

A GRAMMAR OF KURTÖP

by

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DISSERTATION ABSTRACT

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Kurtöp is a Tibeto-Burman language spoken by approximately 15,000 people in Northeastern Bhutan. This dissertation is the first descriptive grammar of the language, based on extensive fieldwork and community-driven language documentation in Bhutan. When possible, analyses are presented in typological and historical/comparative perspectives and illustrated with ample data, drawn mainly from texts but also elicitation as need be.

Within Tibeto-Burman, Kurtöp has been placed within the East Bodish sub-branch. Data presented in this study support this placement and confirm previous observations that the East Bodish languages are close relatives, but not direct descendants of Classical Tibetan. The link between the current East Bodish languages and Bhutanese prehistory remains unclear but the Kurtöp grammar is a first step at understanding the historical relations.

The most remarkable aspect of Kurtöp phonology is the tonal system, which is contrastive following the sonorants, but incipient following the obstruents, except the

palatal fricative, for which tone has completely replaced a previous contrast in voicing.

Tone is present only on the first syllable of stems, where vowels are also slightly longer.

Kurtöp is agglutinating and polysynthetic. Words generally consist of two or three syllables, but may be as long as five or six, depending mainly on suffixing morphology.

Like most languages of South Asia, Kurtöp exhibits verb-final syntax and the typological correlations that follow, including postposition (or relator noun constructions), auxiliaries after the verb, and sentence-final particles.

The case marking system is ‘pragmatic’ ergative, where an ergative marker is required in some transitive contexts, but not in others. In other contexts, including for some intransitive verbs, the ergative signals a variety of pragmatic or semantic factors. This ergative system, though typologically unusual, is characteristic of many Tibeto-Burman languages, including neighboring Dzongkha and Tshangla.

Nominalization and clause-chaining are two essential components of Kurtöp syntax, constituting a majority of clauses and a diachronic source for much of the main clause grammar. The evidential/mirative system in Kurtöp is also of typological interest, encoding a wide range of values pertaining to speaker expectation as well as mirativity and source of knowledge.

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- Hyslop, Gwendolyn. to appear. Mirativity in Kurtöp. *Journal of South Asian Linguistics*.
- Hyslop, Gwendolyn. in press. On Kurtöp morphophonemics. *Proceedings from HLS 13*. Shimla: Indian Association for Advanced Studies.
- Hyslop, Gwendolyn, Stephen Morey & Mark Post (Eds.). to appear. *North East Indian Linguistics. Volume 4*. New Delhi: Cambridge University Press.
- Hyslop, Gwendolyn, Stephen Morey & Mark Post (Eds.). 2011. *North East Indian Linguistics. Volume 3*. New Delhi: Cambridge University Press.
- Hyslop, Gwendolyn. 2010. Kurtöp case: the pragmatic ergative and beyond. *Linguistics of the Tibeto-Burman Area* 33(1): 1-40.
- Hyslop, Gwendolyn. 2010. Tone and Tonogenesis in Bhutan: degrees of tonality? *University of British Columbia Working Papers in Linguistics*, 114-124. Vancouver: University of British Columbia.
- Hyslop, Gwendolyn. 2010. Sonorants, fricatives, and a tonogenetic typology. *eLanguage*. (extended abstract)
- Hyslop, Gwendolyn and Karma Tshering. 2010. Preliminary notes on Dakpa (Tawang Monpa). In eds. S. Morey and M. Post, *North East Indian linguistics* 2, 3-21. New Delhi: Cambridge University Press.
- Hyslop, Gwendolyn and Karma Tshering. 2009. The Tasha-Sili language of Bhutan: a case study in language shift and Bhutanese pre-history. In (eds.) Hakim Elnazarov and Nicholas Ostler *Proceedings of the Foundation for Endangered Languages (FEL XIII): Endangered languages and history*. 101-108.
- Hyslop, Gwendolyn. 2009. Kurtöp tone: a tonogenetic case study. *Lingua* 112: 827-845.
- Hyslop, Gwendolyn. 2009. Review of *A grammar of Jero* by Jean-Robert Oppenort. *Linguistics of the Tibeto-Burman Area*. 32(1): 145-152.

- Hyslop, Gwendolyn. 2008. Kurtoep and the Classification of the Languages of Bhutan. *Proceedings from CLS 44*, 141-152. Chicago: University of Chicago Press.
- Hyslop, Gwendolyn. 2008. Kurtoep phonology in the context of Northeast India. In eds. S. Morey and M. Post, *North East Indian Linguistics* 1, 3-25. Delhi: Cambridge University Press.
- Hyslop, Gwendolyn. 2008. Newar Classifiers: a summary of the literature. *Newar Vijaanan (Journal of Newar Studies)* 6, 28-41.
- Hyslop, Gwendolyn. 2008. Review of Plaisier *A grammar of Lepcha*. *Linguistics of the Tibeto-Burman Area* 31(2): 165-171.
- Lowes, Gwendolyn. 2007. Notice for *Themes in Himalayan Languages and Linguistics* ed. by Tej Ratna Kansakar and Mark Turin. *Himalayan Linguistics Book Notices* 1, 1-2.
- Lowes, Gwendolyn. 2007. Report on the 2nd Annual Meeting of the North East Indian Linguistic Society, Guwahati, Assam, India, 5-9 February 2007. *Linguistics of the Tibeto-Burman Area* 30(1): 219-221.
- Lowes, Gwendolyn 2007. Notice for *Himalayan Languages* ed. by Anju Saxena. *Himalayan Linguistics Book Notices* 3, 1-3.
- Lowes, Gwendolyn and Ausencia Lopez Cruz. 2007. Potential Aspect and the Role of Tone in Two Variants of Zapotec. In eds. Eloina Miyares Bermudez and Leonel Ruiz Miyares *Linguistics in the Twenty-First Century*, 135-144. Cambridge: Cambridge Scholars Press. [expanded version of Lowes & Lopez Cruz 2005]
- Lowes, Gwendolyn and Ausencia Lopez Cruz. 2005. Tonal Alternations in Potential Aspect within Two Variants of Valley Zapotec. *Proceedings from the Ninth International Symposium on Social Communication*. Santiago de Cuba, Cuba.

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CHAPTER I

INTRODUCTION

Kurtöp is a Tibeto-Burman language spoken by approximately 15,000 people in Lhüntse district of Northeastern Bhutan. This dissertation provides the first descriptive grammar of Kurtöp and, when possible, places the description in typological and historical/comparative contexts.

The relationship between the Tibeto-Burman languages has been an area of ongoing academic interest for nearly two centuries, beginning perhaps with von Klaproth's (1823) observation that Tibetan, Burmese, and Chinese shared a number of striking lexical similarities. Since then, identification of other Tibeto-Burman languages has been growing continuously, and along with it a continued attempt to reconstruct Proto Tibeto-Burman as well as discern information about the culture of the people who spoke the Proto language and their subsequent migration patterns.

With the rise in popularity of documentary/descriptive linguistics, due in no small part to the realization of the field of linguistics itself that we are at risk of losing most of the world's linguistic diversity within the immediate generations, an increasing number of grammars of Tibeto-Burman languages are being produced. These descriptive grammars, such as Post (2007), Willis (2007), Coupe (2007), Andvik (2010), Lidz (2010) Chelliah (1997) are the ground-breaking requisites to quality comparative and historical work.

The aim in this dissertation is to present a descriptive grammar of Kurtöp in a historical/comparative perspective within a functional/typological framework. Kurtöp, a Tibeto-Burman language of Bhutan, like most languages of Bhutan, was largely undescribed until the present study. When possible, I situate the Kurtöp data in a comparative or historical point of view, as I have also endeavored for this dissertation to be a contribution in the study of Bhutanese pre-history.

A secondary aim of this grammar is to be a contribution to typological studies. Thus, various phenomena are also considered from a typological view point. The Kurtöp data, in particular, are a contribution to studies of tonogenesis, ergativity, and evidentiality.

The second chapter of this grammar describes the methodology used in compiling the documentation and subsequent description. An effort has been made to work in the evolving collaborative framework that sees language documentation as inherently involving work between outside linguists and inside community members that is for, by, and with a language community. As I argue in §2, this framework provides the ideal means to collect a wide variety of naturalistic data, enabling the linguist to extract a description of the language as it spoken by a wide variety of native speakers across a broad range of socio-cultural contexts.

The third and fourth chapters are devoted to a discussion of Tibeto-Burman linguistics and the linguistic history of Bhutan as a way to situate the Kurtöp grammar in a (pre-) historic context. §3 begins with a brief history of Tibeto-Burman studies and discusses the various groupings within the Tibeto-Burman languages, including the

contentious placement of Chinese¹. I also address the placement of Tibeto-Burman languages in the larger context. The last sections of §3 discuss the East Bodish languages and suggest a preliminary internal phylogeny of Kurtöp's closest linguistic relatives.

Much of the discussion in §4 is devoted to a review of the relevant archaeological literature. There is very little published about Bhutan's archaeology, due to the dearth of studies. There is a fair amount of literature, however, surrounding Bhutan's northern neighbor, Tibet, and slightly less on Bhutan's neighbors in India. The current ethnolinguistic situation in Bhutan is discussed in this context. There is too little information on Bhutan's approximately 20 other Tibeto-Burman languages to form any hypotheses beyond conjecture. In this chapter I also present the first public images of the archaeological site *Bangtsho* of Kurtö 'Umling, which, located in the Kurtö region, may or may not have any link to the current Kurtöp-speaking inhabitants in the region.

The fifth chapter of this dissertation introduces the Kurtöp-speaking community in terms of their geography and culture. The observations presented here, including a map of the Kurtöp-speaking area, and a brief discussion of economy, agriculture, religion and spirituality, history and marriage practices are based on the time I spent in Bhutan.

Chapters six through eight present Kurtöp phonology and the orthographies developed for Kurtöp phonology. In §6 I describe the contrastive phonology, including consonant phonemes, vowel phonemes, and the tonal system. This includes a discussion

¹ As I show in §3, there are several competing models of Tibeto-Burman/Sino-Tibetan. According to some theories, Chinese is considered a separate branch of the larger family, Sino-Tibetan, with the entire Tibeto-Burman family being a sister to Chinese. According to other theories, Chinese is a separate branch *within* Tibeto-Burman. See §3 for an overview of these models.

of the origin of the contrasts when possible, especially the recent development of a retroflex series of stops and tone. The following chapter, §7, describes the non-contrastive phonology of Kurtöp, including word-level stress, phonological words and allomorphy. §8 is a presentation of the Roman and 'Ucen-based Kurtöp orthographies, including the motivations for the difficult decisions involved in adapting 'Ucen to Kurtöp. After §7, all Kurtöp data are illustrated in the Roman orthography.

Chapters nine and ten discuss the Kurtöp lexicon, with §9 being an overview of word shape and etymologies and §10.5 being a discussion of word classes. As we will see, much of the Kurtöp vocabulary is borrowed from Classican Tibetan, or Chöke, and in fact it is still difficult to discern native inheritences from Chöke borrowings. Kurtöp readily distinguishes nouns from verbs, though there is some overlap between the two categories. There is also a category of adjectives as well as numerals and determiners in the noun phrase and adverbs in the verb phrase.

The next three chapters present the structure associated with noun phrases. §11 is a structural analysis of the noun phrase, including a detailed discussion of Kurtöp nouns. In §12 I discuss the nominal modifiers, including the adjectives and numerals. The next chapter, §13, is a presentation of proforms. This includes pronouns and demonstratives, but also branches outside of the NP to include the forms that are syntactically adjectives. In other words, §13 constitutes a discussion of a functional class of words, including a subset of which are found to fulfill the same syntactic function of a NP.

Case markers are introduced in §11 as a category of the NP, but a subset of these are discussed in §14 in greater detail in the chapter on case-marking. In particular, I focus

on a description of the ergative case-marker, which, in addition to demonstrating the expected syntactic distribution of designating the A argument in a bivalent clause, has a noted number of pragmatic uses. §14 also touches on the typologically unusual differential object marking.

Nominalization, which has been shown to be an important facet of Tibeto-Burman syntax, and in particular the development of main clause grammar, is discussed in §15. Though verbal uses of the nominalizers are discussed in passing in §15, a full discussion of the verb phrase is left for §16, which is a full syntactic analysis of the verbal complex, including a discussion of verbs in detail. §16 includes a syntactic analysis of the verbal suffixes, clitics and particles.

The tense/aspect categories are discussed in §17. Perfective and imperfective aspect are contrasted in both main clause grammar and in subordinate clauses. Future tense is found in main clauses only, though in at least one instance it is clear that one of the main clause future constructions has recently grammaticalized from a subordinate irrealis construction involving a nominalized verb plus copula.

Main clauses in Kurtöp can be broadly divided into two categories: those constituting a verb plus an optional tense/aspect/evidential suffix and those constituting a nominalized verb plus copula. Copulas are therefore a rich aspect of Kurtöp verb phrases. §18 describes the four basic copulas in Kurtöp (positive and negative existential and equational plus their various evidential allomorphs).

The next chapter, §19, is devoted to a presentation of non-declarative speech acts. Here, I present imperative constructions, question formation, and negation. There are

three imperative suffixes which differ only by the shape of the vowel and indicate differences in formality or tense. Negation is done exclusively by way of a prefix. The vowel in this prefix varies depending on tense and also changes to agree in height with the stem vowel (see also §7.3.2.1 for a discussion of the movement of tone to the prefix). Question formation in Kurtöp is particularly interesting as speakers must take into account their expectations of interlocutors' knowledge in choosing the forms they use.

Intertwined with the tense/aspect system in finite clauses is a rich and unusual evidential system, a description of which serves the basis for §20. The Kurtöp evidential system makes a five-way contrast in perfective aspect, a two-way contrast in imperfective aspect, and a two-way contrast in epistemic modality in future tense. Even more contrasts are made within the copulas. According to a strict definition of evidentiality, such as 'grammaticalized information source' (Aikhenvald 2004: 14), much of the Kurtöp system described in §20 would fall outside of the category of evidentiality. Indeed, much of what I describe in this chapter is about *expectations* of knowledge, not necessarily *source* of knowledge.

The twenty-first chapter discusses the combination of clauses into complex clauses. Broadly, the constructions described in §21 are grouped into relative clauses, complement clauses, and adverbial clauses. The very productive clause-chaining construction, involving a converb, is discussed in this chapter as a type of adverbial construction.

The second to last chapter is a discussion of rhetorical devices used in Kurtöp. Most of §22 is devoted to the set of constructions involving the rhetorical use of negated

verbs, but a section is devoted each to exclamations and hesitations. The final chapter, §23, summarizes the findings of the grammar and offers conclusions regarding historical placement of Kurtöp as well as typological significance of the grammar.

CHAPTER II

METHODOLOGY

The (re-)emergence of language documentation has brought with it an exciting, rigorous, and collaborative research agenda. Himmelmann (2006: 1) defined language documentation as a ‘lasting, mutlipurpose record of a language’. Woodbury (2003) outlines new conceptions in documentary linguistics, identifying six points that are widely-agreed to be of value in language documentation. These are: 1) diversity of corpus; 2) large corpus; 3) production of corpus that is ongoing, distributed, and opportunistic; 4) transparent and properly annotated materials; 5) material that is preservable, ethical, and portable; 6) ethical corpus.

Describing the benefits of working with natural data as opposed to elicitation, Mithun (2001: 51) states: ‘speakers often shape the record most effectively when they are given the opportunity to choose what to say and how to say it’. Likewise, Chelliah (2001) also advocates steering away from purely elicitation. In a similar vein, Sherzer (1987) describes a discourse-centered approach to language and culture which takes discourse as the starting point for linguistic and cultural analysis.

Grinevald (1998: 156) advocates for a ‘collaborative fieldwork framework ... which consists of a multidimensional framework of work *on* a language, *for* its speakers and *with* its speakers.’ Dwyer (2006) describes ‘cooperative fieldwork’ and ‘community-researcher teams’ wherein successful research outcomes are dependent on 1) a good relationship between the researchers and indigenous partners; and 2) a plan based on

‘knowledge sharing and mutually negotiated goals’ (2006: 50). Yamada (2007) describes a similar framework as the ‘empowerment model’.

Finally, although a language description cannot be based on elicitation alone, Mithun (2001) argues that direct elicitation, in conjunction with recording natural speech, is an essential tool in language description. Thus, I have supplemented the collection of natural discourse with elicitation techniques when appropriate. While eliciting data, I maintain awareness of the issues articulated in Schütze (1996), keeping in mind that speakers may provide differing data for seemingly identical questions because of idiolectal variation, education, other individual experience, or different interpretation of the question or context at hand.

My language documentation methods encapsulate these points, which I envision to be two sides of the same coin: high-quality documentation entails ethical work and relationships; and ethical work and relationships engender high-quality documentation.

2.1. Previous work

Before the present study, Kurtöp had barely been the focus of any linguistic study and there had been no large-scale language documentation in Bhutan whatsoever. Having completed the first linguistic survey in Bhutan, George van Driem laid the foundation stones for our current understanding of Bhutanese linguistics. Van Driem (1998; 1995a; 2001) identifies 19 disparate languages in Bhutan, mostly of Tibeto-Burman origin (see below). Of these, six belong to the Central Bodish group: Dzongkha, Cho-ca-nga-ca-kha, Brokpa, Brokkat, Lakha and Tibetan (B’ökha). The group with the most languages is the East Bodish sub-family, which comprises Bumthap, Khengkha, Kurtöp, ’Nyenkha, Chali,

Dzala and Dakpa. Four other Tibeto-Burman languages are also found in Bhutan. Tshangla (Sharchop) is the *lingua franca* of eastern Bhutan and is spoken by well over one hundred thousand Bhutanese (van Driem 2001). Three particularly endangered Tibeto-Burman languages of Bhutan have received additional attention from the Dzongkha Development Commission (DDC). Van Driem (2004) outlines these *three gems*², which are Lhokpu, Black Mountain, and Gongduk. The only language spoken as a mother tongue in Bhutan not belonging to the Tibeto-Burman family is Nepali. The linguistic situation in Bhutan is described in greater detail in §4.1.

Of the languages outlined above, Dzongkha and Tshangla have received the most attention. van Driem (1998) is a grammar of Dzongkha and Andvik (2010) is a grammar of Tshangla. George van Driem and Karma Tshering, in collaboration with the Dzongkha Development Commission, devised a Roman orthography for writing Dzongkha (van Driem 2001). The orthography is readily used by foreign academics in Bhutan but, unfortunately, has yet to gain popularity with the Bhutanese themselves, including the Dzongkha Development Commission, who still use ad-hoc representations for Dzongkha in Roman orthography.

Within Bhutan, Wangdi (2005) is an outline of various aspects of Tshangla, written primarily for the non-linguistic audience. A recent grammar of Tshangla is Andvik (2010) and Andvik has also been involved in dictionary creation and literacy

² The term ‘three gems’ or ‘triple gem’ has its origin in Buddhism, where the three gems are the Buddha, the Dharma (religion) and the Sangha (the religious community). Reference to good things that come in sets of three is often made using the term *three gems*, as a way to link the three entities at hand with the Buddhist ‘three gems’.

work with the Bhutanese Tshangla-speaking population residing in India. In culmination of several years of work, Andvik (to appear) proposes an 'Ucen-based orthography for Tshangla, though, to my knowledge, there is no standardized orthography in use practically today.

Other, smaller, linguistic studies are Mazaudon and Michailovsky (1988), an acoustic analysis of Dzongkha tones, Watters (1996), an M.A. thesis on Dzongkha prosody, Michailovsky and Mazaudon (1994), a preliminary comparative lexical and phonological analysis of Kurtöp and other languages of the Bumthang group, van Driem (1995b), a preliminary analysis of conjugational verbal morphology in Black Mountain Mönpa, van Driem (2007), a lexical comparison of Dakpa and Dzala, and Nishida (2009), a brief introduction to 'Mangde. This list represents most of the previous research on languages of Bhutan. Until the present work, there was no linguistic documentation in Bhutan *per se*.

The Kurtöp Documentation Project has its roots in Eugene, OR in 2005. At that time native Kurtöp speaker Pema Chhophyel was studying Business at the University of Oregon. When he came to the Linguistics Department looking for work, Professors Spike Gildea and Scott DeLancey immediately decided to hire Pema as the consultant for the upcoming Field Methods class and thus the project was born. The 2005-2006 Field Methods class consisted of Professors Spike Gildea and Scott DeLancey and students Kun Yue, Michael Ahland, Colleen Ahland, Racquel-María Yamada, John Busch, Christopher Doty, Jesse Blackburn-Morrow, Brian Bird and the present author. From the beginning, Pema was concerned with the impending loss of his language and has been

very devoted to the research. At present, though he now resides in Japan, he is very much engaged in the project.

The Field Methods class indeed provided the foundation for the work that was to follow. We were fortunate to find another Kurtöp speaker living in Santa Barbara, CA, and the University of Oregon, Department of Linguistics paid for Pema Chhophyel, Racquel-María Yamada, and the present author to travel to Santa Barbara and record conversations between the two Kurtöp speakers over a Thanksgiving holiday. Those conversations were the the beginning of the current and continually-expanding Kurtöp corpus (see §2.7 for more details).

With a completed M.A. on Kurtöp phonology (Lowes (Hyslop) 2006), I traveled to Bhutan in 2006 in order to ascertain the level of interest and feasibility of a larger, in-depth documentation and description project. My first step was to contact local linguist Karma Tshering. Toegther we traveled to Pema's home village and discussed the proposed project with the village leaders, teachers, and community members. The idea for the project was well-received by the local community and during that time we were able to make a few additional recordings and also made the acquaintance of Kuenga Lhendup, who later joined the project as a collaborator (cf. §2.2).

In 2007 I applied for an Individual Graduate Studentship from the Hans Rausing Endangered Languages Documentation Project, which was awarded later the same year. In another trip to Bhutan the same year, George van Driem and I approached the Dzongkha Development Commission (DDC) about the project, requesting permission to conduct the research over the course of three years, much of it in residence in Bhutan. As

such, requests for a visa and travel permission were also made. Permission from the DDC was also granted later that same year.

2.2. Collaboration

All research in Bhutan -- both from outsiders and from native Bhutanese -- needs to be approved by and conducted in collaboration with a governing authority. In the case of linguistic research this organization in Bhutan has generally been the Dzongkha Development Commission (DDC), and this research has followed suit. All data are archived with the DDC and the DDC gives necessary permissions and helps process paperwork as needed. Orthography development (discussed in detail in §8) is also developed in close collaboration with the DDC.

Since I approached the Kurtöp-speaking community in Bhutan in 2006, many individuals have also gotten on board, forming a team of people dedicated to the documentation of Kurtöp. Individual roles have varied from data collection, input into what sort of data to gather, transcription, translation, editing, and lexicography. The background of these people and their respective roles in the project are described in greater detail in §2.4.

