this work, the term “mirative” is used to recognise that, as for Tibetan, the category it represents in Upper Mangdep (in the copulae), is distinct from the epistemic contrasts made in other paradigms, such as egophoricity. It recognises that the primary sense of the contrast is one of the novelty of the information. This is demonstrable
by observing the consistency of the conjunct/disjunct pattern that occurs with the Upper Mangdep egophoricity contrast even in elicitation, but conversely, the usage of the non-mirative copulae when the proposition is a generic statement about a third person. This will be explicated in full for the relevant morphemes below.

In fact, since unlike <ḥdug>, the Upper Mangdep copulae do not seem to have a secondary egophoricity contrast, at least as far as is observable from reading the data, they may be good evidence for a more puristic category of true mirativity in Tibeto-Burman languages\textsuperscript{35}. I suspect this analysis may also be true of the category of mirativity in Kurtöp copulae (cf. Hyslop (2011b)) but this is an issue for further research.

4.1.1.2 Verb finiteness

An important structural category in understanding predication in Upper Mangdep is verb finiteness. This work follows the common linguistic nomenclature, in which a finite verb is defined as those that predicate independent clauses and can take the maximal inflectional categories available to verbs in a given language (Loos et al. 2004a). By contrast, non-finites are those that cannot predicate independent clauses, rather only dependent clauses; and such verbs are not subject to the full range of inflectional categories found in the verbs of the language (Loos et al. 2004b).

Within these categories, I also define further classes. The first are subordinators, which can head subordinate clauses and cannot take nominal morphology. The second are nominalisers, which cannot predicate clauses but may take nominal morphology. The inclusion of nominalisers in this category of non-finite verbs may not be intuitive and as such is justified here. Firstly, their inclusion is a convenient way of understanding the relationship between nominals derived from verbs and verbs proper. Secondly, it recognises the dual function of some nominalisers as true derived nominals and as components of complex predicate constructions — both functions are described further in this chapter for the relevant structures.

\textsuperscript{35} One candidate mentioned for this empirical endeavour is the Dzongkha suffix of “acquired knowledge” -be ~ -we (DeLancey 1990:557); but in my interpretation this morpheme is also similar to -ḥdug in having secondary alterphoricity sense, and thus is not any more prototypically mirative than -ḥdug.
In Tibeto-Burman linguistics, it is common to describe the above structures with the nominalisation terminology. Genetti et al. (2008:98) contrast derivational nominalisation with clausal nominalisation. The scope of the former is only the lexical root to which the nominalisation strategy applies, whereas in the latter it is the entire clause; the resulting constituent also differs in syntactic category, the former producing a single noun while the latter produces a noun phrase. Derivational nominalisation is further divided into participant nominalisation, in which the output form refers to some entity involved in an action or event; or action nominalisation, where the output form refers to the action itself as an abstract noun. According to Genetti et al. (2008:99), clausal nominalisations have verbs as their head while action nominalisations have nouns as their heads. Clausal nominalisations appear in themselves to be clauses, however, as constituents of larger syntactic structures, i.e. the sentence, they are treated as nouns; notably, they can be predicated, for example, with copulae (cf. Genetti et al. (Genetti et al. 2008:100)).

Upper Mangdep nominalisers tend towards the derivational type. There are on the one hand participant nominalisers, marking, for example, ‘the person who does [verb]’. On the other hand, there are nominalisations that typically function as components of complex predicates, for example predicated by copulae. However, unlike the clausal nominalisations of the type described by Genetti et al., such nominalisations are in Upper Mangdep true nominals in that they can take nominal morphology and thus can be described as action nominalisers. Like clausal nominalisations, however, the scope of nominalisation is typically the whole clause, as these structures do appear in complex predicates.

The composition of a complex predicate with a nominalisation and an inflectional head in Upper Mangdep often produces a construction with opaque, special semantics, a noted property of so-called converbal clauses36 (Genetti et al. 2008:122). Similarly, different verbal features, e.g. tense may be contributed to the overall meaning of the top-level syntactic structure (i.e. the sentence) by either the non-finite marker or the matrix predicate, such as a copula or auxiliary (Genetti et al. 2008:123). These phenomena will become apparent in §4.6.

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36 Those in which a true verb is dependent on a higher-order predicate, but in which the clause cannot function as a noun phrase as with clausal nominalisations.
4.2 Structure of predicates

Predicates in Upper Mangdep are constructed in one of two possible ways. Predicates can consist of:

a. a finite verb, or
b. a non-finite verb or nominal plus a copula or auxiliary

Examples of each are given in (13)(a) and (b) respectively.

(13)(a) da am=zem deme=ya cap bu-s lä-shi
    well.now woman=DEF key=also establish do-NF.PST depart-PST.DIR
    ‘Now the woman also locked (the door) and left.’
    [KT_LS]

(13)(b) bome=dzem dzin jōla bak-s pcilok pcong yi-ze ge
    girl=DEF then bag carry-NF.PST outside take.out go-NMZ.NPST COP.EQ
    ‘The girl will then go outside taking her bag.’
    [KT_LS]

In (13)(a), läshi ‘left’ is the matrix predicate and heads the sentence. The verb consists of a root and a slot II suffix. In (13)(b) the matrix predicate is a serial verb construction. Serial verb constructions in Upper Mangdep are identifiable where constituent verbs are not marked non-finites (cf. §4.4.2.1.5 for the morphology of non-finites)37. The major verb of (13)(b), ‘go’, is marked with the non-past nominaliser. Structurally, the serial verbs are dependent to the copula ge (cf. §4.5.1). This structure, whereby a non-finite verb or nominalised verb is subordinate to a copula resulting in a functionally opaque construction, e.g. one of “TAME” (tense, aspect, modality,

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37 Although the example in (13)(b) has the constituent root pcong, which has ambiguous stem marking (§4.2.1 below on stem types), the fact that the subordinate clause in the sentence is marked with the past tense non-finite suggests that the event ‘take out’ is temporally aligned with the main verb ‘go’. Furthermore, the combination of the non-past non-finite (marked stem) with a matrix verb forms the purposive construction (discussed below in §4.4.2.1.5), transparently not found here.
epistemicity), is common in Tibeto-Burman and found throughout the Bodish languages (cf. §4.1.1.2 above). This will be covered in the section on complex predicates (§4.6).

Verbs basically have three affix slots, not including nominal morphology occurring after nominalisation, or verbal/clausal enclitics, shown in Figure 13.

<table>
<thead>
<tr>
<th>(Polarity)</th>
<th>( Slot I)</th>
<th>( Slot II)</th>
</tr>
</thead>
<tbody>
<tr>
<td>negative</td>
<td>ROOT</td>
<td>aspect</td>
</tr>
<tr>
<td></td>
<td></td>
<td>illocutionary mood</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Figure 13**: Upper Mangdep verbal template, including a generalised list of the functional membership of the classes. Parentheses indicate optional slots.

This verbal template is itself a replication of the Dzongkha verbal template, notably in reserving the first suffix slot for aspect markers and the second for tense markers, among others. This seems to differ from Kurtöp, which appears to have a single suffix slot on verbs (cf. Hyslop (2011a:469)).

The categories used in Figure 13 broadly align with the categories used to structure this chapter; the declarative category being split across the two suffix slots into aspect, tense, evidentiality, and alterphoricity. I describe the verbal morphology of Upper Mangdep as agglutinative. Suffixes have limited allomorphy, which is in part morphophonemically predictable, and in part arbitrary and selected by the root. This allomorphy typically involves changes in the voice-onset timing of the suffix’s initial consonant. This may in some cases indicate historical morphophonemic conditions that are no longer extant. Reciprocally, each root type ostensibly selects either the unmarked stem or the marked stem unpredictably before each suffix (cf. §4.2.1 for more detail).

4.2.1 Stem alternation and allomorphy

Verb roots without bound morphemes, have specific functions in Upper Mangdep grammar. As noted above, unmarked verb stems can be elements of serial verb
constructions, for example. More importantly, however, is a second alternation of verb roots, which I refer to as a “marked stem”. The function of the marked stem as a marker of non-past non-finite verbs, as well as the purposive, is detailed in §4.4.2.1.5. In essence, this morphophonological marking, in its subordinating function, replicates a functionally similar stem alternation found in Dzongkha.

In Kurtöp (Hyslop 2011a:205), and in Khengkha, verb roots with coda –k drop the coda and undergo compensatory lengthening of the nucleus before certain suffixes. In Dzongkha (van Driem and Tshering 1998:209), verb stems similarly change their shape before certain suffixes, but the picture is more complex. In van Driem’s terminology, every verb has an “inflected” stem, found in certain constructions. Roots with nasal codas develop coda –m in the inflected stem, roots with coda –p do not change, and all other roots, which in Dzongkha have open stems, take either a coda –p or –w. This stem is historically derived from the nominaliser *-pa ~ *-ba, also found in Central Tibetan (Denwood 1999:116) as well as in East Bodish languages (cf. Hyslop (2011:426) for Kurtöp), with similar functions in grammatical constructions. However, the Dzongkha form is no longer an active nominaliser.

In the eastern dialects of Upper Mangdep (cf. §4.2.1.1 for western dialectal differences), all verb roots except those with coda –ng and true (etymological) open roots exhibit at least one stem alternation, found preceding different suffixes. One such alternation is the marked stem, which is also found in particular constructions appearing without suffixes. It is unequivocally identifiable if such a marked verb can grammatically precede an equational copula, a construction detailed in §4.6.1 with the non-past habitual function.

Interestingly, the eastern dialects of Upper Mangdep demonstrate a parallel grammaticalisation of a historical nominaliser in order to create this verb form, which is necessitated by constructions ostensibly replicated from Dzongkha (cf. §4.6). The marked stem is formed as follows. Roots with a nasal coda (i.e. –n and –m) merge to coda –ng, with

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38 I prefer the term “marked” stem, as “inflected” seems to imply a simple co-occurrence with morphological inflection.

39 This is cited as –u by van Driem (e.g. in van Driem and Tshering (1998)) but is better analysed as a consonantal coda, having been derived from the consonant /b/ and written as  ས་<w>. In addition, the language, like Upper Mangdep does not have true diphthongs (cf. Appendix D).
no change to original -ng coda roots. All other diachronic codas, i.e. excluding roots which have never had a coda (exceptions discussed below), merge to coda -k. Roots which historically had coda -k are reanalysed as underlyingly open syllables, as are, of course, roots with other lost codas. This reanalysis is also apparent from negated verbs, where suffixes rarely occur — cf. example (11) above, where the verb mō ‘say’ historically has a coda /k/40. This is demonstrated with examples in Figure 14.

<table>
<thead>
<tr>
<th>Unmarked stem</th>
<th>Root coda</th>
<th>Marked stem</th>
<th>Marked coda</th>
</tr>
</thead>
<tbody>
<tr>
<td>bu ‘do’</td>
<td>−Ø</td>
<td>bu</td>
<td>−Ø</td>
</tr>
<tr>
<td>ta ‘see’</td>
<td>−Ø</td>
<td>tā</td>
<td>(long vowel)</td>
</tr>
<tr>
<td>thrā ‘arrive’</td>
<td>−Ø (panchronic -k)</td>
<td>thrak</td>
<td>−k</td>
</tr>
<tr>
<td>dō ‘sleep’</td>
<td>−Ø (diachronic -t)</td>
<td>dök</td>
<td>−k</td>
</tr>
<tr>
<td>gö ‘want, need’</td>
<td>−Ø (diachronic -s)</td>
<td>gök</td>
<td>−k</td>
</tr>
<tr>
<td>kher ‘make’</td>
<td>−r</td>
<td>khek</td>
<td>−k</td>
</tr>
<tr>
<td>dal ‘fall’</td>
<td>−l</td>
<td>dak</td>
<td>−k</td>
</tr>
<tr>
<td>bap ‘descend’</td>
<td>−p</td>
<td>bak</td>
<td>−k</td>
</tr>
<tr>
<td>zhi ‘forget’</td>
<td>−Ø (panchronic -t)</td>
<td>zhit</td>
<td>−t</td>
</tr>
<tr>
<td>thung ‘engage’</td>
<td>−ng</td>
<td>thung</td>
<td>−ng</td>
</tr>
<tr>
<td>kim ‘cross’</td>
<td>−m</td>
<td>king</td>
<td>−ng</td>
</tr>
<tr>
<td>ngen ‘listen’</td>
<td>−n</td>
<td>ngeng</td>
<td>−ng</td>
</tr>
</tbody>
</table>

Figure 14: Marked stem formation of different root shapes in Upper Mangdep41. Note that diachronic codas here refer to those which can be reconstructed or attested for an older form of the lexeme, and that panchronic codas here refer to those which hold both for older stages of the language as well as the synchronic state of the language.

40 There is a cognate in Chali mok ‘say’.
41 The evidence for a diachronic -t coda for dō ‘sleep’ is found in Kurtöp dot ‘sleep’, and ultimately re-constructed to *dot for Proto-East Bodish (Hyslop 2014a:163). The evidence for a diachronic -s coda for gö ‘want, need’ also comes from Dzongkha gö, sometimes (but not always) spelt དགོས <dgos>; the cognate stem occasionally appears in Kurtöp as gor. The diachronic coda explains the fronted vowel in Upper Mangdep (cf. §5.1).
This form in Upper Mangdep, like in Dzongkha, is derived from a historical nominaliser, *-ki. This nominaliser is again also found in Central Tibetan (Denwood 1999:116), and also to some extent in East Bodish (cf. Hyslop (2011:453) for Kurtöp). Due to the presence of both *-pa and *-ki in other Tibetan and East Bodish languages, it appears that diachronically both Dzongkha and Upper Mangdep had these forms, then lost one while the other grammaticalised into the marked stem. This grammaticalisation is in part illustrated by the differential treatment of nasal codas, which in both languages, merge to nasals of a single place of articulation (–m in Dzongkha, –ng in Upper Mangdep). This is indicative of historical assimilation to the respective nominalisers. In addition, the phonological change in which there is syncope of the final vowel replicates the same development in Dzongkha (cf. Appendix D).

This process of grammaticalisation is summarised with examples in Figure 15.

<table>
<thead>
<tr>
<th>Root</th>
<th>Diachronic</th>
<th>Synchronic</th>
<th>Stem</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘sleep’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Mangdep</td>
<td>dö</td>
<td>→ *dö-ki</td>
<td>→ dök</td>
</tr>
<tr>
<td>Dzongkha</td>
<td>hō lhod →*hō-pa lhod.pa</td>
<td>→ höp lhodpa → hölhodpa</td>
<td>–p</td>
</tr>
</tbody>
</table>

| ‘listen’    |            |            |      |
| Upper Mangdep | ngen       | → *ngen-ki | → ngen | –ng |
| Dzongkha   | nyan ñan →*nyem-pa ñan.pa | → nyem ñanma | –m  |

Figure 15: Examples of the grammaticalisation of nominalisers in Upper Mangdep and Dzongkha as the synchronic marked stem, with both non-nasal and nasal root codas.

There are a few exceptions to the formation of the marked stem. For one, the root coda -t, where extant as in zhī/zhit ‘forget’, appears to have been reanalysed as the marked stem coda (refer to Figure 14). This does not occur for diachronic –t and –s codas, which have been lost in the course of fronting of the preceding vowel (cf. §5.1), creating new open roots. This exceptional reanalysis likely occurs due to the infrequency of extant –t coda roots. No synchronic –s coda roots have been found. Secondly, presumed sound changes in
Upper Mangdep create new root rimes that fit predictably within this system. Nasalised open roots, e.g. thōŋ ‘drink’, pattern with -ng coda roots.

Turning to the distribution of the marked stem as a variant of the root in constructions where the verb is inflected, it appears that there is little predictability as to which suffixes take the stem. Presumably, it appears before suffixes that may be themselves grammaticalisations of diachronic free forms such as nominals, copulae, auxiliaries, etc. It is important to note that in polymorphemic verb stems with suffixes, the shape of the root can differ in additional ways beyond the marked stem, again except for -ng coda roots and true (panchronic) open roots.

For root shapes that have only two stem types, unmarked and marked, the root shape selects a stem type for each suffix. This is at least to some extent predictable. Non-finite suffixes, for example, almost always take the unmarked, bound stem (i.e. that with an open syllable if the root type has that stem). The first exception is that panchronic -k coda roots do not follow this tendency completely, using the marked stem before the past non-finite suffix and the past nominaliser. The second exception is for nasal coda roots, which take the marked form with the genitive nominaliser -Ke (§4.4.2.2.4). Finite suffixes are far less predictable, where different root shapes might differ in the alternations they select for particular suffixes as compared to other root shapes. This is particularly true across different types of open roots, where it appears that, at least synchronically, the stem alternation is specific to the verb and its inflected forms. Finally, where the bound (open syllable) stem type is selected, and its nucleus is a front vowel or /a/, it appears with a long vowel preceding a suffix with an open syllable, and with a short vowel preceding a suffix with a closed syllable.

In addition to the two stem types found for most root shapes, i.e. unmarked (found in certain forms with bound morphology and in serial verb constructions) and marked (found elsewhere, as above), -r and -l coda roots have three and four stem types respectively. In these cases, both root shapes have an additional open syllable stem in which the coda is simply deleted. This stem type is found only when bound with suffixes. The root form of -r coda roots (e.g. kher), which is also the unmarked form ending in the etymological coda, is found preceding only one suffix, the indirect past tense suffix -na, possibly reflecting its grammaticalisation (cf. §4.4.1.1.3). -l coda roots also have an -r coda
stem preceding this suffix, probably as a simple phonetic alternation.

These bound stem alternations are summarised with examples, using the suffixes –na and –Do as examples of alternations with different finite suffixes, in Figure 16. Note especially the alternations that occur with kher ‘make’ and dal ‘fall’.

<table>
<thead>
<tr>
<th>Unmarked stem</th>
<th>Before non-finites</th>
<th>Marked stem</th>
<th>Before –na</th>
<th>Before –Do</th>
</tr>
</thead>
<tbody>
<tr>
<td>bu ‘do’</td>
<td>bu</td>
<td>bu</td>
<td>bu</td>
<td>bu</td>
</tr>
<tr>
<td>ta ‘see’</td>
<td>ta</td>
<td>tā</td>
<td>tā</td>
<td></td>
</tr>
<tr>
<td>thrā ‘arrive’</td>
<td>thrā</td>
<td>thrak</td>
<td>thrā</td>
<td>thrak</td>
</tr>
<tr>
<td>dō ‘sleep’</td>
<td>dō</td>
<td>dök</td>
<td>dō</td>
<td>dök</td>
</tr>
<tr>
<td>gō ‘want, need’</td>
<td>gō</td>
<td>gök</td>
<td></td>
<td></td>
</tr>
<tr>
<td>kher ‘make’</td>
<td>khē</td>
<td>khek</td>
<td>kher</td>
<td>khek</td>
</tr>
<tr>
<td>dal ‘fall’</td>
<td>dā</td>
<td>dak</td>
<td>dar</td>
<td>dak</td>
</tr>
<tr>
<td>bap ‘descend’</td>
<td>bap</td>
<td>bak</td>
<td>bap</td>
<td>bak</td>
</tr>
<tr>
<td>zhī ‘forget’</td>
<td>zhī</td>
<td>zhit</td>
<td>zhī</td>
<td></td>
</tr>
<tr>
<td>thung ‘engage’</td>
<td>thung</td>
<td>thung</td>
<td>thung</td>
<td>thung</td>
</tr>
<tr>
<td>kim ‘cross’</td>
<td>kim*</td>
<td>king</td>
<td>kim</td>
<td>king</td>
</tr>
<tr>
<td>ngen ‘listen’</td>
<td>ngen*</td>
<td>ngeng</td>
<td>ngen</td>
<td>ngeng</td>
</tr>
</tbody>
</table>

**Figure 16**: Stem alternations with examples of different, relatively stable environments. *Nasal stems are marked preceding the genitive nominaliser –Ke. Gaps indicate a lack of data, in some cases due to inherent semantic constraints.

The allomorphy of suffixes depends largely on the shape of the preceding stem. Where suffixes have allomorphs, it exclusively affects the voice-onset timing of the their onset consonants. In most cases, the onsets of suffixes will be either voiced or voiceless unaspirated, but certain suffixes may additionally have aspirated onsets. Broadly, the voice-onset timing of the onset of the suffix simply assimilates to the root’s coda voicing, i.e. open stems produce voiced onset suffixes, and closed stems (marked) produce voiceless onset onsets.
suffixes, e.g. thrā ‘arrive’ + -Do ‘IPFV’ = thrak-to; thrā + -Ten ‘CTM’ = thra-den. However, the presence of aspirated onsets for some suffixes is unpredictable, occurring only with specific open syllable roots and with lexically-specific suffixes, e.g. ni ‘sit’ + -Ten ‘CTM’ = ni-then; bu ‘do’ + -Pal ‘NMZ.PST’ = bu-phal; but bu + -Ten = bu-den. The specific allomorphs of each suffix will be described for the suffixes below.

Morphophonemic alternation of these types is indicated in forms in this work with capital letters: voiced consonants (e.g. B, D, G) where the underlying form is presumed to be voiced and VOT alternates between voiced and voiceless unaspirated is conditioned by the rime of the root; and voiceless (e.g. P, T, K) where a three-way contrast is found (cf. Appendix B).

4.2.1.1 Differences in western dialects

Since my investigation into the western dialects of the language is, although crucial, more preliminary, a similarly detailed analysis of stem alternation is not possible. However, there are several useful insights from the data, specifically the Dangchup dialect. Firstly, the -k stems, marked stems in the eastern dialects, are exclusively found with bound morphology, e.g. kher ‘make’ + -Do ‘IPFV’ = khek-to. Where eastern dialects have this form as a marked stem (i.e. they appear in the same syntactic distribution, e.g. before copulae etc.) the Dangchup (western) marked stem appears to be the open stem, e.g. khe for kher. To some extent I suspect this is an indication of further innovative grammaticalisation in the dialect, in which copulae and auxiliaries are beginning to bind to verb roots morphologically. This direction of change would be consistent with expectations founded on the etymologies of Kurtöp verbal morphology (Hyslop 2011a); i.e. that they have grammaticalised from free morphemes.