In addition to the DDC, the following people contribute fully to the direction of the project: Kuenga Lhendup, Karma Tshering, and Pema Chhophyel. This team makes mutual decisions about what data to collect, what to archive, the orthographies (cf. §8), and the content and scope of the dictionary.

2.3. Goals of the Kurtöp Documentation Project

The Kurtöp Documentation Project was founded in 2006 in order to document and describe the Kurtöp language. The present dissertation (grammatical description) is one of these goals. The other goals are: documentation, orthography development, language promotion, and the trilingual dictionary, as described below.

2.3.1. Documentation

The first goal has been to adequately document the language. As such, we have been striving to collect a wide variety of data that would represent the language in as many socio-cultural contexts as possible. To do this, we have collected audio and video recordings of conversations between two or more speakers, personal and third person narratives, songs and dance, detailed accounts of historical and current cultural events, interviews, and story-telling. Photographic documentation is meant to accompany the dictionary, providing visual identification of flora, fauna, and cultural items not native to most English-speaking populations.

In order to ensure the documentation represented the speech of a community and not simply a few individuals, we ensured the consultants were drawn from as mixed a group as possible, including men and women, people who were married and single, educated and uneducated, people who grew up in the village and outside of the village, those currently living in the village and elsewhere, and a wide range of ages, from children to adults in their 80s. Like any other language, Kurtöp has different registers within a given community and different dialect variation from community to community. We also aimed to collect data from as many communities as possible. As I described in

§1, this grammatical description is based on the Kurtöp spoken in Dungkar *geo*, though I note where other dialects differ, when I have evidence for variation. By collecting a wide range of data we have also made the attempt to document various registers of Kurtöp. Throughout the grammar I make reference to register differences I have noted, when possible.

As I describe in §5, there is a great deal of sociolinguistic variation within the Kurtöp-speaking community. Register variation is often triggered by the nature of the interlocutor. Foreign interlocutors, especially Caucasians from abroad but also native Dzongkha-speaking interlocutors, often lead to the speaker using a different register than when the interlocutor is a personal acquaintance from within their community. This is true despite our instructions to the speakers that we were interested in recording *real* Kurtöp, as it is normally spoken at home. As such, we took care to vary the interlocutor and vary the people present at the time of the recording.

2.3.2. Grammatical description

The current dissertation constitutes the grammatical description. As the first description of the language ever, the aim has been to make the description as complete and comprehensive as possible. An important facet of this has been to describe data that do not follow the trends we found or are difficult to explain. As possibly the only description ever of the language, we have aimed to make the description as theory- and jargon-independent as possible. Words and categories are described and while I attempt to link the language typologically where relevant, I also make an attempt to describe the

language in as few linguistic terms as possible. I hope this effort would make the work accessible to a linguistically-savvy audience in the near and distant future.

Though the entire documentation team hopes the work would be of interest to Kurtöp speakers, the current grammar is not intended as a pedagogical grammar. However, I hope the current description would serve as a base for a pedagogical grammar in the future, should the speech community or Bhutanese government decide it useful to have one. Of course, any pedagogical grammar would have to be designed with the local literature tradition and teaching philosophy in mind.

2.3.3. Orthographies

Development of appropriate³ orthographies has been an important facet of our work. First, a Roman orthography was needed for practical reasons. Second, the DDC requested Kurtöp be put to an 'Ucen orthography as well. These orthographies have both been achieved, though only the Roman orthography is in any use practically, and it remains to be seen whether it will become widely used, and indeed whether Kurtöp will be widely written. These factors depend in large part on the future role of literature in Bhutan and Bhutanese policies of promoting minority languages.

³ The term 'appropriate' here is used in two senses. On the one hand, an 'appropriate' orthography is needed for linguistic presentation and ease of written communication in a Roman-based orthography for community members who prefer written communication in a Roman-based medium. On the other hand, a culturally 'appropriate' orthography would be 'Ucen (Tibetan-like; cf. §8.2), based on government requests and cultural practices.

The Roman orthography is used throughout this grammar and both orthographies will be used in the Kurtöp/English/Dzongkha dictionary. The orthographies are described in detail in §8.

2.3.4. Language development

The native Kurtöp-speaking community would also like to see their language be developed. Currently, Dzongkha is the only language with a written tradition and the only Bhutanese language taught in the schools. We have been working to develop Kurtöp in a few ways. First, by continuing to engage native speakers in the documentation process we are spreading pride and interest in Kurtöp as a language worthy of as much prestige as Dzongkha, English, Hindi, or any other written language. Second, we have involved several Kurtöp speakers in the process of orthographic development (cf. §8). Through this process many Kurtöp speakers have learned that it is possible to write in Kurtöp, which furthers the interest in and prestige of the language. Third, we give copies of all conference handouts and published articles to interested Kurtöp speakers. While no Kurtöp speaker has the background necessary to understand the research in much depth, they enjoy seeing their language and their contributions acknowledged in print. This also engenders greater pride in the language. I believe that speakers deserve to know what outsiders have said about their language, in spite of the fact that the analysis may be beyond their present comprehension.

Kurtöp language development is slowly moving beyond the basics described above. In early 2010, Pema Chhophyel created a Facebook page devoted to Kurtöp language and culture⁴. This page is the first public venue devoted solely to the Kurtöp language or culture. The page has received minimal traffic so far, but it has been an important first step. We have had several written Kurtöp conversations on the page, and one speaker commented they were ‘elated to be writing in Kurtöp on Facebook’. Future steps are addressed in §2.9.

2.3.5. Kurtöp/English/Dzongkha dictionary

The fifth goal of the Kurtöp Documentation Project has been to compile a trilingual Kurtöp/English/Dzongkha dictionary. The dictionary will have detailed Kurtöp to English definitions plus indices in English and Dzongkha showing the Kurtöp translation. Here, the potential is greater for the dictionary to be used by a wider audience than the grammatical description. Literate Kurtöp speakers can reference the dictionary to find English terms for Kurtöp words and concepts. Given that English is the primary language of written communication within the government, the private working sector, and most of the education system, this could be a powerful tool indeed for Kurtöp speakers, who otherwise would have to rely on Dzongkha-English or Tibetan-English dictionaries -- languages they do not speak natively, if even fluently.

⁴ The Kurtöp language and culture Facebook page can be accessed at:
<http://www.facebook.com/?ref=home#!/group.php?gid=342961272735&ref=ts>.

2.4. Consultants

In total, over fifty individuals have been involved in data collection. The roles of these people have varied, from being the primary speaker(s), to conducting the recording, to being present during the recording. The consultants vary greatly in age, education, and life experience. They represent men and women, speakers who were born in Kurtö and have never left the village as well as speakers born outside the village and residing in Thimphu or even outside of Bhutan. The occupations of the consultants also vary greatly; speakers range from being monks, former monks, college students, farmers, housewives, shopkeepers, and government civil servants. There is a range of second languages spoken by the speakers as well, though no monolingual speakers were found. Even the most uneducated speakers had working knowledge of Dzongkha or Chocangaca. Details pertaining to the Kurtöp consultants involved in the Kurtöp Documentation Project can be found in Appendix C.

2.5. Fieldtrips

Following the Field Methods class at the University of Oregon, I conducted nine separate field trips to Bhutan, totaling just over sixteen months. The first trip, described briefly above, was in 2006. I traveled to Kurtö for the first time and gained local permission for the project. I began collaborating with Karma Tshering at that point and made a few recordings. The last three days of this two-week trip were spent with Kuenga Lhendup, a native Kurtöp speaker who had just graduated from Kanglung College, in Trashigang, Bhutan, with a B.A., with honors, in English. He was immediately drawn to the project and offered to volunteer his help in any way he could. I trained him to use the

program *Transcriber* and explained the working orthography I had outlined based on discussions with Karma Tshering and my previous M.A. work. As time passed, Kuenga continued to be one the most important members of the project.

The second field trip was a week-long stay in March, 2007. The aim of this trip was to submit a proposal for long-term research with the Dzongkha Development Commission. I also met with Kuenga Lhendup during this time and collected the transcriptions and translations he had completed.

With official permission from the government of Bhutan I returned for the first official field trip in fall of 2007 for two weeks. The plan was to travel to Kurtö and spend the majority of my time in the village, finalizing plans for the rest of the project. However, it rained heavily during most of the time and a landslide closed the road from Monggar to Lhüntse the day before I reached Monggar. After waiting most of the remainder of my time in Monggar, the road did not open and I had to return to Thimphu.

The third field trip began in January 2008 and ended in February 2009. During this period I was based in Monggar, in eastern Bhutan, where I could easily commute to Kurtöp-speaking villages for extended stays. I recorded data in the villages during that time and also conducted research as a participant-observer in several aspects of village life. In Monggar, I worked on monolingual transcription and translation with Kurtöp speakers residing there. During this time period I also made four trips to Thimphu in order to archive data with the DDC and keep in contact with Kuenga Lhendup for elicitation, transcription and translation. With Monggar being less than a day's drive to Kanglung, location of Sherubtse College, I also made a point to connect with the Kurtöp-

speaking community enrolled in the college. This turned out to be very effective for the research project. There, I met Jurme Tenzin, primary lexicographer, and Sangay Phuntsho, who works with Kuenga Lhendup to transcribe and translate recordings.

The fifth field trip in September 2009 involved a stayover in Japan, where Pema Chhophyel was living. I brought a draft of the Kurtöp/English/Dzongkha dictionary and he painstakingly went through every entry, making comments and corrections where appropriate. In Bhutan, I focused my efforts on clarifying questions I had in the grammatical analysis, collection and further distribution of recordings for transcription and translation, and training of consultants for data collection. I made a focused attempt at training the students in using new equipment (the Marantz PMD 660 and Shure head-mounted microphone) and encouraged them to train others.

Five months later I returned to Thimphu in February 2010, for a brief trip of only one week. I received transcriptions and translations from Kuenga and Sangay and passed on more work to them. I also spent a large portion of my time with the DDC discussing the details of the Kurtöp 'Ucen font, designed by Chris Fynn for the DDC.

My seventh trip was again a short trip of two weeks in June of 2010. With the grammatical description close to completion, I focused my efforts on clarifying more questions and doubts regarding grammatical and phonological analysis that had arisen since my previous trip.

The eighth and final fieldtrip was in September 2010 when I presented a draft of the Kurtöp grammar to the DDC and the Kurtöp community for their approval.

2.6. Data collection and processing

The primary researchers involved in data collection have been the author, Karma Tshering, Kuenga Lhendup and Jurme Tenzin. A Marantz PMD 660 has been the primary recording device, recording most data in .wav format at a sampling rate of 48,000 Hz. However, sampling rates of 44,100 Hz and 22,050 Hz were also used on occasion if there was a need to minimize space. The team also had access to a Sony Minidisc recorder but this was only used as an emergency backup since it recorded data in a proprietary ALTRAC format, thus losing quality when it was converted into .wav for use in other programs. The third recorder we had occasional access to was an Edirol R-09HR portable recorder, on loan from Karma Tenzin with the Bhutan Broadcasting Service, which we also set to record in .wav format.

A wide range of microphones were used, including lapel, hand-held, and head-mounted microphones. The lapel and head-mounted microphones were omni-directional while the hand-held microphone was uni-directional. The head-mounted microphone was used exclusively for recordings that were going to be the source of acoustic analysis, while the other microphones were used for other recording contexts. When possible, a single speaker was recorded with the head-mounted microphone, in order to ensure maximal fidelity, but this was not always possible, either because the head-mounted microphone was not available at the time of the recording, or because the speaker did not feel comfortable using it. When recording two people we usually used two lapel microphones, with one being clipped to the shirt of each speaker. When recording more

than one speaker, sometimes the omni-directional hand-held microphone was used, by being placed on a stand between the speakers.

The audio files were transferred directly to the researchers' computer, where they were named, stored, and prepared for analysis. A small set of the recordings were used for acoustic analysis, and these were kept separately from the recordings used for transcription and translation. The larger group of audio recordings, a collection of conversations, storytelling, interviews, and narratives, were given names that allowed to researchers to glean some information about the recording and then opened with the program *Transcriber*. The researchers and assistants used *Transcriber* to transcribe and translate the recordings.

Some video recording accompanied the audio recording, but it is of relatively poor quality, and has been used for linguistic analysis only as a backup device. The Sony DCR-SR40 records .mpeg format videos directly on to a 30GB hard drive, which can then be transferred to the computer. The primary aim of the Sony HD videocamera was 1) to serve as a way to capture the metalinguistic context of recordings; and 2) serve as a backup recording device in case an audio recorder failed. Unfortunately, the Sony HD videocamera did not have external microphone capability, and thus the quality of the audio in the video recordings is not ideal. However, the files did serve their purpose to add to the metalinguistic context and, though the subsequent audio would not be suitable for acoustic analysis, we were able to transcribe and translate much of it for the purposes of grammatical analysis.

Regardless of the type of data (audio -- for acoustic or grammatical analysis, or video) we recorded appropriate metadata to accompany each recording. In general, the metadata consisted of the place, date and time of recording and details about the event or context, including what other people were present during the recording. When possible, we obtained the age, gender, level of education, occupation and the languages known from all people involved in data collection, even if their role was a silent one. The metadata was linked to the filename on an excel spreadsheet. A separate spreadsheet keeps track of the speaker metadata (shown in Table 1, in Appendix C).

2.7. Corpus

The corpus consists of over 150 recordings, consisting a variety of lengths and genres. The recordings were also done in different formats -- some audio, some video, and some in both. The meta-data for each recording is summarized in Table 2 in Appendix C.

2.8. Funding

Initial research in 2005-2006 on Kurtöp was funded by the University of Oregon, Department of Linguistics. In addition to offering the Field Methods class, they paid for Pema Chhophyel and two researchers (Racquel-María Yamada and the author) to travel to Santa Barbara, CA, where Kezang Wangchuk, another Kurtöp speaker, was residing. We recorded several conversations between Pema and Kezang as well as elicited data and performed acoustic production and perception experiments with Kezang. The UO Department of Linguistics also paid for Pema to travel to Bhutan and return to his village

in Tabi over winter break, 2005-2006, in order to collect more data for the class to analyze.

The initial fieldtrips for what was to become the current dissertation began in 2006, with funding from the Center for Asian and Pacific Studies (CAPS) and the Department of Linguistics, both at the University of Oregon. CAPS continued to cover the researcher through smaller grants. In addition, the Center for the Study of Women in Society, at the UO, and the Association for Asian Studies offered research grants in 2007. The Endangered Languages Documentation Project, out of the School of Oriental and African Studies (SOAS) has funded the majority of the research since 2007 by means of an Individual Graduate Studentship. The National Science Foundation also supported aspects of this research from 2008-2010 through a Doctoral Dissertation Research Improvement Grant.

CHAPTER III

TIBETO-BURMAN AND THE PLACEMENT OF KURTÖP

The observation that Chinese, Tibetan and Burmese are related languages appears to have first been made by Julius Heinrich von Klaproth (von Klaproth 1823) but the modern Sino-Tibetan research agenda began with the work of Robert Shafer, which can be summarized by an examination of Shafer (1966), outlined in §3.1, and Paul Benedict, which can be summarized by an examination of Benedict (1972), discussed in §3.2.

3.1. Shafer (1966)

For Shafer, Sino-Tibetan was composed of nearly 400 languages spread across six divisions: Sinitic (e.g. Mandarin Chinese), Daic (e.g. Thai), Bodic (e.g. Tibetan), Burmic (e.g. Burmese), Baric (e.g. Garo) and Karenic (e.g. Karen⁵). He discusses languages in these main divisions in terms of comparative phonology, and in some instances discusses the internal relations among languages within a division, but abstains from discussion on relations among these divisions⁶. Shafer's (1966) map of Sino-Tibetan is shown in Figure 1.

⁵ Shafer (1966: VII) also mentions Miao (e.g. Hmong) as possibly being distantly related.

⁶ A cursory inspection of Shafer (1966) may suggest that the author does believe in higher-level subgroupings, but Shafer himself (1966: 1) notes ‘Compounds, such as *Sino-Daic*, *Sino-Bodic*, etc., imply no close genetic connection, but merely that for the moment we are considering the groups together.

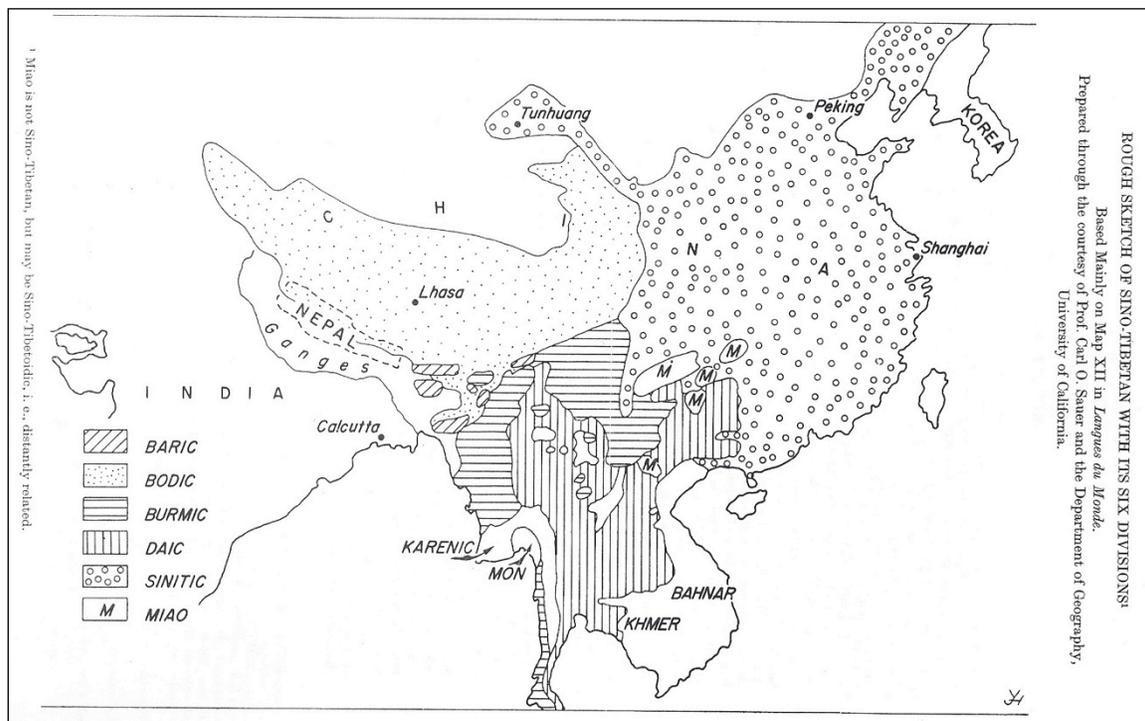


Figure 1. Sino-Tibetan languages according to Shafer (1966: VII)

In terms of phonology, Shafer (1966) describes the development in modern-day Sino-Tibetan languages from reconstructed initial aspirated, voiceless, and voiced labial, dental and velar stops as well as a four-way series in nasals (labial, dental, palatal, velar), rhotic and lateral consonants, and palatal and labio-velar glides, as well a contrast between ‘glottal opening’ vs. ‘easy vocalic ingress’ Shafer (1966: 41).

With regard to vowels, Shafer (1966) describes medial vowels versus final vowels and often considers rhymes rather than a vowel in a nucleus on its own. He reconstructs:

*-i, *-ui, *-e-, *-ya-, *-uk, *-uj, *-ok, *-oŋ, *-uD⁷, *-uL⁸, and *-a-. The reconstructed finals are *-r and *-l.

Another important feature in Sino-Tibetan is tone, and modern-day linguists still disagree over whether or not to reconstruct tone to Proto-Sino-Tibetan/Tibeto-Burman. Shafer (1966) does not reconstruct proto-tones for Sino-Tibetan but does discuss tone on the assumption that it should be reconstructed. He also discusses the placement of tone in words vs. syllables amongst the Bodic and Burmic languages by stating that on polysyllabic stems there is indication that only the root will carry the tone Shafer (1966: 17).

Shafer (1966: 77) may also be the first to notice the similarities between Khassic (<Austroasiatic) and neighboring Tibeto-Burman languages, for which he puts forth three possible hypotheses: 1) that the Khassic languages (and, presumably, therefore Austroasiatic) are distant relatives of Sino-Tibetan; 2) that the languages groups have borrowed extensively from each other; or 3) that the resemblance is accidental. The possible genetic relation is not reflected in his diagram.

At the word and morphemic level, Shafer (1966) discusses proclitics, prefixes (actually phonetic elements which precede the root but have no clear morphological function), roots, stems (prefix+root), determinatives (the suffixal equivalent of a prefix)

⁷ Shafer (1966: iv) uses ‘D’ to refer to dental stops without reference to voicing/aspiration type.

⁸ Shafer (1966: iv) uses ‘L’ to refer to labial stops without reference to voicing/aspiration type.

and suffixes (which have a morphological function) as constituting Sino-Tibetan words.

A schematic interpretation of Shafer’s analysis is shown in Figure 2.

Proclitic-	Stem (prefix+root)	-Determinative	-Suffix
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Figure 2. The Sino-Tibetan word according to Shafer (1966)

3.2. Benedict (1972)

Benedict (1972), unlike Shafer (1966), proposes an internal taxonomy amongst the divisions of Sino-Tibetan and also removes the Daic branch from the Sino-Tibetan family altogether. Benedict places Sinitic coordinate to Tibeto-Karenic, stating that ‘the relationship between Tibeto-Karenic and Chinese is a distant one, comparable to that between Semitic and Hamitic, or between Altaic and Uralic’ (Benedict 1972: 2). Tibeto-Karen, Benedict argues, is composed of Tibeto-Burman on one side and Karen on the other, with Karen standing in relation to Tibeto-Burman in a relationship analogous to Hittite and Indo-European (1972: 2). Within Benedict’s (1972) Tibeto-Burman are seven primary divisions: Tibetan-Kanauri (Bodish-Himalayish), Bahing-Vayu (Kiranti), Abor-Miri-Dafla (Mirish), Kachin, Burmese-Lolo, Bodo-Garo, and Kuki-Naga. One of these groups, Kachin, is envisioned to be at the center of Tibeto-Burman, both geographically as well as linguistically (lexically and morphologically). The proposed relationship among the Sino-Tibetan languages is represented in Figure 3.