Conversely, however, the root form is retained with more suffixes than in eastern dialects, possibly suggesting that those suffixes are more recently grammaticalised, for example -shi ‘PST.DIR’ (cf. §4.4.1.1.3), which, again with the verb ‘make’, produces kher-shi.

4.3 Peripheral morphology of predicates

This section describes the negative prefixes, phrasal enclitics, and the various clause-final particles of Upper Mangdep.
4.3.1 **Negative prefixes**

Upper Mangdep, like other languages of Bhutan, has two negative prefixes, *ma-* and *me-* ~ *mi*-. van Driem and Tshering (1998:208) claim a distinction between past and present tense respectively, but Hyslop (2011:565) describes the contrast in Kurtöp primarily as one of aspect, whereby the prefix *ma-* is used in the perfective and *me-* in the imperfective or future tense. Although my data on the prefixes’ distribution in Upper Mangdep is inconclusive, it appears that that analysis for Kurtöp is applicable here too. Given that in Dzongkha as well as in Upper Mangdep, the prefixes never (or rarely in Dzongkha) appear with suffixes of either aspect or tense, it is likely the aspect analysis applies for all three languages.

(14) \[
\begin{align*}
\text{rū} & \quad \text{me-zu}=\text{wa}
\end{align*}
\]

\text{curry } \text{NEG.IPV-eat}=\text{ROG.TAG}

‘Not eating your food, huh?’

[VT_S1]

The sentence in (14) is particularly suggestive of the aspect-based analysis. The utterance was spoken to me by my dinner host, returning to the room after I had stopped eating, having been full enough to leave food in my plate. The best reading would therefore be that the speaker is confirming that I am no longer eating and not planning to continue eating, rather than asserting that I had not eaten at all.

Similarly, the form is found in the rhetorical imperfective in storytelling, whereby the speaker narrates events as ongoing prior to their completion within the scope of the story, rather than the scope of all linear time, as in (15).

(15) \[
\begin{align*}
\text{dzin} & \quad \text{pcangka}=\text{ge} & \quad \text{bos}=\text{zem} \quad \text{shā} & \quad \text{bak-sar} & \quad \text{me-thung}
\end{align*}
\]

\text{and.then } \text{poor.man}=\text{GEN} & \quad \text{guy}=\text{DEF} & \quad \text{what} & \text{carry-NMZ.OBL NEG.IPV-engage}

‘And then the poor man’s son was going to have nothing to bring.’

[Dr_GD]

Although the underlying semantic conditions for the distinction might then suggest
a realis-irrealis contrast, only the perfective form ma- has been found with the conditional suffix, one of the only subordinators it co-occurs with in the corpus, as in (16).

(16) ma-drak-sahan=ya
    NEG.PFV-recover-CND=also
    ‘Even if she doesn’t get better, …’
    [KT_LS]

The vowel in the suffix me- ~ mi- is conditioned by vowel height in Kurtöp (Hyslop 2011a:566), but the alternation is less consistent in Upper Mangdep. Notably, however, it sometimes undergoes complete vocalic assimilation with the nucleus of the root, a common phonological process in Upper Mangdep. In one common case, where it prefixes the verb gö ‘want, need’, as in (17), it also appears with a nasal coda. According to Hyslop (pc.), this alternation is replicated from Dzongkha, where the nasal coda occurs as a result of assimilation to a diachronic complex onset, or “pre-radical” in Tibetological terms, on the verb root.

(17) khagö soso kyak möng-gö
    instruction different establish.NF NEG.PFV-need
    ‘There’s no need to instruct (them each) separately.’
    [DDRD_C1]

4.3.2 Phrasal enclitics

Upper Mangdep has a set of morphemes that are found both at the end of noun phrases as well as at the end of clauses, with somewhat ambiguous structural status. This does not include those nominal enclitics that also appear following nominalised verbs. These enclitics can be further divided into interrogative enclitics and subordinating enclitics.

The enclitic analysis is motivated by their flexible syntactic binding (i.e. to both noun phrases and verbs) in juxtaposition with the morphophonological variation found with the polar question enclitic =ya, which by extension suggests the same morphological
binding for all other morphemes of its structural type.

4.3.2.1 Interrogative enclitics

Upper Mangdep has six interrogative morphemes with different functions. The four enclitics are bound forms of underlying copulae. One could argue that they only bind to verbs, and are free elsewhere, but for unity of analysis, they are always analysed as enclitics in this work.

Firstly, the enclitic used in the formation of polar (i.e. “yes/no”) questions is =ya or =Ka. The first form can be traced in other East Bodish languages, including Bumthangkha and Kurtöp (Hyslop 2011a:575), and the second is clearly borrowed from the equivalent Dzongkha morpheme =ga ཀ་<ga>. An example is given in (18). It is assumed from this example that the enclitic subsumes the copula that would be found in the declarative form of the sentence, and that the copula is not simply ellipsed.43

(18) lok rā-ze=ya
    again come-NMZ,NPST=ROG,POL
    ‘Are you coming back?’
    [VT_S1]

As in many languages, the enclitic can be used to juxtapose clauses in a construction roughly equivalent to English “whether or not”, as in (19).

(19) ye khadek phrā=ga ma-phrā=ga ma-bren
    2sg together meet=ROG,POL NEG,PFV-meet=ROG,POL NEG,PFV-know
    ‘I didn’t know whether or not I had met with you!’ (i.e. ‘I didn’t know if I was supposed to lie about having met with you or not.’)
    [PW_VM]

42 Dzongkha also has a rhetorical question marker =ya (van Driem and Tshering 1998:250).

43 This is because this construction is never found in the interrogative with the enclitic following the copula that is found in the declarative.
Like other verbal morphemes with initial stops, the enclitic exhibits allomorphy with changes to VOT with specific verbs (cf. §4.2.1 above), such as the aspirated allomorphy occurring with the verb *ni* ‘sit’.

(20) nga adzo ni=kha
1sg DM.MED sit=ROG.POL

‘May I sit here?’

[Elicitation]

The enclitic is also found as a component of two particles, formed from the (alterphoric) affirmative and negative (respectively) equational copulae (*ne* and *be(kte)*; cf. §4.5.1), *nikya* ~ *niya* ~ *niga* and *bikya* ~ *biya* ~ *biga*. Although the complete distribution of morphemes used to form questions with the equational copulae are not clear, these derivatives have at least two distinct functions. It is probable that they are generally used for basic polar questions formed from copulae, but it is difficult to differentiate such pragmatically unmarked questions from tag questions and rhetorical questions, which would be formed in the same way, in the current corpus. By virtue of the fact that there is both an affirmative and a negative particle, the usage of the particles suggests pragmatic marking for the expected answer, in the same way that ending sentences in English with ‘is it?’ or ‘is it not?’ produces different meanings. In the unmarked distribution, the forms should be considered structurally free like other copulae.

The pragmatic functions are similar to those of Dzongkha *'ina* ~ *'ime-ga* ཆེ་ཏེ་ ~ ཆེ་རླུང་ <in.na; in.pas.ga> and *mena* ~ *membe-ga* མེན་ ~ མེན་རླུང་ <men.na; men.pas.ga> (van Driem and Tshering 1998:131), but unlike in Dzongkha, no contrast in egophoricity is found. That is to say, the form *ge-*ya, using the non-mirative equational copula as a base, is not found in the language. van Driem and Tshering remark that in Dzongkha, that contrast differentiates whether or not the speaker expects that their interlocutor knows the answer to the question. The fact that that contrast also does not occur for non-polar copular questions (see below) in either Upper Mangdep or Dzongkha suggests that the contrast may simply have been levelled out in Upper Mangdep. In Kurtöp, the polar question particle does not fuse with the copula, presumably leaving these contrasts open to use.
The best example of an unmarked, copular use is found in (21). In that example, the speaker is pointing at an image and does not expect her equally unfamiliar interlocutor to know the answer.

(21) adze ʼap niga lā
DM.PRX father AFF.ROG.POL HON
ʼIs this the father?''
[DDRD_PT1]

The rhetorical usage of these morphemes is far more common in the corpus. It appears that to some extent they have lexicalised as particles expressing doubt (but see §4.6.5 for the dubitative construction). The clearest examples that suggest this analysis are where both the affirmative and negative forms of the particle are concatenated, as in (22).

(22) nga ngilam=nang ʼöbô niga biga thung-shi
1sg dream=inside teacher AFF.ROG.POL NEG.ROG.POL engage-PST.DIR
ʼIn my dream I may or may not have seen a teacher.'
[Elicitation]

Secondly, there is the enclitic =lo, which has multiple functions. Firstly, it is used as the interrogative suppletive for the copulae (cf. §4.5), in the formation of “content” questions with interrogative pronouns. That is to say, where the copula would appear in a content question, the enclitic =lo replaces the copula. This is much the same as the usage of its cognate in Kurtöp yo (Hyslop 2011a:583). The East Bodish forms seem to be virtually identical in function to the Dzongkha particle ’mo smo>.

An example is found in (23) where the enclitic is the equivalent of the equational copula in the declarative construction (cf. §4.6.1).
(23) te ashe cā-s tsū=lo
        egg how signify-NF.PST lay.egg=ROG.COP
        “‘How do you lay eggs?’”
        [KT_HM]

The second function of =lo, which could perhaps be considered an unrelated homophone to the interrogative copula, is as a polite imperative, either on its own or with the imperative suffix (cf. §4.4.1.2). Kurtōp has an irrealis imperative lo also (Hyslop 2011a:571), but it is not clear if these are related.

(24) gyāb=e sā 'ye mō=lo cā-den
        king=GEN prince 2sg say=PER.HON signify-CTM
        ‘When he says “prince, you tell me,” …’
        [Dr_GD]

Upper Mangdep also has an infrequent dubitative interrogative, =shū ~ =shün, likely related to Kurtōp shu (Hyslop 2011a:507), and not dissimilar in function. Van Driem (2015:47) also reports the presence of shu in Bumthap as an “interrogative hearsay” marker.

(25) khi 'wangdi=t yik-to=shū
        3sg Wangdi=LOC go-IPFV=ROG.DBT

        yik-to ra
        go-IPFV come
        Q: ‘Is he perhaps going to Wangdi?’ A: ‘Maybe he is going.’
        [Elicitation]

In (25) the function of the enclitic becomes clear when the speaker offers a pairing of question and response as an example. The response contains the dubitative construction using the auxiliary ‘come’ (cf. §4.6.5), and the speaker suggests that any alternatives which are featurally heterogeneous are infelicitous. That is, a question formed with the dubitative
interrogative enclitic requires a response with the dubitative construction.

As in Kurtöp and as for the particles *niya* and *biya* etc., *=shū* may also be used rhetorically in essentially declarative statements to express doubt, as in (26).

(26) **bome chingk=ata bji-ze  nik=shün  adze  bjuru**
    girl  small=DAT  give-NMZ.NPST  COP.EQ.MIR=ROG.DBT  DM.PRX  necklace
    ‘Maybe (she’ll) give it to the little girl, this necklace?’
    [TPDD_LS]

Finally, there is the tag question enclitic *=wa*, used to request confirmation of an established belief, or to soften one’s commitment to a proposition. The form itself may be related to the Kurtöp enclitic *=wu* ~ *=wa* ~ *=au* (Hyslop 2011a:498) and appears to be similar in function. Hyslop (2014d:209) describes the function of that enclitic in opposition to another tag enclitic *=mi* in terms of the speaker’s expectation, when using *=wu*, that the interlocutor shares the speaker’s knowledge of the proposition. Conversely, when using *=mi*, the speaker does not expect that the interlocutor shares knowledge of the proposition. It is not clear from the existing data if Upper Mangdep *=wa* conforms specifically to either of these functions, especially given that speaker expectation of interlocutor knowledge is defined as an epistemic category of its own for Kurtöp (cf. §4.1.1.1.3).

(27) **adze  ’mön=de  ne=wa**
    DM.PRX  medicine=ONE  COP.EQ.MIR=ROG.TAG
    ‘This here is a medication, right?’
    [DDRD_PT1]

(28) **dzizaw=wa**
    house.carpenter=ROG.TAG
    ‘He’s the carpenter isn’t he?’
    [DDRD_C1]
As evidenced by these examples, this morpheme does not appear to supplant the copulae, unlike some of the other interrogatives above.

4.3.2.2 Miscellaneous enclitics

Although none of the following enclitics bind morphophonemically, their status is clear in following both noun phrases and verbs. Importantly, they exclusively have scope over the constituent to which they bind.

This is particularly evident for the enclitic =ya ‘also’, sometimes phonetically reduced to =ä. The form has obvious cognates in Kurtöp =yang ~ =ya (Hyslop 2011a:317) and Dzongkha =ya ^=e<yaŋ> (van Driem and Tshering 1998:372). The function of the morpheme in both languages is also virtually the same, being used not only to identify additional elements in a discourse, but also to construct the meaning of absolute quantitative evaluation when attached to interrogative pronouns, like in many languages (i.e. ‘everything’; ‘nothing’ with negatives); and to emphasise the concessive construction (cf. §4.4.2.1.4).

\[(29)\] tāngbji kha=nang ge=wa

Tangsibji language=inside COP.EQ=ROG.TAG

‘It’s to be in Tangsibji language, yes?’

[Dr_GD]

As evidenced by these examples, this morpheme does not appear to supplant the copulae, unlike some of the other interrogatives above.

\[(30)\] pcukp=e bos=ya pcilok pcong

wealthy.person=GEN guy=also outside take.out

‘...and taking the rich man’s son out too (i.e. just like the others before him)…’

[Dr_GD]

\[(31)\] dzin ‘ye ashte kece bu-ro=ya

then 2sg how.much good do-CNC=also

‘Then no matter how much good you do...’

[KT_LS]
The combination of both absolute evaluation (‘no matter how much’) and the emphatic concessive construction in (31), is especially suggestive of the scope of the morpheme being defined by its host constituent, in this case a subordinate clause.

By extension, the comitative morpheme should also be analysed as an enclitic, =ni(n). This enclitic is formally similar to the Kurtöp comitative -ni (Hyslop 2011a:316), but, interestingly, also cliticises to verbs in a matter which replicates the Dzongkha -da נים <daŋ>, analysed by van Driem and Tshering (in press) as both a comitative and a “present gerund”, a kind of present non-finite subordinate verb, so to speak. In Upper Mangdep, the enclitic is freely added to subordinated verbs with no apparent distinction as to meaning, as in (32), although it is unclear if it also occurs on uninflected roots, since -n is also a subordinate suffix in the language (cf. §4.4.2.1.1) and it would therefore be virtually homophonous with such an inflected root anyway.

(32) pincha be vä-sahan=ni
    family NEG.COP.EQ signify-CND=COM
    ‘If they are not supposed to be family, then...’
    [KT_LS]

Finally, the enclitic =mun, which has no known equivalent in Dzongkha or Kurtöp, is found occasionally in the corpus; its precise function is unclear.

(33) am=dze bjuru ge=mun bome=dzem täm tä-do-de
    woman=DEF necklace wear=after girl=DEF entertainment see-IPFV-ALT
    ‘The woman puts on the necklace and the girl is watching her.’
    [TPDD_LS]

It is similar in function to the sequential subordinator -Zen (cf. §4.4.2.1.3), with which it often co-occurs (indicating it is unlikely to also be a suffix). Discussions with consultants seem to imply a shade of epistemic meaning, equivalent perhaps to the egophoricity contrast or the dubitative mood, but this is not clear from the data (cf. examples (34) and (35)).
(34) nā adu gaga ne cā-sen=mun

1pl how smile.REDUP COP.EQ,MIR signify-SEQ=after

‘After we said (earlier) how very happy he was!’

[DDRD_PT1]

In (34), the clause is a stranded adjunct. The speaker is noting how different the situation of a character in the picture story has become after she described the character as looking happy in an earlier picture.

(35) am=dzem dāwā nga khadek chat bu-sen=mun

woman=DEF earlier 1sg together chat do-SEQ=after

‘The woman was chatting with me earlier and then…’

[PW_VM]

As with subordinated verbs, the comitative enclitic can also be added to =mun with no discernible change in meaning, as in (36). This stacking of enclitics also occurs among nominal enclitics.

(36) ayō tā yi-sen=mun=nin

DM.UP see.NF go-SEQ=after=COM

‘He went up there to see him and...’

[DDRD_C1]

4.3.3 Clause-final particles

Upper Mangdep has a number of particles that follow clausal predicates. They are mainly pragmatic or discursive in function.

The particle wā is similar in function to the tag question enclitic, but is found in declaratives. Its function is to informally impress the speaker’s commitment to the utterance. Speakers were able to translate the particle to Dzongkha ’mā ཉི་<smas>, described by van Driem and Tshering (1998:418) as expressing “friendly entreaty”, which is
also an appropriate description of Upper Mangdep wā. It is not clear if an equivalent exists in Kurtöp, but it may be similar to the tag enclitics (cf. =wa above; Hyslop (2014d)).

I have chosen to gloss the particle as simply ‘eh’.

(37) way way gom ma-thrū wā
    hey hey anger.hon neg.pfv=become.hon eh
    ‘Hey, look, I’m sorry, okay!’ (lit. ‘don’t get angry’)
    [PW_VM]

(38) way dasu bu-n nā=dzömp lungden nakte wā cā=mun=nin
    hey today do-cnd 1pl=two divinity cop.ex.mir eh signify=after=com
    ‘‘Hey, today the two of us are blessed, yeah!’ he said, and then…’
    [DDRD_C1]

Upper Mangdep also has the Tibetic politeness particle lā, found where the speaker expresses deference to or respect for their addressee, often where the addressee is older than the speaker. The particle is a common borrowing across Bhutanese languages. In (39), the character in the story is addressing a respected arbitrator note also the use of the suppletive humble verb for ‘say’.

(39) sē ge biga lā cā-h zhu-tu-na
    die cop.eq neg.rog.pol hon signify=nf.pst say.hum-pfv.ego-pst.ndr
    ‘‘...it dies, no?’ he said.’
    [Dr_GD]

The particle nūng expresses overt certainty in a declarative proposition. Although homophonous with the lexical verb nūng ‘receive; pick up’, I do not consider it an auxiliary or etymologically related. It is relatively rare in the corpus. It has no exact equivalent in Dzongkha or Kurtöp, but is quite similar to the particle wā and its equivalents as well. Dzongkha also has a construction, the perfective suffix –da ཀ་ ~ བཏང་ <rda; btang> followed by the suffix –ba ག་ <par> (van Driem and Tshering 1998:288), which is offered as one possible
translation in Dzongkha. Importantly, however, it is not clear if this construction can function as an interrogative, as can the Upper Mangdep particle nūng. In that case speakers seem to translate the particle as the Dzongkha interrogative copula 'mo.

This distribution of the particle in both declarative and interrogative clauses is superficially confusing. Because the particle expresses overt certainty in the declarative, its use in the interrogative requests certainty of the addressee. Recall that the interrogative particles niya and biya (cf. §4.3.2.1) can be used to express a kind of rhetorical doubt in pragmatically declarative clauses. The particle nūng essentially holds the opposite functions. Whereas niya etc. is unmarked for doubt as an interrogative, nūng expresses doubt in interrogatives; conversely, in declaratives, niya expresses doubt while nūng expresses certainty.

Such an example of the rhetorical, embedded interrogative use is found in (40).

(40) shä  pcong  nūng  cā-sahan
what  take.out  CERT  signify-CND

'If we think about what’s going on (in this movie)…'

[KT_LS]

(41) sö-shi=ya  OR  sö-shi  nūng
       put.in-PST.DIR=ROG.POL  put.in-PST.DIR  CERT

sö-shi  nūng
put.in-PST.DIR  CERT

Q: ‘Did you put it in?’ A: ‘Yes, I did indeed put it in.’

[Elicitation]

Example (41) contrasts with the example in (25) above, demonstrating that the answer söshi nūng is an appropriate response to either one of the possible questions given.
Example (42) is an example of the declarative, overt certainty meaning of the particle _nūng_. It is a translation from a Dzongkha sentence (van Driem and Tshering 1998:364), illustrating the hortative suffix (cf. §4.4.1.2). The use of _nūng_ here is therefore particularly suggestive of the present analysis, since it occurs with a morpheme which expresses a promissory future event.

(42) nämbä les biza bu-s bu-cho nūng

tomorrow work enthusiastically do-NF,PST do-HRT CERT

‘Tomorrow I will work hard!’

[Elicitation]

In (43) the speaker is laying out a piece of evidence while explaining what she thinks is happening in the film, saying that although she is only inferring what seems to be happening, she is at least sure that the proposition in (43) is true.

Finally, a natural example of the interrogative occurrence of _nūng_ is found in (44).

(43) dāwä deme kāb=e bā=t sō-shi nūng

erlier key abdomen=GEN middle=LOC put.in-PST,DIR CERT

‘She definitely put a key in the middle of her waist before.’

[TPDD_LS]

(44) adze shā bu nūng

DM,PRX what do CERT

‘What could be going on here?’

[DDRD_PT1]

4.3.3.1 The reported speech particle _re_ ~ _rē_

In most cases, a quoted utterance forms a complement of the verb _cā_ ‘signify’, which exactly parallels the functions of the Dzongkha verb _z’ē_ <zer>. Kurtőp instead makes use of the subordinator _ngaksi_, lexicalised from the verb _ngak_ ‘to do’ (Hyslop 2011a:510).

Upper Mangdep also features a somewhat infrequent particle used to mark (usually
indirect) reported speech, re ~ rē. The particle is formally similar to the Kurtöp hearsay marker =ri (Hyslop 2011a:492), but is somewhat different in function. Also similar is the Bumthap hearsay particle re (van Driem 2015:47). In describing the Bumthap particle, van Driem notes that Nepali also has a hearsay marker re, but suggests the formal similarity is probably a coincidence. It is also worth noting that Central Tibetan has an evidential copular auxiliary /reː/ ereotype which appears in imperfective and perfective hearsay constructions as well as alterphoric future constructions (DeLancey 1990:303). Dzongkha also has a hearsay particle lo ereotype (van Driem and Tshering 1998:405). Unfortunately, it is not clear from the published data on lo if the particle is functionally similar to Upper Mangdep re.