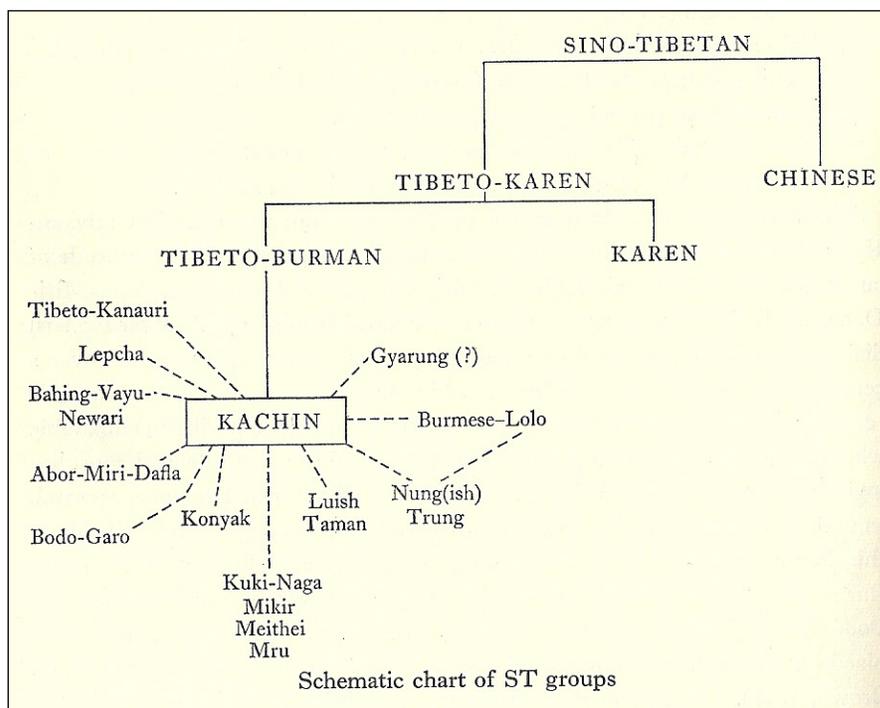


Figure 3. Sino-Tibetan phylogeny according to Benedict (1972)

Much of Benedict (1972) is devoted to phonological reconstruction of Tibeto-Burman, which, recalling Shafer's agnostic view of Sino-Tibetan phylogeny, would actually represent a distinct but lower-down Proto-language from what Shafer's reconstruction represented. For Proto-Tibeto-Burman (PTB), Benedict reconstructs a two-way contrast in voicing amongst velar, dental and labial consonants, plus voiced and voiceless dental fricatives, velar, dental and labial nasals, a rhotic, a lateral, a palatal and labio-velar glide, and an aspirate.

According to Benedict's (1972) reconstruction, in root-initial position the PTB consonants may group into consonant clusters as follows. *r* and *l* may follow velar stops

and labial consonants (stops and nasals), with *r* also appearing following the velar nasal; *w* may follow all stops plus a voiceless fricative and affricate; and *y*, the palatal glide, may follow the velar and labial stops plus the voiceless fricative and affricate. The PTB vowel system was made up of the five cardinal vowels. Benedict also mentions the fact that tones are spread widely throughout TB, but points out that our understanding of the synchronic tonal systems is too meager to be of use toward a reconstruction.

A brief discussion of morphology and syntax follows the discussion of phonology, including mention of several syntactic features which could be considered typical areally (such as ‘relatively isolating’ morphology and verb-final syntax). Benedict (1972: 96–123) reconstructs several prefixes and suffixes with morphological functions. The last section of Benedict (1972) presents the Tibeto-Burman consonantal and vocalic alternations found throughout the family, before moving on to discuss the Karen and Sinitic branches of Sino-Tibetan.

3.3. Competing models of Sino-Tibetan

With many of the estimated 450 Sino-Tibetan languages (Lewis 2009) still undescribed or only marginally described, and internal reconstructions within languages or across smaller divisions within the family still outstanding, the phylogeny of the Sino-Tibetan languages still remains subject to debate. Three primary proposals have received considerable attention in the literature: the Tibeto-Burman hypothesis, described in §3.3.1, the Sino-Tibetan hypothesis, described in §3.3.2, and the agnostic ‘fallen leaves’ hypothesis described in §3.3.3.

3.3.1. The Tibeto-Burman hypothesis

The proposal that Sinitic is a branch of Tibeto-Burman, not a subfamily on the same level as Tibeto-Burman, is often referred to as the Tibeto-Burman hypothesis. Van Driem (1995b; 2005a; 1997; 1992; 2002; 2006) adheres to the Tibeto-Burman hypothesis and more specifically following Simon (1929) and Bodman (1980) argues for the ‘Sino-Bodic’ hypothesis, which links Chinese and Bodic languages to one parent within Tibeto-Burman.

Van Driem (Driem 2005b: 299) attributes the observation that Chinese and Tibetan are closer to each other than either are to Burmese, to Klaproth himself⁹. The first use of the term ‘Tibeto-Burman’ appears to be attributed to John Logan in 1852 (van Driem 2006: 16). The use of the term ‘Tibeto-Burman’ to refer to the family of languages comprising Chinese, Tibetan and Burmese continued into the discourse of Charles Forbes (Forbes 1878: 210) and Bernard Houghton (Houghton 1896: 28). Following the more recent works of Simon (1929) and Bodman (1980), van Driem has been the primary modern proponent of the ‘Sino-Bodic’ (van Driem 1997), summarized in Figure 4.

⁹ Van Driem (Driem 2005b, 299) states: ‘Sino-Bodic essentially dates back to Klaproth’s own observation that Tibetan appeared to be genetically closer to Chinese than either was to Burmese (1823: 346, 356, 365).’

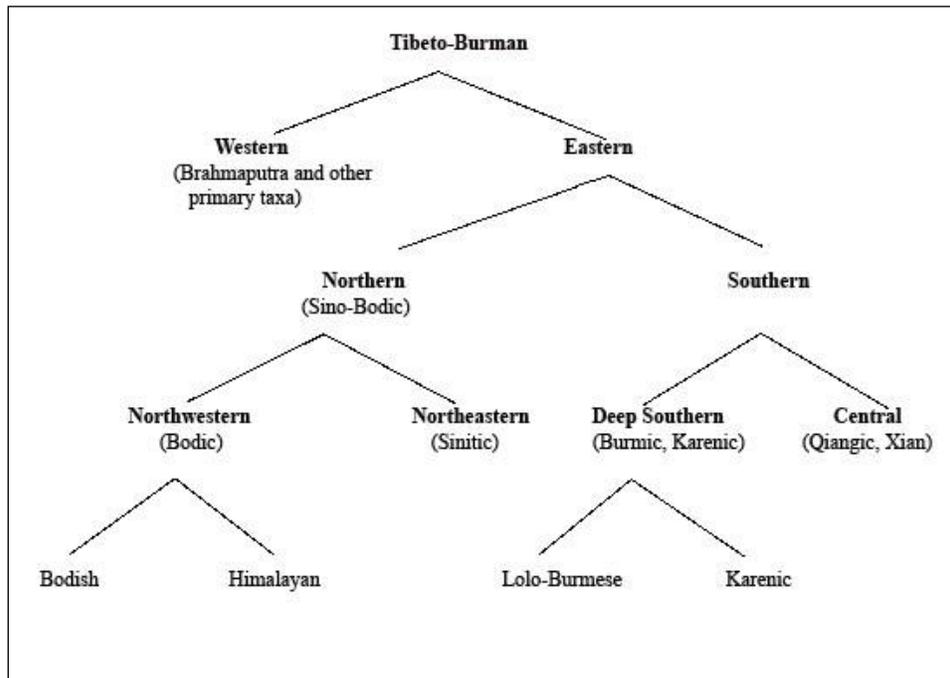


Figure 4. Van Driem’s phylogenetic model of Tibeto-Burman. Adapted from van Driem (2005: 89).

According to van Driem (2002; 2005b), the phylogenetic model in Figure 5 can be interpreted in geographic space, with assistance from archaeology and genetics as follows. The Tibeto-Burman homeland was likely in Sichuan around the Yangtze river and dates from >11,500-2,000 BC. van Driem (2002) summarizes three arguments in support of this claim. First, Sichuan is the center of gravity based on distribution of modern Tibeto-Burman languages. Second, it appears that archaeologists have identified the Indian Eastern Neolithic as originating in Sichuan. Third, archaeologists have argued that Southwestern China would be a potentially promising place for Neolithic civilizations which later took root in Yellow River Valley. The latter point here is corroborated by genetic research in J Y Chu et al. (1998).

This mesolithic and neolithic Sichuan culture was the origin for a number of subsequent migrations, corresponding to the ensuing dispersal of Tibeto-Burman languages. The first migration was the westward advancement of Tibeto-Burman speakers into Northeast India. This migration may have begun as early as before 7,000 BC and brought with it the seeds for the Indian Eastern Neolithic. Northward migrations before the beginning of the sixth millennium BC established the Dadiwan and Peiligang-Cishan Neolithic cultures along the Yellow River. These groups would have spoken the proto language which is represented by Sino-Bodic in the phylogenetic model in Figure 4.

Perhaps the most important neolithic settlements of East Asia are those of 裴李崗 Péilǐgāng¹⁰ cultures in North China and 河姆渡 Hémǔdù¹¹ in South China. Péilǐgāng has

¹⁰ The Péilǐgāng (裴李崗) culture was first identified in 1977 in Henan (河南) province as a number of related sites in the Yilou valley near the Yellow River (Barnes 1993; Chang 1986). It is one of four material assemblages that depict Early Neolithic North China cultures, the others being Cishan (磁山) in south Hebei, Houli in north Shandong and Laoguantai (in Shaanxi) (Li Liu 2004). The name ‘Péilǐgāng’ comes from the most important of these sites and is used to apply to the entire culture. In the late 1970s to early 1980s, the discovery of the Péilǐgāng culture was important as it pushed back the known dates of agriculture from the Yangshao culture (approx. 5000 BCE) to a now established Early Neolithic starting at 6500BC. Chang (1986) also describes pots filled with grains, indicating storage. Additional evidence in support of agriculture at this time is the presence of tools such as grinding slabs and sickles in the stratigraphy. In addition to evidencing agriculture for the first time in North China, the Péilǐgāng culture provides evidence for domestication of dog, pig and chicken (Barnes 1993), though the chicken is argued to have been domesticated already in Southeast Asia at that time (West and Ben-Xiong 1989). Another important facet of Péilǐgāng culture is pottery. Pots found were mostly plain red or brown but could be decorated by means of cord-marking, comb-impressions, comb-rocker stampings, appliqué, incisions or press-and-pick designs (Chang 1986). In terms of shape, the pots may be tripod, quadruped, handled pots, perforated vessels and angled vessel supports. Other artifacts associated with the Peiligang cultural complex were tools such as tanged, untanged or barbed projectile point bone tools, awls, adzes, and punches, some being intricately carved and decorated, and, interestingly, microliths. Other bone artifacts were spearheads, arrowheads, harpoons, hairpins, needles, and more (Chang 1986).

¹¹ Hémǔdù, just south of the Shanghai delta, is also known for pottery that may be blackish and plain or cord-marked.

been important in the East Asian archaeobotanical record for its early purported dates of domesticated millet, with both Broomcorn millet (*Panicum miliaceum*) and Foxtail millet (*Setaria italica*) present as early as 6,000 BP (Lee et al. 2007). Hémǔdù, on the other hand, is best-known for early dates of the domestication of rice where it, along with dogs, were clearly domesticated by 5,000 BCE (Barnes 1993).

We are not yet at a stage when we can definitely associate modern ethnolinguistic groups with archaeological sites as old as Péilǐgāng and Hémǔdù, but it may prove fruitful to speculate some on the relationship between current ethnolinguistic groups and known archaeological cultures, particularly in the case where historical linguistics, history, and genetics may be brought in.

Following the Mǎjiāyáo Neolithic (3900–1700 BCE), itself a successor to the Dàdiwān culture along the Yellow River, offshoot cultures ventured west, seeding the cultural sites at Kharro in modern-day eastern Tibet, and Burzahom in modern-day Kashmir. This offshoot of the Mǎjiāyáo could be interpreted as being the forebearers of the communities that brought Bodic languages into Tibet and the Himalayas.

Van Driem (2006) outlines alternative models to the one described above. One intriguing alternative shares a beginning with the previous scenario but deviates with regard to the development of the languages along the Yellow River basin, namely that the Yellow River basin and the several cultures found along the river have been source of intense cultural contact over the course of history. In fact, that intense cultural contact could have given birth to the Sinitic languages is suggested in the following:

‘It might be argued that the ST (Sino-Tibetan) elements constitute only a superstratum in Chinese, and that the substratum is of a distinct origin. In historical terms, the Chou (Zhōu) might be regarded as the bearers of a ST language (Sino-Tibetan), which became fused with, or perhaps immersed in, a non-ST (Sino-Tibetan) language spoken by the Shang (Shāng) people.’ (Benedict 1972: 197). [Information in parentheses is mine.]

In other words, a second hypothesis regarding the development of the Sinitic and possibly Bodic languages is that the Shāng may, in fact, not have been Sinitic speakers. Rather, it was the Zhōu who brought Sinitic languages into the Shāng non-Tibeto-Burman speech community.

Van Driem (2006: 190-197) expands on this idea in a couple of different ways. Contra-agricultural dispersal theory, van Driem suggests it may have been the lure of advanced civilization and agriculture that enticed different communities (Tibeto-Burman and non-Tibeto-Burman speakers) to the Yellow River basin. It is quite possible that the Sinitic languages are the result of language contact as different ethnolinguistic groups have come in contact with each other over time. DeLancey (to appear) argues the Bodo-Garo languages arose out of an intense contact situation in which non-native speakers abandoned their native languages and switched en masse to speaking a form of Proto-Bodo-Garo, simplifying the grammar. DeLancey (to appear) makes a similar argument for Lolo-Burmese as well.

3.3.2. The Sino-Tibetan hypothesis

Many contemporary linguists adhere to the Sino-Tibetan hypothesis. That is, they recognize the close relationship between Sinitic (i.e. Chinese languages) on the one hand and Tibeto-Burman languages on the other. The family of languages represented by Klaproth (1823) was first named ‘Sino-Tibétain’ by Jean Przyluski (Przyluski 1924). By the time Paul Benedict inherited the model, ‘Sino-Tibetan’ consisted of Tibeto-Burman on one side, and Sinitic (with Daic recently removed) on the other (Driem 2005b, 298).

Despite the fact that this model is widely used in Tibeto-Burman linguistics, the evidence for this model remains to be illustrated in rigor. Both Benedict (1972) and recently (Matisoff 2003) adhere to the model in which Sinitic lies one side, parallel to the family of Tibeto-Burman languages, but neither presents the evidence in favor of this. The Sinitic languages are typologically different when compared to Tibeto-Burman languages. For example, Sinitic has SVO syntax and isolating morphology, like languages of Southeast Asia, while most of the other languages of the Sino-Tibetan family have SOV syntax. Much of this can likely be attributed to areal influence. The Chinese (Sinitic) languages are typologically similar to their neighbors, the SE Asian languages, while much of Tibeto-Burman languages are typologically similar to their neighbors, the verb-final languages of South Asia.

Bradley (1997) assumes the Sino-Tibetan theory and updates the Tibeto-Burman branch based on data new since the the time of Benedict (1971) as shown in Figure 5.

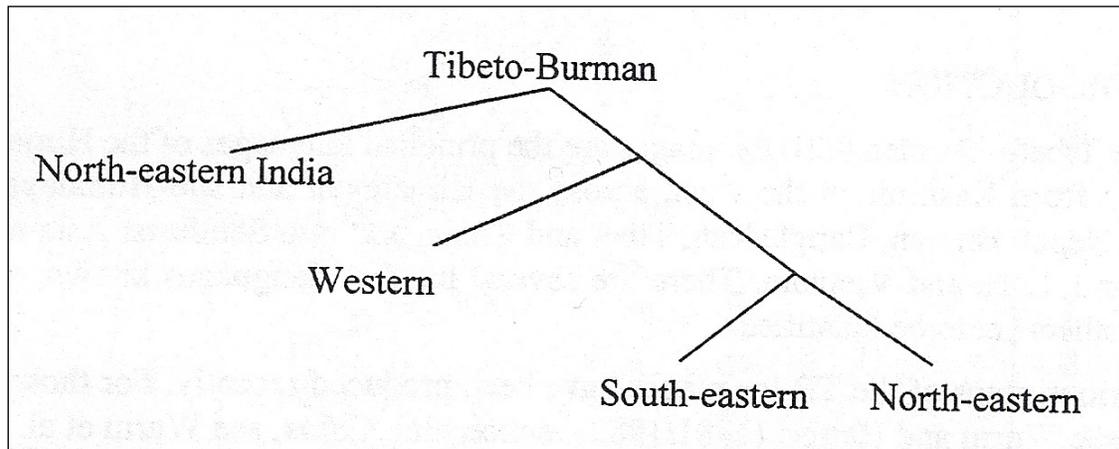


Figure 5. Bradley’s phylogenetic model of Tibeto-Burman (1997: 2)

Bradley’s ‘Northeastern India’ group includes the languages that Shafer had coined as ‘Baric’ (more commonly referred to as the Sal¹² languages today) plus Jinghpaw and the Luish group. The ‘Western’ group mainly corresponds to Shafer’s Bodic group with some additions (see §3.5 for a more detailed discussion of Bodic). ‘Southeastern’ comprises Lolo-Burmese, Kuki-Chin, Karen, and the Naga¹³ languages. Finally, the ‘Northeastern’ languages in Bradley’s (1997) classification consist of Qiang, Nungish and Naxi languages.

3.3.3. Fallen leaves model

The most agnostic theory of the relationship amongst Sino-Tibetan languages is the ‘fallen leaves’ model (see

¹² ‘Sal’ is the term proposed in Burling (1983) to name the TB languages of NE India which all shared the innovative word *sal* for ‘fire’.

¹³ It is becoming more and more apparent that the term ‘Naga’ is similar to the term ‘Monpa’ in that it is more of a vague endonym or ethnonym, and probably does not represent a group of languages that would be cohesive from a genetic point of view.

Figure 6), so-named in van Driem (2001, *inter alia*) but perhaps first attributed to Shafer (1966). This model is an agnostic acknowledgement of the observation that too little is known about Tibeto-Burman languages to make a meaningful tree of relationships within Tibeto-Burman. This is true enough, especially when one considers the likelihood that Tibeto-Burman languages of the Himalayas may be rich in TB and non-TB substrates, as several scholars have argued for many of the TB families.

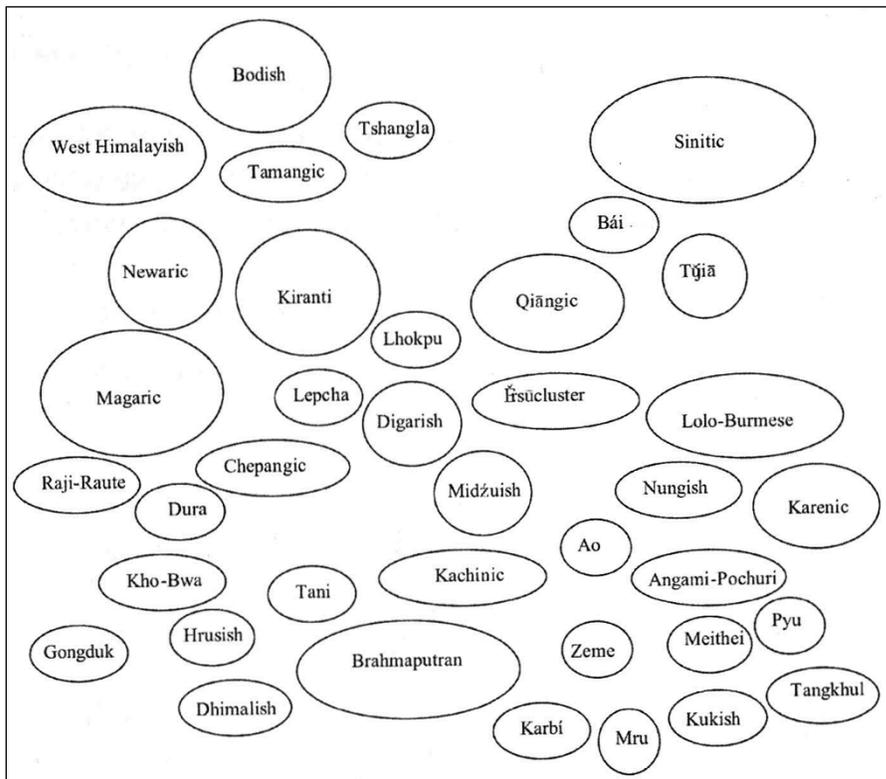


Figure 6. Van Driem’s ‘fallen leaves’ model of Tibeto-Burman (2001: 403).

Regardless of whether one assumes the model above, or any other model, there is a tremendous number of languages which remain undescribed and internal

reconstructions which are yet to be done. For several languages, such as the Kho-Bwa¹⁴ languages in Arunachal Pradesh, and Gongduk in Bhutan, we have barely more than scanty wordlists, but what we do have suggests the languages -- though assumed to be Tibeto-Burman -- are highly unusual in a comparative light. Until more work is done on these languages, it remains difficult to do much more than speculate on the broader relationship between the languages subsumed in the Sino-Tibetan and/or Tibeto-Burman families.

3.4. Beyond Sino-Tibetan

Scholars have also speculated about the relationship of the Sino-Tibetan languages with other language families.

The *Sino-Tibetan-Austronesian* theory, which proposes a common ancestor between the Sino-Tibetan and Austronesian speakers. Sagart (2005) states that this Proto-language would have been spoken 8500-7500 years ago in the mid to lower Huang He valley. Sagart speculates the first division would have been attributed to an ‘eastern’ group spreading southward along the coast, eventually reaching Taiwan by ca. 5500 years ago, yielding the Austronesian language family. Tai-Kadai is absorbed into this theory as a family under Austronesian which returned to coastal South China and underwent heavy relexification. The ‘western’ group of Sino-Tibetan-Austronesian would have become the

¹⁴ Van Driem (2001) proposes the term *Kho-Bwa* to identify four (Lishpa, Bugun, Sherdukpen, Puroik) highly divergent Tibeto-Burman languages, where *kho* is the term for ‘water’ and *bwa* is the term for ‘fire’. Rutgers (1999) also identified the relationship between these languages, referring to them as ‘isolates’ because of the collective deviance from other Tibeto-Burman languages. However, cognates to *kho* are now shown to appear in many other Tibeto-Burman languages, such as Kurtöp *khwe* ‘water’, Dzongkha *khau* ‘snow’, Bodo *khwa* ‘snow’, Dakpa *kho* ‘snow’, etc.

Sino-Tibetan family, leaving Chinese primarily in-situ while the rest of the family headed westward and formed the modern Tibeto-Burman languages. One potential problem with this theory is the fact that the Sinitic side is much less diverse than the Tibeto-Burman side. If Sinitic had been in-situ for so many millennia, we would expect much more diversification of language in the geographic area.

3.5. East Bodish languages

The East Bodish languages are a fairly coherent group of languages spoken primarily in Bhutan, though the language areas also extend into Tibet and Arunachal Pradesh. Shafer (1954) appears to have been the first to use the term ‘East Bodish’ to identify Dakpa, a language that was clearly in a close relationship to the Tibetan dialects but was not a dialect of Tibetan. Since then, Michailovsky and Mazaudon (1994), DeLancey (2008) and Hyslop (2008a) have provided further evidence that Kurtöp, though closely related to Tibetan, cannot be considered a Tibetan dialect. Tournadre (2008) identifies 25 Tibetic languages and lists several dozen lexical criteria diagnostic of Tibetan. The data in Table 1, a comparative list of chosen vocabulary items from Tournadre’s (2008) diagnostic Tibetan vocabulary with their Kurtöp counterparts, repeat the arguments put forth in Michailovsky & Mazaudon (1994), DeLancey (2008) and Hyslop (2008a) that Kurtöp (and therefore the other East Bodish languages) are not dialects of Tibetan.

Table 1. A comparison of some diagnostic Tibetan vocabulary with Kurtöp

Tibetan	Kurtöp	Gloss
---------	--------	-------

(diagnostic per Tournarde)	(or * PEB)	
<i>gcig</i>	<i>*thek</i>	one
<i>gnyis</i>	<i>zon</i>	two
<i>gsum</i>	<i>*sum</i>	three
<i>bzhi</i>	<i>*ble</i>	four
<i>bdun</i>	<i>*nís</i>	seven
<i>bcu</i>	<i>che</i>	ten
<i>brjed</i>	<i>zhit</i>	forget
<i>btsong</i>	<i>'mui</i>	to sell
<i>'bras</i>	<i>mras</i>	rice
<i>'brog-pa drogpa</i>	<i>nakpo</i>	pastoralist
<i>bsgyur</i>	<i>zhi, pu</i>	change
<i>chu</i>	<i>khwe</i>	water
<i>dmar(-po)</i>	<i>zhinti</i>	red
<i>gzhu</i>	<i>limi</i>	bow
<i>glo</i>	<i>zhowa</i>	lung
<i>gnyis</i>	<i>zon</i>	two
<i>khol</i>	<i>shak, koi</i>	be boiled
<i>khrag</i>	<i>kak</i>	blood
<i>klad-pa</i>	<i>tratpa, ratpa</i>	brain
<i>lcags</i>	<i>'la:</i>	iron
<i>lo</i>	<i>'neng</i>	year
<i>lud</i>	<i>yot</i>	manure
<i>mda'</i>	<i>mya</i>	arrow
<i>mye</i>	<i>gami</i>	fire
<i>mgo</i>	<i>guyung</i>	head
<i>nag(-po)</i>	<i>nyunti</i>	black
<i>nye</i>	<i>chan(do)</i>	near

<i>phyi</i>	<i>bi(to)</i>	outside
<i>'phur</i>	<i>ling</i>	fly
<i>rdo</i>	<i>gor</i>	stone
<i>rkang-pa</i>	<i>tawa</i>	leg
<i>rlung</i>	<i>zhilung</i>	air
<i>sgam</i>	<i>drom</i>	box
<i>shi</i>	<i>set</i>	die
<i>shig</i>	<i>se</i>	louse
<i>shing</i>	<i>seng</i>	wood
<i>shug-pa</i>	<i>drokseng</i>	juniper
<i>skol</i>	<i>shak, koi</i>	boil
<i>skudpa</i>	<i>'rotman</i>	thread
<i>so</i>	<i>kwa</i>	tooth
<i>sran-ma</i>	<i>neme</i>	pea
<i>srab-(po)</i>	<i>ngapmi, pratmi, 'latmi</i>	thin
<i>wa</i>	<i>am, phawa?</i>	fox

While East Bodish appears to be an obvious subgrouping, the placing of East Bodish within Tibeto-Burman remains subject to debate. Bradley (1997) proposes that East Bodish languages are most closely related to the Central Bodish languages, or Tibetan dialects. In addition to the East Bodish languages described here, Bradley also includes Sherdukpen and the ambiguous ‘Eastern Monpa.’ However, my own comparison of Sherdukpen with other East Bodish language data suggests Sherdukpen would not be in this group, an observation echoed in van Driem (2001: 473). An approximate family tree for the Bodic subfamily, proposed in Bradley (1997), is illustrated in Figure 7.

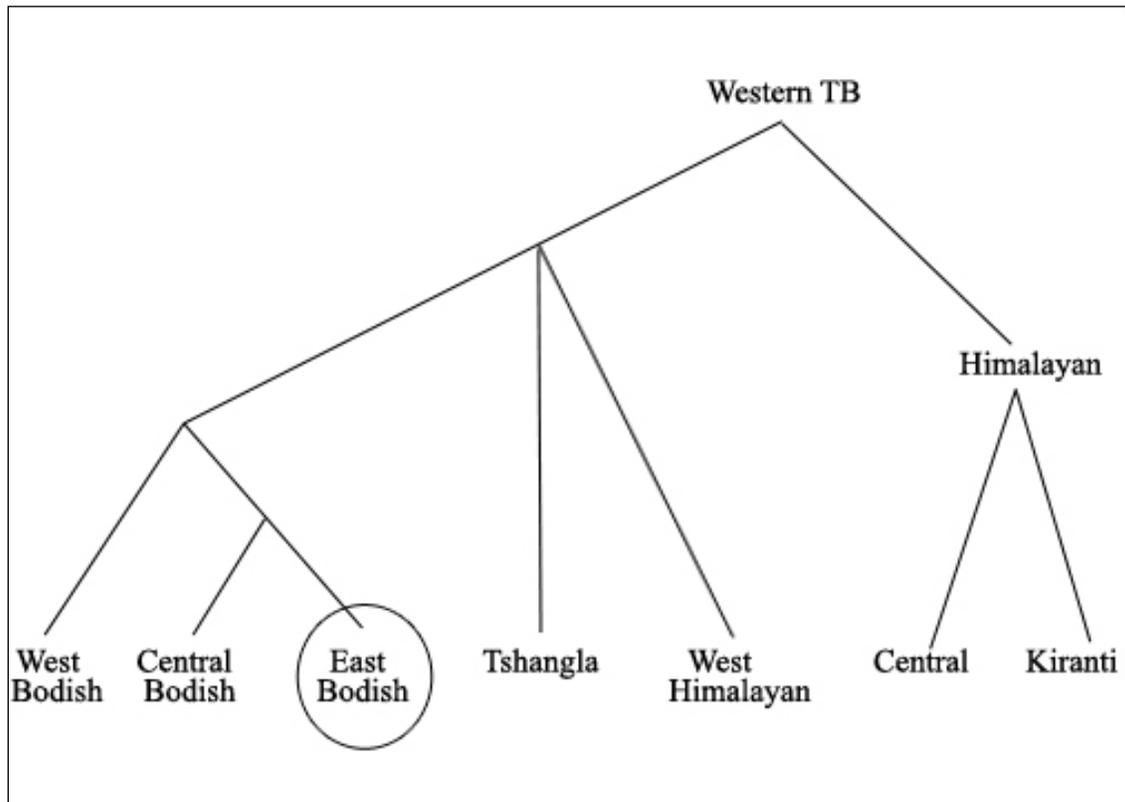
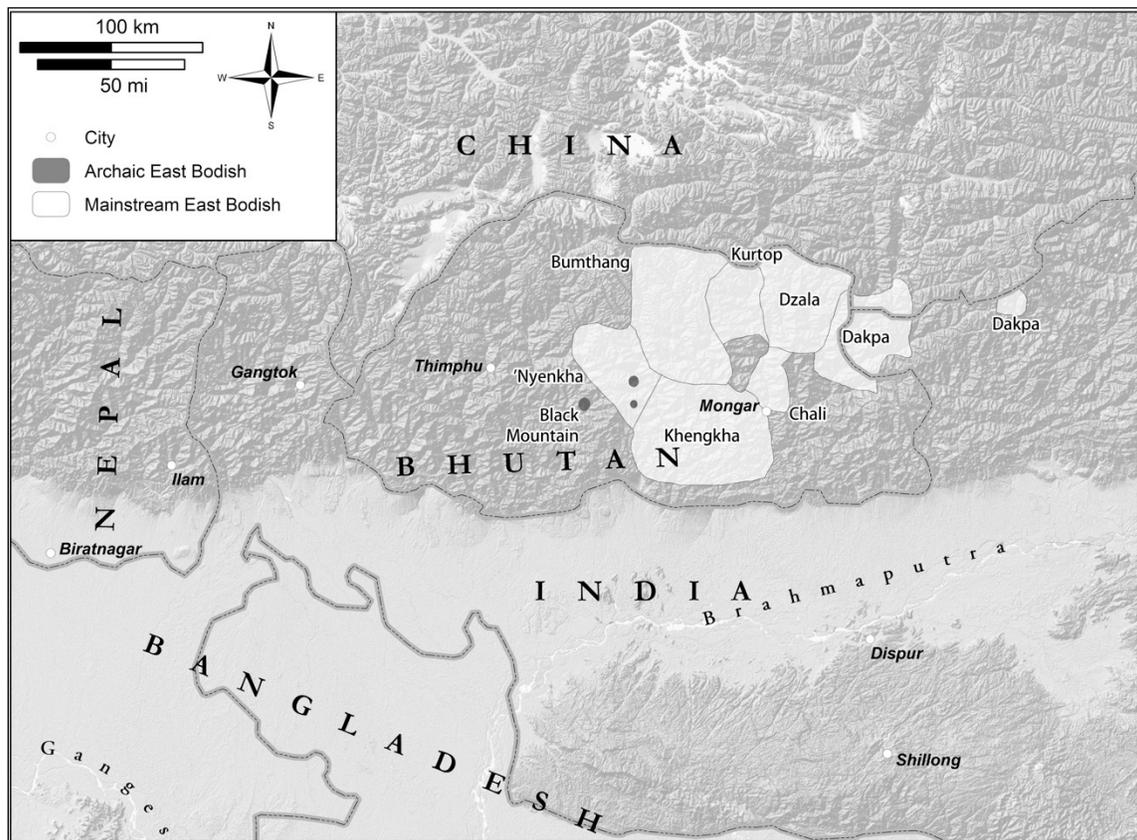


Figure 7. The ‘Western’ (also called ‘Bodic’) languages within Tibeto-Burman. Central Bodish (e.g. Dzongkha), East Bodish (e.g. Kurtöp) and Tshangla. Adapted from Bradley (1997: 3).

According to Figure 7, the East Bodish languages join with the Central Bodish languages (e.g. Tibetan dialects), which next join with the West Bodish languages (e.g. Tamang, Gurung) into Bodish. Bodish joins with Tshangla¹⁵, West Himalayish (e.g. Kanauri, Darma) and Himalayan (e.g. Magar, Newar and the Kiranti languages).

¹⁵ Bradley (1997: 53) incorrectly assigns Lhokpu and Gongduk to a Tshangla branch. Neither language has been studied in any significant depth, making classification problematic at this stage. Further, an overview of the Gongduk data presented in van Driem (2001: 463–468) and the Lhokpu data in Sharma (2005: 232–238) make it clear that neither language is obviously close to another language within Tibeto-Burman. For example: Gongduk *danli* ‘water’, *tah* ‘meat’, *din* ‘wood; firewood’, *ɹn* ‘tooth’, *um* ‘face’ have no known

The East Bodish languages themselves have been only marginally studied, with the current dissertation being the most in-depth study of any East Bodish language to date. A handful of East Bodish languages have been identified, including the majority of the languages indigenous to Central and Eastern Bhutan (e.g. Bumthang, Black Mountain, etc.), the adjacent region in Tibet (e.g. Cuona Menba) and some languages in Arunachal Pradesh (e.g. Dakpa). The distribution of the East Bodish languages is summarized by Figure 8 and Table 2.



cognates in TB and Lhokpu *tirr bang* ‘sky’, *tahli* ‘moon’, *yarnhi* ‘sun’, *teng* ‘hill’, *boh* ‘soil’, *puh-ium* ‘head’, *tang-tuk* ‘chest’, *toi-mhu* ‘heart’, *ra-an* ‘man’ do not have any known cognates in TB, either.

Figure 8. Current approximate distribution of East Bodish languages.

Kurtöp was first studied by Michailovsky and Mazaudon (1994), who describe the phonology of Kurtöp, showing comparison with Tibetan, several other East Bodish languages, and, occasionally, Tamang. Recently, DeLancey (2008) also compares Kurtöp with Tibetan, showing a close relationship but sufficient evidence to show that Kurtöp is not a direct descendent of Classical Tibetan. Busch (2007) is a M.A. thesis examining verbal nominalizations in Kurtöp. The most comprehensive work on Kurtöp has been my own, including a grammar (the current dissertation), a dictionary (Hyslop et al. in prep), several publications (Hyslop 2008a; Hyslop 2010a; Hyslop 2008b; Hyslop 2009) and conference presentations. The names, location, and estimated number of speakers of the East Bodish languages is summarized in Table 2.¹⁶

Table 2. Name, location, and estimated population of East Bodish languages

Name	Other names	Population	Location
Kurtöp	Kurtöbi-kha, Zhâke, <i>au gemale</i>	15,000	Lhüntsi
Bumthap	Bumthang-kha, Bumthabikha	30,000	Bumthang
Khengkha		40,000	Zhämgang
Chali	Chalipakha	1,000	Monggar
ʔNyenkha	Henkha, Mangdebi-kha	10,000	Trongsa

¹⁶ The data presented here are based on figures from van Driem (1998). In a few places the numbers have been modified to reflect updated findings in my own research.

Dakpa	Tawang Monpa, Dwags, Northern Monpa	35,000	Trashigang, Tawang district (Arunachal Pradesh)
Dzala	Kurtöp, 'Yangtsebikha, <i>i ga brok</i>	20,000	Lhüntse, Trashi- 'Yangtse, Tibet
Black Mountain	'Olekha, 'Olep	500	Trongsa, Wangdi

Other work on East Bodish languages include a 61 page publication on Bumthang (Driem 1995a), an article presenting Black Mountain conjugational verbal morphology (Driem 1995b), a short article comparing Dakpa and Dzala (van Driem 2007) and Lù (1986), a 187 page publication in Chinese on Cuona Memba (actually dialects of Dzala and Dakpa, according to van Driem 2001: 914–915). In 2008-2009 Carol Genetti led a Field Methods class using Dzala as the language. A summary of the results of that class was presented at the 15th Himalayan Languages Symposium (Genetti 2009; Balodis 2009). Dakpa was the focus of work by Shafer (1954) and a small study we conducted in 2007 (Hyslop and Tshering 2010). Fuminobu Nishida has been working on the dialect of Mangde spoken near Trongsa since 2007, producing a twelve-page report in Japanese (Nishida 2009).

These previous, descriptive studies echo the observation made by Shafer (1954) and subsequently codified by Bradley (1997) that the East Bodish languages are close relatives of Tibetan. However, a more thorough examination of these languages -- both in terms of comprehensive description of one language and a comparison of several -- calls

the placement of “East Bodish” within Bodish into question. For example, DeLancey (2008) uses the allomorphy associated with the Kurtöp perfective *-pa* (c.f. §7.3.2.2, which shows that *-pa* has allomorph *-sa* after open verb stems and *-wa* after *-ng*, *-k* and *-r* final stems) as evidence that Kurtöp shares a Bodish ancestor with Tibetan. However, this allomorphy is not found throughout all Kurtöp dialects; nor does Khengkha, Kurtöp’s sister language, possess this allomorphy. Rather, in Khengkha and the variety of Kurtöp spoken in Tangmachu, *-pa* is found invariably following all verb stems, regardless of phonological shape. This finding challenges the notion that Kurtöp has shared the allomorphological change characteristic of Bodish languages since the change in Dungkar Kurtöp could not have occurred at the time of the parent language. Rather, the fact that a dialect of Kurtöp still does not have the allomorphy associated with perfective *-pa* is evidence that Dungkar Kurtöp and other varieties which exhibit this morphophonological alternation have borrowed it.

As further evidence against the claim that Kurtöp *-pa* is shared with a Proto-Bodish ancestor, the *-pa* nominalizer meaning ‘one who’ or ‘one from’ in Kurtöp (§15.2.1) does not exhibit any allomorphy whatsoever. Again, this lack of allomorphy is evidence that the *-pa* nominalizer is new and thus is borrowed in Kurtöp as well, perhaps under the influence of Dzongkha.

There are other facts which potentially challenge the classification of Kurtöp and other East Bodish languages as Bodish at all. For example, the Kurtöp copula *nâ* (§18.2.1, §20.2.1.1.2) has recently grammaticalized from a lexical verb ‘to be at’. The evidence for this is found in a comparison with Bumthap and Khengkha, for which *nak*

‘to be at’ still inflects morpho-syntactically as the other lexical verbs¹⁷. Further research is clearly needed to ascertain the exact history of the East Bodish languages and thus their placement in Tibeto-Burman.

Van Driem (1995b) provisionally divides the East Bodish languages into ‘Maintstream’ and ‘Archaic’, with Archaic being represented by two dialects of what he refers to as ‘Black Mountain Mönpa’. §3.5.1 presents some evidence in favor of Black Mountain being a separate branch of East Bodish and in §3.5.2 I argue for a provisional genetic classification of the other East Bodish languages.

3.5.1. Archaic East Bodish¹⁸

Van Driem (1995b) recognizes two varieties of what he calls ‘Archaic East Bodish’. The western variety of ‘Archaic’ East Bodish is also called ‘Olekha; it is spoken in the remote village of Rukha, Wangdi district and is the most endangered language in Bhutan with only a few speakers still alive¹⁹. The eastern variety of Black Mountain Mönpa (Archaic East Bodish) is spoken in Trongsa district in the villages of Wang’ling, Jâmbi, and Phumzur, and in Zhämngang district in the village of Cunseng. Other than van

¹⁷ In Bumthap and Khengkha, *nak* is still a lexical positional verb, meaning something like ‘be at’, as in Bumthap *weri Bumthabikha lektoka nakta* ‘your Bumthap language is good’ (field notes).

¹⁸ In a recent conversation with George van Driem, prior to the submission of this dissertation but after this section had been written, he advocates for removing Black Mountain Mönpa from the East Bodish tree altogether, citing the observation that much of the lexicon is probably borrowed from an old Bodic/Bodish source, and that the heart of the language is not Bodish, though clearly Tibeto-Burman.

¹⁹ Under invitation from the Bhutanese government, Bhutanese colleagues and I recently visited Rukha and worked with the last speakers of ‘Olekha. While media reports had indicated there was only one speaker who still lived, we met three elderly native speakers and two middle-aged younger speakers. The younger speakers are fluent, but Dzongkha is their first language. We found that young children did not even have a passive understanding of the language, though younger adults, in their twenties and thirties, often did, even if they could not speak.

Driem (1995b), an overview of Black Mountain conjugational morphology, there is no linguistic study published to date, though some vocabulary may be gleaned from Giri (2004)’s ethnographic study, bearing in mind the author is not a linguist. Nonetheless, a preliminary comparison of the data presented in these studies with other East Bodish data offers meager support to the hypothesis that Black Mountain and the other East Bodish languages form a distinct sub-family of languages. Some of these similarities are presented in Table 3.²⁰

Table 3. Data evidencing similarity between ‘Archaic’ and ‘Mainstream’ East Bodish languages

Gloss	Black Mountain Mönpa	Other East Bodish
‘ <i>Artemesia sp.</i> ’	<i>dungmen</i> (Giri 2004: 64)	<i>dungmin</i> (Kurtöp)
‘nettle’	<i>kulima</i> (Giri 2004: v)	<i>kuli</i> (Kurtöp)
‘today’	<i>dirik</i> (Driem 1995b: 240)	<i>dεε</i> (Dakpa); <i>dasum</i> (Kurtöp)
ERGATIVE	<i>-se</i> (Driem 1995b: 239)	<i>-si</i> (Dakpa; Hyslop and Tshering 2010: 14)
FUTURE	<i>-m</i> (Driem 1995b: 239)	<i>-m</i> (Dakpa; Hyslop and Tshering 2010: 16) <i>-m</i> (Khengkha)
IMPERATIVE	<i>-lo</i> (Driem 1995b: 239-240)	<i>-lu/-lo</i> (Kurtöp; see §17.4)

²⁰ In our Dakpa data, we found *-m* to correlate with third person future, while *-k* appeared to correlate with first person future. Given that the study was preliminary, it is too early to tell whether or not the analysis of *-m* being a marker of third person future, or something else, such as disjunct future, for example.

Due to scarce data, the differences between Black Mountain and the other East Bodish languages are equally difficult to show. However, two linguistic facts immediately become salient in a brief comparison. First is the fact that Black Mountain has complex conjugational verbal morphology (van Driem 1995b). Second is the presence of a stop-initial first person pronoun where the other East Bodish languages present a nasal-initial form.

3.5.2. Mainstream East Bodish

Table 4. Black Mountain and Mainstream East Bodish personal pronouns

Gloss	Krt	Kh	Bm	Ph	Ch	Da	Dz	Black Mountain
1.SG	<i>ɲat</i>	<i>ɲa/ɲat</i>	<i>ɲat</i>	<i>ɲa</i>	<i>ɲat</i>	<i>ɲe</i>	<i>ɲe</i>	<i>kö</i>
1.PL	<i>ner</i> (INCL) <i>net</i> (EXL)		<i>ɲet</i>		<i>ne</i>	<i>ɲar</i>	<i>ɲata</i> (INCL) <i>ɲara</i> (EXL)	<i>ɔɲdat, ɔɲnak</i> (INCL), <i>anak</i> (EXL)
2.SG	<i>wit</i>	<i>we</i>	<i>wet</i>	<i>yi</i>	<i>i</i>	<i>i</i>	<i>i</i>	<i>iɲ, andat</i>
2.PL	<i>nin</i>		<i>win</i>			<i>ir</i>	<i>ita(ɲ)</i> (INCL) <i>ira(ɲ)</i> (EXL)	<i>iɲnak, iɲ</i>
3.SG	<i>khit</i>	<i>gon</i>	<i>gon/khit</i>	<i>khi</i>	<i>khi</i>	<i>be</i>	<i>be</i>	<i>hoʔma</i> (M), <i>hoʔmet</i> (F)
3.PL	<i>bot</i>		<i>bot</i>			<i>ber</i>	<i>beta(ɲ)</i> (INCL)	<i>hoʔoɲ, hoɲnak</i>

<i>bera(ŋ)</i> (EXL)

A comparison of Black Mountain pronouns with Mainstream East Bodish pronouns is shown in Table 4.²¹ Figure 9 illustrates the proposed tentative relationship of the East Bodish languages.