Unlike both the Dzongkha and East Bodish hearsay markers, the Upper Mangdep reported speech particle is sometimes used for both indirect and direct quotations, as in (45), rather than merely information source. For example, I found that some speakers consistently used re after repeating back to me recorded speech segments for transcription. Hyslop (pc.) reports that Kurtöp speakers only use ngaksi in this context.

(45) da  kхи  Bub  ne  re
    well.now  3sg  B  COP.EQ.MIR  REP
‘Now (he says) that he is “Bub”.’
[KT_SS]

In fact, in (46), the speaker is quoting himself in the past.

(46) nga-yi  dzinin  ode  bong-ze=lo  re
    1sg=ERG  and.then  what.quantity  stay-NMZ.NPST=ROG.COP  REP
‘...and then I (said), “how long are you going to stay?”’
[PW_VM]

Nevertheless, there are examples in which re does indeed express hearsay evidentiality, such as (47).
(47) bö=zömp=ä nāmu lā chu-ze ne rē
3pl=also day.after.tomorrow depart go.away-NMZ,NPST COP,EQ,MIR REP
‘...(I heard that) the two of them are also leaving the day after tomorrow.’

The reported speech analysis is very plausible for Upper Mangdep, and to some extent other Bhutanese languages, in light of the fact that it is ostensibly not obligatory, for example, in narratives. This contrasts with true prototypical hearsay evidentials (cf. §4.1.1.1.1).

4.4 Suffixal verbal morphology

This section deals with bound verbal suffixes that fill the two suffix slots of the verbal template (cf. Figure 13 above). This morphology can be further divided by its structural properties, firstly into those suffixes found on finite verbs, and those found on non-finite verbs.

4.4.1 Finite verbal suffixes

This section is further divided by illocutionary mood, into those forms found in declarative clauses and those found non-declarative clauses. As mentioned in §4.2, the Upper Mangdep predicate may be complex or simple, containing one word-level inflectional constituent. The latter kind of predicate is often represented by lexical verbs which take the finite verbal morphology presented in this section.

4.4.1.1 Finite declarative verbal suffixes

The suffixes discussed in this section are a fundamental part of the tense-aspect paradigm of Upper Mangdep, and also feature a range of epistemic categories. Each morphological slot is optional. Naturally, suffixes in a given slot of the finite declarative paradigm co-occur only with suffixes in the other slot of this paradigm, however, the aspectual suffixes of slot I are restricted as to which slot II suffixes they can occur with.
4.4.1.1.1 The imperfective suffix –Do

As with the perfective suffix (cf. §4.4.1.1.4 below), the imperfective suffix appears in slot I of the verbal template. Although not totally dissimilar in form to its equivalent in other East Bodish languages, which typically have imperfective -ta (cf. Hyslop (2011a:484) for the Kurtöp form), it seems that the Upper Mangdep form -to ~ -do is a direct borrowing from Dzongkha -do དོ་<do> (van Driem and Tshering 1998:200). The allomorph -to appears after verb stems ending in voiceless consonants, and the allomorph -do after voiced consonants or open syllable stems.

The imperfective suffix essentially marks an event the endpoint of which has not yet occurred or is not known. The suffix is therefore most common in the present tense as in (48), but is sometimes found in past tense discourses, as in (49). Note that despite this clear aspectual meaning, the suffix never co-occurs with the slot II past tense suffix, probably as this would be a structural violation with the slot II alterphoric suffix that sometimes appears obligatorily with the imperfective.

(48) nga dzō mā kyak-to
1sg DM.MED house establish-IPFV
‘I’m here building a house.’
[DDRD_C1]

(49) khi Bangkok yi-ze ge phala mok-to-de
3sg Bangkok go-NMZ.NPST COP.EQ conversation say-IPFV-ALT
“‘He was saying he was going to go to Bangkok,” (I said).’
[PW_VM]

In (49), the imperfective-marked verb ‘say’ is predicating a quotation of one referent (indexed by khi ‘3sg’) within another quotation of the speaker himself, which continues after the portion shown here.

When the verb is marked solely with the imperfective suffix, it marks egophoricity by default (cf. §4.1.1.1.3). In (50), the speaker interrupts her conversation upon hearing her

44 i.e. ‘I said, “he was saying that “he is going to Bangkok””.’
phone ring. The use of the egophoric here may be due to the fact that the phone is owned by the speaker and she is accustomed to its ring; or it may be due to her expectation that her interlocutor would not have been aware that it was her ringtone (cf. Kurtöp egophoricity in §4.1.1.3).

(50) nga call rā-do
   1sg call come-IPFV
   ‘I’m getting a call.’
   [DDRD_PT1]

The imperfective can also appear in the alterphoric with the slot II suffix -De (cf. §4.4.1.1.2 below). Example (51) demonstrates the consistent use of the alterphoric imperfective during stimulus tasks in which the speaker was asked to narrate videos as they watched them. The same usage applied in stimulus tasks where the speakers were narrating static images, as in (52), in which the character in the image is putting up his hands to refuse alcohol. The use of the alterphoric here is expected as the speakers are watching the actions of third persons, to the minds of whom they have no access.

(51) dzin amcuku thuk-to-de
   then mango cut-IPFV-ALT
   ‘So she’s cutting the mango.’
   [KT_LS]

(52) meng-gō-ra cāk-to-de
     NEG.IPFW-want=EMPH signify-IPFV-ALT
     ‘He’s expressing that he doesn’t want it.’
     [DDRD_PT1]

In (53), the speaker had just gone to check to see if the person we were waiting on was awake yet. She uses the alterphoric as she has no knowledge of the person’s volition.
(53) *rā-do-de*
   
   *come-IPFV-ALT*
   
   ‘He’s coming.’

[VT_S1]

The reported speech particle (§4.3.3.1) can occur with the imperfective with or without the specificity of the alterphoric marking, as in (54).

(54) *shebusi cāk-to re*
   
   *why signify-IPFV REP*
   
   “‘Why?’ (he told me) he was saying.’

[DDRD_C1]

In that example, the speaker is recounting a conversation between her husband and a monk that he had told her about.

Unlike other finite verbal suffixes, verbs marked with the imperfective can also be subordinate to copulae or auxiliaries. The functions of some of these constructions are detailed in §4.5.2.1.

4.4.1.1.2 The alterphoric suffix *-De*

The alterphoric suffix appears in the second suffix slot in the Upper Mangdep verbal template. This structure is one way in which Upper Mangdep has replicated the verbal template of Dzongkha. As in Dzongkha, the Upper Mangdep alterphoric imperfective construction is formed from the imperfective suffix in slot I and an epistemic suffix in slot II\(^{45}\), which in Dzongkha produces the form *-de* from *-do-wā* སྤ་<do.bas>.

The allomorphy of *-De* is similar to that of *-Do*, in that the onset is devoiced to *-te* following a voiceless consonant. In addition to providing the egophoricity contrast in the imperfective, the alterphoric suffix also functions as a general marker of alterphoricity in the immediate present, such as with verbs expressing emotions and sensations. This

\(^{45}\) This is called the suffix of “acquired knowledge” by van Driem and Tshering (1998:202), and described thus as mirative by DeLancey (2012) (see above in §4.1.1.1.4).
function is also found for Dzongkha -be ~ -we འོི་དུ་བས -pas; bas (van Driem and Tshering 1998:196), as well as the separately analysed suffix of “experienced perception” -me ལྷོར་ <mas>. This function frequently surfaces with the verb གོ་ 'want, need' in Upper Mangdep. This function is exemplified in both (55)(a) and (b).

(55) (a) nä kä shuk bu gök-te
     1pl voice force do need-ALT
     ‘We must speak loudly.’
     [TPDD_LS]

(b) kä shuk ma-bu-sahan kece me-bjong-de
     voice force NEG.PFV-do-CND good NEG.IPV-come.out-ALT
     ‘If we don’t speak loudly it won’t come out good.’
     [TPDD_LS]

A similar form to this suffix is known to occur in Khengkha /te/, with an ill defined function generally but at least one common feature, namely its usage in questions; again this function is also found for the Dzongkha -be ~ -we and -me. I suspect this function is restricted by some specific semantic criteria but it is not clear from the existing data, cf. (56) and (57).

(56) ani nga=ta zhego ma-rök-te biga cā-sen
     where 1sg=DAT meal NEG.PFV-bring-ALT NEG.ROG.POL signify-SEQ
     ‘“Where is it, you didn’t bring me my meal!?” she says, and then…’
     [KT_HM]

(57) ki lek-te=ga
     potato be.good-ALT=ROG.POL
     ‘Is the potato (harvest) good?’
     [Pe_SS]

Again, this function is described as mirative in nature by DeLancey (2012).
In some occurrences, the suffix seems to simply function as the imperfective with the imperfective suffix ellipsed, especially with the negative, as in (58).

(58) shā nak niya mek=ya me-thung-de
    what COP.EX AFF.ROG.POL eye=also NEG.IPVF-engage-ALT

‘What’s there (in this picture), I also can’t see it.’

[DDRD_PT1]

There are two main reasons to analyse the function of –De as alterphoric rather than mirative, although the theoretical distinction is negligible as it applies here. The consistency of the distribution of co-occurrence with the subject person feature of the clause, demonstrating a typical conjunct-disjunct phenomenon, cannot be ignored. Note particularly the lack of the suffix in example (50) where a true mirative might be expected. Secondly, although the suffix appears fossilised in some mirative copulae (i.e. the affirmative mirative existential copula, the negative equational and existential copulae; cf. §4.5), it also appears on the affirmative mirative equational copula ne, with the interrogative function described above, as in (59). If the suffix were mirative, such a form would be redundantly double-marked.

(59) nek-te bakpal
    COP.EQ,MIR-ALT scooter

‘Is it? A scooter?’

[DDRD_PT1]

4.4.1.1.3 The past tense suffixes –shi ~ -sh and –na ~ -hōng

The past tense suffixes are slot II suffixes which contrast in evidential mediation. The tense function of the suffixes, in contrast to a functional aspect distinction, is demonstrated by their inability to co-occur with temporal adverbs that indicate future tense, such as ‘tomorrow’ (cf. the examples in §1.5). As defined in §4.1.1.1.1, the direct/indirect contrast in Upper Mangdep marks whether or not the speaker witnessed the
event through direct visual perception. This evidential contrast is illustrated by the use of the direct past suffix\(^{47}\) in contexts where the alterphoric imperfective or other mediated epistemic contrasts are otherwise in use. In §4.4.1.1.1, I noted that in stimulus tasks where speakers narrated a video as it was played, events in progress were described using the alterphoric imperfective. However, in these same tasks, events that had already passed took the direct past suffix, as the speaker could attest to the events through firsthand visual information. This is demonstrated in (60). Note that perfectives will be discussed in the next section.

\[(60)\] \(\text{da} \quad \text{dop=ya} \quad \text{phrö-tu-shi}\)

well.now bracelet=also remove-PFV.EGO-PST.DIR

‘Now she has removed her bracelets too.’

[KT_LS]

Conversely, the indirect past suffix appears in oral histories, as speakers never witnessed the events themselves, as in (61).

\[(61)\] \(\text{kelok} \quad \text{totsha} \quad \text{cham-tokt} \quad \text{khe-s}\)

again male.friend be.harmonious-NMZ.ATTR make-NF.PST

\(\text{cham} \quad \text{lā} \quad \text{chu-na}\)

be.harmonious leave go.away-PST.NDR

‘Once again as close friends, (they) left in harmony.’

[Dr_GD]

The indirect past suffix was found much less frequently in the stimulus tasks, when the verb referred to an emotional state that the speaker was deducing from the actors’ facial expressions, as in (62).

\(^{47}\) Note for the sake of argumentation that use of the direct past suffix is the past tense form usually found with first person subjects.
(62) am=ze drā=ya nathe=ra kā-du-na
woman=DEF fury=also securely=EMPH put.on-PFV.EGO-PST.NDR
‘The woman has become quite angry.’
[KT_LS]

As mentioned in §4.1.1.1.1, the indirect past is used when describing dreams, as in (63); although this can be overridden by other epistemic contrasts, as in example (22) above.

(63) nga ngi=la=nang 'wangdi=t yi-na
1sg dream=inside 'Wangdi=LOC go-PST.NDR
‘I went to 'Wangdi in a dream.’
[Elicitation]

Two more canonical examples of the two past suffixes are shown in (64) and (65).

(64) mā drup-tu-shi
house complete-PFV.EGO-PST.DIR
‘(My) house has been completed.’
[Pe_SS]

(65) mi hödö trika khe-s bak-s rā-na=wa
person all satisfactory make-NF.PST carry-NF.PST come-PST.NDR=ROG.TAG
‘It looks like he’s come along bringing everything he needed, eh?’
[DDRD_PT1]

In (64), the speaker was describing recent events in his life, mentioning his new house nearby that had just been built, for which rituals were about to be held. In (65), the speaker is commenting to her interlocutor on the field equipment I set up to record the conversation.
The forms for the suffixes differ across dialects. In the western dialects, the direct past –shi often is reduced to –sh. Where the eastern dialects have –na for the indirect past, the western dialects have –hōng ~ –ho, as in (66).

(66) khi dzō thrā-ho=ya
3sg DM.MED arrive-PST.NDR=ROG.POL
‘Has he arrived here?’

The functions of the two past tense suffixes are also the product of reanalytic pattern replication from Dzongkha. Unlike either Dzongkha or Upper Mangdep, languages such as Lhasa Tibetan (cf. DeLancey (1990)) or Kurtöp (cf. Hyslop (2011a)) formally mark only distinctions in aspect, not tense. The most parsimonious conclusion is that Dzongkha developed the tense contrast and it was subsequently replicated by Upper Mangdep.

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48 Note the historical affinity between <ḥ> and pre-nasalisation in Tibetic languages; cf. Hill (2011:448).
speakers. Similarly, the evidential feature of the suffixes is also precisely equivalent, van Driem and Tshering describing Dzongkha -nu as inferential (1998:270).

It also seems that this convergence is promoted by the similarities in form (cf. §2.2), i.e. Dzongkha -nu and eastern Upper Mangdep -na. In fact the direct past -shi is probably a formal borrowing from the Dzongkha -ci allomorph of the direct past suffix. Note that the spirantisation of the affricate is both a frequent variation in synchronic Upper Mangdep phonology and a common change applied to Dzongkha loanwords (cf. Appendix D).

These convergent changes appear to have marginalised and restricted the distribution of older perfective marking on Upper Mangdep verbs. This is described in the next section.

4.4.1.1.4 The perfective aspect suffixes –Du and –Be

The perfective aspect is marked with one of two slot I suffixes. With this, we can now see the complete convergence of the finite declarative verbal template of Upper Mangdep with that of Dzongkha. Consider the information presented in Figure 17.

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49 Perfectives have been known cross-linguistically to grammaticalise as past tense markers, cf. Heine and Kuteva (2004:231, 334).
Figure 17: The finite declarative verbal suffixes of Upper Mangdep (top lines) and Dzongkha (bottom lines).

In Figure 17, we can see the near total isomorphism of the Upper Mangdep and Dzongkha finite declarative verbal paradigms. The distribution of the Upper Mangdep functional categories between morphological slots is replicative of the distribution in Dzongkha.

The major difference between the two systems is the contrasts made in the perfective aspect. In Dzongkha, the perfective –da is used mostly for transitive verbs; –so and –chi for two lexically-specific subsets of intransitive verbs; and a small set of verbs have suppletive perfective forms (van Driem and Tshering 1998:284). Upper Mangdep, however, contrasts perfectives by egophoricity, not by transitivity. Consider a canonical use of the egophoric perfective –Du (~–tu) in (67). In this example, the speaker is discussing her family’s search for workers to construct a new house in the village.

(67) mā zhik-tu-shi da bu-n

‘The (old) house has been torn down, and so...’

[DDRD_C1]

Compare this with the use of the alterphoric perfective –Be (~–pe) in (68). In this example, the speaker is describing to me a short video clip he has just seen. Because he has witnessed the event through visual perception, he uses the direct past suffix; but because
he has no access to the volitional intention of the third person actor behind the event, he uses the alterphoric perfective.

(68) bome=dzem rathō gyāng-s phop hrum-pe-shī
girl=DEF hammer throw-NF,PST bowl shatter-PFV,ALT-PST,DIR

‘The girl threw the hammer and the bowl shattered.’

[TS_ES]

Also compare the sentence in example (64) above, with the rhetorical, self-directed question from the same monologue in (69).

(69) dasu sēng thap=ze=lok sēng kā-be-sh=ya
today tree stove=DEF=DAT tree put.on-PFV,ALT-PST,DIR=ROG,POL

‘Have I placed the wood for the stove today?’

[Pe_SS]

Recall from §4.1.1.1.3 that when speakers use self-directed questions in languages with egophoricity or conjunct-disjunct systems, the verb must be marked with the alterphoric, as the act of asking oneself a question implies a lack of known volition. However, if the speaker in (69) has in fact completed the event in question, he would have indeed seen himself do it; therefore, the direct past suffix is used. The distinction is neutralised when the indirect past suffix is used, as a lack of knowledge of the event itself presumes a lack of knowledge of its cause (cf. Figure 12 in §4.1.1.1.3). In this case, either suffix may be used, although –Du is more common. This is exemplified by example (70), the conclusion to a narrative.

(70) gomchen drangsu dzin thrāng pre-tu-na
gomchen truth.seeker then straighten express-PFV,EGO-PST,NDR

‘The Gomchen Drangsur has sorted it out.’

[Dr_GD]
It would seem from this data that despite structural differences, Upper Mangdep still shares some functional features with Kurtöp. Compare the data so far and the functions of the paradigm in Figure 17, with the functions of the perfective paradigm in Kurtöp’s single suffixal slot in Figure 18.

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<tr>
<td>Dubitative</td>
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<td>Indirect</td>
<td>-mu</td>
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<tr>
<td>Mirative</td>
<td>-na</td>
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<tr>
<td>Egophoric</td>
<td>-shang</td>
<td>-pala</td>
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</table>

**Figure 18**: The Kurtöp perfective suffixes organised by epistemic functions, adapted from Hyslop (2014d:204). Note that the Kurtöp egophoric is different to the Upper Mangdep egophoric (cf. §4.1.1.1.3).

However, the Upper Mangdep perfectives continue to undergo significant changes under pressure from Dzongkha. Firstly, the egophoricity contrast is being lost in the eastern dialects. For those speakers, alterphoric -Be is rarely found, and is used sporadically and inconsistently when it is. Interestingly, the contrast may still exist for speakers from the eastern village of Tangsibji, who uttered examples (68) and (70) above, but it is almost certainly gone for speakers from neighbouring Tshangkha. The suffix -Be is far more frequent in the western dialect, where it is used consistently. Whether or not the egophoricity features of the suffixes have the same semantics as the egophoricity contrast in the imperfective remains a question for future research.

Secondly, the distribution of the suffixes more generally has been restricted so that they converge with the more marginal use of perfectives in Dzongkha. Unlike in Kurtöp, it is clear that the primary marking of verbs in the perfect (i.e. those which are both perfective in aspect and past in tense) in Upper Mangdep (and Dzongkha) is with the past tense suffixes, not the perfectives. Although the perfective suffixes in Upper Mangdep can appear without past tense suffixes, this construction can only be interpreted with future

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50 In the western dialects, the suffix sometimes undergoes vocalic assimilation with the past tense suffixes.
tense. The perfectives are, however, ostensibly optional. Similarly, in Dzongkha, it appears that the perfective suffixes never appear without the past tense suffixes, except the future perfective suffix -nyo. For this construction, Upper Mangdep simply uses the bare perfective, demonstrating that the suffixes are indeed true perfectives, as in (71).

(71) hara ta-s zä-tu=wa

quickly see-PST finish-PFV.EGO=ROG.TAG

‘We will finish (this task) looking quickly, yeah?’ (i.e. ‘let’s look quickly so we can finish.’)

[DDRD_PT1]

There is insufficient data from the relevant dialects to ascertain whether or not the egophoricity contrast applies in this future perfective construction.

It is also worth noting that the perfective suffix -Du is the only finite suffix that co-occurs with non-finite suffixes\(^{51}\), demonstrating that those suffixes belong structurally to slot II. This will be described further for the relevant morphemes below.

4.4.1.1.5 Summary of finite declarative verbal suffixes

Thus it is clear that Upper Mangdep speakers have adopted some of the structural features of the finite declarative verbal suffixes of Dzongkha. In the eastern varieties, it also appears that speakers are levelling the egophoric contrast on perfectives in the absence of such a contrast in Dzongkha. The past tense suffixes are also an example of functional convergence to the Dzongkha paradigm, sharing isomorphic tense and evidential features, as well as the extensively diffused grammaticalisation of the mirative existential copula as a marker of inferential or indirect evidentiality. Similarly, the two languages form both the egophoric and alterphoric imperfective identically in terms of morphological structure, morphological function, and in part, even morphological form.

Although it is difficult to determine precisely how the language has changed given the insufficient data available from East Bodish languages apart from Kurtöp, it is without doubt that the current paradigm in Upper Mangdep continues to converge to that of

\(^{51}\) It is not clear if -Be can also appear in this distribution as it has never arisen in the data.
Dzongkha. In doing so, the morphological structures have become virtually identical and the morphemes are shifting in their functional distribution towards isomorphy with Dzongkha. One can therefore elicit virtually isomorphic examples such as the (respectively) Upper Mangdep and Dzongkha pair in (72).

(72) \textit{phop jom-du-na}  
\text{bowl break-PFV.EGO-PST.NDR}

\textit{phöp drˈum-so-nu}  
\text{bowl break-PFV.INTR-PST.NDR}

'The bowl broke.'

[Elcitation]

4.4.1.2 Other illocutionary moods

There are suffixes for two non-declarative moods in Upper Mangdep. Neither is particularly frequent in the data. The first is the imperative –\textit{gi}, which is East Bodish in form, similar to the –\textit{ge} allomorph of the Kurtöp (Hyslop 2011a:216) and Chali imperative, although these other East Bodish languages have many more allomorphs for the imperative depending on the root coda. It appears to be essentially an equivalent of Dzongkha –\textit{sh} གི། <shig> (van Driem and Tshering 1998:416)\footnote{Derived from གཅིག་<gcig> 'one'; \textit{ci} in contemporary Dzongkha (Hyslop, pc.).}. An example is given in (73) with the interrogative copula cliticised to the end, used in polite imperatives (cf. 4.3.2.1).