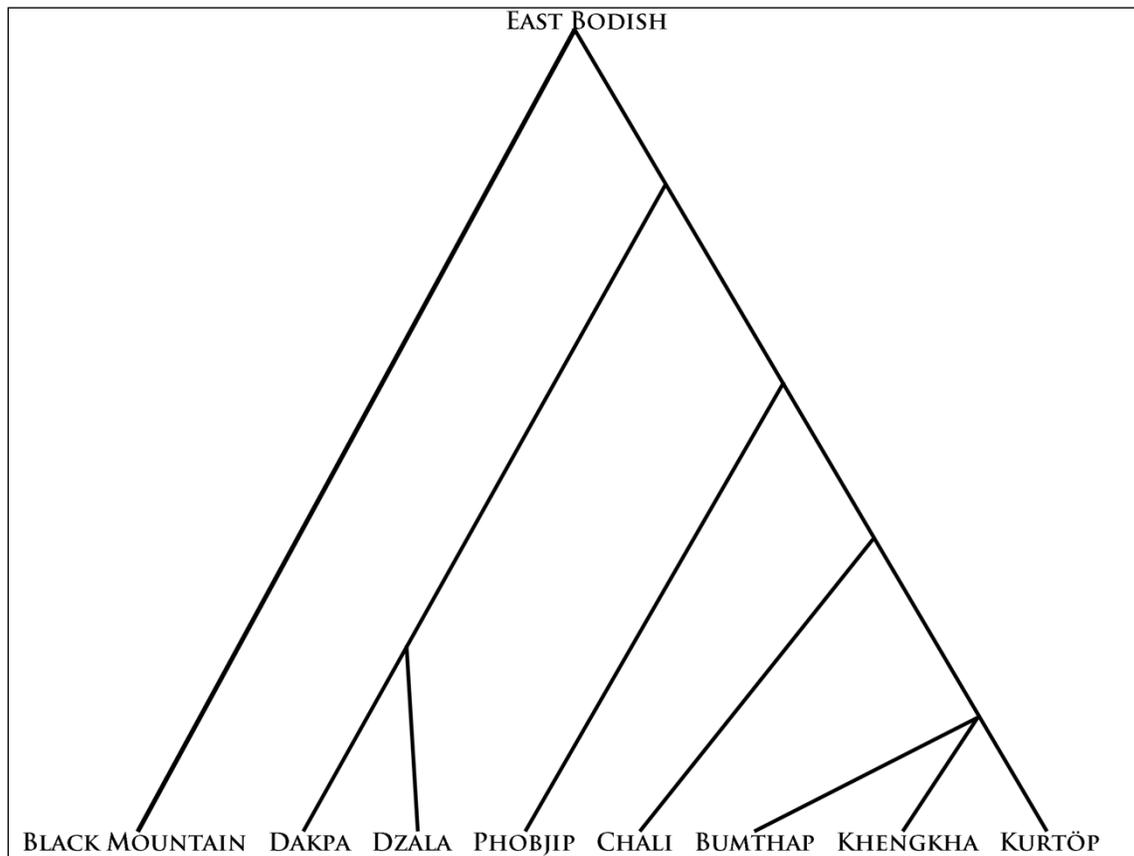


Figure 9. Proposed tentative relationship amongst East Bodish languages

²¹ Pronominal Dzala data are from Genetti (2009) and Black Mountain data are from (Driem 1995b).

3.5.2.1. Dzala/Dakpa vs. the rest

The fact that Dzala and Dakpa form their own subgroup within East Bodish was first noticed in van Driem (2007). My findings corroborate and build on this. There are two sound changes which separate Dzala and Dzakpa from the rest of the Mainstream East Bodish languages; the low vowel /a/ is fronted to /e/ and /e/ is raised to /i/. Some examples are shown in Table 5.^{22,23}

Table 5. Sound changes $a > e$, $e > i$ in Dzala and Dakpa

Gloss	Da	Dz	Krt	Bum	Kh	Ch	Ph
‘horse’	<i>te</i>	<i>te</i>	<i>ta</i>	<i>ta</i>	<i>ta</i>	<i>ta</i>	<i>ta</i>
‘five’	<i>leŋe</i>	<i>leŋe</i>	<i>jaŋa</i>	<i>jaŋa</i>	<i>jaŋa</i>	<i>jaŋa</i>	<i>laŋ</i>
‘waist’	<i>khret</i>	<i>thret</i>	<i>khrat</i>	<i>khrat</i>	<i>thrat</i>	<i>ketpa</i>	
‘four’	<i>bri</i>	<i>bli</i>	<i>ble</i>	<i>ble</i>	<i>ble</i>	<i>bre</i>	<i>bre</i>

Another phonological difference that separates Dakpa and Dzala from the rest of the Mainstream East Bodish languages is aspiration. While all East Bodish languages make the three-way contrast in voicing described for Kurtöp (§6.2.1.1), Dakpa and Dzala often have voiceless unaspirated initials where the rest of the East Bodish languages have aspirated initials. Some examples are shown in Table 6.²⁴

²² This sound change has several exceptions, such as: Dakpa *wá* and Kurtöp *kwa* ‘tooth’, Dzala, Dakpa, Kurtöp *khasha* ‘deer’.

²³ The order of the sound change is primarily motivated by the comparison with PTB ‘five’ **ŋa* Matisoff (2003: 650) and Written Tibetan ‘horse’ *ཕྲ* <rtā>

²⁴ It is not clear whether the lack of aspiration in the Dakpa and Dzala forms for ‘ten’ is innovative or conservative. Further, this example is potentially problematic. The Phobjip form *k^hepche* suggests the

Table 6. Aspiration in Dakpa/Dzala versus other East Bodish

Gloss	Da	Dz	Krt	Bum	Kh	Ch	Ph
‘ten’	ciŋnəi	ci	che	che	che	che	khepche

In addition to the sound changes that separate Dakpa and Dzala from the other East Bodish languages, Dakpa and Dzala share a number of forms that are not found elsewhere in East Bodish to our knowledge. Some examples are shown in Table 7.

Table 7. Words unique to Dzala and Dakpa

Gloss	Dakpa	Dzala	Kurtöp	Bumthap	Kheng	Chali	Phobjip
‘sun’	<i>plaŋ</i>	<i>praŋ</i>	<i>ne</i>	<i>ni</i>	<i>ni</i>	<i>thanman</i>	
‘water’	<i>tshi</i>	<i>tshi</i>	<i>khwe</i>	<i>khwe</i>	<i>ϕe</i>	<i>khwe</i>	<i>khö</i>
3.SG	<i>be</i>	<i>be</i>	<i>khit</i>	<i>khit/gon</i>	<i>gon</i>	<i>khi</i>	<i>khi</i>

3.5.2.2. Phobjip vs. Chali/Bumthang group

One of the East Bodish languages identified in van Driem (1998) is ’Nyenkha, actually a rather diverse group with several dialects including those of Trongsa, Tshangkha, and Phobjikha, Of these van Driem (2001: 913) states that the variety spoken in the Phobjikha valley is the most divergent, lexically. Phonological evidence that Phobjip is separate from Chali and the Bumthang languages is shown in Table 8, which presents evidence of a sound change shared by Chali and the Bumthang languages, but not the other East Bodish languages.

etymology ‘twenty-half’ for ‘ten’. If so, presumably the form *c^he* found in Kurtöp, Bumthap, Khengkha and Chali.

Table 8. Sound change *l > j* in Chali and the Bumthang group

Gloss	Dakpa	Dzala	Kurtöp	Bumthap	Kheng	Chali	Phobjip
‘five’	<i>leŋɛ</i>	<i>leŋɛ</i>	<i>jaŋa</i>	<i>jaŋa</i>	<i>jaŋa</i>	<i>jaŋa</i>	<i>laŋ</i>
QP	<i>lo</i>		<i>jo</i>				<i>lo</i>
‘hand’			<i>ja:</i>	<i>ja:</i>	<i>ja:</i>		<i>la:</i>

3.5.2.3. Bumthang group

There are several changes that separate Kurtöp from Bumthap and Khengkha, Bumthap from Khengkha and Kurtöp, and Khengkha from Kurtöp and Bumthap. In other words, each language constitutes a group in its own right.

3.5.2.3.1. Kurtöp

Kurtöp differs from Khengkha and Bumthap in not using the form *gon* as a pronoun for third person and has a number of different lexical items. Another importance difference is the grammaticalization of *nak* ‘to be at’ as a copula, which is still a lexical verb in Bumthap and Khengkha. Examples are in Table 9.

Table 9. Forms unique to Kurtöp

Gloss	Krt	Bum	Kh
3.SG	<i>k^hít</i>	<i>gòn/k^hít</i>	<i>gòn</i>
‘nose’	<i>ná</i>	<i>náp^haŋ</i>	<i>nabli</i>
‘do’	<i>ŋàk</i>	<i>bù</i>	<i>bù</i>
COP	<i>nà:</i>	<i>nàk</i> (‘to be at’)	<i>nàk</i> (‘to be at’)

Kurtöp has also simplified all previous velar-rhotic onset clusters, as illustrated by data in Table 10.

Table 10. Loss of /kr-, k^hr-, gr-/ Kurtöp

Gloss	Krt	Bum	Kh
‘hair’	<i>rá</i>	<i>krá</i>	<i>krá</i>
‘climb’	<i>t^hrán</i>	<i>k^hrán</i>	<i>k^hrán</i>
‘arrive’	<i>t^hák</i>	<i>k^hrák</i>	<i>k^hrák</i>
‘six’	<i>dò</i>	<i>gròk</i>	<i>grò</i>
‘village’	<i>tón</i>	<i>krón</i>	<i>krón</i>

3.5.2.3.2. Khengkha

There are some forms unique to Khengkha, not found in Kurtöp or Bumthap, as shown in Table 11.

Table 11. Forms unique to Khengkha

Gloss	Kh	Krt	Bum
‘eat’	<i>cáp</i>	<i>zù</i>	<i>zù</i>
‘wife’	<i>kéme</i>	<i>nésan</i>	<i>némo</i>

Khengkha has also innovated a voiceless labial fricative where Kurtöp and Bumthap have /k^hw-/ onset clusters. Khengkha also has a palatal stop in some instances where Bumthap and Kurtöp have fricatives. Table 12²⁵ presents some of these innovations.

²⁵ Bumthap data here are from (van Driem 1995b).

Table 12. Sound changes unique to Khengkha

Gloss	Kh	Krt	Bum
‘red’	<i>jinti</i>	<i>zhinti</i>	<i>zhinti</i>
‘what’	<i>ja</i>	<i>zha</i>	<i>zhra</i>
‘dog’	<i>phi</i>	<i>khwi</i>	<i>khwi</i>
‘water’	<i>pe</i>	<i>khwe</i>	<i>khwe</i>

3.5.2.3.3. Conclusions

The East Bodish languages are clearly not dialects of Tibetan, though they share a close relationship with Tibetan. More work is needed to confirm all levels of the proposed genetic relationship among the East Bodish languages. Within East Bodish, particularly, it is still not clear whether we are dealing with clearly delineated languages or with something more like a dialect chain. More documentary and descriptive work is needed on all these languages, particularly the Black Mountain language, about which we know almost nothing. Along with descriptive work, rigorous comparative work is needed in order to peel off what must be many layers of borrowing from Tibetan. For the sake of completeness and comparison, Table 13 presents numerals one through ten and 20 in the East Bodish languages.

Table 13. East Bodish numerals

Gloss	Kurtöp	Khengkha	Bumthap	Phobjip	Chali	Dakpa	Dzala
‘one’	<i>thé:</i>	<i>thek</i>	<i>thék</i>	<i>thi</i>	<i>thé</i>	<i>thí</i>	<i>thé</i>
‘two’	<i>zòn</i>	<i>zon</i>	<i>zòn</i>	<i>zøn</i>	<i>nè</i>	<i>nèi</i>	<i>nài</i>
‘three’	<i>súm</i>	<i>sum</i>	<i>súm</i>	<i>sum</i>	<i>súm</i>	<i>súm</i>	<i>súm</i>
‘four’	<i>blè</i>	<i>bla</i>	<i>blè</i>	<i>bre</i>	<i>brè</i>	<i>blì</i>	<i>bri</i>
‘five’	<i>jàngà</i>	<i>janga</i>	<i>jàngà</i>	<i>lan</i>	<i>jàngà</i>	<i>lɛŋ</i>	<i>lɛŋ</i>
‘six’	<i>dò:</i>	<i>gro</i>	<i>gròk</i>	<i>dò</i>	<i>dò?</i>	<i>krò</i>	<i>dò?</i>
‘seven’	<i>ní(s)</i>	<i>nyít</i>	<i>nyít</i>	<i>nís</i>	<i>ní</i>	<i>nís</i>	<i>ní</i>
‘eight’	<i>jàt</i>	<i>jat</i>	<i>jàt</i>	<i>gæ</i>	<i>jàt</i>	<i>kɛt</i>	<i>get</i>
‘nine’	<i>dògò</i>	<i>dogo</i>	<i>dògò</i>	<i>dok</i>	<i>dùgù</i>	<i>dùgù</i>	<i>dùgù</i>
‘ten’	<i>ché</i>	<i>che</i>	<i>ché</i>	<i>khepche</i>	<i>ché</i>	<i>cíηnəi</i>	<i>cí</i>
‘twenty’	<i>khedi</i>	<i>khaide</i>	<i>khaethek</i>	<i>khedi</i>	<i>khethe</i>	<i>khəli</i>	<i>khalit</i>

CHAPTER IV
LINGUISTIC HISTORY OF BHUTAN

In a recent archaeological study, Meyer et al. (2009) reported evidence of human inhabitation in northwestern Bhutan as early as 4280 ± 130 cal BP. This data is consonant with the general idea that the earliest inhabitation of Bhutan is 2000 BCE (e.g. Chakravarti (1979) and the National Museum in Paro, Bhutan). Unaware of the archaeological evidence in northwestern Bhutan, sources such as Chakravarti (1979) and Savada (1993) cite the presence of stone tools and weapons, megaliths, large stone structures, and absence of neolithic mythological legends²⁶ as evidence of inhabitation in 2000 BC. According to Savada (1993), there is evidence in Bhutanese and Tibetan chronicles that *Lhomon* or *Monyul* was a kingdom present in modern-day Bhutan, existing between 500 BC and AD 600. *Lho* is a Tibetan word for ‘south’, *mon* may refer to ‘without religion’, or a generic ethnolinguistic term for non-Tibetans and non-Indians²⁷, and *yul* means ‘country’. Thus, the general understanding of *Lhomon* and

²⁶ It is likely the sources who gave this interviewed only speakers of Dzongkha, and not other Bhutanese ethnolinguistic communities. It would be interesting to interview Gongduk and Lhokpu speakers to ascertain what their legends suggest regarding their own origins.

²⁷ Jäschke ([1881] 2007:420) defines མོན་ <mon> as ‘general name for the different nations living between Tibet and the Indian plain’ while the Dictionary put out by the Dzongkha Development Commission (DDC 2007) defines མོན་ <mon> as མོས་དང་ཡོན་ཏན་མ་དར་བའི་གཡུ་ས། <chos.dang.yon.tan.ma.dar.bai.gyus> ‘a valley where religion and knowledge have not been diffused’.

Monyul is that they refer to Tibetan expressions denoting a sort of inferior race of people in the south.

However lacking rigorous archaeological study may be on prehistoric sites in Bhutan, recent genetic work in Nepal and Bhutan (e.g. Kraaijenbrink et al. 2007; Parking et al. 2006), it seems, has led to the discovery of genetic markers that are specifically correlated to the spread of Tibeto-Burman populations in Asia. Su et al. (2000) suggest that the modern Bodic and Baric Tibeto-Burman speaking populations moved into the Himalayas about 5000-6000 BP. The genetic data and archaeological evidence, under the interpretation put forth in van Driem (2008), suggest that Bhutan could have been inhabited only recently (around 4000 BP), as populations from Kharro spread into Bhutan.

Buddhism arrived in Bhutan in the 7th century AD, imported directly from Tibet under the orders of the Tibetan king Srongtsen Gampo, who constructed the J'ampa Lhakhang and Kichu Lhakhang in Bhutan. Both remain revered as the holiest of sites in Bhutan. Soon after, in AD 747, the Indian Buddhist saint Padmasambhava (known as Guru Rimpoche in Bhutan) came to Bhutan, leaving behind a rich and fascinating folklore that today dominates Bhutan's colorful ideas regarding origins.

Shortly after the arrival of Buddhism, Bhutan lacked a central government but instead consisted of small and independent monarchies, each ruled by a *Deb Raja*. Forces from Tibet continued to come into Bhutan and by the 11th century much of Bhutan was inhabited by Central Tibetan-speaking forces, pushing the indigenous inhabitants further south into remote pockets. The independent kingdoms continued warring until Ngawang

Namgyal (referred to as *Zh'apdrung* in Bhutan) came from Tibet in 1616 and unified the country. Several wars with Tibet ensued after Zh'apdrung's death and Bhutan's borders grew and shrank as parts of land were taken and recaptured from neighboring regions. Notably, Bhutan had acquired the portion of India immediately south of the current border, referred to as the Bengal and Assamese Duars. Britain became involved and war ensued for five months between 1864-1865 (Rennie 1866), with the eventual result that the Duars were returned to India, in exchange for an annual payment from India to Bhutan²⁸.

Finally, in 1907, Sir 'Ugen Wangchuk emerged as the first King of Bhutan and a peaceful monarchy reigned for one hundred years, before the fourth King, His Majesty Jigme Singye Wangchuk, introduced a Constitutional Monarchy in 2008.

4.1. Current ethnolinguistic situation

There have been very few ethnographic studies of any Bhutanese cultures to date (Sharma 2005 and Giri 2004 being two such exceptions) but I have made some of the following observations in my fieldwork. In reading the following, one should keep in mind that I am not an anthropologist and as such my observations regarding culture (exclusive of language) would be best be equated with those of a layperson. The following overview combines my own field notes with information outlined in van Driem (1998, 2001).

²⁸ To my knowledge, there is still no authoritative and accurate source for Bhutanese history. The history outlined until this point has been based on my interviews in Bhutan and reflects the general understanding of most educated Bhutanese.

Bhutan, though being sparsely populated (between 600,000-700,000 inhabitants at the current estimate), is surprisingly diverse in language and culture. With the exception of recent Nepalese immigrants²⁹, the languages of Bhutan all fit into the Tibeto-Burman family. But within Tibeto-Burman, the 19 languages³⁰ are understood to belong to six sub-families.

Western Bhutanese are identified as 'Ngalop and speak Dzongkha, the national language. Dzongkha, together with the Tibetan dialects, belongs to the Central Bodish branch within Bodic. Aberrant varieties of Dzongkha are also spoken by the northern nomads in the Laya and Lunana areas. Chocangaca is the most conservative Central Bodish language in Bhutan, having retained many phonological features characteristic of Classical Tibetan but lost in most dialects of Tibetan, including Dzongkha. Because of the similarity of Chocangaca with Classical Tibetan, and the designation of Classical Tibetan as the liturgical language, Chocangaca enjoys a special privileged status when compared to its geographic neighbors (see Figure 10).

East Bodish languages comprise the family of languages with the most internal diversity in the Kingdom. Ranging from south central Bhutan to the northeast corner, the East Bodish languages wrap around the middle and northeastern portion of the country.

²⁹ The Nepalese immigrants, who primarily inhabit the southern border areas of Bhutan, speak Nepali and often various Tibeto-Burman languages indigenous to Nepal.

³⁰ George van Driem, having completed the first linguistic survey of Bhutan, tentatively identifies 19 different Tibeto-Burman languages in the Kingdom (van Driem 1998). This figure will likely be larger once more extensive documentation work takes place on known languages and mutual intelligibility is better understood. It remains entirely likely that more languages are waiting to be identified in Bhutan, given the difficulties inherent to language survey and documentation work.

In a few isolated pockets in the south, a few communities still speak what van Driem (1995b; 1998) refers to as Black Mountain Mönpa and what is locally called ‘Monkha’. Van Driem (1995b) considers this an archaic East Bodish language, separated from its East Bodish relatives largely by a complex system of conjugational verbal morphology. The other branch of East Bodish consists of Khengkha, ’Nyenkha, Bumthap, Kurtöp, Chali, Dzala, Dakpa and mTshona Menba.³¹

In the southwestern Samtsi district, the Lhokpu are found to be one of the oldest groups in Bhutan. They speak an unclassified Tibeto-Burman language, though van Driem (2001: 804) tentatively notes that the Lhokpu language appears to be closer to the Kiranti languages of Nepal than to the neighboring Lepcha. The Lhokpu have also resisted being converted to Buddhism and still inter their dead (van Driem 2001; Sharma 2005) and evidence a matrilineal and matrilocal-based social organization (Sharma 2005). Interestingly, van Driem (2001: 804-805) hypothesizes that the Lhokpu language may in fact be a substrate to Dzongkha, and speculates that perhaps most of ’Ngalop Bhutanese are actually of mixed Lhokpu and ’Ngalop ancestry. This claim is also supported by the fact that matrilineality is the norm throughout most (if not all) of Bhutan and matrilocality is so common that a usual question asked of a married couple in Bhutan in Dzongkha is *’maba züzu ’ing na* ‘(did you) enter as a husband?’ or *’nama züzu ’ing na*

³¹ Lü (1986) is a short description in Chinese of two dialects of mTshona Menba, spoken in southeastern Tibet. Van Driem (2001: 914-915) states that that dialects represented in this study are actually a dialect of Dzala and a dialect of Tshangla.

‘(did you) enter as a wife?’ Also, there is a word in Dzongkha and other Bhutanese languages to express husbands of sisters (*maro*) but not wives of brothers.

Gongduk is another language of Bhutan that does not appear to have any other close relatives, though it has been classified as Tibeto-Burman. Gongduk is spoken in a secluded corner of the Kheng district in south central Bhutan. Little is known about the group of Gongduk speakers, except for what has been published of their language in van Driem (2001a), though van Driem (2001a: 870) also speculates that Gongduk may be a substrate in the ‘Greater Bumthang’ languages (i.e. Butmhang, Kurtöp, Khengkha) and perhaps may itself be a mixed language with a non-Tibeto-Burman substrate, representing an even older population in Bhutan.

Perhaps the largest linguistic group in Bhutan is the Sharchop (lit. *easterners* in Dzongkha) who speak Tshangla. This language has been well-described by Erik Andvik (Andvik 2010; Andvik 1999; Andvik 2003). Tshangla is also spoken in adjacent Arunachal Pradesh, where it is often called Central Monpa. B.Chakravarti (1979) speculates that the current Tshangla-speaking population is representative of an old Austroasiatic-speaking population, perhaps related to the contemporary Khasi population in Shilong.

The location of Bhutan’s Tibeto-Burman languages is illustrated in Figure 10.



Figure 10. The Tibeto-Burman language map of Bhutan. The small black shape in the southwest corner of the country, near Chhukha, indicates the approximate location where Lepcha is spoken; the adjacent blue shape denotes Lhokpu and the small green circle, just south of Zhemgang, is the approximate location of Gongduk. Central Bodish languages are illustrated with purple shapes. Dzongkha (and its many dialects) are indicated with a large shape in the western portion of the country. Chocangaca is spoken toward the east. The small blue circle illustrates approximate areas where Black Mountain Mönpa is spoken. Other blue shapes, starting in the south and moving clockwise into Arunachal Pradesh, represent Khengkha, 'Nyenkha, Bumthang, Kurtöp, Dzala and Dakpa, respectively. The pink shapes illustrate where Tshangla is spoken (adapted from van Driem 1998 to reflect my own research).

4.2. The archaeological record

4.2.1. Bhutan's Neighbors

4.2.1.1. Tibet

4.2.1.1.1. Paleolithic

The archaeology of the Tibetan plateau, which borders Bhutan's north, has been studied by both Chinese and western archaeologists. Aldenderfer and Zhang (2004) outline the prehistoric research of the Tibetan plateau, noting late Paleolithic inhabitation in a handful of locations. One that has been relatively well-studied is that of Chusang, located approximately 85 km northwest of Lhasa. Optically stimulated luminescence dates estimate the age of site to be between 21,700 and 20,600 BP (Zhang and Li 2002).

The find consisted of 19 human hand and foot prints, probably including those of children, on a now calcified Travertine deposit (Zhang and Li 2002). No artifacts have been found, though Zhang and Li believe they may have evidence for a hearth in the locality. As Aldenderfer and Zhang point out, if this evidence is indicative of inhabitation, it would predate the late glacial maximum (LGM) and models of extensive ice cover on the plateau are probably invalid (2004:17).

These hand and footprints are not the only evidence of Paleolithic inhabitation of the Tibetan plateau. An assemblage of large blade tools, core and simple flake tools were unearthed from the Getting (Huang 1984; Qian and Wu 1988), Duogeze (Liu and Wang 1986), Zhulole (An and et al 1982), Hadongtang and Quedetang (Huo 2000) and Zhabu

(Liu and Wang 1986) sites, spreading from west (Zhabu) to the south (Sure) (Figure 11).

These tools were presumably used as scrapers, graters, burins and unifacial points.

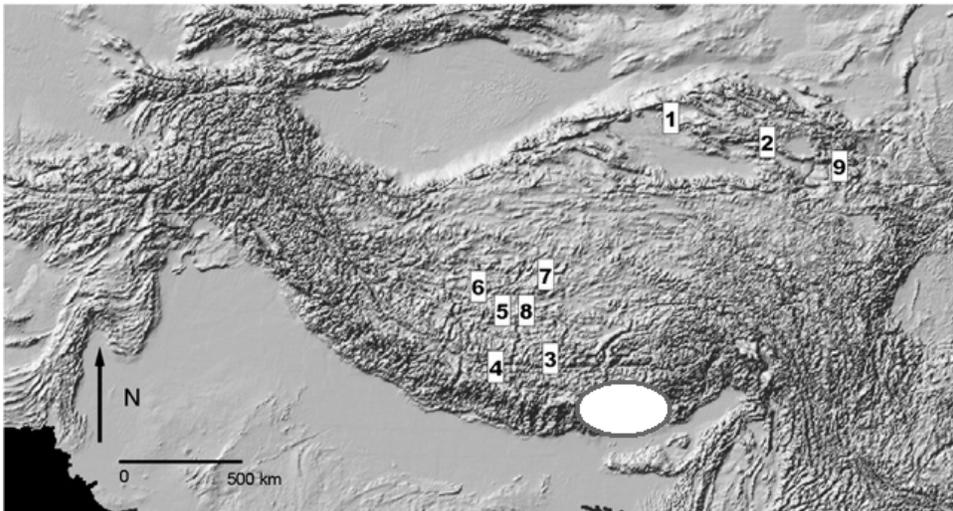


Figure 11. Paleolithic sites on the Tibetan Plateau. The approximate location of Bhutan is indicated with a white oval. 1: XiaoQaidam; 2: Heimhe and Jiangxigou; 3: Chusang; 4: Sure; 5: Zhuluole; 6: Duogeze; 7: Zhabu; 8: Luling; 9: Layihai. (Adapted from Aldenderfer and Zhang 2004: 17)

The only other finds on the Tibetan Plateau from the Pleistocene are near Koko Nor lake (also called Qinghai lake, near point 9 in the map in Figure 11 above) in the Northeastern corner of Qinghai province, China (Brantingham et al. 2003), dating between 12,400 and 10,800 BP.³² At the Heimahe site five stone-lined hearths were found in the stratified layers, revealing several animal bone fragments but none of lithics.

³² These dates are based on AMS (Accelerator Mass Spectrometry) radiocarbon dating of wood charcoal (Brantingham 2003).

The Jianxigou site consists of one hearth and debitage from it suggests a microblade industry.

4.2.1.1.2. Tibetan neolithic

As Gayden et al. (2007) articulate, the genetic, archaeological and linguistic evidence all point toward a peopling of the Tibetan Plateau during the Neolithic period. Aldenderfer and Zhang (2004) propose alternative theories in greater detail. The eastern Neolithic cultures spread to the Tibetan Plateau by 5000 BP as clearly evidenced by several settlement sites (Aldenderfer and Zhang 2004). Whether any indigenous groups contributed to the Neolithic arrivals on the plateau is an interesting question, pending further investigation, and will not be further pursued here.

In the Holocene, archaeological evidence between 11,000 and 6,000 BP is virtually absent. The one exception to this has been Layihai in the eastern extreme of Qinghai province (Gai and K Wang 1983). By 5000 BP the Neolithic culture was well established in several places on the Tibetan Plateau, as seen in Lhasa, Nyingthri and Metok counties (van Driem 2001a).

The one of the most famous Neolithic sites is the Kharro (mKharo-ro) Fort, also called 'Fort River' (mKhar-chu) (van Driem 2001a:430). It is located at a high terrace above the confluence of the Mekong with a small lateral tributary, about 12 km south of Chamdo (chab-mdo) in Kham, eastern Tibet (today the southeastern portion of Qinghai and northwestern Sichuan provinces of China). The site was first excavated and described in a report by The 'Managing Committee for Cultural Affairs of the Autonomous Region of Tibet' (Xizang etc. 1979) excavated the site under the name of 'Karu' and reported its

cultural similarity to the Neolithic culture called the ‘Mǎjiāyáo (馬家窯)’ in Gansu-Qinghai regions. Tong, Jian, and Suolang (1982) report the presence of millet at Karuo and speculate that the inhabitants there did not share the rice-based culture of central and southern China.

The artifacts at Karuo were the bone tools and multi-functional stone tools, including polished jade. Coil-built pottery has cord-marked, appliqué, punctate, and painted decoration. The similarities of this site with the Mǎjiāyáo culture is noted by Tong *et al.* (1982) and Van Driem more specifically argues that the site is most closely related to Banshan (2200-1900 BC) and Machang (1900-1700BC) phases of the Mǎjiāyáo culture (2001a:431)³³. This Neolithic inhabitation at Kharro are dated from 3300 to 1800 BC.

In the Himalayas, a culture similar to Mǎjiāyáo has been found in the Djangu area of Northern Sikkim (Sharif and Thapar 1992). The artifacts here resemble the so-called ‘Mǎjiāyáo nucleus’, including double-perforated rectangular harvesters and semi-lunar knives (van Driem 2001a:430). Sharif and Thapar (1992:129) also note the similarity between the Sikkim site with the Yángshào (仰韶) culture in the east, postulating a southward penetration into Sikkim during the early third millennium BC or slightly later. If the Sikkim Neolithic culture originated from the Tibetan Neolithic culture, which is well represented at the Kharro site, it is plausible to assume that the Tibetan Neolithic

³³ Mǎjiāyáo, found in the upper Yellow River region of Gansu, in modern day Qinghai province, is considered an offshoot of the Yángshào culture, which was a Neolithic Yellow River culture existing in modern day Henan, China from approximately 5000-3000BC (Chang 1986).

people passed through Bhutan sometime after 3300 BC but before the beginning of the Sikkim Neolithic culture as Van Driem argues (2001; 1999). Van Driem (2001; 1999) speculates that the modern Bodic languages of the Himalayas were brought in when bands of Tibeto-Burmans migrated west from the Kharro proximity.

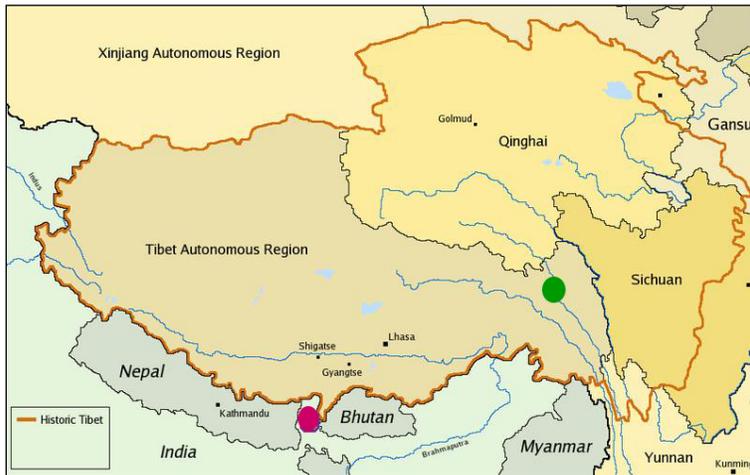


Figure 12. The location of the Kharro site in eastern Tibet (illustrated with a green circle), modern day Bhutan, and the approximate location of the Sikkim Neolithic cultural complex (illustrated with a purple circle). Note that any group migrating from Kharro to Sikkim would like have had to pass through Bhutan.

Though no Neolithic sites in Bhutan have been squarely identified,³⁴ the current ethnolinguistic situation in Bhutan may also support the migration hypothesis. Languages such as Lhokpu and Gongduk may be remnants of languages spoken by the first Tibeto-Burmans to populate the Himalayas. Lhokpu and Gongduk have been only marginally studied, though preliminary research has shown them to be highly divergent Tibeto-

³⁴ This is probably due to the dearth of archaeological research in Bhutan.

Burman (though probably Bodic) languages with no clear close relatives. However, as van Driem (2001a) articulates, the little documentation of most of the Himalayan languages (Arunachal Pradesh, in particular) inhibits our ability to test theories regarding the correlation between modern-day endangered Bhutanese languages and possible Neolithic migrants entering Bhutan from the northeast.

4.2.1.1.3. Zhang-zhung

At least as long as 3000 years ago the inhabitants of Upper Tibet had developed a state-level society, what would become the Zhang-Zhung kingdom, and many elements of the kingdom still exist in Tibet and parts of the Indian Himalaya. Bellezza (2008) provisionally identifies the two major cultural epochs in the region, based on the rock art and monuments. Epoch I is further divided into the two cultural phases: the Iron Age and the protohistoric period. Epoch II is the historic time, consisting of the early historic and vestigial cultural periods.

The first phase of Epoch I begins in the late Bronze Age (circa 1200-800 BC) or the early Iron Age (1000 – 500 BC). The second phase is the Tibetan extension of the Iron Age and marked by the Central Tibetan line of kings (Bellezza 2008: 26). The Tibetan written records referenced the Central Tibetan kings of the second phase but the presence of Bon texts needs to be confirmed. Epoch I ends by the 7th century AD.

Epoch II, the early historic period, corresponds to the Tibetan Empire. Buddhism was introduced during this period and along with it the development of the Tibetan orthography. The upper Tibetan proto states of Zhang-zhung and Sum-pa joined this wider Tibetan polity. It is during this time that historical records document Tibetan

relations with Bhutan and proto-Dzongkha speakers invaded Bhutan, leaving this Central Bodish language to eventually become the national language of Bhutan (van Driem 2001a). The second phase in the historic epoch, the vestigial period, spans from the late 10th to the mid 13th centuries AD. Even though Tibet had collapsed by then, the production of some earlier cultural assets continues during this time.

Although this chronology seems fairly straightforward, much work on Zhangzhung remains provisional, As Bellezza states

this provisional chronology indicates that archaic cultural horizon archaeological monuments in Upper Tibet are a highly diverse group in terms of age and composition. By virtue of spanning the prehistoric and historic epochs, the sites surveyed represent a heritage of varying environmental dimensions, social forces, religious persuasions and political order, which are emblematic of cultural change in Upper Tibet over a period of no less than two millennia (2008:27)

Though more research is needed to understand the specific details of the chronologies within these time periods, and cultural documentation in general, the architecture has been well described. Corbelled buildings were a particularly prominent style of architecture from the prehistoric to early historic times. Bellezza (2008:32) further suggests that all-stone corbelled buildings in Upper Tibet reached the fullest stage of development in Inner Asia, East Asia and the Subcontinent. Although there are minor

all-stone shelters for shepherds found in various western Transhimalayan regions, it was Upper Tibet where corbels became a canonical feature of extensive archaeological projects). Generally, these buildings were residential structures for Upper Tibetans, rather than large places for communal gatherings. Though dating is still ongoing, one site is radiocarbon-dated to 550-100 BC.

The alleged date of the 'Umling Bangtsho 'castle' in eastern Bhutan would predate the upper Tibet sites with corbels by at least 1500 years, making the Bhutan ruins a precursor to those of Zhang-zhung. While it remains premature to link the corbelling technology associated of the 'Umling Bangtsho with that of Zhang-zhung, these dates do call into serious doubt question the purported date of 'Umling Bangtsho being 2000BC.

In addition to residential buildings, ceremonial sites have been fairly well documented in Upper Tibet, though a great deal of them has been destroyed since the communist period in China and especially during the Cultural Revolution. Interestingly, many of these structures are attributed to the Mon, rather than Tibetan culture. The most prominent of the Upper Tibetan ceremonial structures are stelae (Tibetan <rdo-ring>) with their accompanying structures. They begin to appear on the horizon in the early part of the first millennium BC and vary in size from 20 to 250 cm. They may be triangular, four-sided or tabular in form and may come from volcanic, igneous, metamorphic or sedimentary rocks.

Stelae were erected into compact rows of two to around 50. Larger groups (up to 4000 at a single site) were arranged in multiple rows producing quadrate formations. Such pillars are not unique to Upper Tibet, but are found in Himachal Pradesh and

Kashmir, India, in the upper valleys of Kumaon and Kathmandu, Nepal (Bellezza 2008:70), Bhutan, and Meghalaya, India. What relationship do these sites have with one another? Were these constructed by the same ethnocultural group? Or did the different groups share the similar cultural practices? And if so, which cultural group(s) practiced this trend first, and how did the trend spread? Understanding the interrelations of each region may shed a light on Bhutan's unknown past.

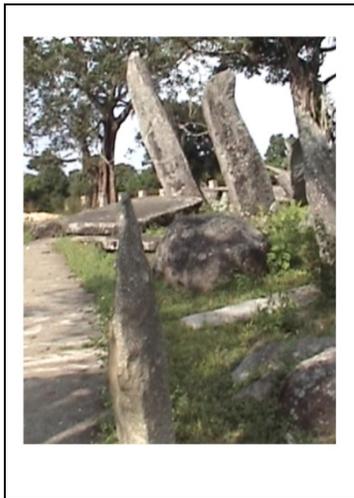


Figure 13. Stelae (Megaliths) in the Jaintia Hills, Meghalaya, taken by author. Attributed to the Khasi (Mon-Khmer speaking) culture

Scholars have discussed the Zhang-Zhung languages for decades, beginning probably with Frederick Thomas (1933; 1926) who was among the first to examine the ancient manuscripts discovered in the Dūnhuáng caves discovered by Sir Aurel Stein. Since then, many scholars have studied the manuscripts and made conjectures about the

language as it was spoken then and what its contemporary daughter languages might be. There appears to be unanimous agreement that Zhang-Zhung is Tibeto-Burman³⁵ and that its closest extant relatives are the West Himalayish languages, such as Byangsi, Manchad and Zhangzhung (e.g. (Shafer (1957); Hoffman (1967); Driem (2001), etc.). There appears to be no direct relationship between Zhang-zhung and the contemporary languages of Bhutan.

4.2.1.2. India

Sorting out the prehistoric and historic details from the area south of Bhutan, the Brahmaputra river valley, is more complex than the situation in the north, due in large part to the passing of several different ethnolinguistic groups throughout the course of time. For example, northeast India is currently home to five language families: Indo-European, Tibeto-Burman, Dravidian, Austroasiatic and Tai-Kadai (Hyslop 2008).

Many scholars hypothesize that by the time Tibeto-Burman speakers arrived in northeast India, Austroasiatic speakers populated the region (Kakati 1941; Driem 1997). Some even speculate that the Brahmaputra river valley is possibly a homeland for Proto-Austroasiatic (e.g. Driem 2001; Diffloth 2005). The genetic evidence points out that Tibeto-Burman migrations into northeast India were incursions into Austroasiatic territory. Sahoo et al. (2006) found the Y haplogroup O2a present at a frequency of 77% in Austroasiatic populations and 47% in Tibeto-Burman speaking populations. Van

³⁵ One derivation from this is the claim made by Hummel (1995); (1986) that there is evidence for a proto-Altaic substrate in Zhang-zhung.

Driem (2008) suggests that a possible linguistic interpretation for these data is that Tibeto-Burman parental lineages could have partially replaced Austroasiatic speaking populations already present when Tibeto-Burman speakers migrated in.

Indo-European languages (represented by Assamese) were later intruders, followed by Tai-Kadai (represented by Ahom) in the 13th century AD. It is not clear what role Dravidian has played in the development of the current linguistic situation in northeast India. One or two Dravidian languages are reported to be spoken in northeast India, but they are clearly eastern outliers, and thus perhaps very recent migrations. To my knowledge, the establishment of Dravidian languages in northeast India remains an unstudied topic.

Turning back to Tibeto-Burman migrants, scholars have speculated that Bodo-Garo languages, or at least some Tibeto-Burman languages, have been spoken in the Brahmaputra river valley for 3,000 years. An epic from around 3000 years ago, the Mahabharata, mentions “Kirata” and “Mlecha” of Pragjyotisha.³⁶ Both are considered to be Tibeto-Burman tribes (Sircar 1990; Baruah 1962). DeLancey (in press) proposes the entry of Proto-Bodo-Konyak-Jingphaw³⁷ by 1000 BC at the latest. Since that time, Tibeto-Burman languages have been spoken throughout the Brahmaputra river valley, sometimes as a lingua franca and other times in small, isolated pockets.

³⁶ Modern-day Assam, India and its capital Guwahati, have been identified by several names throughout the course of history. During the time of the Mahabharat, the region surrounding Guwahati was known as Pragjyotisha. Following that time it was known as Kamarupa.

³⁷ This is sub-branch of Tibeto-Burman which refers to the linguistic ancestor shared by modern Bodo-Garo, Jingphaw and Konyak languages.

4.2.2. Bhutan

The only pre-historical study we know of Bhutan's archaeology is Meyer et al. (2009), who has found that by circa 4280 ± 130 cal BP there was human inhabitation in northwestern Bhutan, as evidenced by the presence of cereals (barley) and over-grazing and trampling, which would be evidence of yak pastoralism. Meyer *et al.* speculate that those prehistoric inhabitants migrated south from Tibet, but it is not clear whether or not there are any modern remnants of that culture in Bhutan.

The next oldest site that is known is the palace of the Bangtsho king at *Kurtö 'Umling*, which an Indian team of archaeologists excavated. No report appears to be available and most artifacts that would have been present have apparently disappeared. One potsherd is on display at the Paro Museum in Bhutan, but an examination remains to be carried out. For example, it is not known at present what type of clay was used or if there is any archaeobotanical residue inside the pot. The piece of pottery attributed to Kurtö 'Umling is shown in Illustration 1.

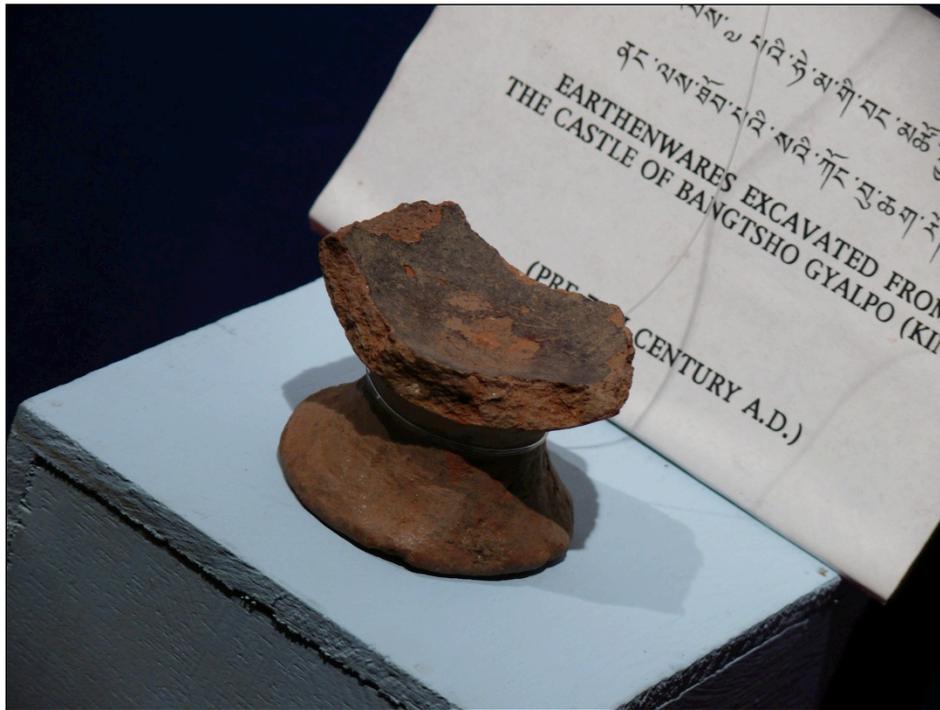


Illustration 1. Potsherd from Kurtö 'Umling site

The Paro museum reports the site of Kurtö 'Umling to date to 2,000 BC, though there appears to be no criteria to dictate this date. This is a suspicious date given the relatively well-preserved state of the ruins today and the technology available in neighboring regions 4000 years ago.³⁸

The Kurtö 'Umling site is near the Chocangaca-speaking villages 'Umling and Domkhar in Lhüntse district, Bhutan. The site is located on the top of a hill, approximately 1000 m higher in elevation from the village of Domkhar (approximately 1,400 masl). The site is shown in Illustration 2 below.

³⁸ By neighboring regions I mean explicitly Tibet and Sikkim. A review of the archaeology in areas adjacent to Bhutan's southern and eastern border has yet to take place.



Illustration 2. The mound covering the Kurtö 'Umling site in Lhüntse.

From the outside a few rooms were fully exposed and accessible, due to fallen walls. Images of these are shown in Illustrations 3 and 4.



Illustrations 3. An exposed room of the Kurtö 'Umling ruins.



Illustrations 4. An exposed room of the Kurtö 'Umling ruins, with Karma Tshering inside serving as an indicator of relative size of the area in the room.

Through at least one of the rooms a small passage opened into otherwise concealed rooms, one of which consisted of a large stone plank, shown in Illustration 5 below.