(73) \textit{yā nyeng-gi=lo cä-s}  
\text{oh listen-PER=PER.HON signify-NF.PST}

‘Okay, hear me,’ …'

[Dr_GD]

Upper Mangdep also has a hortative marker –\textit{cho} ~ –\textit{sho} ~ –\textit{sh}. It is equivalent but not cognate to Kurtöp hortative –\textit{ki} (Hyslop 2011a:573) and Dzongkha “adhortative” –\textit{ge} གེ། <ge>
It can be used as a polite imperative, to encourage an action, or to promise an action on one’s own part. An example is given in (74).

(74) wôngze nā=yi da adzem=e teng ’ā=ra tā-cho
DM.PRX 1pl=ERG now DM.PRX=GEN top who=EMPH see-HRT
‘So, this, now let’s additionally see who (it was who stole the key).’

4.4.2 Non-finite suffixes

As mentioned in §4.2, Upper Mangdep makes use of complex predicates which can consist of non-finite verbs headed by a copula or auxiliary. This section describes verbal morphology that prevents the verb from acting as the head of a predicate on its own. This section is divided into those morphemes which are subordinators, allowing the verb to act as the head of subordinate clause but which do not take nominal morphology; and nominalisers, which cannot head clauses and are structurally nominals.

4.4.2.1 Subordinators

The subordinators of Upper Mangdep are essentially used to express the temporal or logical relationship between events. I group them among the slot II suffixes, as a number of them can co-occur with the perfective suffixes (cf. §4.4.1.1.4 above).

4.4.2.1.1 The conditional –sarhan ~ –sahan ~ –shün ~ –sön ~ –n

The function of the conditional is to express logical conditionality of a proposition, essentially translated into English as ‘if’. I suspect that the most common forms –sarhan ~ –sahan, found especially in the eastern dialects, are historically polymorphemic but the source of its development has not been found. Its equivalent in Kurtöp is –nani (Hyslop 2011a:461); in Dzongkha, it is –bacin ~ –wacin ~ –macin བ་ བ་ བ་ བ་ ma.cin (van Driem and Tshering 1998:363) — is in fact some variant of the adhortative, clearly having the same etymological base. Recent discussions with Dzongkha speakers have struggled to yield a semantic contrast between –ge and –geno (Karma Tshering, pc.; Atasoy, pc.)

53 It would seem that what van Driem analyses as the “autolalic future” in Dzongkha — i.e. future tense used when speaking to oneself; –geno གེ་ནོ <ge.no> (van Driem and Tshering 1998:363) — is in fact some variant of the adhortative, clearly having the same etymological base. Recent discussions with Dzongkha speakers have struggled to yield a semantic contrast between –ge and –geno (Karma Tshering, pc.; Atasoy, pc.)
Driem and Tshering 1998:304). Some canonical examples are in (75) to (78); the example in (78) shows the co-occurrence of the perfective with the conditional.

(75) tangkhu thōng-sahan mi sē ge
tobacco drink-CND person die,NF COP,EQ
‘People die if they smoke cigarettes.’
[KT_SS]

(76) bos=ni bos khades ni-sahan gay ge cāk ne
guy=COM guy together sit-CND gay COP,EQ signify,NF COP,EQ,MIR
‘If a man and a man stay together, it is said they are “gay”.’
[KT_SS]

(77) dzin ma-cham-sahan dzin
than NEG,Pfv-be.harmonious-CND then
‘…if they don’t get along, well then…’
[Dr_GD]

(78) thrikha trö pre-tu-n
contract pay express-Pfv.EGO-CND
‘...if you paid them on a contract...’
[DDRD_C1]

Interestingly, as in Dzongkha, the conditional is often reduced to –n in Upper Mangdep (cf. example (78)), although this should possibly be considered a separate morpheme as other subordinators also appear to reduce to –n. The two languages also share a construction pattern [1sg,erg see-CND] meaning ‘in my opinion’ (van Driem and Tshering 1998:307); it is not known if this construction also occurs in Kurtöp. An example is given in (79).
(79) adze=zömp 'nyen drā-de ngī ta-n=wa
DM.PRX=TWO marriage be.similar-ALT 1sg.ERG see-CND=ROG.TAG
‘These two seem to be married, in my opinion, right?’
[DDRD_PT1]

Upper Mangdep also has a construction shā bu-sahan [what do-CND] meaning ‘because’, as in (80).

(80) tiru nyang=ga cā-s shā bu-sahan
money receive=ROG.POL signify-NF.PST what do-CND

khi am nā-phal ne
3sg woman be.sick-NMZ.PST COP.EQ.MIR
‘... “will (I) receive my money?” (she says) because her mother is sick...’
[KT_LS]

The form –sarhan is presumably the older form and has only been found in the speech of the elderly. The form –sön is found in the Dangchup dialect of the western area.

4.4.2.1.2 The co-temporal subordinator –Ten

The function of the co-temporal subordinator is to express than an event occurs at the same time as the matrix event, translated in English as ‘while’. The lexical aspect of the verb need not have a duration; i.e. the subordinator can be used with verbs that are inherently momentary or that cannot be said to be “ongoing” at any point (cf. example (81)). The terminology for this subordinator comes from Hyslop (2011a:644) who describes the same category of subordinator in Kurtöp –mo. Dzongkha does not have an equivalent for this morpheme.
(81) nya kyåp tup-ten së ge
fish abdomen slice-CTM die.NF COP.EQ
‘“When you cut the middle of a fish it dies.”’
[Dr_GD]

(82) tshönkha=nang bu-den wông cã-h ta-h bông ge biya
prison=inside do-CTM like.this signify-NF.PST see-NF.PST stay.NF.COP.EQ NEG.NF.POL
‘When (one) is in prison, they always appear like this, isn’t it?’
[DDRD_PT1]

(83) cham-tokto khe-s ni-then dzin pra=yi pcilok les bu
be.harmonious-ATTR make-NF.PST sit-CTM then monkey=ERG outside work do
‘...while they lived in harmony, the monkey worked outside...’
[KT_HM]

4.4.2.1.3 The sequential subordinator -Zen

In contrast to the co-temporal subordinator, the sequential subordinator indicates that the event of the subordinated clause temporally precedes the events of the matrix clause, within the scope of time indicated by the matrix clause. Neither Dzongkha nor Kurtöp have an equivalent for this morpheme. It may be that it is a grammaticalisation of the particle dzin ‘then’, or some other derivative of the non-past nominaliser -Dze (cf. §4.4.2.2.5) or the non-finite past -s (cf. §4.4.2.1.5). It may also be merely a variant of the co-temporal subordinator. Both the co-temporal subordinator and the sequential subordinator may appear in the construction shā bu-den ~ bu-zen [what do-CTM/SEQ] which is usually translated as 'but'.

(84) khi adze 'la se-zen tiru nyang=ga cã-s
3sg DM.PRX month die-SEQ money receive=ROG.POL signify-NF.PST
‘She says, “when this month ends will (I) receive my money?”...’
[KT_LS]
(85) dzin mākh tsā chū-sen dzin yō dang=e teng thrāṅ bu-sen
then oil [heat.up]-SEQ then dm.up rack=GEN top climb do-SEQ
"And then after you heat up the oil, then after you climb onto the rack," …
[KT_HM]

(86) khi Bangkok yi-ze ge phala mok-to-de
3sg Bangkok go-nmz.npst cop.eq conversation say-IPFV-ALT

shā bu-zen dende ashu bu-s niga cā-s ma-bren
what do-seq truth how do-nf.pst aff.rog.pol signify-nf.pst neg.pfv-know
"He was saying that “he is going to Bangkok” but I don’t know if it’s true or not,”
(I said).’
[PW_VM]

The sequential subordinator has also been found with the perfective, as in (87).

(87) sēng=e genkha bak-mi=dzem bak-tu-sen
tree=gen responsibility carry-nmz.core=def carry-pfv.ego-seq
‘…the one who takes responsibility for the carpentry, after having taken (the responsibility), …’
[DDRD_C1]

4.4.2.1.4 The concessive subordinator –ro

The concessive subordinator expresses a logical relationship between propositions that conveys that the matrix proposition is true without regard to the concessive subordinate proposition, translated into English as ‘although, even if’. The form and function are basically identical to Dzongkha –ru སྤྲུས་<ru> (van Driem and Tshering 1998:308), and the terminology I use is taken from its analysis. I assume then that it is a borrowing from Dzongkha. Kurtöp does not have a morpheme with this function. Upper Mangdep also uses the enclitic =ya ‘also’ (cf. examples (16) and (31) above) for the same
function or to emphasise the concessive subordinator. Chali has the suffix -nayang for the same function, which presumably formed in part from =yang ‘also’.

(88) nēch=e dzaw=e dütshō bjik lā-ro=ya dzin
daytime=GEN lunch=GEN time miss leave=CNC=also then
‘...even though the time for lunch had passed, ...’

The concessive subordinator also participates in a construction in which some dependent of the concessive marked verb is an interrogative pronoun, meaning ‘no matter what/where/etc.’, as in (89).

(89) wōngze sum ′uda chu-ro totsha cham-tokto khe-s
dm,prx three where go.away=CNC male.friend be.harmonious-NMZ.ATTR make-NF,PST
‘Wherever these three went, they were good friends, ...’

4.4.2.1.5 The non-past non-finite and the past non-finite -s ~ -h

Upper Mangdep has two generic subordinators, the tense values of which operate within the scope of the matrix clause tense. The non-past non-finite is unique among Upper Mangdep inflectional morphology in that it is simply a function of the marked stem (described in §4.2.1 above). The two forms are particularly significant in Upper Mangdep complex predicate grammar (cf. §4.6 below for details).

The past non-finite -s, often -h for some speakers, is related to the Kurtöp non-finite -si (Hyslop 2011a:656) and similar morphemes elsewhere in East Bodish, which is apparent not only from its form but its unique structural distribution. The forms in both languages participate in clause chains, although Upper Mangdep also makes use of the other subordinators above for this purpose (such as the sequential subordinator in §4.4.2.1.3). In both languages, verbs marked with the morpheme cannot take any other morphology except the emphatic enclitic -ra (identical in both languages). In addition, both languages have a parallel construction in which the non-finite marked verb is subordinate to the
existential copula, producing a durative aspectual meaning (Hyslop 2011a:525, 675) — see §4.6.4 below for a description of that construction. Finally, the word shebus ~ shebusi ‘why’ is fossilised from the construction [what do-NF.PST], and sometimes contains the final vowel /i/ which is a trace of the morpheme before the syncope of the vowel.

Upper Mangdep -s is often translated with the Dzongkha past participle -di སྟེ་ ~ སྟེ་ ~ སྟེ་ <ste, te, de> (or “participle” by van Driem and Tshering (1998:296)) and vice versa, however unlike that morpheme, -s ~ -h is a true non-finite in that it cannot take nominal morphology and cannot modify nouns. In clause chains it indicates that the marked event occurs prior to the matrix event; the tense feature is also attested from its role in complex predicates (cf. §4.6). The suffix -s ~ -h for this clause chaining or subordinating function is extremely common and has featured in many examples already presented. A few additional examples are presented in (90)–(92).

(90) ‘up child small=DEF eye curiously make-NF.PST=EMPH see,NF COP.EQ,MIR ra=ra tā ne ‘The small child is really looking with curious eyes.’
[TPDD_LS]

(91) lakcak handcuffs kyap establish bu-h do-NF.PST tshönkha=nang prison=inside khō-tse npst escort-NMZ.NPST COP.EQ,MIR ne ‘Having locked the handcuffs (onto him), they will take him to jail.’
[DDRD_PT1]

(92) khā 3sg,ERG yi-den go-CTM pcilok outside yi-den deme=ya cap-s key=also go-CTM leave,NF COP.EQ,MIR lāk also lāk ne ‘As she goes, as she goes outside, she leaves also locking (the door behind her).’
[KT_LS]

Upper Mangdep speakers have two choices when describing contemporaneous events with clause chains. The first is the co-temporal subordinator described in §4.4.2.1.2. The second is verb serialisation. Unlike other languages of Bhutan, Upper Mangdep has true
serial verb constructions in that bare roots can occur in a sequence to describe a sequence of events, cf. example (13)(b) above and (93) below; (94) is not a serial verb construction but demonstrates how bare roots (i.e. non-marked stems) can function as subordinated verbs.

(93) adahalu kelok cham-h lā chu-na
as.usual again be.harmonious-NF.PST leave go.away-PST.NDR
‘Back to being friends as usual, they left.’
[Dr_GD]

(94) lā ōm=e nang zhor bā
hand left.one=GEN inside alcohol carry

lā 'āb=i am=e gulung pok rā ne
hand right.one=ERG woman=GEN head hit.NF come.NF COP.EQ.MIR
‘Carrying alcohol in (his) left hand, and coming to hit the woman in the head with his right hand.’
[DDRD_PT2]

By contrast, the use of the non-past non-finite as a subordinator in the eastern dialects of Upper Mangdep is specifically a purposive construction, translated into English as ‘to’ or ‘in order to’.

(95) drī chuk meng-gō
ask.NF go.away.NF NEG.IPFV-need
‘We don’t have to go to ask.’
[DDRD_C1]

---

54 However, it is also possible in Kurtöp to subordinate verbs as parts of a clause chain without the marking of -si with apparently the same meaning (Hyslop 2011a:671). At the very least, it can be said that bare roots can function as non-finites in contrast to those marked stems in the purposive construction.
The old man is looking menacing coming to hit (her), isn’t he?’

[I] [DDRÐ_PT1]

‘I will renovate my house over there, so I have come to call you.’

[I] [DDRÐ_C1]

Note that the western dialects have preserved the East Bodish purposive in –go, found in Chali with allomorphy similar to that of the Kurtöp locative (Hyslop 2011a:218); compare also the Kurtöp purposive nominaliser –ki (Hyslop 2011a:453). Note that Dzongkha has –ba ~ –ma ~ –wa བར་ ~ བར་ <par, bar> for this function (van Driem and Tshering 1998:237).

An example is in (98).

‘Uncle Pemba, are you going there to eat?’

[I] [Pe_CS]

Given the differences between them, the functional distribution of the past and non-past non-finites is not perfectly symmetrical, however, the forms do have related uses in complex predicates (cf. §4.6 below). The asymmetrical distribution of verb forms in use for particular constructional functions is directly attributable to language contact. As we will

55 I assume this suffix is comprised of the –pa nominaliser (cf. 4.2.1) with the Tibetic –r locative (Denwood 1999:266).
see, while Upper Mangdep converges to Dzongkha in some constructions, it retains other East Bodish ones found in Kurtöp, or innovates new ones.

4.4.2.2 Nominalisers

There are many nominalisers in Upper Mangdep, some quite infrequent in the data. As a result, this section focuses on those that are either especially frequent, transparent in function and structure, and/or central to complex predicate grammar. This notably excludes attributive nominalisers such as -tokto and -sisi, of which there are many, all ostensibly with the meaning ‘the quality of [verb]’. Many of these are found across Bhutanese languages; for example, -tokto appears in Dzongkha and Khengkha and -toka in Kurtöp (cf. (van Driem and Tshering 1998; Hyslop 2011a). The nominalisers can also be categorised morphologically into those slot I that cannot occur with other suffixes, and those in slot II, which can occur with the perfective, as with other non-finites. The other important categorisation is whether the suffix is a participant nominaliser or an action nominaliser (cf. §4.1.1.2). Only action nominalisers participate in complex predicates.

4.4.2.2.1 The core argument nominaliser -mi

The core argument nominaliser is a participant nominaliser that results in a noun referring to subject or object of the nominalised verb, typically the agent or patient. The form is identical to that found for the Dzongkha agent nominaliser and is derived from Bodish mi ‘person’, which is still an active lexeme in all Tibetic and East Bodish languages to my knowledge (Thinley 2009:74). No such morpheme is described for Kurtöp.

The following examples are of the agentive usage in (99) and of the patientive usage in (100) and (101).

(99) doro adze=ya zhor thōng-mi ne
     again56 DM.PRX=also alcohol drink-NMZ.CORE COP.EQ.MIR

‘This one is also a drunkard.’

[DDRD_PT2]

56 Insertion from Dzongkha.
(100) da äm=ya adze Bub cäk-mi=dze
now who=also DM.PRX B signify-NMZ.CORE=DEF

me-ga cä-s ne
NEG.IPFV-smile signify-NF.PST COP.EQ.MIR

‘Now (she says) that no-one likes this one who is called “Bub”.’
[KT_SS]

(101) ‘ub=e tsem tsē-mi=dze am=zem=e gulu=teng pok-s
child=GEN game play-NMZ.CORE=DEF woman=DEF=GEN head=top hit-NF.PST

‘Hitting the woman on the head with the child’s toy, …’
[KT_LS]

The core argument nominaliser is also found in the reason nominalisation construction, in conjunction with the definite enclitic. Thinley (2009:82) analyses a reason nominaliser in Dzongkha –gop composed of the verb go ‘need’ and the marked stem –p. The Upper Mangdep function could also be a plausible analysis of the same pattern in Dzongkha: in one example given by van Driem and Tshering (1998:427), a subordinate clause headed by a verb with the nominaliser and the definite is used to translated the sentence with the frame ‘the fact that X[–NMZ.CORE=DEF], means that Y’. This could also be reinterpreted as ‘the reason why X is because Y’.

Examples of the construction are in (102) and (103).

(102) sem co bu-s kelok mä=t ra-mi=dze shebus niga
mind sad do-NF.PST again house=LOC come-NMZ.CORE=DEF why AFF.ROG.POL

‘What is the reason that she comes back to the house looking sad…’
[KT_LS]
The reason why monkeys have red buttocks, the reason, it was said to be this, nowadays.'

4.4.2.2 The oblique argument nominaliser –sar ~ sa

This morpheme is found as –sa in Kurtöp (Hyslop 2011a:423) and –saṃ <sar> (Thinley 2009:80; van Driem and Tshering 1998) in Dzongkha; however, in both cases it has been analysed as a locative nominaliser. However, it is clear that the scope of the Upper Mangdep nominaliser is broader, encompassing any conceivable oblique verbal argument.

Examples of the locative usage are in (104) and (105), and examples of other oblique arguments are in (106) as well as (15) above.

(104) khä dö-sar palang=e teng nī bu-s
3sg.gen sleep-NMZ.OBL bed=gen top sit.NF do-NF.PST
‘Sitting on her bed…’

[KT_LS]

(105) nga ’ye nak-sar ra-phal bu-sen dzin
1sg 2sg COP.EX-NMZ.OBL come-NMZ.PST do-SEQ then
‘I came to your place (i.e. the place you live at) and so, …’

[DDRD_C1]

(106) bome=dze da mā pcik-sa pcik-to nāng-ze ne
girl=DEF now house sweep-NMZ.OBL sweep-IPFV COP.EX-NMZ,NPST COP.EQ.MIR
‘Now the girl seems to be sweeping the house with a broom.’

[KT_LS]
In (106), the nominalised verb refers to an instrumental argument of the verb, ‘broom’ (i.e. “thing for sweeping”).

4.4.2.2.3 The manner nominaliser –thang

Precisely as in Kurtőp (Hyslop 2011a:424) and Dzongkha (Thinley 2009:81), Upper Mangdep has an infrequent manner nominaliser –thang which can be translated as ‘the way of doing [verb]’. An example is in (107).

(107) da nä les bu-thang
    well.now 1pl work do-NMZ.MNR
    ‘Well, now, our way of doing work...’
    [KT_SS]

4.4.2.2.4 The genitive nominaliser –Ke

As noted by Thinley (2009:101), one of the relativisation strategies in Tibetic languages is to modify a noun with a nominalised clause marked in the genitive. The genitive nominaliser in Upper Mangdep serves this function, although the other action nominalisers (below) can also take the genitive enclitic for this reason. It is not clear if there is any functional distinction between the use of the genitive nominaliser and other action nominalisers with genitive morphology, however, it may be that usage is partly conventionalised in certain constructions.

Some examples in which the genitive nominalisation modifies nouns are presented in (108)–(110).
The genitive nominaliser is also found in somewhat conventionalised temporal constructions, such as in (111).
It is clear that the nominaliser is distinct from the usual, nominal genitive morphology, as the nominalising suffix is subject to uniquely verbal morphophonemic patterns, the selection of which is lexically specific (cf. §4.2.1). Note especially from (111) that the verb ni ‘sit’ selects the aspirated onset allomorph, as it does with the co-temporal subordinator, the polar interrogative enclitic, etc. (cf. §4.2.1).

The exact development of the suffix is unclear, although there are a few possibilities. Kurtöp, as mentioned in §4.4.2.1.5, has a purposive “nominaliser” –ki. Hyslop (2011a:453) notes that in this function, the suffix can only be attached to constituents that have already been nominalised. One form of the genitive in Kurtöp is also –ki (Hyslop 2011a); and as mentioned in §4.2.1, Tibetic languages often have the clausal nominaliser –ki. Although all of these forms have reflexes elsewhere in Upper Mangdep, it is not implausible that the Upper Mangdep genitive nominaliser is one of multiple such reflexes.

Another possibility is a deep replication of the similar Dzongkha genitive nominalisation construction. The Dzongkha suffix, –bi ~ –mi ~ –wi བའི་ ~ བའི་ <pahi; baḥi>, is described as “gnomic” by van Driem and Tshering (1998:218) due to its generic present tense feature. For this reason, its etymology is suggested to be a reduced form of the [verb.NF COP.EQ] construction (cf. §4.6.1). However, I suspect that this suffix in Dzongkha and the purposive –ki suffix of Kurtöp probably developed these functions in conventionalized constructions in which the verb form modified a noun, but this noun was ultimately ellipsed.

This process of ellipsis is synchronically observable in all three languages. In both Dzongkha and Upper Mangdep, there is a construction in which the genitive nominalisation takes a noun derived from the Tibetic root སྒང་ <sgāṇ> ‘peak; (by semantic extension) point in time’. A similar construction is described for Kurtöp by Hyslop (2011a:308), who also suggests it may be a borrowing from Dzongkha. The construction expresses what van Driem
and Tshering describe as the present continuous, i.e. it expresses that an event is actively ongoing at the time of the utterance (1998:226). In Dzongkha, the construction in its full form is predicated by the equational copula, but this can be ellipsed. An example from Dzongkha is shown in (112), and a similar example from Kurtöp in (113).

(112) nga d’ato to z’a-wi gang ‘ing
1sg now cooked.rice eat-NMZ.GEN point COP.EQ
‘I’m eating just now.’ (i.e. lit. ‘it is now the point of eating...’)  
[van Driem and Tshering 1998:226]

(113) thang chut=ki gang-be wen
ground cut=GEN time-only COP.EQ
‘They were just making the ground.’  
[(Hyslop 2011a:309)

In Upper Mangdep, the copula ostensibly never appears, cf. (114).

(114) to khe-ge gāngn
cooked.rice make-NMZ.GEN point
“(I) am presently cooking food.’  
[Elicitation]

Clearly, then, the forms in all three languages should be analysed as genitives or genitive nominalisers. It is also worth noting that a genitive nominaliser has been described for Balti (Jones 2009), with the form –pi, similar to Dzongkha.

If the forms in Upper Mangdep and Dzongkha did not each independently arise — in Dzongkha from a nominaliser marked with nominal genitive morphology and in Upper Mangdep simply from an extension of the genitive or the nominaliser –ki in some other capacity — it may be that Upper Mangdep has replicated the underlying morphological structure of the Dzongkha morpheme. Recall from §4.2.1 that Dzongkha has the marked stem codas –p and –w, while Upper Mangdep has the marked stem coda –k. Similarly, both
languages have forms of the genitive enclitic which occur on closed syllables, \(=i\) in Dzongkha and \(=e\) in Upper Mangdep. If this analysis is correct, Upper Mangdep speakers have analysed the internal structure of this construction and incorporated native morphology into the pattern. This results in isomorphism such as in (115).

\[
\text{(115) (a)} \quad \text{thrā-ge} \quad \text{gāngn} \\
\text{arrive-NMZ.GEN} \quad \text{point}
\]

\[
\text{(b) } \text{hō-bi} \quad \text{gang} \\
\text{arrive-NMZ.GEN} \quad \text{point} \\
\text{‘in the process of arriving’} \\
\text{[Elicitation]}
\]

In other words, Upper Mangdep speakers identify the shared function of the marked stem in each language, represented by \(-k\) in Upper Mangdep and \(-p\sim-w\) in the source language, Dzongkha; and they separately identify the shared function of the genitive represented by \(=e\) in Upper Mangdep and \(=i\) in Dzongkha. The pivot for this matching of correspondences (in the terminology of Matras (2009) is presumably any nominal like \textit{gang}, which has probably been borrowed. Note that like Upper Mangdep in (111), the Dzongkha genitive nominaliser often modifies temporal nouns (van Driem and Tshering 1998:220).

Finally, assuming that replication takes place due to a high degree of embeddedness in mental representation (cf. §2.1), there is some additional evidence for this hypothesis in that speakers sometimes code-mix the Dzongkha form into Upper Mangdep speech, as in (116), and even in careful elicitation as in (117). Note that (116) was uttered by the same speaker as in (109), after which her interlocutor asked for clarification and then she repeated herself without code-mixing in (109).

\[
\text{(116) } \text{kha} \quad \text{pci-we} \quad \text{kūng} \quad \text{drā-de} \quad \text{biya} \\
\text{mouth} \quad \text{open-NMZ.GEN} \quad \text{meaning} \quad \text{be.similar-ALT} \quad \text{NEG.ROG.POL} \\
\text{‘It seems to be the reason she scolds (her).’} \\
\text{[TPDD_LS]}
\]
The essential action nominalisation function is illustrated in (118).

\[(118) \text{tsizhi} \quad \text{pce-ze} \quad \text{gulung} \quad \text{thuk-s}\]
\[
\text{deliberation sort-NMZ.NPST head weave-NF.PST}
\]

‘Having decided [lit. ‘weaved heads’] on seeking a judicial opinion, …’

[Dr_GD]

The nominaliser does in fact derive a true nominal from the verb root, as demonstrated by the fact that forms nominalised with the non-past nominaliser can take nominal morphology, as in the construction in (119) in which the form takes the genitive enclitic.

\[(119) \text{dzin} \quad \text{bö} \quad \text{sum} \quad \text{nya} \quad \text{sü-ze=ge} \quad \text{zhan}\]
\[
\text{then 3pl three fish kill-NMZ.NPST=GEN by.fault.of}
\]

‘So the three of them, merely over the killing of a fish, …’

[Dr_GD]
The suffix is derived from a grammaticalisation path that has been replicated from Dzongkha. Consider the paradigm of inanimate and location demonstratives in Dzongkha, Upper Mangdep and Kurtöp in Figure 19.

<table>
<thead>
<tr>
<th>Type</th>
<th>Dzongkha</th>
<th>Upper Mangdep</th>
<th>Kurtöp</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRX</td>
<td>'ani ~ ni ཨ་ནི། &lt;a.ni&gt;</td>
<td>adze(m) ~ wōngze</td>
<td>wo ~ wozī</td>
</tr>
<tr>
<td>location</td>
<td>nā ར་ &lt;nha&gt;</td>
<td>dzē ~ dzō</td>
<td>tsho</td>
</tr>
<tr>
<td>MED</td>
<td>d'i དེ་ &lt;de&gt;</td>
<td>adzo ~ wōngzo</td>
<td>—</td>
</tr>
<tr>
<td>DST</td>
<td>'aphi ~ phê ཨ་ཕི། &lt;a.phi ~ phe&gt;</td>
<td>athu ~ wōngthu</td>
<td>wudi</td>
</tr>
<tr>
<td>location</td>
<td>phâ དར་ &lt;phar&gt;</td>
<td>thū</td>
<td>thu</td>
</tr>
</tbody>
</table>

Figure 19: The comparative paradigm of the proximal, medial, and distal inanimate (‘this, that’) and location (‘here, there’) demonstratives in Dzongkha, Upper Mangdep and Kurtöp; adapted from van Driem and Tshering (1998:121, 370) and Hyslop (2011a:376–8).

There are a number of similarities between the forms. In each language, inanimate demonstratives clearly contain a kind of morphological base, 'a ~ a in Dzongkha and Upper Mangdep and wōng ~ wo ~ wu in Upper Mangdep and Kurtöp. Suffixed to this base are markers of deictic reference, distinguishing proximal and distal deixis, and medial deixis in Dzongkha and Upper Mangdep.

In both Dzongkha and Upper Mangdep, the definite enclitic is identical in form to the proximal or medial inanimate demonstrative morphology, with =ni ~ =di ཨ་དི། <ni; Ḍdi> found in Dzongkha, and =dze(m) found in Upper Mangdep. Furthermore, the proximal form has also grammaticalised as the non-past nominaliser in each language, with –ni in Dzongkha57 and –dze (this section) in Upper Mangdep. In Dzongkha, the distal form may have further grammaticalised as the past participle –di (cf. §4.4.2.1.5; also §4.4.2.2.6 for the Upper Mangdep past nominaliser), for the functions of which Upper Mangdep uses native morphology. This is summarised in Figure 20.

---

57 van Driem and Tshering (1998:338) call this the “infinitive”, but given the present analysis as well as its described nominalisation function, is it more accurate to call it a nominaliser.
This analysis is particularly likely because Upper Mangdep has also replicated complex predicate patterns that make use of this nominaliser (§4.6.2). There is also further evidence in that the proximal demonstrative, the definite enclitic, and the non-past nominaliser have an underlying /m/ coda that surfaces when the genitive is cliticised to them, as in (120)\(^{58}\).

\[(120) \text{ nga } ja \text{ khe-tu-zem=e } \text{ teng=e } \text{ dzaw dzin} \]

\[1sg \text{ tea make-PFV.EGO-NMZ.NPST=GEN top=GEN lunch then} \]

‘In addition to me having made the tea, there’s lunch, and then…’

[DDRD_C1]

It has been suggested to me that the nominalisation actually operates through the definite enclitic =\textit{dze}, i.e. the definite is encliticised to a verb to nominalise it. As suggested by Figure 20, this may have been the case at some point during the grammaticalisation process. However, given that the non-past nominaliser can co-occur with the definite, as in (121) and (122), the two are certainly distinguishable.

\(^{58}\) This example also demonstrates the co-occurrence of the non-past nominaliser with the slot I perfective suffix.
(121) nya sii-ze=dem=e zhan
    fish kill-NMZ.NPST=DEF=GEN by.fault.of
    ‘Merely over the killing of a fish,…’
    [Dr_GD]

(122) dzin wongze bu-ze=dzem dasu-ñæmbä
    then DM.PRX do-NMZ.NPST=DEF today-tomorrow
    ‘And so the reason it is like this, nowadays,…’
    [KT_HM]

Note that in (122), we again see a reason nominalisation construction formed with the definite enclitic, as with that described earlier for –mi (cf. §4.4.2.2.1).

4.4.2.2.6 The past nominaliser –Pal

The past nominaliser is similar in function and distribution to the non-past nominaliser, featuring in similar complex predicate constructions, however, the past nominaliser refers to past events, again within the scope of the events described in the discourse. There are no direct equivalent in Dzongkha, although Dzongkha does have a number of past and perfective non-finites. Hyslop (pc.) has suggested that the past nominaliser is likely related to the Kurtöp perfective nominaliser –pala, and indeed the two share a number of other similarities in addition to form. As in Kurtöp, the Upper Mangdep past nominaliser is a clausal nominaliser, and it can take nominal morphology (Hyslop 2011a:428). However, there are no examples in the data to suggest that –Pal is perfective rather than past tense. Indeed, similar to the argumentation for the finite past tense suffixes in §1.5 and §4.4.1.1.3, the past nominaliser has not been found in any non-past tense context and, like the non-past nominaliser –Dze, it can be explicitly marked for perfective aspect with the perfective suffix.
(123) makh tsā chū-bal=ε teng ‘yū cok prē=lo 
oil [heat.up]-NMZ,PST=GEN top 2sg,ERG feces express=PER,HON 
“Defecate onto the pre-heated oil...’

[KT_HM]

(124) bö thēthek mok-pal ngeng ne bikya 
3pl one.REDUP say-NMZ,PST listen.NF COP,EQ,MIR NEG,ROG,POL 
‘They listen to the things each of them say, isn’t it so?’

[DDRD_C1]

In (123), the nominalised clause ‘heated up oil’ allows the speaker to mark it with the
genitive as part of a phrasal adjunct. In (124), the nominalised clause functions as the object
of the matrix clause headed by ‘listen’.

(125) semjen bekte ten thin-bal ne 
animal NEG,COP,EQ,MIR mat lay.out-NMZ,PST COP,EQ,MIR 
‘It’s not an animal; it’s a mattress.’

[DDRD_PT1]

The clause in (125) superficially appears to be a complex predicate of the sort
described for this nominaliser in §4.6.3. However, the translations consistently given by
speakers for the nominalised clause ten thinbal as ‘mattress’, suggests a true nominal,
possibly one that is somewhat conventionalised as it is repeated a few times in the
discourse. In it, the speakers are discussing what they are seeing in the pictures in the
stimulus task.

The semantics of the nominalisations particularly in (123) and (125) are interesting
from a comparative perspective. As mentioned in §4.4.2.2.4 above, nominalisations marked
with the genitive in Tibetic languages (Thinley 2009:101) as well as East Bodish languages
(Hyslop 2011a:431) are a common strategy for relativisation. In the examples above,
however, what appears to be essentially relativisation (e.g. considering (123) in terms of
‘the oil which has been heated’) is achieved through apparent clausal nominalisation, in
which the internal verb-final structure of the clause is not affected. This is also noted for Kurtöp (Hyslop 2011a:433), however, in that case the nominaliser still retains genitive marking, as though the word order had simply changed. Note that this is different to the usage of –Dze found in the examples in §4.4.2.2.5, which never seems to relativise an argument of the nominalised verb. The precise syntactic nature of relativisation strategies in these languages thus remains an open topic for research.

4.5 Copular predication

I follow Hyslop’s definition of copulae for Kurtöp (2011a:536) in defining the category and function of copulae in Upper Mangdep. Copulae for this purpose of this work are structural elements of the language that predicate non-verbal phrases in the strict morphological definition that defines nominalisation above and in §4.1.1.2. The Upper Mangdep copulae themselves, like the Kurtöp copulae, appear in two different syntactic categories. We have already seen interrogative copular enclitics in §4.3.2.1. In this section, I will describe copular verbs, which are not verbs in the strictest sense as they are not subject to the same morphological paradigm, described in the previous section, as true verbs. Instead, they operate within their own morphological paradigm, some of which is similar to that of true verbs and some of which is not.

I also follow Hyslop in dividing the copulae into two types, the equational and the existential. The former predicates the equivalence of one thing to another, and the attribution of descriptive adjectives to a subject; this concept can be translated into English as ‘is/are’. The latter is predicates existence, possession, and attribution of descriptive nouns to a subject; this concept can be translated as ‘there is’ or ‘has’.
4.5.1 The equational copulae

The forms of the equational copulae are presented in Figure 21.

<table>
<thead>
<tr>
<th></th>
<th>(unmarked)</th>
<th>Mirative (MIR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affirmative</td>
<td>ge</td>
<td>ne</td>
</tr>
<tr>
<td>Negative</td>
<td>be</td>
<td>bekte ~ bede</td>
</tr>
</tbody>
</table>

*Figure 21: The basic forms of the Upper Mangdep equational copula.*

The forms of the equational copula do not appear to be cognate with the forms of either Tibetic languages such as Dzongkha nor East Bodish languages like Kurtöp or Khengkha. Dzongkha has 'ing ཞིན་<in> for the unmarked equational copula and the derived 'ime ཞིན་པས་<in.pas> in the mirative (van Driem and Tshering 1998:125), which replaces Central Tibetan རེད་<red> (Zeisler 2000:41). Kurtöp has non-mirative wen and mirative wenta as well as other epistemically marked forms (Hyslop 2011a:551). One possible cognate to the non-mirative ge in Upper Mangdep is found somewhat distantly in Tshangla, the equational copula of which has the root gi (Andvik 2010:173).

As we will see below, complex predicate constructions that feature copulae inherit the epistemic features of the component copulae. For this reason, it is important to justify the analysis of the categories that appear in the copulae. Unlike the Kurtöp equational copulae, which are divided into five epistemic categories (Hyslop 2011b:56), Upper Mangdep replicates the Dzongkha pattern in having only one basic distinction, which is mirativity. Other epistemic features can be expressed, but again unlike Kurtöp and like Dzongkha, this requires the use of complex copular constructions, which will be described in the section on the existential copula below.

Mirativity as it features in Upper Mangdep has been described in §4.1.1.1.4. Recalling that definition, the basic distinction in the Upper Mangdep copulae is the novelty of information to the speaker. Recall in particular that with the egophoric/alterphoric distinction described for the imperfective in §4.4.1.1.1, the egophoric is typically associated with first person in the declarative while the alterphoric is associated with the second and third persons. Elicitation of the equational copulae in Upper Mangdep demonstrates that this is not the case for this epistemic contrast, as in (126).
(126) (a) nga 'lōbō ge
1sg teacher COP.EQ
‘I am a teacher.’
[Elicitation]

(b) khi 'lōbō ge
3sg teacher COP.EQ
‘He is a teacher.’
[Elicitation]

By contrast, the complex predicate used in (127) to remark on future tense equivalence uses the mirative, presumably as a hypothetical event cannot also be an assimilated fact.

(127) khi 'lōbō me-bu-ze ne
3sg teacher NEG.IPFV-do-NMZ.NPST COP.EQ,MIR
‘He will not become a teacher.’
[Elicitation]

As noted in §4.4.1.1.2, the mirative equational copula can also be marked with the alterphoric suffix –De, however, this form has only been found as an interrogative. The negative mirative equational copula is formed with this suffix, however it should of course be analysed as mirative in the context of the paradigm and the argumentation presented above. In this way, the two epistemic categories are associated but functionally separate, appearing in varying distributions of tense, aspect and predication type.

A few examples of the equational copulae found in natural speech are presented in (128)–(130).
In (131), the speaker does not use the existential copula as expected. Instead, the equational copula is used to describe the scene presented by the picture, rather than the actual scenario depicted. This could be translated in English as ‘it is a depiction of being in a river’.

The equational copula alone can also be used as a general marker of the truth of a state of affairs, such as in (132), where it means something to the effect of ‘it is not (the case)’. 
Finally, the negative equational copula appears to have a rare subordinate form *bile*, perhaps somewhat similar to the genitive nominaliser (cf. §4.4.2.2.4), recalling that forms with onset /l/ are common allomorphs of the genitive in East Bodish languages including Upper Mangdep (cf. §3.2.2). This form is exemplified in (133).

(133) ˈmön=ɐ dōngju bile tshönkha=nang ne biya
  medicine=GEN cube NEG.COP.EQ.SUB prison=inside COP.EQ,MIR NEG.ROG.POL
  ‘It is not a medicine cube but rather it is (shown) inside a prison, is it not?’
  [DDRD_PT1]

4.5.2 The existential copulae and complex copulae

The forms of the existential copula are presented in Figure 22.

<table>
<thead>
<tr>
<th></th>
<th>(unmarked)</th>
<th>Mirative (MIR)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Affirmative:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>eastern</td>
<td>nāng ~ nā ~ naха ~ nak</td>
<td>nakte</td>
</tr>
<tr>
<td>western</td>
<td>nāng ~ noho ~ nāhōng ~ nok</td>
<td>nakte ~ ina</td>
</tr>
<tr>
<td><strong>Negative:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>eastern</td>
<td>mü</td>
<td>mede</td>
</tr>
<tr>
<td>western</td>
<td>mü</td>
<td>mede ~ mìnē</td>
</tr>
</tbody>
</table>

Figure 22: The existential copulae of Upper Mangdep across both dialect groups.

Unlike the equational copulae, the existential copulae are plainly cognate with the East Bodish forms found in Kurtōp which has the root *nak ~ nā* (Hyslop 2011a:539) — although cf. §3.2.4 for a discussion of the history of *nāng*. The negative form *mü* corresponds
to the Kurtöp form *mut* (Hyslop 2011a:545). As mentioned above, the existential copula predicates the existence or possession of its subject.

Some typical examples are in (134)–(138).

(134)  
\[
\begin{align*}
mē & \ 'ub=i & \text{taphodek} & \text{codrup} & \text{nāng} & \text{wā} \\
\text{DM.DN} & \text{child=ERG} & \text{vastly} & \text{talent} & \text{COP.EX} & \text{eh} \\
\end{align*}
\]

‘The children down there are all talented, eh.’

[DDRD_C1]

(135)  
\[
\begin{align*}
bome=ya & \ zōn & \text{nakte} \\
girl=also & \text{two} & \text{COP.EX.MIR} \\
\end{align*}
\]

‘There are also two girls.’

[TPDD_LS]

(136)  
\[
\begin{align*}
tsikp & \ ca-mi & \ 'ode & \text{nahōng} \\
masonry & \text{establish-NMZ.CORE} & \text{how.many} & \text{COP.EX} \\
\end{align*}
\]

‘How many masons are there?’

[Pe_SS]

(137)  
\[
\begin{align*}
\text{Tāngbjip} & \ Pāngla & \text{cā-s} & \text{mū} & \text{wā} \\
\text{Tangsibji.person} & \text{P} & \text{signify-NF,PST} & \text{NEG.COP.EX} & \text{eh} \\
\end{align*}
\]

‘There is no Tangbjip Pāngla.’ (i.e. ‘there is no person from Tangsibji by that name.’)

[DDRD_C1]

(138)  
\[
\begin{align*}
\text{gam} & \ \text{mede=wa} \\
\text{fire} & \text{NEG.COP.EX.MIR=ROG.TAG} \\
\end{align*}
\]

‘There’s no light, eh?’

[VT_S1]

\[59\text{ Insertion from Dzongkha.}\]
The logic behind the mirativity analysis for the existential copula is essentially the same as for the equational copula above. The acceptability in elicitation of (139) indicates that the contrast is one of mirativity and not personal knowledge.

\[(139) \textit{khi}=\textit{ta} \quad \textit{tiru} \quad \textit{nā} \]

\[3\text{sg}=\text{DAT} \quad \text{money} \quad \text{COP.EX} \]

‘He has money.’

[Elicitation]

The existential copula exhibits a wider range of inflectional morphology than the equational copula. We have seen in examples (103) and (105) above that the existential copula can take the core and oblique nominalisers. The existential copula has also appeared in the data with the conditional –\textit{sahan}, as in (140); and with the concessive subordinator –\textit{ro} as in (141).

\[(140) \textit{khemla} \quad \textit{wōnge} \quad \textit{bu-sahan} \quad \textit{khemla} \quad \textit{nak-sahan} \quad \textit{gay} \quad \textit{ge} \quad \textit{cāk} \quad \textit{ne} \]

friend \quad DM,PRX \quad do-CND \quad friend \quad COP.EX-CND \quad gay \quad COP.EQ \quad signify.NF \quad COP.EQ,MIR

‘If your friend acts like this, if you have a friend (like this), they say you are gay.’

[KT_SS]

\[(141) \textit{kheng-mi} \quad \textit{nāng-ro} \]

know-NMZ.CORE \quad COP.EX-CNC

‘Even if there are those who know how, …’

[DDRD_C1]

As with the negative equational copula (cf. (133)), the negative existential copula also has an infrequent subordinate form with coda /l/.
4.5.2.1 Complex copulae

In Tibetic languages, some copular functions can be expressed with the existential copula as a subordinate of the equational copula. In Lhasa Tibetan, for example, the non-mirative existential copula དབོད་<yod> can combine with the mirative equational copula རེད་<red> as དབོད་རེད་<yog.red>, which marks statements as generic facts (DeLancey 2012:550). Upper Mangdep can form the isomorphic combination nak ne as in (143).

(143) dzin dop-nangä gomchen drangsu cä-s nak ne

then long.ago gomchen truth.seeker signify-PST COP.EX COP.EQ.MIR

‘Long ago there was the so-called Gomchen Drangsur.’