Illustration 5. A room inside Kurtö 'Umling. This is one of the many room with all its walls intact; entrance is only possible through a small opening, leading from what appears to have been an inner corridor. The large stone slab is approximately six feet in length.

Many of the rooms displayed corbelled ceilings and traces of paintings on the wall. Many of the ceilings appeared to be in very good condition. The paintings, however, were heavily faded; on the walls exposed to the outside the painting was barely visible. Inside concealed rooms, the painting was more obvious. Only black and red colors were visible, often indicating circular shapes. Examples of corbelled ceilings are

shown in Illustration 6 and Illustration 7 and some wall paintings are illustrated in Illustration 8, Illustration 9, and Illustration 10.



Illustration 6. A corbelled ceiling inside the ruins of Kurtö 'Umling.



Illustration 7. A corbelled ceiling in unexposed rooms of Kurtö 'Umling



Illustration 8. Wall painting inside the ruins of Kurtö 'Umling. Note also the stone shelving built into the wall of this room.



Illustration 9. Wall painting inside a concealed room of the Kurtö 'Umling ruins.



Illustration 10. Wall paintings in Kurtö 'Umling.

I was able to access one or possibly two levels of structure inside Kurtö 'Umling. However, there was at least one level below us we were not able to enter. Obviously, a rigorous study of the entire Kurtö 'Umling site is required. The aim of including what little information we have regarding this site is to introduce the site, noting some of its structures and features. The corbelled design, in particular, appears similar to the iron-age structures in Tibet. It is not yet known if this prehistoric site has any relationship to the modern Kurtöp-speaking population.

Tracing the prehistoric events that have formed Bhutan's current ethnolinguistic situation, we are forced to expand our survey of the literature outside of Bhutan's borders. Since all of Bhutan's indigenous languages belong to the Tibeto-Burman family, it is reasonable to begin with other, adjacent Tibeto-Burman speaking cultures.

The Tibetan Plateau, north of Bhutan, offers evidence of inhabitation since the Pleistocene, although there is little (if any) evidence that the Plateau has been inhabited continually since then. Archaeological, linguistic and genetic data point to a modern peopling of the plateau during the Neolithic period; the Tibeto-Burman speakers along the Yellow River Valley migrated to the plateau around 5300 BP. Kharro, near modern day Chamdo reflects the first westward movement. Shortly following this migration, it may be inferred that a population from this culture found its way to Sikkim, to form the Sikkim Neolithic during approximately 5000 BP. It is highly likely that in this migration course, some communities stayed in Bhutan, forming the ancestral communities that are represented by Lhokpu and Gongduk communities today.

Closer to historic times, the Zhang-zhung kingdom began to flourish in Upper Tibet from approximately 3200 BP to its absorption into Tibet in the second half of the first millennium AD. Zhang-zhung is associated with corbelled stone buildings, perhaps similar to the ruined site of Kurtö 'Umling in eastern Bhutan. The language associated with Zhang-zhung texts has since died and what are considered to be its closest linguistic relatives are found in Himachal Pradesh, India, far west of Bhutan. However, this fact does not exclude the possibility that a language similar to that found in the Zhang-zhung texts could also have been spoken in the Kingdom at that time. Several possible questions

result, including whether or not the linguistic ancestors of a related language could have migrated to Bhutan at that time, and whether the Kurtö 'Umling ruins are representative cultural incursions from the North during the time of Zhang-zhung. Alternatively, Kurtö 'Umling may have been built by indigenous Bhutan (perhaps the Gongduk), inspired by the technology in the north. In the case of the latter, an explanation for why the Gongduk would have lost much of their technology would be in order. Another possible scenario is that the Kurtö 'Umling culture has no relation with the modern day ethnolinguistic situation in Bhutan.

Tibeto-Burman influence from the south could have come as early as 3000 BP. In fact, historical evidence suggests that Bodo-Garo languages were spoken in Bhutan during recent times. During the Mughal period in India, a historian of Mir Jumlah invaded the areas of India adjacent to Bhutan in the 17th century AD and noted that the people of Bhutan spoke a language similar to that of the 'Koches' (of the Bodo-Garo branch) (Gait 2005). And during his political mission into Bhutan in the 19th century, Sir Ashley Eden learns that before the time of Zhabdrung, Bhutan belonged to people called the 'Tephu', originally believed to have been from Koch Bihar. They were apparently driven down into the plains once Tibetan soldiers invaded the country. If these records are true, and modern-day Bhutan was home to Bodo-Garo speakers who would have entered Bhutan some time after their 3000 year old migration into the Brahmaputra river valley from the mountainous area bordering Burma, then we can ask the question of how Bodo-Garo shaped the modern languages of Bhutan. It would not be unreasonable to wonder whether any of the modern Bhutanese languages have a Boro-Garo substrate.

Whyte (2004) also mentions a Khen dynasty in modern day Cooch Bihar that was prominent before the 16th century; perhaps there is some link between this dynasty and the current Khen community in southern Bhutan.

Other possible relations with the south could have existed between the 4th and 12th centuries AD. Gait (2005) reports that in the Hindu epic *Vishnu Puran*, Kamarupa was said to have extended about 450 miles from the Kamakhya temple in Guwahati. If this is the case, then Kamarupa would have included nearly all of modern day Bhutan.

Finally, the possibility that Austroasiatic presence could have influenced the modern ethnolinguistic diversity of Bhutan is intriguing. Chakravarti (1979) assumes a scenario in which the current Tshangla-speaking population in Bhutan is representative of an old Austroasiatic population. Genetic and other evidence suggests Austroasiatic presence in the Brahmaputra valley before the onslaught of Tibeto-Burman speakers from the northeast. One could propose the hypothesis that the ‘Mon’ described by the Zhang-zhung refers to Austroasiatic speakers who migrated north from the Brahmaputra river valley, through Assam. In such a scenario, one would have to ask whether the introduction of stelae in upper Tibet associated with their presence; and likewise, whether the megaliths in Bhutan associated with their culture as well.

Historical linguists discuss with great detail and great potential accuracy the way languages change over time, and historical linguistics can tell a great deal about the relationship of modern languages to a known or unknown ancestral language. However, our models for language shift or replacement are virtually non-existent. As LaPolla (2001) and Kortlandt (2002) for example, articulate, language replacement is more

common than population replacement. In the event of a migration of one group of people to an area already inhabited by another, rather than replace the entire population (by warfare or migration elsewhere) the indigenous population adopts the language of the newcomers. Colin Renfrew (1990) has called this 'elite dominance' language transfer. Linguists have hardly touched the idea, but it clearly is paramount to our understanding of language change over time. Indeed it is possible that much of Bhutan's current ethnolinguistic diversity may have been shaped by language transfer, as Neolithic Tibeto-Burmans (and those inhabiting Bhutan prior to their arrival), Austroasiatics, Iron-Age Tibetans, Bodo-Garo speakers and now Central Bodish speakers migrated into Bhutan.

Unfortunately, the study of Bhutanese prehistory is in its infancy and we can only raise questions. However, I hope this is one step toward deciphering the prehistoric events which have taken place in forming the current ethnolinguistic situation in Bhutan.

CHAPTER V

KURTÖ AND THE KURTÖPS

This chapter provides a brief ethnographic description of the people who speak Kurtöp. It should be noted that the following observations are not made by a trained anthropologist. A rigorous ethnography of Kurtöp-speaking people, and in fact most of Bhutanese cultures, is still needed.

5.1. The name of the language

Kurtöp, also called *Kurtöp**kha*, *Kurtö**bikha*, *Zhâke* and also known 'Au Gemale (lit. 'where are you going') in Bhutan has been called Kurtöp in the western linguistics literature. In Bhutan, the term *Kurtöp* is a Dzongkha word referring to a person from the Kurtö region in Bhutan, roughly the area of Lhüntse district in eastern Bhutan. The word *Kurtö* itself can also be analyzed according to the written equivalent in Chöke:³⁹ <skur.stot>, where <stot> means 'upper' and <skur> is the name of the river. Other than the name of the river, *kur*, or *kuri* as it is also called, the origin of <skur> is unknown, although it is tempting to point to the possible relationship with Old Chinese **gar* 'the Yellow River' Norman (1988: 68) and hypothesize that when East Bodish speakers migrated into the already inhabited region, they took the local name for the river ('water') as the name of the river itself.

³⁹ Chöke, literally 'religion language' refers to the liturgical language in Bhutan, also called Classical Tibetan.

Scholars in Bhutan have offered a few potential hypotheses regarding the origin of the name *kur* or *kuri*, as it is also sometimes called. Drâsho Sangay Dorji (pc)⁴⁰ observes that the name of the glacier from which the *Kur* river originates is *Kulagangri* and thus states it is possible that *Kur* may have a shared history with *Kula*. However, Dorji also points out that most rivers in Bhutan are named after the valley, rather than the source. Geshe Tenzin also says that he saw <skuristod> and <skurismad> used as place names in a few Chöke texts, without any other reference to meaning.

Kurtöp is the word used in Dzongkha to refer to people from the Kurtö region; this term is not used in Bhutan to refer to a language, but only to people. The terms *Kurtöpkha* or *Kurtöbikha* are Dzongkha words which refer to the language spoken by *Kurtöps*, or people from the Kurtö region in Bhutan. Within the Kurtö region in Bhutan, a number of languages are actually spoken. In the village of Khoma and surrounding area, the *Kurtöps* speak a language known as Dzala in the western literature. South of Lhüntse town, *Kurtöps* speak another language, closer in relation to Dzongkha, often called *Chocangackha* or *'Matpaikha*. In Lhüntse itself, and the villages directly north of Lhüntse along the Kurichu up to the border of Tibet, and in the village of Tangmachu *Zhâke* is spoken.

Because *Kurtöp* literally means ‘one from Kurtö’ in Dzongkha, and several distinct languages are actually spoken in the Kurtö region, the term *Kurtöp language* in Bhutan is actually ambiguous. In addition to Kurtöp (the focus of this dissertation), Dzala

⁴⁰ I am grateful to Namgay Thinley for discussing the etymology of Kurtö with scholars in Bhutan on my behalf.

and Chocangaca are also spoken in the Kurtö region and, thus, are sometimes also referred to as the *Kurtöp* language. When people designate themselves as being *Kurtöps* or as speakers of *Kurtöbikha*, the question ‘which Kurtöp?’ usually follows. In order to specify which particular *Kurtöp* language is at question, speakers often identify *Zhâke* by the way they ask ‘where are you going?’, which is *au gemale?* The use of the translated question ‘where are you going’ is a common way to identify other languages in Bhutan as well. For example, Dzala is often referred to as *i ga brok*, which is ‘where are you going?’ in Dzala.

According to the DDC, the term *Zhâke* is used to refer to Kurtöp (the focus of this dissertation), exclusively, setting it apart from the other languages spoken in the Kurtö region which may be confused with Kurtöp (the focus of this dissertation). The term *Zhâke* is composed of two morphemes: *zhâ* and *ke*. The former term is of unknown origin but the latter is a reflex of Written Tibetan <skad> ‘voice’. The loss of the coda consonant and fronting of the vowel in *ke* are indicative of a Dzongkha origin for the term *Zhâke*, as these sound changes have occurred in Dzongkha, like in other Central Bodish languages. The East Bodish languages (to which *Zhâke* belongs) have, for the most part, not participated in these sound changes and in fact have a different linguistic history altogether (cf. §3.5). In Kurtöp, for example, the reflex of Written Tibetan <skad> is *kat* and in Dakpa and Dzala, the term is *ket*, where a vowel quality difference separates the two.

5.2. Geographical context

Kurtöp is spoken in Lhüntse. In addition to Tangmachu (where Chocangaca) is also spoken, Kurtöp is spoken between the village of Gorgan, south of Lhüntse, and up until Naling, near the border with Tibet. Some of the villages included in this area are Gangzur, Shawa, Zhamling, Dungkar, Tabi, Jasabi, Tünpe, Cakzom, and Nê, amongst several other villages. In total, there are probably around 15,000 speakers of Kurtöp.

The Kurtöp language community spans the approximate geographic coordinates of 27° 35' 38.90'' N on the southern end of the region to 27° 53' 01.50'' N on the Northern edge, just south of the border with Tibet. The lowest point of the river valley in the area is around 3,800 feet and the highest mountain peak in the region is approximately 16,500 feet; however, the villages are located at elevations ranging from approximately 4,000 to 8,500 feet.



Illustration 11. Dungkar village as seen from Tabi during the summer



Illustration 12. Dungkar village as seen from Tabi during the winter



Illustration 13. Thünpe village

5.3. History of the Kurtö region

Obtaining historical facts throughout Bhutan is, in general, difficult due to the tendency in Bhutan to mix fact with mythology in such a way that it is nearly impossible to disentangle historical accuracy from popular mythology. A deeper understanding of the history of Kurtö region will likely come only through broader studies, such as historical/comparative linguistics, archaeology, and genetics, keeping the Kurtöps, in particular, in mind. In §4 I summarized the current state-of-the-art of Bhutan's past and thus will focus the remainder of this section on what is known, or assumed, to be true particularly with regard to the Kurtö region.

The origin of the word *Dungkar*, considered to be a sort of cultural capital for the Kurtöps-speaking area, is somewhat of a mystery. Local myth says that Pema Lingpa was

instructed to find the area of the white conch (lit. *dung kar*) and settle there. Thus, he arrived at Dungkar, which is said to resemble a white conch, and settled the village. However charming this story may be, the fact that a large number of Bhutanese villages and towns have a second syllable beginning with a velar initial, followed by the rhyme *-ar* cannot be ignored. For example, other places names in Bhutan are Monggar, Khengkhar, Jakhar, etc., and the resemblance of these syllables with place names in India, such as Itanagar or Chandigar, cannot be ignored. It may also be relevant here to point out that *ghar* in Hindi means ‘house’, *gar* in Kurtöp means ‘shack’, *gur* in Mongolian is ‘hut’. While of course it is possible that the relationship between the second syllable *-gar* in Indian and Bhutanese place names with Mongolian/TB/Hindi words for residence-type structures is simply chance, the other possibility, that these are related, could be explored.

5.4. Subsistence and economy

Kurtöps are by and large subsistence farmers, with each family raising cows for dairy and cultivating grains and vegetables for individual use. Dairy from cows is used primarily for making cheese and butter; their byproducts whey and buttermilk are also consumed.

Rice has become a staple grain only in recent years; previously maize, ground into grain-like pellets called *kharang*, was probably the most important, but wheat (*go*), buckwheat (*cara*), millet (both finger millet, *Eleusine coracane* -- called *thre* locally, and foxtail millet, *Setaria Italica* -- called *ran* locally), and bitter buckwheat (*brama*) have also been in use. Historically, taro (*byo*) and a root which may or may not be cassava

were also used, though these days people have the means, and indeed prefer to, cultivate the grains described above instead.

Common crops are potatoes (*ki*), which grow particularly well in Shawa, green onion (*tsong*), beans of several varieties (*shepen*), eggplant (*dolom*), daikon radish (*muya*), squash (*laushar*) and, more recently, cabbage (*banda kopi* < Hindi), cauliflower (*meto kopi* < Kurtöp + Hindi). Chiles (*banggala*) are a very important crop and they are used in several different ways. In addition to being used in its fresh, green state, chiles may be dried in the sun after turning red (*banggala kam*), dried green (*'ngokam*) or boiled and then dried, becoming white.

Several foods are found growing in the wild, including a wide variety of mushrooms (*mu*), and fiddlehead (*zhiwa*). Fruits are citron (*kapula*), banana (*cela* ~ *ceya*, *ngala* in some dialects), guava (*'andre*), fig (*khongdi*), orange (*tshalu*), a sweet tomato that grows on trees (*'lambenda*) and various berries (*mrip*). Spices are cilantro (*wesi*), ginger (*saga*) and garlic (*chacu*) and salt (*tsha*), which is used generously in nearly all cooking. People rarely drink water, but tea (*ja*) in a variety of forms (e.g. *suja* 'butter tea' *'ngaja* 'sweet tea'), whey (*shurkhu*) and buttermilk (*tarwa*) are common. Kurtöps also make alcohol out of a variety of grains, such as rice, corn, and millet. Distilled alcohol is called *zhor*. Potatoes are a common cash crop.

5.5. Religion and spirituality

The official religion of the Kurtöps, like mainstream Bhutan, is Buddhism. However, also like mainstream Bhutan, much of the Buddhist practices are actually interlaced with Bon, or seemingly non-Buddhist, practices. The actual meaning

of *Bon* seems to be vague with a wide range of uses, ranging from something like ‘barbaric, unreligious, animistic practices’ to the identification of a codified religion, with an identified spiritual leader who predated the Buddha. Rather than attempt to describe Kurtöp religious practices as being either animistic or something belonging to an earlier, codified religion called *Bon*, I will simply present the observations made by many Bhutanese themselves regarding Buddhism in Bhutan, supplemented with my own observations about religious life in Kurtö.

There have been several recent articles in the national online newspaper, *Kuensel* about Buddhism and/or Bonism in Bhutan. An article by Rinzin Wangchuk in 2005 (<http://www.kuenselonline.com/modules.php?name=News&file=article&sid=5318>) describes a biannual ritual in Bongo, located in Chukha Dzongkhak, in which the people historically made ritual sacrifices at the time of planting and then again at cultivation to sister deities that are said to rule over the village. If these deities are not appeased through these animal sacrifices, people believe, the harvest will not go well and the farmers’ hard work will have been in vain. During these rituals the villagers also invoke neighboring deities and ask for their protection and assistance in obtaining a successful harvest. Household sacrifices are also performed as needed, to drive away sickness and evil spirits.

Two articles by Sonam Wangmo in January, 2008 (<http://www.kuenselonline.com/modules.php?name=News&file=article&sid=9701> and <http://www.kuenselonline.com/modules.php?name=News&file=article&sid=9733>) describe the existence of many *Bon* elements in Bhutanese Buddhism. Wangmo cites an

interview with Dasho Sangay Wangchuk, advisor to the Department of Cultural Affairs, in the Home Ministry, who states “In my opinion and from my observations, the influence has been great. Although Buddhism is our faith, I think many of our rituals are not only derived from Bon but are based on Bon beliefs.” Wangmo clarifies:

Many ritual objects we use and think to be Buddhist originate from Bon. Research and studies on the subject seem to support this. Prayer flags, *tormas* (sacrificial food offerings), use of swords, spears, and arrows in rituals, *namkhas* (thread-cross constructions), belief in *lus* (underworld spirits), *yulhas* (village deities), and *nyes* (spirits that live in trees, rocks, lakes and mountains), are all Bon traditions. Even our endless worldly rituals to local deities, observed to clear obstacles, to bring wealth, to make the sick better, *pawos*, *mo* and *tsi* all come from the Bonpo cosmogony. Our death rituals also stem from Bon and the practice of Phowa comes from their soul ritual. (italics added)

Wangmo’s research finds that animal sacrifices were also associated with *Bonism* in Tibet, prior to the arrival of Buddhism. I find Wangmo’s description of *Bon* religious practices throughout Bhutan an apt description of the religious practices of Kurtö as well, though thorough, anthropological research remains outstanding.

5.6. Marriage practices

As elsewhere in Bhutan, marriage amongst the Kurtöps involves little ceremonious ritual. People become ‘married’ once they’ve moved in together. Traditionally, much (perhaps all?) of Bhutan is a matrilocal and matrilineal society so that men usually go to the woman’s house upon marriage and property is passed down from mother to daughter. While it is not unusual for a woman to move to men’s houses, particularly when the man’s family has fewer people to help with the farm work, property is almost always passed from mother to daughter.

5.7. Sociolinguistic factors

Even in a community as small as the Kurtöp-speaking community, there are different registers of speech, depending primarily on education, time spent in the village, and exposure to Dzongkha. The highest register of Kurtöp involves a high level of Chöke and Dzongkha borrowings and is characterized by the use of the honorific particle *la* (cf. §16.2.4.8) and honorific vocabulary (cf. §9.3). Interestingly, the pronunciation of these words varies drastically, depending on education and experience of the speaker. For example, front-rounded vowels are only found in the speech of the most educated speakers, or those who have grown up in Thimphu (cf. §6.3.2.1). As in Dzongkha, Hindi borrowings are also characteristic of the ‘cool’ speech of the younger generation, though some words, such as *thrika* ‘okay; good’ appears to have filtered down to all registers.

CHAPTER VI

CONTRASTIVE PHONOLOGY

The phonology of Kurtöp has been described in several publications. The first publication on Kurtöp, to my knowledge, was a phonological sketch by Michailovsky and Mazaudon (1994) who placed Kurtöp into the East Bodish group for the first time. They clearly showed that Kurtöp was a not Tibetan dialect (i.e. a direct descendent from Classical Tibetan) but could tentatively belong in the same family as Dakpa, assuming Shafer's (1954; 1966) classification. Since then, I published a M.A. thesis on Kurtöp phonology, which included an in-depth examination of acoustic properties such as Voice Onset Time (VOT), pitch and vowel length (Lowes (Hyslop) 2006), an outline of the phonology in a comparative perspective⁴¹ (Hyslop 2008), and an experimental study providing evidence that Kurtöp is undergoing tonogenesis (Hyslop 2009). In (Lowes (Hyslop) 2006) and (Hyslop 2008), I also showed how my findings deviated from those reported in Michailovsky and Mazaudon (1994). This chapter includes new data and a slightly updated analysis.

⁴¹ This article presented Kurtöp phonology in a comparative perspective with data from several languages of Northeast India, with the attempt to assess to what extent NE India could be conceived of as a linguistic area, apart from Bhutan. The tentative conclusions were that the languages of NE India differed from Bhutanese languages by their pervasive lack of retroflex consonants, a feature which, interestingly, Masica (1976) used to establish South Asia as a linguistic area.

6.1. Introduction

Kurtöp contrasts fifteen stops, three fricatives, two affricates, two laterals, one rhotic, four nasals, two glides and a glottal aspirate, shown in Table 14 below.⁴² A subset of the Kurtöp consonant phonemes may be combined to make complex onsets; these are illustrated in Figure 14.

Table 14. Kurtöp consonant phonemes

	labial	dental	retroflex	palatal	velar	glottal
stops	p, p ^h , b	t, t ^h , d	ʈ, ʈ ^h , ɖ	c, c ^h , ɟ	k, k ^h , g	(ʔ)
affricates		ts, ts ^h				
fricatives		s, z		ç		
nasals	m	n		ɲ	ŋ	
laterals		l, l̥				
rhotics		r				
glides	w			j		
aspirates						h

pr- pj- (pl-)
p ^h j- p ^h r-
br- bj- bl-
mr- mj-
kw- k ^h w- gw-

Figure 14. Kurtöp onset clusters

⁴² The use of parentheses with the glottal stop indicates this segment has not been found to be phonemically contrastive; it only precedes vocalic high-toned initials (§6.4) and some times in place of coda /k/ (cf. §6.2.1.1.4).