This combination is consistent with the composition of the habitual complex predicate construction (cf. §4.6.1) in Upper Mangdep with true verbs more generally. However, there are also more opaque, non-compositional complex copular forms that take specific epistemic meanings. This is also attested in Lhasa Tibetan (Tournadre and LaPolla 2014:251). In these cases, Upper Mangdep speakers have directly replicated construction patterns from Dzongkha. No such constructions are described for Kurtöp.

There are two such constructions. The first nominalises the existential copula with the non-past nominaliser –Dze (i.e. ཉང་-dze) and predicates it with the mirative equational copula ne. This construction is virtually isomorphic with the Dzongkha construction ཡོད་ནི་མས་<yod.ni.mas> (Hyslop and Tshering to appear), and, like the Dzongkha construction, has an inferential epistemic function (cf. 4.1.1.1.1). Note that it does not seem that, unlike the construction in (143), the construction is specific to either the existential or

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60 Technically, the Dzongkha construction makes use of the mirative suffix འཕལ་<mas>, which forms the mirative equational copula in བིས་<in.pas> (cf. §4.4.1.1.2).
equational sense. That is, although it would appear that the semantics of the predicate nāṅ-dzē ne specifies an existential predication, it may apply to either an equational or an existential predication; such seems to be the case especially in (144).

(144) chingk=dze khā 'up nāṅ-dzē ne
small=DEF 3sg.GEN child COP.EX-NMZ.NPST COP.EQ.MIR

‘The little one seems to be her child.’
[TPDD_LS]

(145) 'yeyā khemla nāṅ-dzē ne
2sg.GEN friend COP.EX-NMZ.NPST COP.EQ.MIR

‘It must be your friend.’ (i.e. ‘the person who cares about you must be your friend.’)
[KT_SS]

In the second construction, the equational copula is replaced with the auxiliary ra ‘come’, which marks dubitative or speculative meaning (cf. §4.6.5 for more on this auxiliary). Here again, the Dzongkha construction yōp ong གྲོལ་འོང་<yodpa,hon> (Hyslop and Tshering to appear) is replicated, although the morphology on yō is not isomorphic (i.e. the marked stem is used in Dzongkha rather than the non-past nominaliser). This construction is less common; an example is in (146).

(146) khemla nāṅ-dzē ra cāk ne
friend COP.EX-NMZ.NPST come signify,NF COP.EQ.MIR

“Maybe you have a friend,” she says.’
[KT_SS]

It was mentioned in §4.4.1.1.1 that imperfective-marked verbs, unlike other finite verbs, can also head subordinate clauses. The indirect imperfective is the most important construction of this type. In this construction, the imperfective finite verb is subordinate to the indirect complex copula described above. It is not clear from existing descriptions or personal fieldnotes if this pattern is found in Dzongkha. The example in (147) is somewhat
similar to the example in (62) above, in that the speaker uses the indirect evidentiality, as they are unable to witness the act of perception on the part of another person.

(147) 'ngencha=ya pre zhaphtra=ya theng-do nāng-ze ne
musical.instrument=also express song=also set-IPFV COP.EX-NMZ,NPST COP.EQ,MIR
‘The (sound of) musical instruments is coming and she also seems to be playing a song.’
[KT_LS]

The construction has been mostly found in the context of these stimulus tasks, where speakers are sometimes unsure of what is actually happening in the overall context of the stimulus; that is to say, while they are able to perceive the events of the stimulus, they do not necessarily know how to interpret the complete event structure without more information. One could imagine, for example, watching a video of someone going to lie down, and saying ‘they must be going to sleep’, i.e. inferring that the person lying down means that they will go to sleep, when in fact they might end up doing something else while lying down. Such an example is found in (148): the speaker has seen the first half of the video, after which I asked him to describe the relationship between two of the characters. He comments that one of the characters has just told the other that her food is ready, as a servant would. He then uttered the sentence in (148).

(148) to=dze=ya khi-khe=yi khek-to nāng-dze ne mā=t
cooked.rice=DEF=also 3sg-REFL=ERG make-IPFV COP.EX-NMZ,NPST COP.EQ,MIR house=LOC
‘It seems that she herself makes the food as well, in the house.’
[KT_LS]

The construction has also been found for the imperfective in narratives, as in (149).
Further complex predicates involving the nominalisation or subordination of true verbs are discussed in the next section.

4.6 Complex predicates

Complex predicates consist of nominalised or subordinated verbs and a copula or auxiliary. In this section, I describe each of the productive complex predicate constructions.

4.6.1 The habitual construction

The habitual construction is formed from the non-past or past non-finite verb form (§4.4.2.1.5) with the equational copula (§4.5.1). It inherits its tense feature from the non-finite verb and its epistemic feature from the copula. Therefore this construction has four possible exponents, represented in Figure 23.

<table>
<thead>
<tr>
<th></th>
<th>COP.EQ (non-mirative)</th>
<th>COP.EQ.MIR (mirative)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NF (non-past)</td>
<td>−Ø + ge</td>
<td>−Ø + ne</td>
</tr>
<tr>
<td>NF.PST (past)</td>
<td>−s + ge</td>
<td>−s + ne</td>
</tr>
</tbody>
</table>

Figure 23: The four Upper Mangdep habitual constructions.

An isomorphic construction is found in Dzongkha. As in Upper Mangdep, the Dzongkha construction is comprised of the marked stem (i.e. the non-past non-finite) and the equational copula. This is described by van Driem and Tshering as the “factual present” (1998:206). The “generic” nak ne (Upper Mangdep), yöp ’ing (Dzongkha) and <yog.red> (Lhasa Tibetan) complex copular construction described in §4.5.2.1 is based on the same frame as this habitual construction; note the stem form of the existential copula in Upper Mangdep and Dzongkha. Although I use the term “habitual”, “generic” or some variant of this is also
an adequate description of the function of this construction; the applicability of each is subject to the lexical semantics of the relevant verb. The overall function of the construction is to mark events that occur under the normal circumstances of the specified scope of time.

(150) nā dzong=e kha=ra mok ge
1pl dzong=GEN language=EMPH say.NF COP.EQ
‘They speak our district’s language, indeed.’
[TPDD_LS]

In (150), I had asked the speaker in Upper Mangdep what languages her children were able to speak, and she first responded with this sentence.

(151) bome=dze mā=t=ya nik ne
girl=DEF house=LOC=also sit.NF COP.EQ,MIR
‘The girl also lives in the house.’
[KT_LS]

(152) dzin khi-khe tokpa cha-shi cā-s ne
then 3sg-REFL doubt alight-PST.DIR signify-NF.PST COP.EQ,MIR
‘And so it was that she feels doubtful.’
[KT_LS]

The two mirative habitual constructions are shown in (151) and (152). In (152), the speaker is making an interpretation of the character’s facial expressions and assesses reflectively that the character feels doubtful.

(153) wōngze ne tōn-s ge cā-s ne dasu-nām bàn
DM,PRX COP.EQ,MIR show-NF.PST COP.EQ signify-NF.PST COP.EQ,MIR today-tomorrow
‘It was said to be this, they say, these days.’
[KT_HM]
The example in (153) is repeated from §4.4.2.2.1. In it, the speaker, who lives in Australia, remarks that the mythology of the narrative is how people used to explain this fact (that monkey’s have red buttocks). The construction in töns ge is in the past tense as the speaker conceptualises the generic event of the performance of story as it was happening back in Bhutan (i.e. before he came to Australia). The non-mirative is used, as it is familiar knowledge to him.

It was a function of the type of data collected that the past tense constructions were not particularly common; however, in elicitation, I also became aware that the –s ge construction has a reduced from –he in the western dialects.

4.6.2  *The inchoate future construction*

The inchoate future construction is formed of a non-past clausal nominalisation (§4.4.2.2.5) and the equational copula. It inherits its epistemic feature from the copula. Its tense feature is in part inherited from the nominaliser, however, the tense and aspect function of the construction is complex and non-compositional, belonging to the construction itself as a unit. The perfective suffix is known to co-occur with the nominaliser, however, has not been attested with this construction itself. The construction is presented in Figure 24.

<table>
<thead>
<tr>
<th>NMZ.NPST (non-past)</th>
<th>COP.EQ (non-mirative)</th>
<th>COP.EQ,MIR (mirative)</th>
</tr>
</thead>
<tbody>
<tr>
<td>−Dze + ge</td>
<td>−Dze + ne</td>
<td></td>
</tr>
</tbody>
</table>

Figure 24: The inchoate future constructions.

The construction fundamentally expresses future tense. I have termed the construction “inchoate future” as it often connotes that the event is already incipient and will be completed in the future.

(154) nāmbā tshāng-s bōng-ze ne
tomorrow come-NF,PST stay-NMZ,NPST COP.EQ,MIR
‘Tomorrow he is coming back and staying.’

[TPDD_LS]
Some typical examples are presented in (154)–(156). In (154), the speaker is relaying to a friend my plans for staying in the village. Example (156) shows the use of the construction in the interrogative. The example in (157), as well as that in (158) below, demonstrate how events marked with this construction may be already underway but described in terms of their future results. In (158), the speaker happened upon me walking in the village and uttered the sentence. The result of the verb is yet to occur but the event itself was in progress, i.e. me walking.

(157)  gö-se      ge    
   want-NMZ.NPST COP.EQ  
   ‘Yes, I’d like that, please.’  
   [Elicitation]

The inchoate future construction is also isomorphic with a Dzongkha construction which also predicates a non-past nominalisation with the equational copula (van Driem and Tshering 1998:348). Functionally, the construction is similar to the Kurtöp irrealis nominaliser -male, which also combines panchronically with the equational copula (Hyslop 2011a:452), but has grammaticalised to a finite suffix without the copula as well. To some extent, this process may be occurring for Upper Mangdep speakers as well, as in (158).
The question in this example is usually asked with the interrogative copular enclitic, as with the example in (156), but which has here been omitted.

As mentioned, the epistemic feature of the construction inherits its value from the copula. This is demonstrated by the example in (13)(b), reproduced here in (159).

(159) bome=dzem dzin jōla bak-s pcilok pcong yi-ze ge
girl=DEF then bag carry-NF.PST outside take.out go-NMZ.NPST COP.EQ

‘The girl will then go outside taking her bag.’

In that example, the speaker has already seen the event take place in a flash-forward scene earlier in the film, and it is therefore not marked as new information with the mirative.

4.6.3 The experiential past construction

The experiential past construction is formed from a past clausal nominalisation (§4.4.2.2.6) and once again the equational copula. The two forms of this construction are presented in Figure 25. It inherits its tense feature from the nominaliser and its epistemic feature from the copula.

<table>
<thead>
<tr>
<th></th>
<th>COP.EQ (non-mirative)</th>
<th>COP.EQ.MIR (mirative)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NMZ.PST (past)</td>
<td>-Pal + ge</td>
<td>-Pal + ne</td>
</tr>
<tr>
<td>PFV.EGO-NMZ.PST (perfect)</td>
<td>(unattested)</td>
<td>-Du-ba + ne</td>
</tr>
</tbody>
</table>

Figure 25: The experiential past constructions.
However, the aspect feature of the construction is a non-compositional function of the construction as its own unit; but it is not clear exactly how it differs to finite past tense verb forms. In some contexts this construction is best interpreted as an imperfective past construction, however, the past nominaliser in this construction can also co-occur with the perfective suffix -Du (§4.4.1.1.4). The construction is particularly common in narratives as well as in describing experiences. It is for this usage, which may be translated in English as ‘I have done X in my life’, or, in the interrogative ‘have you ever done X?’, that I have termed the construction “experiential”. It may be that the construction exists to make use of the mirativity function in the past tense. There is no clear equivalent construction in Dzongkha or in Kurtöp.

(160) mē yōnda=ra ta-phal ne
eye DM.UP.ALL=EMPH see-NMZ.PST COP.EQ.MIR
‘(His) eyes are always looking upwards.’
[DDRD_PT1]

(161) ’up=dze bö=zomp=e bā=t ’namesame chādachōri kā-phal ne
child=DEF 3pl=TWO=GEN middle=LOC very partiality put.on-NMZ.PST COP.EQ.MIR
‘(The woman) plays a lot of favouritism between the two of the children.’
[KT_LS]

In (160), the past tense is used although the speakers are looking at still images, as was frequently the case in these stimulus tasks. However, the imperfective function is possible from this example based on native speakers’ translation as well as the nature of the event having no endpoint in a still image. The imperfective interpretation also applies in example (161), where the speaker is commenting on the behaviour he has witnessed of the characters up until that point.

The construction also appears to be common with the verb nā ‘to be sick’, as in (162).
(162) khi am=ze nā-phal ne cā-s
   3sg woman=DEF be.sick-NMZ.PST COP.EQ,MIR signify-NF.PST
   ‘Her mother has been sick, she said.’
   [KT_LS]

(163) adze sach=the=ge nang pra=the=ni khaw=de ni-phal ne
   DM.PRX village=ONE=GEN inside monkey=ONE=COM hen=ONE sit-NMZ.PST COP.EQ,MIR
   ‘In a village there lived a hen and a monkey.’
   [KT_HM]

The example in (163) is typical of the narrative usage that suggests an imperfective interpretation, or otherwise some temporal remoteness from the present.

An example with the perfective suffix is found in (164).

(164) pra 'abu pura shur-tu-bal ne
   monkey buttocks all get.scalded-PFV.EGO-NMZ.PST COP.EQ,MIR
   ‘The monkey’s butt got all burnt.’
   [KT_HM]

Examples with the non-mirative are given in (165) and (166).

(165) nga=da wōngze jam-bal ge cā=mun
   1sg=DAT DM.PRX be.easy-NMZ.PST COP.EQ signify=after
   ‘For me, this has been easy, however...’
   [DDRD_C1]

(166) bu-mi=dze maba=ra thrim=ni gā-bal ge
   do-NMZ.CORE=DEF actually=EMPH law=COM violate-NMZ.PST COP.EQ
   ‘Those who do this have actually broken the law.’
   [KT_SS]
The experiential sense is attested from question such as that in (167).

(167) *ye* 'uda *ni-phal=lo*

2sg where *sit-NMZ.PST=ROG.COP*

‘Where have you lived?’ (i.e. ‘Where have you lived in your life?’)

[Elicitation]

4.6.4 The copular durative

The durative under examination here is formed with a past non-finite verb and the existential copula. As mentioned in §4.4.2.1.5, the same, isomorphic construction pattern is found in Kurtöp; it is not known if equivalent patterns are found with the Dzongkha existential copula, although Dzongkha also has a durative subordinator -*sara* ་ས་རང་<sa.raṃ>[van Driem and Tshering 1998:295]. As in Kurtöp, the existential copula retains its inflectional capacities in this construction for epistemic categories, etc.

The construction can be understood logically in terms of an event coming to a resulting state or action, and staying that way. In literal terms, we might understand the construction as translating to ‘to do X and be (stay) there’. Examples are in (168)–(170).

(168) *tsem* *tse-s nakte*

*game play-NF.PST COP.EX.MIR*

‘She sits there playing.’

[KT_LS]

(169) *lā=ya dramla=da cor bu-h naha*

*hand=also jaw=DAT hold.up do-NF.PST COP.EX*

‘He just stays there resting his chin on his hand.’

[DDRD_PT1]
(170) am=ze sem co bu-s nakte
woman=DEF mind sad do-NF.PST COP.EX.MIR
‘She was looking sad.’

4.6.5 The dubitative auxiliary ra ‘come’

One of the most productively used auxiliaries in Upper Mangdep is the dubitative, derived from the lexical verb ‘come’. This grammaticalisation is diffused throughout the languages of Bhutan, being found with the cognate morpheme in Kurtöp “presumptive” perfective -para (Hyslop 2011a:519), as well as in Dzongkha with its equivalent lexical verb ong ཤོ (van Driem and Tshering 1998:356). Western dialects have the morpheme ha of an unknown morphological class for this function. This may be a lenited form of the same auxiliary morpheme, or perhaps an archaic suffix. Due to the extensive diffusion of the ‘come’ grammaticalisation in these languages, it is probably impossible to establish an understanding of the directionality of this diffusion.

The usage of the auxiliary in Upper Mangdep is structurally very similar to that of the auxiliary in Dzongkha. In these constructions, the auxiliary can simply replace the equational copula. As discussed in §4.1.1.1.2, the form expresses the speaker’s uncertainty about the proposition, either because they have incomplete information or are guessing.

(171) namgün bu-n thukp tshok gō-tse ra ēyā
winter do-CND porridge prepare.NF need-NMZ.NPST come 2sg.ERG
‘When it becomes winter maybe you will have to make porridge.’

In (171), the speaker has been asking her interlocutor about her obligations to the workers she has hired, and then suggests that in addition to the current arrangement regarding food and tea, she may have to provide porridge in winter.

An example of the use of the auxiliary with the experiential past construction is presented in (172).
The use of the auxiliary in place of the equational copula in the complex copula was described in §4.5.2.1. The auxiliary can replace the equational copula in its basic predicational function as well, as in (173).

(173) däwä thu 'long-mi bjuru=dze ra
earlier DM.DST store-NMZ.CORE necklace=DEF come
‘Maybe what was stored away back there earlier is a necklace.’
[KT_LS]

The exception to the interchangeability of the dubitative auxiliary with the equational copula is with the habitual constructions of §4.6.1, where it is not found. Instead, the combination of the marked stem (non-past non-finite verb form) with the dubitative auxiliary produces a construction that marks near future or prospective (those that are ‘about to’ happen) events.

(174) am 'up pang bā bu-s pok ra
woman child cradle carry do-NF.PST hit.NF come
‘The woman, cradling her child, is about to get hit.’
[DDRD_PT1]

(175) nyī phala tsho-s mok ra că-s mok-pal ge
1sg.ERG conversation converse-NF.PST say.NF come signify-NF.PST say-NMZ.PST COP.EQ
‘“I will talk (with him) and then I will tell you [i.e. straight away],” I said.’
[PW_VM]
Unlike the other uses of the dubitative auxiliary above, this construction appears to be unique to Upper Mangdep.

4.7 Conclusions

This chapter has surveyed the core elements of the Upper Mangdep verbal complex, although many peripheral elements require further research. This includes the system of auxiliaries, of which there are many that either do not appear to contribute significantly to verbal semantics in the language, or which are too rare in the data to describe. Some have been left out in the interests of space. More research is also needed on clausal relationships, the structural status of verbs marked with the infinitive, the infrequent use of reduplication (not only in Upper Mangdep but Dzongkha as well), and many other smaller indeterminacies in the data. It is my belief that these problems are best approached through a comparative analysis of diversity in the language as well as outside of it. It is like that the current data represents only a limited sample of the diverse variation that exists among Upper Mangdep speech communities.

What has been demonstrated, however, is that many of the most frequently used verbal constructions in Upper Mangdep directly replicate corresponding constructions in Dzongkha. I here list those patterns which share significant formal, functional or structural properties with Dzongkha.

1. structure of verbal morphology
2. verb stem alternation and distribution
3. formation of the egophoric and alterphoric imperfective construction
4. the distribution of the alterphoric suffix
5. the evidential and tense categories of slot II finite suffixes (past suffixes)
6. loss of epistemic contrast on the perfective suffixes
7. the distribution of the conditional subordinator in constructions
8. the borrowing of the concessive subordinator
9. the grammaticalisation and distribution of the genitive nominaliser
10. the grammaticalisation of the non-past nominaliser from demonstratives
11. the complex copular construction
12. the habitual construction
13. the inchoate future construction
14. the distribution of the dubitative auxiliary

In the next section of this thesis, I will discuss these and other contact-induced changes in Upper Mangdep, making observations about their typological nature and probable historical background.
5 Discussion

It is now clear that the paradigm of Upper Mangdep verbal constructions shares a number of structural and functional similarities with the paradigm of verbal constructions in Dzongkha. A number of pattern replication phenomena, outlined in §2.2, were observed. Firstly, in some cases, Upper Mangdep demonstrates replication of grammaticalisation paths in some cases. The language has gained a meaningful morphological category in the marked stem alternation by grammaticalising a nominaliser into the same distributional pattern as the equivalent structure in Dzongkha. Perhaps most tellingly of all, there is highly accessible grammaticalisation path in both Dzongkha and Upper Mangdep from demonstratives to definite enclitics, and from definite enclitics to non-past nominalisers. Undoubtedly this change has been motivated by the high frequency of the morpheme in Dzongkha (and subsequently Upper Mangdep) complex predicates, particularly those described in §4.6.2.

There have also been changes to the structural organisation of verbal constructions, both in terms of surface morphology and function. It was noted that the Upper Mangdep verbal template is virtually an exact replica of the verbal template of Dzongkha, having two suffixal slots where Kurtöp has one. In addition, this verbal morphology largely marks the same categories as in Dzongkha, replicating the way in which, for example, epistemic functions are distributed across the verbal template, with evidentiality marked in slot II past tense suffixes and alterphoricity marked with its own slot II suffix; similarly the perfective suffixes, although neither related to those of Dzongkha nor functionally similar in epistemic features, have been distributed such that they share the same morphological slot as in Dzongkha. The speakers’ functional analysis of these morphemes have presumably also converged at some point, such that Upper Mangdep, like Dzongkha, now has two past tense suffixes which contrast for evidential mediation.

This work has focused primarily on verbal constructions as the locus of many convergent changes in the language. In this chapter, I review some additional evidence of
convergent change elsewhere in the Upper Mangdep language, and then discuss some of the implications of this analysis.

5.1 Phonological changes

One of the most prominent sound changes in Upper Mangdep, unique among East Bodish languages by current knowledge, is the Tibetic vocalic mutation that occurs in the environment of alveolar codas. In this change, phonological back vowels /a, o, u/ front and, in the case of /o, u/, round, where the syllable coda is an alveolar consonant, e.g. Dzongkha ‘sit’ སྡོད་<sdod> is synchronically /døː/. It would not be surprising that speakers borrow these vowels /y, ø, ɛ/ in Dzongkha loanwords. However, it is interesting how extensively these vowels have diffused throughout the phonological system of Upper Mangdep, including in native, East Bodish lexical items. Hyslop (2011a:142) notes that educated Kurtöp speakers similarly use these vowels, albeit inconsistently. By contrast, Upper Mangdep speakers have consistently fronted vowels in the expected phonological environments. Unlike Dzongkha, however, the change often does not cause loss of the conditioning environment, notably in the cases of coda /s/ and coda /l/. Examples are shown in Figure 26.

<table>
<thead>
<tr>
<th></th>
<th>Bumthangic</th>
<th>Upper Mangdep</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘kill’</td>
<td>sut (Ku.)</td>
<td>sü</td>
</tr>
<tr>
<td>‘finish’</td>
<td>zat (Ku.)</td>
<td>zā</td>
</tr>
<tr>
<td>‘two’</td>
<td>zon (Ku.)</td>
<td>zön</td>
</tr>
<tr>
<td>‘barley’</td>
<td>nas (Ku.)</td>
<td>nes</td>
</tr>
<tr>
<td>‘night’</td>
<td>hula (Ch.)</td>
<td>’rül</td>
</tr>
<tr>
<td>‘when’</td>
<td>arba (Bu.)</td>
<td>āwā</td>
</tr>
</tbody>
</table>

Figure 26: Vocalic mutation in native East Bodish lexicon, comparing cognates in other East Bodish languages.

The change is most consistently applied in the environment of coda /t/. Where Dzongkha typically loses conditioning environments /l/ and /s/, they often, although not always, remain in Upper Mangdep. Interestingly, the vowels have also diffused beyond this conditioning environment more inconsistently. Although the sound change occurs as a
mutation of back vowels in this specific conditioning environment, the feature is sometimes misinterpreted in the phonological representation of individual speakers as a rounding of front vowels, or perhaps a rounding of all vowels in the conditioning environment of the change. For this reason, there is sometimes free variation between /i ~ y/. One such example is the word *peilok* ‘outside’, found in Classical Tibetan फेलुक <phyi.logš>. The word is variously realised as [pʰeilok ~ pʰeylok] by Upper Mangdep speakers. Note that the Tibetic vocalic mutation change does not usually apply across syllable boundaries, e.g. Upper Mangdep *gulu* ‘head’ does not exhibit the mutation as the /l/ is structurally a part of the second syllable.

There are a few other substantial divergences in Upper Mangdep phonology as compared to other East Bodish phonologies. One is the de-syllabification of second syllables in disyllabic words, a process also found in Dzongkha. For example, in the Dzongkha word *rmagpa* <rmagpa> ‘husband’, the first syllable lost its original coda but retained the onset of the second syllable as the new coda of a monosyllabic word. Presumably, the Upper Mangdep change, in which only the final vowel is syncopated, resulting in complex codas, is an intermediate stage in this change; i.e. Upper Mangdep *makp* ‘husband’. In western dialects such as Dangchup, the change progresses to the simplification of the codas as in Dzongkha. Examples are in Figure 27.

<table>
<thead>
<tr>
<th>Bumthangic</th>
<th>Upper Mangdep</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘frost’</td>
<td>chakpa (Ch.)</td>
</tr>
<tr>
<td>‘nape of neck’</td>
<td>takpa (Bu.)</td>
</tr>
<tr>
<td>‘red’</td>
<td>zhinti (Ku.)</td>
</tr>
<tr>
<td>‘bamboo flute’</td>
<td>lingbur (Ch.)</td>
</tr>
<tr>
<td>‘small’</td>
<td>chinggu (Bu.)</td>
</tr>
</tbody>
</table>

*Figure 27:* De-syllabification of unstressed syllables in historically disyllabic words in Upper Mangdep.
5.2 Sociolinguistic context

It has been mentioned that there are substantial differences in the socio-economic circumstances of communities in the two dialect groups (§1.3). Given also the influential history of the region in which the eastern dialect-speaking communities find themselves (§3.1.4.2), these differences are probably not merely coincidental. To highlight a few key points, recall that the eastern communities of Upper Mangdep speakers are substantially more integrated into the capitalist economy than those of the west, possessing greater material wealth in addition to undergoing gradual urbanisation. Recall also that this area, home to a historically important dzong not five kilometres or so from the village Tshangkha, was politically dominant for several centuries after the unification of Bhutan, and ultimately gave the contemporary Kingdom its hereditary monarchy.

To the west of Pêle La, a mountain pass utilised for travel from western to eastern Bhutan, and where Tibetic and East Bodish speakers are often said to be divided, the sociological context appears different. In the valley of Phobjikha, Upper Mangdep speaking communities live only a short walk within the valley from Dzongkha speaking communities. The communities share local religious institutions, presumably as well as institutions such as schools, and so on. Karma Tshering (pc.) has noted that Dzongkha speaking communities in areas outside the valley engage in regular and consistent trade with Phobjip communities.

It is interesting then that the two dialects seem to differ, not just in the scope of general linguistic variation, but in the types of contact phenomena found in them as a result of contact with Dzongkha. It appears, although from admittedly relatively incomplete data, that western dialects have integrated significantly more Tibetic forms into their lexicon than eastern dialects, across several semantic domains. Consider the data in Figure 28.
<table>
<thead>
<tr>
<th>Dzongkha</th>
<th>Upper Mangdep (west)</th>
<th>Upper Mangdep (east)</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘forest’ nātshe ཐན་ཚལ་</td>
<td>nātshe</td>
<td>lump</td>
</tr>
<tr>
<td>‘dog’ rochi རོ་ཁྱི་</td>
<td>rosh</td>
<td>chü</td>
</tr>
<tr>
<td>‘snake’ bü སྦུལ་</td>
<td>bül</td>
<td>po</td>
</tr>
<tr>
<td>‘maize’ Gäza གེ་ཟ་</td>
<td>Gäza</td>
<td>kyādump</td>
</tr>
<tr>
<td>‘wheat’ kā དཀར་</td>
<td>kar</td>
<td>zēng</td>
</tr>
<tr>
<td>‘scratch’ trē སྣྱར་</td>
<td>trī</td>
<td>zhar, brā</td>
</tr>
</tbody>
</table>

**Figure 28:** Differential etymology of basic lexemes across Upper Mangdep dialects.

It seems, perhaps impressionistically, that western dialect speakers have been more likely to borrow word forms from Dzongkha than eastern dialect speakers. Conversely, the western dialects appear to be more conservative in pattern replication. I noted in §4.4.1.4 that the egophoricity contrast marked on perfectives in Upper Mangdep is most consistently preserved in western dialects. In §4.4.2.1.5, it was noted that western dialects also maintain a purposive verbal marker where Upper Mangdep uses the marked stem; notably the Dzongkha purposive in fact seems to be historically derived from the <pa>-nominaliser, from which it derives its marked stem, in combination with the Tibetic locative <r> to form the suffix –ba ~ –ma or –wa གར་ ~ གཅ་ <par; bar>. In addition, I have found that the western dialects also preserve the East Bodish ablative enclitic =ni, where Upper Mangdep has =nda of unknown origin.

Although these preliminary observations are not an argument for causation, the correlation between the type of replication and the sociolinguistic context that motivates language contact phenomena is an interesting area for further research, both in the context of Bhutanese linguistics and in contact linguistics more broadly. It may be that we can draw more specific links between the types of relationships between communities in language contact, e.g. trade, intermarriage, institutional dominance, etc. and the types of contact that languages are likely to undergo as a result. One observation in the literature is that communities that have conservative linguistic norms are less likely to borrow linguistic matter, i.e. borrow word forms (cf. §2.3.2). I suspect, intuitively, that communities with conservative linguistic norms are more likely to be those that are wealthier and maintain strong, hierarchical political structures, a tendency which eastern Upper Mangdep
communities would likely fit. Although all speakers with whom I have worked placed great value on their language, it certainly seemed that speakers of the eastern dialect were more likely to self-correct when inserting Dzongkha words into their speech, or speak about grammar prescriptively. It may be that this is simply a function of English-medium education and therefore possibly a bias in the sample, however.

5.3 Upper Mangdep epistemic modality in contact

Perhaps of most comparative interest, this work provides insight into how categories of epistemic modality change in contact situations. Recall that I have given a background of the literature on this topic in §2.4 and defined the epistemic categories of Upper Mangdep in §4.1.1.1.

In §2.4, it was mentioned that evidential systems are likely to undergo simplification if the language is contact with a language that has no evidentials or fewer evidentials. Interestingly, Upper Mangdep has undergone evidential simplification in at least one construction in the absence of any influencing factor from Dzongkha or elsewhere. This is the reported speech particle, described in §4.3.3.1. As described, the particle can mark — in addition to hearsay evidentiality as in Kurtöp and Dzongkha, and reported third person speech as in Dzongkha — any reported speech, including first person speech. This reduces the function of the particle from an evidential to an evidential strategy, but, even then, it does not have the semantics typically expected of hearsay evidentials.

Secondly, we saw in §4.4.1.1 that the paradigm of finite declarative verbal suffixes in Upper Mangdep undergoes a functional shift to develop isomorphy with Dzongkha. This is true not just of tense and aspect features, but of evidential features as well. The completeness of this shift, whereby Upper Mangdep has gradually converged almost entirely to the evidential and epistemic functional paradigm of finite declarative verbal suffixes, seems to confirm Aikhenvald and Dixon’s (1998) claim that evidentials are especially prone to change in contact situations due to their high communicative salience.

Finally, the retention of the egophoric distinction in the perfectives in the west, and the simultaneous loss of this distinction in the east (cf. §4.4.1.1.4), is particularly fascinating from the perspective of social context. Recall that in both dialect groups, the perfective suffixes have converged to the Dzongkha verbal template, appearing in a limited
distribution in slot I and typically with the past tense suffixes. Note also that, as mentioned above and in §2.4, evidential systems undergo simplification when the model language lacks the functions of the same system. Indeed, the Dzongkha slot I perfectives lack any kind of epistemic function, and are distinguished primarily by transitivity. However, given that there are no notable differences between the two dialect groups in terms of community bilingualism, i.e. the linguistic situation is essentially the same, with people likely to speak both Dzongkha and Upper Mangdep, both using Dzongkha in institutional domains, etc., why is it that the perfective egophoricity distinction is being lost only in one dialect group?

I suspect that the answer may be sociological in nature. As discussed in §2.4, evidentiality tends to correlate with small-scale social organisation. I have noted a number of sociological differences between the two dialect groups thus far, including the degree of which the communities are integrated into the capitalist economy. The fact that eastern dialect communities such as Tshangkha are losing young people to cities and towns (urbanisation) suggests that the personal relationships of Tshangkhap speakers are broadening to include people from all over Bhutan and further afield. In this environment, coupled with the consequent increase in contact with English, it seems to follow from the claims presented in the literature that such a change to the language could be motivated by social organisation. Note also that a number of somewhat surprising loanwords from English have appeared in the Tshangkhap data, even among older speakers who spoke no English, such as ‘ball’, ‘drugs’, ‘mango’, ‘room’ and ‘bottle’. Undoubtedly, this is in part due to access to mass media, and in part due to the large number of villagers from Tshangkha and Tangsibji who could be found living in major towns and cities like Thimphu, who likely bring home English loanwords with them on holiday visits. By contrast, even with connections in Phobjikha, it was quite difficult to locate speakers of that dialect in Thimphu, with my main informant in Mol seemingly knowing just one villager who was living in Paro (western Bhutan).

In summary, the Upper Mangdep categories of epistemic modality demonstrate several probable contact-induced developments that appear to be largely consistent with the theoretical principles outlined in the existing literature. Undoubtedly, Upper Mangdep, as well as other languages of Bhutan, is likely to continue to be an interesting source of
information for understanding the typology of such changes in the domain of epistemic modality.

5.4 Conclusion

This thesis has, hopefully, provided a substantial contribution to the field of Tibeto-Burman linguistics in Bhutan, as well as offered interesting and thought-provoking data from an ongoing language contact situation. As it is, apart from Hyslop’s work on Kurtöp, this work is among the most extensive descriptive works on an East Bodish language to date. It is the first work of substantial length and descriptive depth on the Upper Mangdep language, ever more an important a fact as societies such as those in Bhutan are thrust into global socio-economic organisation. In addition, this is one of few works known to me that provides data and an albeit cursory analysis of epistemic modality in contact. Finally, it is hoped that the new data and argumentation presented in §3 brings us closer to an understanding of the East Bodish language subgroup in the context of Tibeto-Burman linguistics.

This thesis has demonstrated that Upper Mangdep is conclusively an East Bodish language, and that it has undergone numerous convergent changes as a result of contact with Dzongkha, including replication of grammaticalisation paths, structural replication, and functional reanalysis of verbal constructions. It has shown that grammatical similarities to Dzongkha are the result of ongoing, asymmetric societal bilingualism among other factors. Finally, it has provided the first description of the grammar of predication in Upper Mangdep.
## Appendix A — Glossing abbreviations

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Appendix B — Other notations

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### Morphophonemic alternations

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<td></td>
<td>k / C[^voice] /</td>
<td></td>
</tr>
</tbody>
</table>
Appendix C — Modified Wylie transliteration for Tibetan script

<table>
<thead>
<tr>
<th>ཆ</th>
<th>&lt;ka&gt;</th>
<th>ཇ</th>
<th>&lt;kha&gt;</th>
<th>ཐ</th>
<th>&lt;ga&gt;</th>
<th>ད</th>
<th>&lt;ŋa&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>ཇ</td>
<td>&lt;ca&gt;</td>
<td>ཇ</td>
<td>&lt;cha&gt;</td>
<td>ཇ</td>
<td>&lt;ja&gt;</td>
<td>ཇ</td>
<td>&lt;ŋa&gt;</td>
</tr>
<tr>
<td>ཉ</td>
<td>&lt;ta&gt;</td>
<td>ཉ</td>
<td>&lt;tha&gt;</td>
<td>ཉ</td>
<td>&lt;da&gt;</td>
<td>ཉ</td>
<td>&lt;na&gt;</td>
</tr>
<tr>
<td>ཊ</td>
<td>&lt;pa&gt;</td>
<td>ཊ</td>
<td>&lt;pha&gt;</td>
<td>ཊ</td>
<td>&lt;ba&gt;</td>
<td>ཊ</td>
<td>&lt;ma&gt;</td>
</tr>
<tr>
<td>ཌྷ</td>
<td>&lt;tsa&gt;</td>
<td>ཌྷ</td>
<td>&lt;tsha&gt;</td>
<td>ཌྷ</td>
<td>&lt;dza&gt;</td>
<td>ཌྷ</td>
<td>&lt;wa&gt;</td>
</tr>
<tr>
<td>ཎ</td>
<td>&lt;zha&gt;</td>
<td>ཎ</td>
<td>&lt;za&gt;</td>
<td>ཎ</td>
<td>&lt;ha&gt;</td>
<td>ཎ</td>
<td>&lt;ya&gt;</td>
</tr>
<tr>
<td>ཏ</td>
<td>&lt;ra&gt;</td>
<td>ཏ</td>
<td>&lt;la&gt;</td>
<td>ཏ</td>
<td>&lt;sha&gt;</td>
<td>ཏ</td>
<td>&lt;sa&gt;</td>
</tr>
<tr>
<td>ཐ</td>
<td>&lt;ha&gt;</td>
<td>ཐ</td>
<td>&lt;a&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ཊ</td>
<td>&lt;i&gt;</td>
<td>ཊ</td>
<td>&lt;u&gt;</td>
<td>ཊ</td>
<td>&lt;e&gt;</td>
<td>ཊ</td>
<td>&lt;o&gt;</td>
</tr>
<tr>
<td>ཌྷ</td>
<td>&lt;gya&gt;</td>
<td>ཌྷ</td>
<td>&lt;g-ya&gt;</td>
<td>ཌྷ</td>
<td>&lt;gra&gt;</td>
<td>ཌྷ</td>
<td>&lt;gla&gt;</td>
</tr>
<tr>
<td>ཐ</td>
<td>&lt;gwa&gt;</td>
<td>ཐ</td>
<td>&lt;grwa&gt;</td>
<td>ཐ</td>
<td>&lt;sgra&gt;</td>
<td>ཐ</td>
<td>&lt;rdzong.kha&gt;</td>
</tr>
</tbody>
</table>
Appendix D — Phonology

1. Consonants

<table>
<thead>
<tr>
<th>Nasal</th>
<th>Stop</th>
<th>Fricative</th>
<th>Affricate</th>
<th>Approximant</th>
<th>Lateral</th>
<th>Rhotic</th>
</tr>
</thead>
<tbody>
<tr>
<td>m</td>
<td>p, pʰ</td>
<td>s</td>
<td>ðc</td>
<td>w</td>
<td>l</td>
<td>r</td>
</tr>
<tr>
<td>ɲ</td>
<td>t, tʰ</td>
<td>z̃</td>
<td>bzd</td>
<td>j</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ɲ)</td>
<td>d, dʰ</td>
<td>ʃ, ʃʰ</td>
<td>ʂ, ʂʰ</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>η</td>
<td>t̪, t̪ʰ</td>
<td>d̃, d̃ʰ</td>
<td>ɬ, ɬʰ</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 1: The phonemic consonants of Upper Mangdep, transcribed with their prototypical realisations. Consonants on the left side of a place of articulation are voiceless; those on the right are voiced (technically breathy). The unaspirated/aspirated contrast is divided by a comma.

<table>
<thead>
<tr>
<th>Nasals</th>
<th>Distribution</th>
<th>Tone</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>/m/</td>
<td>Onset and coda.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>/ɲ/</td>
<td>Onset and coda.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>/ŋ/</td>
<td>Onset and coda.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>/ɲ/</td>
<td>Onset only.</td>
<td>Yes. Possibly /ŋj/. Variant of /ŋ/ → /#_i, e/</td>
<td></td>
</tr>
</tbody>
</table>

Initial analysis suggested, as in Nishida (2011), that Upper Mangdep had a series of voiceless nasals, however, these are simply devoiced free variants, appearing in the environment of other voiceless consonants, e.g. eastern dialect /pyhmy/ ‘knee’ is realised as ['pymə] — compare more conservative Khengkha /pusmuŋ/.

/ɲ/ | /m/ | /ŋ/ | /ŋ/ | /ŋ/ | /ŋ/ | /ŋ/ | /ŋ/ |
<p>| /ɲeː/ ‘1pl’ | /meː/ ‘house’ | /ɲa/ ‘1sg’ | /ɲa/ ‘fish’ | /ɲyl/ ‘ear’ | /ɲyl/ ‘rat’ |</p>
<table>
<thead>
<tr>
<th>Stops</th>
<th>Distribution</th>
<th>Tone</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>/p/</td>
<td>Onset and coda.</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>/b̩/</td>
<td>Onset only.</td>
<td>No.</td>
<td>Intervocalic variant /β/.</td>
</tr>
<tr>
<td>/ɡ̩/</td>
<td>Onset only.</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>/dʒ̩/</td>
<td>Onset only.</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>/kʰ/</td>
<td>Onset and coda.</td>
<td>No.</td>
<td>Variant /x ~ χ/ in /V_V/, /_/#/ .</td>
</tr>
<tr>
<td>/ɡ̩/</td>
<td>Onset only.</td>
<td>No.</td>
<td>Intervocalic variant /γ/.</td>
</tr>
</tbody>
</table>

Upper Mangdep is unusual in having aspirated stops in syllable-final position; but they are in free variation as the second consonant in a coda cluster; thus /nékʰ/ ‘chest’ can be realized as [nék] or [néx].

/p/ /pʰ/ /b̩/ /pre:/ ‘express’ /pʰre:/ ‘drop; meet’ /b̩re:/ ‘keep’

/t/ /tʰ/ /ɡ̩/ /takp/ ‘nape’ /tʰakp/ ‘rope’ /ɡ̩ak/ ‘fall.NF’

/tʃ/ /tʃʰ/ /dʒ̩/ /tʃo/ ‘be.sad’ /tʃʰu/ ‘go.away’ /dʒ̩u/ ‘milk’

/k/ /kʰ/ /ɡ̩/ /ka/ ‘snow’ /kʰa/ ‘mouth’ /ɡ̩a/ ‘smile; laugh’
<table>
<thead>
<tr>
<th>Fricatives</th>
<th>Distribution</th>
<th>Tone</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>/s/</td>
<td>Onset and coda.</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>/zʱ/</td>
<td>Onset only.</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>/ʃ/</td>
<td>Onset and coda.</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>/ʒʱ/</td>
<td>Onset only.</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>/h/</td>
<td>Onset and coda.</td>
<td>?</td>
<td>Coda /h/ often a variant of /s/.</td>
</tr>
</tbody>
</table>

/s/  /zʱ/  /ʃ/  /ʒʱ/  /h/
/sa/ ‘earth’  /zʱa/ ‘seed’  /ʃa/ ‘meat’  /ʒʱa/ ‘rainbow’  /ha/ ‘understanding’

<table>
<thead>
<tr>
<th>Affricates</th>
<th>Distribution</th>
<th>Tone</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>/pʃ/</td>
<td>Onset only.</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>/bʒʱ/</td>
<td>Onset only.</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>/ts/</td>
<td>Onset only.</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>/tʃʱ/</td>
<td>Onset only.</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>/dzʰ/</td>
<td>Onset only.</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>/tɬ/</td>
<td>Onset only.</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>/tɹʱ/</td>
<td>Onset only.</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>/dɹʱ/</td>
<td>Onset only.</td>
<td>No.</td>
<td></td>
</tr>
</tbody>
</table>

Upper Mangdep, like other Bhutanese languages, has labio-palatal affricates /pʃ/ and /bʒʱ/ but they do not seem to contrast in aspiration. The post-alveolar affricates /tɬ, tɬʰ, dɹʱ/ developed like retroflexes in other languages of the region, from [stop]+/r/ onsets, but like other East Bodish languages retained labial stop + /r/ onset clusters. Unlike in Chali, but like in other Bhutanese languages, the phonemes are technically affricates and are not sub-apical retroflexes. The [ɬ] is consistently raised, sometimes described as a “buzzing” approximant. The voicing of [ɬ] assimilates to the voicing of the stop portion of the affricate; [ɬ] may also be realised as an off-glide. These affricates are distributed only in onset position. /zʱ/ is often in free variation with /dɹʱ/, but speakers find at least one contrast, /zʱaw/ ‘carpenter’, vs. /dɹʱaw/ ‘lunch’.
<table>
<thead>
<tr>
<th>Approxim.</th>
<th>Distribution</th>
<th>Tone</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>/w/</td>
<td>Onset and coda.</td>
<td>Yes.</td>
<td>[u] → /i, e/</td>
</tr>
<tr>
<td>/j/</td>
<td>Onset and coda.</td>
<td>Yes.</td>
<td>[u] → /y, ø/</td>
</tr>
<tr>
<td>/wa/ ‘ROG.TAG’</td>
<td>/ja / ‘ROG.POL’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Laterals</th>
<th>Distribution</th>
<th>Tone</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>/ɿ/</td>
<td>Onset and coda.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>/ɿ/</td>
<td>Onset only.</td>
<td>No.</td>
<td>Appears only in loanwords. High tone only.</td>
</tr>
<tr>
<td>/ɿ/</td>
<td>/ɿ/</td>
<td></td>
<td></td>
</tr>
<tr>
<td>/lá/ ‘month’</td>
<td>/ła/ ‘god’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rhotics</td>
<td>Distribution</td>
<td>Tone</td>
<td>Notes</td>
</tr>
<tr>
<td>---------</td>
<td>--------------</td>
<td>------</td>
<td>-------</td>
</tr>
<tr>
<td>/ᵣ/</td>
<td>Onset and coda.</td>
<td>Yes.</td>
<td>Variants [ɹ ~ ŋ].</td>
</tr>
<tr>
<td>/r̥/</td>
<td>Onset only.</td>
<td>No.</td>
<td>Rare. High tone only.</td>
</tr>
</tbody>
</table>

/r̥/ /r̥/, /ɹˀ/ ‘rouse’ /ɹum/ ‘shatter’

1.1 Voice-onset timing and tone
Voiced consonants are quite marginally distinct from their voiceless counterparts, probably an indication of incipient tonal contrast replacing the voicing contrast. When articulated carefully, voiced obstruents are usually realised as breathy. Tone is contrastive following voiced sonorants. High tone is usually realised as high falling [˦˧⁴] and low tone as low falling [˨˩²¹].

2. Vowels

![Vowel Diagram](image)

Figure 2: The oral (left) and nasal (right) vowels of Upper Mangdep.

In addition to the nasalisation contrast, vowels contrast for length. The vowels /y, ø, ɛ/ are usually long through compensatory lengthening arising through the deletion of the phonological environment which conditioned them (alveolar codas); the vowels are short in closed syllables which occur through other phonological changes, however. The existence
of these vowels in Upper Mangdep is mostly unique within East Bodish. Nasalised vowels are always long. Long oral vowels are often heavily laryngealised. As in other East Bodish languages, the vowel space is tight, with vowels except /a/ only minimally distinct by height. The nasal vowel /ɒ̃/ is the nasalised equivalent of /a/, although it is realised as /ãː/ in some western dialects.

It is common for vowel qualities to assimilate across syllable boundaries; e.g. /ˈpyhmy/, where historically only the first vowel should have rounded in the environment of an alveolar coda (cf. Khengkha /pusmuŋ/).

<table>
<thead>
<tr>
<th>Vowel</th>
<th>Pronunciation</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>/à/</td>
<td>/ˈà/</td>
<td>/là/ ‘mountain.pass’</td>
</tr>
<tr>
<td>/á/</td>
<td>/ˈá/</td>
<td>/lá/ ‘month’</td>
</tr>
<tr>
<td>/əː/</td>
<td>/ˈəː/</td>
<td>/laː/ ‘hand’</td>
</tr>
<tr>
<td>/yː/</td>
<td>/ˈyː/</td>
<td>/yː/ ‘blow’</td>
</tr>
<tr>
<td>/eː/</td>
<td>/ˈeː/</td>
<td>/eː/ ‘hand’</td>
</tr>
<tr>
<td>/ɔː/</td>
<td>/ˈɔː/</td>
<td>/ɔː/ ‘climb’</td>
</tr>
<tr>
<td>/øː/</td>
<td>/ˈøː/</td>
<td>/øː/ ‘wash’</td>
</tr>
<tr>
<td>/bʱyː/</td>
<td>/ˈbʱyː/</td>
<td>/bʱøː/ ‘3pl’</td>
</tr>
<tr>
<td>/bʱeː/</td>
<td>/ˈbʱeː/</td>
<td>/bʱeː/ ‘NEG.COP.EQ’</td>
</tr>
</tbody>
</table>

3. Phonotactics

<table>
<thead>
<tr>
<th>Onset clusters</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>/pr/</td>
<td>Dangchup dialect [pɹ ~ pʰ ~ pʰᵻ]</td>
</tr>
<tr>
<td>/pʰr/</td>
<td>Usually [pʰ]. Dangchup dialect [pʰᵻ]</td>
</tr>
<tr>
<td>/bʰr/</td>
<td>Dangchup dialect [bʰ ~ v]</td>
</tr>
<tr>
<td>/mr/</td>
<td>Dangchup dialect [mᵻ]</td>
</tr>
<tr>
<td>/kj/</td>
<td>Palatalised to /tʃ/ for some speakers; /kʰj/ fully palatalised.</td>
</tr>
<tr>
<td>/gʃ/</td>
<td>Palatalised to /dʒʰ/ for some speakers.</td>
</tr>
</tbody>
</table>
The East Bodish clusters $/C_{labial} + r/$ are retained in Upper Mangdep; they are merged with East Bodish $/C_{labial} + l/$ clusters. The palatalisation of $/C_{velar} + j/$ clusters is found widely across dialects but varies significantly among different speakers and even randomly in the speech of the same speakers, possibly in part due to generational change.

The full range of coda clusters has not been determined. These clusters arose from syncope of historical rimes. Syllabic fusion of the type $/C_1 V C_2 C_3 V/ \rightarrow /C_1 V C_3/$ is a sound change found in Dzongkha; this is also found in some western dialects of Upper Mangdep. However, most dialects only syncopate the final vowel, thus: $/C_1 V C_2 C_3 V/ \rightarrow /C_1 V C_2 C_3/$. This commonly affects words historically formed with the nominaliser *-pa*, thus Dzongkha /máp/ རྫོགས་ is cognate with Upper Mangdep /mákp/. In the western Dangchup dialect, this coda cluster becomes /kʷ/. 
Appendix E — Orthography

This orthography is a modified version of that used for Kurtöp by Hyslop (2011), and for Dzongkha used by van Driem and Tshering (1998; in press).

The following is the notation for the consonant phonemes of Upper Mangdep.

<table>
<thead>
<tr>
<th>Consonants</th>
<th>Labial</th>
<th>Denti-alveolar</th>
<th>Post-alveolar</th>
<th>Palatal</th>
<th>Velar</th>
<th>Glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nasal</td>
<td>m</td>
<td>n</td>
<td></td>
<td>ny</td>
<td>ng</td>
<td></td>
</tr>
<tr>
<td>Stop</td>
<td>p, ph</td>
<td>b</td>
<td>t, th</td>
<td>d</td>
<td>c, ch</td>
<td>j</td>
</tr>
<tr>
<td>Fricative</td>
<td>s</td>
<td>z</td>
<td>sh</td>
<td>zh</td>
<td>h</td>
<td></td>
</tr>
<tr>
<td>Affricate</td>
<td>pc</td>
<td>bj</td>
<td>ts, tsh</td>
<td>dz</td>
<td>tr, thr</td>
<td>dr</td>
</tr>
<tr>
<td>Approximant</td>
<td>w</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>y</td>
</tr>
<tr>
<td>Lateral</td>
<td></td>
<td></td>
<td></td>
<td>l</td>
<td>lh</td>
<td></td>
</tr>
<tr>
<td>Rhotic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>hr</td>
<td>r</td>
</tr>
</tbody>
</table>

Note that to mark contrastive phonation on voiced consonants in Dzongkha, van Driem uses the apostrophe, e.g., /b/ <b>, /bʱ/ <b’>. I transcribe the unique Dangchup dialect clusters /pf, φv, βv, mv/ (see above) with <pf>, <phf>, <bv>, <mv> respectively.

<table>
<thead>
<tr>
<th>Vowels</th>
<th>Front</th>
<th>Back</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Oral</td>
<td>Nasal</td>
</tr>
<tr>
<td>High</td>
<td>i</td>
<td></td>
</tr>
<tr>
<td>High long</td>
<td>i</td>
<td></td>
</tr>
<tr>
<td>Mid-high</td>
<td>e</td>
<td></td>
</tr>
<tr>
<td>Mid-high long</td>
<td>ā</td>
<td></td>
</tr>
<tr>
<td>Mid-low</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td></td>
<td>a</td>
</tr>
<tr>
<td>Long</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Note that I have added a convention for transcribing nasalised vowels in Upper Mangdep, which van Driem has left unmarked in Dzongkha, which is that a vowel before <ng> is marked as long for a nasalised vowel, and short to retain the usual values of the rime. This is such that <ang> should be read /aŋ/ but <āng> should be read /āː/; <eng> should be read /eŋ/, but <ēng> should be read /ēː/, and so on. This applies also in words where syllables have fused, e.g. /dōːl/ <dāngl> and so on.

Note also that while van Driem and Hyslop use the circumflex to mark length, i.e. /aː/ <ā>, I have used the macron, i.e. /aː/ <ā>. This is in part for aesthetic reasons but in part also as the marking of length with the macron applies more universally in Roman orthographies across the discipline, particularly in Indo-Aryan linguistics.

As in the Kurtöp and Dzongkha orthographies, contrastive high tone is marked with an apostrophe before the syllable, e.g. /lýmp/ ‘bamboo flute’ <ˈlūmp>. 
# Appendix F — Comparative wordlist for §3.2.3

<table>
<thead>
<tr>
<th>Word</th>
<th>Upper Mangdep</th>
<th>East Bodish</th>
<th>Tibetic</th>
</tr>
</thead>
<tbody>
<tr>
<td>'one'</td>
<td>thek</td>
<td>PEB *thek</td>
<td></td>
</tr>
<tr>
<td>'two'</td>
<td>zön</td>
<td>Ku. zon</td>
<td></td>
</tr>
<tr>
<td>'four'</td>
<td>bre</td>
<td>PEB *ble</td>
<td></td>
</tr>
<tr>
<td>'five'</td>
<td>'lang</td>
<td>PEB *laya</td>
<td></td>
</tr>
<tr>
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Appendix G — Consultant metadata

This Appendix contains the biographical information for any consultant from whom I collected Upper Mangdep data or who assisted with transcriptions. Ages are recorded at the time the data was recorded as of 2015 or 2016. Locations are shown on the map in Figure 1 (§1.1). Education refers to the highest level of formal educational qualification attained by the speaker; this information was not recorded for all speakers.

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The story of the hen and the monkey, and how monkeys have come to have red buttocks.

(1) dop-nangä-nangä adze
    long,long.ago DM.PRX
    ‘Once upon a time,’

(2) sach=the=ge nang pra=the=ni khaw=de ni-phal ne
    village=ONE=GEN inside monkey=ONE=COM hen=ONE sit-NMZ.PST COP.EQ.MIR
    ‘in a village there lived a hen and a monkey.’

(3) dzin bö=zömp pincha cá-ro khemla cá-ro
    then 3pl=TWO family signify-CNC friend signify-CNC
    ‘And the two of them, whether among family or among friends,’

(4) ‘namesame cham-tokto khe-s ni-phal ne
    very be.harmonious-NMZ.ATTR make-NF.PST sit-NMZ.PST COP.EQ.MIR
    ‘lived with much harmony.’
‘And as the two of them were living happily in that one house,’

‘the monkey worked outside,’

‘and the hen worked in the house, cooked,’

‘they would be working in that way.’

‘And then one day, the monkey went to the worksite,’

‘and the chicken made a meal and came,’

‘fried eggs and brought them (to him).’
The monkey's lunch was always, without fail, done as described, so working outside.

The chicken did the house work, and made food and brought it to the monkey in the daytime, and was (always) coming to bring it.

And then one day, the monkey said, to the hen, well that all the time he works outside and gets very tired,
(19) bu ma-tshu da dasu 'ye les pcilok bu-shu=lo
do NEG.PFV-be.able well.now today 2sg work outside do-HRT=PER.HON
‘and couldn’t do it, “well now today how about you work outside?”,’

(20) khi mä=t ni-s dzin zhego khe-s
3sg house=LOC sit-NF.PST then meal make-NF.PST
‘ye=ta rö ra cā-s mok-pal ne
2sg=DAT bring come signify-NF.PST say-NMZ.PST COP.EQ.MIR
‘and he staying at home, “I will make the food and bring it to you,” he said.’

(21) dzin bö=zömp khathün bu-s khaw pcilok les bu yi
then 3pl=TWO decision do-NF.PST hen outside work do go
‘So the two of them agreed and the hen went outside to work,’

(22) dzin pra mä=t ni bu les bu-phal ne
then monkey house=LOC sit do work do-NMZ.PST COP.EQ.MIR
‘and the monkey stayed at home and worked.’

(23) wōngshe cā-s ni-khe bā=t=ra dzin
that.way signify-NF.PST sit-NMZ.GEN middle=LOC=EMPH then
‘In the meantime of staying like that, then,’

(24) nēch=e dzaw=e nēch=e to dūtshō
daytime=GEN lunch=GEN daytime=GEN cooked.rice time

ren-bal ne
time.come-NMZ.PST COP.EQ.MIR
‘the time of the afternoon lunch, the afternoon meal, was coming.’
(25) *dzin* dûtshô ren-s *dzin* dûtshô ren-bal ne
then time time.come-NF.PST then time time.come-NMZ.PST COP.EQ.MIR
‘Then the time coming, the time came...’

(26) *pra=yi dzin khaw=ata zhego khe-bal ne*
monkey=ERG then hen=DAT meal make-NMZ.PST COP.EQ.MIR
‘So the monkey was making a meal for the hen.’

(27) to kher
cooked.rice make
‘Making the food, ...’

(28) to adze pura khe-s zä bu-s
cooked.rice DM.PRX all make-NF.PST finish do-NF.PST
‘and having finished making the rice and all that,’

(29) rū khe-tse thra-den *dzin*
curry make-NMZ.NPST arrive-CTM then

rū shä khe-tse niga ma-bren
curry what make-NMZ.NPST AFF.ROG.POL NEG.PFV-know
‘(but) when it came time to make the curry, he didn’t know what curry to make.’

(30) *dzinin khaw=yi adze te ngu-h=ra rö bren-bal ne*
and.then hen=ERG DM.PRX egg fry-NF.PST=EMPH bring know-NMZ.PST COP.EQ.MIR
‘And then he knew that the hen was always frying and dropping off eggs.’
(31) dzinin wöpte thra-den
   and.then time.period arrive-CTM

   khi wönŋ cä-s noksa pre-h
   3sg like.this signify-NF.PST thought express-NF.PST
   ‘And as the time came he was thinking about this, ...’

(32) pra wōngshe cä-s noksa pre-s ni-khe bā=t=ra
   monkey that.way signify-NF.PST thought express-NF.PST sit-NMZ.GEN middle=LOC=EMPH
   ‘while the monkey was staying thinking that way,’

(33) khaw thrak ra-phal ne
   hen arrive.NF come-NMZ.PST COP.EQ.MIR
   ‘the hen arrived.’

(34) khaw tsip za-s dzinin
   hen [get.angry]-NF.PST and.then
   ‘The hen was angry, and,’

(35) nēch=e dzaw=e dūtshō bjik lä-ro=ya dzin
   daytime=GEN lunch=GEN time miss.NF leave-CNC=also then
   ‘even though the time for lunch had passed,’

(36) pra=yi khaw=ata zhego ma-rök ne
   monkey=ERG hen=DAT meal NEG.PFV-bring.NF COP.EQ.MIR
   ‘the monkey wasn’t bringing the chicken her meal.’

(37) dzin dzin wōŋze bu-s
   then then DM.PRX do-NF.PST
   ‘And so that’s why,’

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when the hen came home very angry,'

'she spoke to the monkey.'

"Where is it, you didn’t bring me my meal!?” she said, and then,'

'I was bringing the meal but then I didn’t know how to make the curry,'

'well, when I was thinking of making the egg curry,'

'how was I supposed to lay eggs,'

'I didn’t know how,” he said.’

'So in addition to the hen already sitting there angry,'
(46) dzin khaw=yi mok-pal ne thu=nda len
then hen=ERG say-NMZ.PST COP.EQ.MIR side=ABL response
‘the hen then spoke, a response from her point of view,’

(47) dat dzin len bile nangä=ra
well.now then response NEG.COP.EQ.SUB before=EMPH
‘-- well -- before there was a response,’

(48) pra=yi dri-phal ne
monkey=ERG ask-NMZ.PST COP.EQ.MIR
‘the monkey asked,’

(49) da 'ethimejera nga=ta te ngu
well.now all.the.time 1sg=DAT egg fry
‘see, all the time you fry eggs for me,’

(50) te tsok-s=ra rök ne
egg boil-NF.PST=EMPH bring.NF COP.EQ.MIR
‘boil eggs and come and bring them (to me).’

(51) dzin 'ye te ashe cä-s khek=lo
then 2sg egg how signify-NF.PST make.NF=ROG.COP
‘But how do you make the eggs?’

(52) te ashe cä-s tsū=lo cä-s dri-phal ne
egg how signify-NF.PST lay.egg.NF=ROG.COP signify-NF.PST ask-NMZ.PST COP.EQ.MIR
‘how do you lay eggs?” he asked.’

(53) dzinin khaw tsip za-phal=e teng dzin
and.then hen [get.angry]-NMZ.PST=GEN top then
‘And so on top of the hen’s anger,’
(54) khaw=yi nāgap ashe cā-s pcong-bal ne
hen=ERG method how signify-NF.PST take.out-NMZ.PST COP.EQ.MIR
'the hen showed (him) how to do it.'

(55) dzin da 'ye te tsū te khek gö-sahan nangā=ra
then well.now 2sg egg lay.egg.NF egg make.NF want-CND before=EMPH
“Well now if you want to lay an egg, to make eggs, firstly,'”

(56) thap thab=e teng dzin kaladzam=nang
stove stove=GEN top then pot=inside
‘on top of the stove, and inside a pot,'

(57) makh lō bu-s makh tsā chū=lo cā-bal ne
oil pour do-NF.PST oil [heat.up]=ROG.COP signify-NMZ.PST COP.EQ.MIR
‘pour some oil, then heat up the oil,” she said.’

(58) dzin makh tsā chū bu-s dzin makh tsā chū-sen
then oil [heat.up] do-NF.PST then oil [heat.up]-SEQ
‘And he heated up the oil, “and after heating up the oil,’

(59) dzin yō dang=e teng thrāng bu-sen
then DM.UP drying.rack=GEN top climb do-SEQ
‘then you climb up on top of the drying rack and then,’

(60) 'ye=yi yōtha dang=e teng=tha
2sg=ERG DM.UP.ABL drying.rack=GEN top=ABL
‘you, from up on top of the drying rack,’

(61) mō makh tsā chū-bal=e teng
DM.DN oil [heat.up]-NMZ.PST=GEN top
‘downward onto the pre-heated oil,’
'(And then) the monkey really thinking it was certain in his heart,‘

'(the monkey climbed up on top of the drying rack,‘

'and defecated. And as he defecated,'
(70) *dzin* wöngze bu-ze=dzem dasu-nāmbā
then DM.PRX do-NMZ.NPST=DEF today-tomorrow
‘And so the reason it is like this, nowadays,’

(71) *pra* 'abu zhint nak-mi=dze jumtshen
monkey buttocks red COP.EX-NMZ.CORE=DEF reason
‘the reason why monkeys have red buttocks, the reason,’

(72) wöngze ne tön-s ge cä-s ne dasu-nāmbā
DM.PRX COP.EQ.MIR show-NF.PST COP.EQ signify-NF.PST COP.EQ.MIR today-tomorrow
‘it was explained to be this, nowadays.’

(73) las kadrinche
okay.HON thank.you
‘Okay, thank you.’
Appendix I — List of texts

This Appendix contains the list of texts cited in examples other than elicited data, demonstrating the context of the utterances transcribed. The first part of the abbreviation refers to the speaker(s) involved in the recording.

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DDRD_C1</td>
<td>Discussion about the organisation of one speaker's house construction.</td>
</tr>
<tr>
<td>DDRD_PT1</td>
<td>The first stage of the social cognition picture stimulus task, in which the speakers discuss each picture, ordered randomly, in turn.</td>
</tr>
<tr>
<td>DDRD_PT2</td>
<td>The second stage of the social cognition picture stimulus task, in which the speakers discuss the arrangement of the pictures into a story.</td>
</tr>
<tr>
<td>KT_HM</td>
<td>A narrative about how monkeys have come to have red buttocks, presented in full in Appendix H above.</td>
</tr>
<tr>
<td>KT_LS</td>
<td>The speaker narrates (in real time) and answers questions about the Khmer-language Tropfest South East Asia 2014 finalist short film Laek.</td>
</tr>
<tr>
<td>KT_SS</td>
<td>The speaker narrates (in real time) and answers questions about the English-language Tropfest Australia 2010 finalist short film Smoking Will Kill You.</td>
</tr>
<tr>
<td>Pe_CS</td>
<td>The speaker explains a conversation recorded between himself, his sister-in-law, and her children.</td>
</tr>
<tr>
<td>Pe_SS</td>
<td>The speaker gives a short monologue about the events of his day.</td>
</tr>
<tr>
<td>PW_VM</td>
<td>A voice message recorded by the speaker in which he apologises to a friend for accidentally revealing a secret to someone else.</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
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<tr>
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<td>-----------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>TPDD_LS</td>
<td>The speaker narrates (in real time) the Khmer-language Tropfest South East Asia 2014 finalist short film <em>Laek</em> to another speaker.</td>
</tr>
<tr>
<td>TS_ES</td>
<td>The speaker describes some of the events represented in the short stimulus video clips, designed by the Language and Cognition Department at the Max Planck Institute for Psycholinguistics to elicit constructions representing different event structures, known as “Staged Events”.</td>
</tr>
<tr>
<td>VT_S1</td>
<td>The spontaneous utterances of a variety of Tshangkha residents.</td>
</tr>
</tbody>
</table>
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