Figure 15⁴³ shows the subset of phonemes used as coda consonants. Kurtöp consonants are discussed in detail in §6.2. More details regarding syllables, including shape and the comparative/historical relevance of Kurtöp syllables can be found in §7.

-p	-t	-k
(-s)		
-m	-n	-ŋ
-r	(-l)	

Figure 15. Kurtöp coda consonants

Kurtöp vowels are summarized in Figure 16 and diphthongs are shown in Figure 17. Vowels may be long or short, may be glottalized, and may have high or low tone. However, the distribution of each of these is limited and is of particular relevance and interest to historical phonological events which are recoverable in the language. Vowels, including diphthongs are further discussed in §6.3. Tone is discussed in §6.4.

⁴³ The consonants in parentheses are marginally found as codas. See §6.2.1.3.1, §6.2.4.2, and §6.2.5 for detailed information regarding the coda status of /s/, /l/ and /h/, respectively.

i (y)	u
e (ø)	o
	a

Figure 16. Kurtöp vowels

iu	ui (~ y:)
	oi (~ ø:)
au	

Figure 17. Kurtöp diphthongs

6.2. Consonants

6.2.1. Obstruents

6.2.1.1. Stops

Like several languages of the area (e.g. Dzongkha, Nepali, Hindi, Tshangla, etc.), Kurtöp contrasts stops at five places of articulation (labial, dental, retroflex, palatal, velar). The contrast made with each place is demonstrated by the data in

Table 15.

Table 15. Kurtöp stops at five places of articulation

Phoneme	Example	Gloss
/p/	pa:	‘slice.of.meat’
/t/	ta	‘horse’
/t̥/	t̥a	‘brightness’
/c/	ca	‘dress.up’
/k/	ka	‘snow’

Like many Bodic languages (e.g. Tshangla, Tamang) each place of articulation makes three contrasts in terms of voicing. The categories of voiceless unaspirated, voiceless aspirated and voiced for each place of articulation will be discussed for each stop below.

6.2.1.1.1. Labials

Kurtöp contrasts voiceless unaspirated, voiceless aspirated and voiced labials, as demonstrated in Table 16.

Table 16. Kurtöp labial stops

Phoneme	Example	Gloss
/p/	pa:	‘slice.of.meat’
/p ^h /	p ^h á? ~ p ^h ák ~ p ^h á:	‘pig’
/b/	bà	‘target’

The labials in Kurtöp tend to combine with other consonants more readily than any other consonant type to form complex onsets. All three (voiced, voiceless, aspirated) can occur as the first member of an onset cluster with sonorants and obstruents.

The data in (1) illustrate /p/ in its environments within the syllable. The complex onsets involving /p/ are rarer than the simple onset. Out of approximately 5,500 tokens, only 26 being with /pr-/, 4 begin with /pj-/, and one sole token begins with /pl-/.⁴⁴ Michailovsky and Mazaudon (1994) also report only word with /pl-/ as an onset, but I have been unable to find the same word. The onset /pj-/ is pronounced with a great deal of variation. The pronunciation with a glide [pj-] is found only amongst the older population, usually with speakers over 60 years old. The younger generation of speakers, from around 30 to 60, will pronounce this sequence with a palatal fricative or stop for the second member of the cluster: [pɕ ~pc]. Finally, the younger generation of speakers often pronounces this onset as a simple stop with the initial /p/ at all: /c/. This variation mirrors the Tibetan sound change *py* > *c*.⁴⁵

(1)	/p/	onset	onset cluster with /r/	onset cluster with /j/	onset cluster with /l/	coda
		pa:	prá	pjó	plik	thép
		‘meat.slice’	‘cheese’	‘falsehood’	‘circumcise’	‘saliva’

⁴⁴ The one word in the database to begin with /pl-/ is /plik/ ‘penis’. Interestingly, the Koro word for ‘penis’, [mlak^(h)] is also unusual phonologically in that it has both a complex onset and coda consonant (Anderson, Harrison, and Murmu 2009). Both are likely etyma of the PTB form **lik* ‘penis’

⁴⁵ Dzongkha also appears to be undergoing this sound change, so that Written Dzongkha *py*, *phy*, *by* are pronounced [pɕ, pɕ^h, bj].

In word-initial-position /p/ is found preceding all five vowels, as demonstrated in Table 17.

Table 17. Kurtöp /p/ before each vowel

Vowel	Example	Gloss
/i/	pí	‘pluck’
/e/	pé	‘example’
/a/	pá:	‘meat.slice’
/o/	pó	‘fur’
/u/	pú	‘change’

The aspirated labial /p^h/ is found only in the onset of the syllable and in clusters with /r/ and /j/. The data in (2) illustrate /p^h/’s distribution across the syllable. /p^h/ is often pronounced as [ɸ]. The set of words with /p^hr-/ or /p^hj-/ as an onset is small. The pronunciation of /p^hj-/ is found as such only amongst the oldest group of speakers, those overly roughly 65. Younger speakers pronounce the cluster with fortition of the glide to a fricative or stop for /p^hɕ/ or /pc^h/. Many younger speakers have lost the labial altogether and pronounce only a full stop /c^h/. This variation is similar to that described above for /pj-/ and, like the change suggested to be in progress for Kurtöp (*py* > *c*), the variation [p^hj ~ p^hɕ ~ p^hc ~ c^h] is reminiscent of the change in Tibetan from *py* to *c*.

(2)	/p ^h /	onset	onset cluster	onset cluster
			with /r/	with /j/
		p ^h í:	p ^h rúm	p ^h ja

‘flour’

‘cheese’

‘local.religious.festival’

The aspirated labial is found preceding all five of Kurtöp’s vowels. The distribution of /p^h/ is shown with six vowels are shown in Table 18.

Table 18. Kurtöp /p^h/ before each vowel

Vowel	Example	Gloss
/i/	p ^h i:	‘flour’
/e/	p ^h é:	‘edge’
/a/	p ^h á:	‘pig’
/o/	p ^h ó	‘hole’
/u/	p ^h ú	‘upper’

There is a tendency for the voiced labial /b/ to spirantize to [β], though there appears to be no conditioning factor for this. The voiced bilabial, like its aspirated counterpart, has a distribution limited to syllable onsets. It can also occur as the first member in an onset cluster with /r/, /l/ and /j/. A merger between /br-/ and /bl-/ is underway in Kurtöp and thus many younger speakers (under approximately 45) no longer make a distinction between /br-/ and /bl-/ in pronunciation, with /br-/ winning out. Speakers over 45 consistently make the difference; other speakers seem to prefer a pronunciation of /br-/ for /bl-/. Many often comment that it is better to pronounce words such as /ble/ ‘four’ and /blek/ ‘keep’ as *bre* and *ble*, respectively. The distinction made by /bj-/ also is waning. Like the previously mentioned change in progress for Kurtöp /pj-/ and /p^hj-/, the realizations of /bj-/ vary, with an apparent end result of a palatal stop. The pronunciation of /bj-/ as [bj-] is found only amongst the elderly speakers. Speakers

between the ages of 25 and 60, roughly, pronounce the complex onset /bj-/ as [bj-] or [bj]. At the end of this sound change in progress is the pronunciation [j], which is found primarily in young speakers, under the age of 25. Again, this appears to be evidence that Kurtöp is mirroring the known sound change *by* > *j* in Tibetan. (3) illustrates /b/ in its possible onset combinations.

(3)	/b/	onset	onset cluster	onset cluster	onset cluster
			with /r/	with /l/	with /j/
		be	bre	ble	bjə
		‘only’	‘measuring.cup’	‘four’	‘sand’

The voiced bilabial has been found following each of the five vowels, as illustrated in Table 19.

Table 19. Kurtöp /b/ before each vowel

Vowel	Example	Gloss
/i/	bì	‘give’
/e/	bè	‘only’
/a/	bà	‘target’
/o/	bo	‘son’
/u/	bù:	‘breath’

6.2.1.1.2. Dentals

The fact that Kurtöp contrasts a voiceless unaspirated, voiceless aspirated and voiced dental is represented by the minimal triplet in Table 20.

Table 20. Kurtöp dental stops

Phoneme	Example	Gloss
/t/	ʔá	‘horse’
/tʰ/	tʰá	‘wooden.beater’
/d/	dá	‘now’

The voiceless dental stop is found in syllable onsets and codas, as shown in (4). Note that the dental series do not form onset clusters. As I show in §6.2.1.1.3 a series of old dental plus rhotic onset clusters has become a series of retroflex stops in the modern language.

(4)	/t/	onset	coda
		tídaliŋ	pʰát
		‘umbilical.cord’	‘okay’

As illustrated in Table 21, the voiceless unaspirated dental stop is found preceding the five Kurtöp vowels.

Table 21. Kurtöp /t/ before each vowel

Vowel	Example	Gloss
/i/	tí	‘support’
/e/	té	‘be.able’

/a/	tá	‘horse’
/o/	tó	‘peeled.corn.cob’
/u/	tú	‘vagina’

The aspirated dental is found in syllable onsets only and does not form tautosyllabic clusters with any other consonant. Table 22 illustrates /t^h/ as an onset with the five vowels.

Table 22. Kurtöp /t^h/ before each vowel

Vowel	Example	Gloss
/i/	t ^h i:	‘measurement’
/e/	t ^h é? ~ t ^h é:	‘one’
/a/	t ^h áʔt ^h á:	‘weaving’
/o/	t ^h ó:	‘crops’
/u/	t ^h ú	‘DIST’
/au/	t ^h áuli	‘bud; small.fruit’

The voiced dental, like its aspirated counterpart, is only found in onset position and does not form any tautosyllabic clusters. The data in Table 23 illustrate /d/ as an onset preceding the five Kurtöp vowels and two diphthongs.

Table 23. Kurtöp /d/ before each vowel

Vowel	Example	Gloss
/i/	di	‘large.pot’
/e/	dè	‘be.sure.through.experience’
/a/	dà	‘now’
/o/	dò	‘load.for.someone.else’

/u/	dù	‘come.together’
/au/	dàu	‘luck’
/iu/	diu	‘bullet’

6.2.1.1.3. Retroflexes

The retroflex series is a recent innovation, having come from velar or dental plus rhotic clusters, as exemplified by the data in Table 24.

Table 24. Correspondences of Kurtöp retroflexes with Written Tibetan complex onsets involving rhotics

Written Tibetan	Kurtöp	Gloss
<sgro>	dò	‘feather’
<sgra>	d̥a	‘pronunciation’
<sgru>	dù	‘boat’
<grub>	dùp	‘house.completion’
<drel>	d̥è:	‘mule’
<drilbu>	d̥ibu	‘bell’
<dkrug>	túk ~ tú:	‘stir’
<khri>	t̥hí	‘throne’
<khrom>	t̥hóm	‘market’
<krung-krung>	t̥uŋ-tuŋ	‘crane’

Unlike in Tibetan, however, onset clusters involving a rhotic as the second member and labial stop as the first member have not become retroflex stops. This is illustrated by the data in Table 25.

Table 25. Correspondences of Kurtöp labial plus rhotic onset clusters with Written Tibetan

Written Tibetan	Kurtöp	Gloss
<sbrang.ma>	bᵛᵛ	‘fly (insect)’
<brang>	bᵛᵛ	‘chest’
<spra>	pᵛ	‘monkey’
<phral.ba>	p ^h ré:	‘separate’

The change $k, k^h, gr > t, t^h, d$ is recent sound change, which has not occurred in either of Kurtöp’s closest neighbors, Bumthap or Khengkha (see §3.5 for more details on the phonological developments of Kurtöp and the other East Bodish languages). This sound change may turn out to be due to areal influence, pending future research. The sound change took place as Written Tibetan developed in Lhasa Tibetan, a change which would have began well after the East Bodish languages had separated from Central Bodish languages.⁴⁶

The distribution of Kurtöp retroflexes across the syllable is an obvious result of the diachrony. Because clusters in the proto language were only in onset position,

⁴⁶ Interestingly, despite the fact that Dzongkha has several hundred words with retroflex consonants, the sound change $kr, khr, gr, pr, phr, br > t t^h d$ has not taken place in Dzongkha. This is because Dzongkha did not have the complex onsets kr, khr, gr, pr, phr, br , at least at the stage when the ascribed sound change took place. Rather, where Dzongkha has palatal glides in complex onsets where WT has rhotics. In other words, WT has kr, khr, gr, pr, phr, br while Written Dzongkha has ky, khy, gy, py, phy, by (the velar series of these have all changed to palatal stops, while the labial set is currently participating in the same sound change as Kurtöp: $py, phy, by > c, ch, j$).

retroflexes today are also found only as onsets. Though the Kurtöp segments are true retroflexes, there are remnants of the old cluster in pronunciation. Speakers may occasionally pronounce the retroflex stop with a following /r/, so that [t̚] may also be [tr]. This appears to be free variation. Nonetheless, the three-way contrast in voicing is shown below in Table 26.

Table 26. Kurtöp retroflex stops

Phoneme	Example	Gloss
/t̚/	t̚á	‘brightness’
/t̚ʰ/	t̚ʰá	‘Common Kestrel (<i>Falco tinnunculus</i>)’
/d̚/	d̚ak ~ d̚áʔ ~ d̚á:	‘excel’

The voiceless unaspirated retroflex is found to contrast in syllable onset positions and does not join any other consonant in a tautosyllabic cluster. Examples of /t̚/ before the five cardinal vowels are illustrated in Table 27.

Table 27. Kurtöp /t̚/ before each vowel

Vowel	Example	Gloss
/i/	t̚í	‘wrap.around’
/e/	t̚é	‘year.of.the.monkey’
/a/	t̚á	‘brightness’
/o/	t̚ó	‘heartwood’
/u/	t̚úlku	‘reincarnated lama; trulku’

/t̚ʰ/ has been found in syllable onset position preceding all five of Kurtöp’s vowels, shown below in Table 28.

Table 28. Kurtöp /tʰ/ before each vowel

Vowel	Example	Gloss
/i/	tʰí	‘throne’
/e/	tʰé	‘finger.millet (<i>Eleusine coracane</i>)’
/a/	tʰák ~ tʰáʔ ~ tʰá:	‘brightness’
/o/	tʰó	‘bathe’
/u/	tʰúk ~ tʰúʔ ~ tʰú:	‘stir’

The voiced retroflex has been found preceding the five cardinal vowels to date, as illustrated in Table 29.

Table 29. Kurtöp /d/ before each vowel

Vowel	Example	Gloss
/i/	dì	‘ask’
/e/	dè	‘mule’
/a/	dák ~ dáʔ ~ dá:	‘excel’
/o/	dò	‘six’
/u/	dù	‘boat’

6.2.1.1.4. Palatals

The palatal series of stops in Kurtöp tends to be affricated so that /c, c^h, ʃ/ are often realized as /tɕ, tɕ^h, dz/. Cuona Menba⁴⁷ (Lù 1986), spoken just north of Kurtö in Tibet, and Tshangla (Andvik 2003), spoken southeast of Kurtö report a three-way contrast of palatal affricates, rather than stops. My argument for naming the Kurtöp equivalent as stops, rather than affricates is phonological. Kurtöp stops, unlike the affricates and fricatives, make a three-way contrast in voicing at four other places of articulation. Thus, a palatal series of stops, with a three-way voicing contrast, is more consonant with the phonology of Kurtöp.

The contrast between voiceless unaspirated, voiceless aspirated and voiced at the palatal place of articulation is demonstrated in Table 30.

Table 30. Kurtöp palatal stops

Phoneme	Example	Gloss
/c/	cá	‘dress up; adorn’
/c ^h /	c ^h á	‘seedling’
/ʃ/	ʃa	‘tea’

The palatal series in Kurtöp is only found in onset position. While palatals usually occur on their as onsets, there are a few instances, depending on speaker age, register used, and potentially other factors, the complex onsets described above as labial-glide

⁴⁷ The publication by Lù on ‘Cuona Menba’ (also called [mø1 kɛʔ1]) refers to two dialects, one of which appears to be a variety of Dzala and the other which appears to be a variety of Tshangla (Driem 2001: 914-915).

clusters (§6.2.1.1.1 and §7), when a palatal stop may occur as the second member of a labial-initial onset cluster. These instances are not illustrated here.

The voiceless palatal stop is illustrated in onset position in front of each of Kurtöp's five vowels in

Table 31.

Table 31. Kurtöp /c/ before each vowel

Vowel	Example	Gloss
/i/	cík ~ cíʔ ~ cí:	'be.identical'
/e/	cé	'swim'
/a/	cá	'fraction'
/o/	có	'do; make'
/u/	cúk ~ cúʔ ~ cú:	'vomit'

The aspirated palatal is illustrated below in front of the five vowels in Table 32.

Table 32. Kurtöp /c^h/ before each vowel

Vowel	Example	Gloss
/i/	c ^h i	'lips'
/e/	c ^h é	'ten'
/a/	c ^h ák ~ c ^h áʔ ~ c ^h á:	'land on; land; step on'
/o/	c ^h ó	'religion'
/u/	c ^h ú	'bite.and.eat'

The voiced palatal stop is also found before all five vowels, as shown below in

Table 33.

Table 33. Kurtöp /j/ before each vowel

Vowel	Example	Gloss
/i/	ɟin	‘weight’
/e/	ɟè	‘bet’
/a/	ɟan	‘be.spread’
/o/	ɟòt	‘sow’
/u/	ɟù	‘milk’

6.2.1.1.5. Velars

Like the other stops, Kurtöp velars also contrast three voicing types: aspirated, unaspirated and voiced. The contrast is shown below in Table 34.

Table 34. Kurtöp velar stops

Vowel	Example	Gloss
-------	---------	-------

/k/	ká	‘snow’
/k ^h /	k ^h á	‘mouth; language’
/g/	gá	‘saddle’

The velars have a greater distribution than dentals, retroflexes and palatals, though slightly less than that of the labials. Kurtöp velars may occur in onset position as the sole member, in a cluster with a labiovelar glide, or, with some restrictions, as a coda. Like other complex onsets in Kurtöp, the velar-labiovelar sequence is found in only a small subset of the lexicon, with only nineteen out of over 5,500 words representing /kw-/, for example. As a coda, /-k/ is usually found only word-internally, as word-finally, /-k/ has had a tendency to be deleted leaving vowel length and for some (but not all) speakers glottalization of the vowel and/or a high, level tone (see §6.3.3 and §6.4 for more details). A /-k/ coda may be pronounced in words which are not used with much frequency, in particular specialized, religious vocabulary borrowed from Chöke.⁴⁸

The distribution of /k/ across the Kurtöp syllable is exemplified by the data in (5).

(5)	/k/	onset	onset cluster with /w/	coda
		kiktumpa	kwí	p ^h íksaŋ
		‘Hooded Pitta (<i>Pitta sordida</i>)’	‘trivet’	‘broom’

⁴⁸ This is also true of the use of /-l/ as a coda. See §6.2.4.2 for more details.

The Kurtöp voiceless unaspirated /k/ occurs preceding all of the vowels, as shown in Table 35.

Table 35. Kurtöp /k/ before each vowel

Vowel	Example	Gloss
/i/	kí	‘potato’
/e/	ké	‘birth’
/a/	kaʔ ~ ka:	‘snow’
/o/	kó	‘door’
/u/	kú	‘statue’

Like the voiceless unaspirated velar, the Kurtöp voiceless aspirated velar may occur as an onset by itself or may combine with the labiovelar glide /w/ in a complex onset. Neither the aspirated nor voiced velar may occur as a coda consonant in Kurtöp. The distribution of /k^h/ in Kurtöp syllables is shown below in (6).

(6)	/k ^h /	onset	onset cluster with /w/
		k ^h áuti	k ^h wé
		‘(chicken) egg’	‘water’

The occurrence of /k^h/ before the five vowels is illustrated below in Table 36.

Table 36. Kurtöp /k^h/ before each vowel

Vowel	Example	Gloss
/i/	k ^h i:	‘3.ERG’

/e/	k ^h ék ~ k ^h éʔ ~ k ^h é:	‘tie.up’
/a/	k ^h ák ~ k ^h áʔ ~ k ^h á:	‘be.bitter’
/o/	k ^h ók ~ k ^h óʔ ~ k ^h ó:	‘peel’
/u/	k ^h úp	‘hatch’

The Kurtöp voiced velar stop /g/ also occurs in onset position, either in a cluster with /w/ or on its own, as show in below in (7). The onset cluster /gw-/, more so than /kw-/ or /k^hw-/ seems to be rapidly leaving the language. For example, many speakers pronounce / gwà-/ as /gò-/ and in a lexicon over 5,500 words, only six have the onset cluster /gw-/.

(7)	/g/	onset	onset cluster with /w/
		gà	gwà
		‘be.happy’	‘two.CT’

The consonant /g/ is shown before each of the five Kurtöp vowels in Table 37.

Table 37. Kurtöp /g/ before each vowel

Vowel	Example	Gloss
/i/	gi	‘move’
/e/	gè	‘go’
/a/	gà	‘path’
/o/	gò	‘wheat’
/u/	gùm	‘crouch.down’

6.2.1.1.6. Summary

This section has shown a three-way contrast in terms of voicing (voiceless unaspirated, voiceless aspirated and voiced) at five places of articulation: labial, dental, retroflex, palatal and velar. The labials and velars are used most widely in the language, combining with sonorant consonants to make onset clusters and allowing their voiceless unaspirated members to be syllable codas. The dentals are the next most widely used, serving as onsets and codas but not in complex onset clusters. The other segments, retroflexes and palatals, are used least frequently in Kurtöp.

Kurtöp has innovated a third contrast in the category of voicing since the time of Proto-Tibeto-Burman, which is only reconstructed to have a contrast amongst voiced and voiceless initials. The writing system of Classical Tibetan also distinguishes voiceless unaspirated, aspirated, and voiced stops, though they are in close to complementary distribution within the syllable (DeLancey 2003). In modern-day languages, the three-way system is very common throughout TB languages today, including Lolo-Burmese (e.g. Wheatley (2003) for Burmese; Matisoff (2003) for Lahu), Bodic (e.g. Genetti (2003) for Dolakhā Newār; Andvik (2003) for Tshangla), and Qiangic (e.g. LaPolla (2003) for Qiang; Ding (2003) for Prinmi), just to name a few areas of the family.

6.2.1.2. Affricates

Kurtöp contrasts two dental affricates; one is voiceless unaspirated /ts/ and the other is voiceless aspirated /ts^h/. Dzongkha has a voiced counterpart /dz/, which may also

marginally appear in other languages of Bhutan,⁴⁹ but the voiced counterpart does not appear in Kurtöp. Even borrowings from Dzongkha and Chöke with /dz/ are rendered as /z/ in Kurtöp, so that *Dzongkha*, the name of the national language, is pronounced [zòŋk^hɑ]. The contrast between the voiceless aspirated and unaspirated dental affricate is shown below in Table 38.

Table 38. Kurtöp affricates

Phoneme	Example	Gloss
/ts/	tsá	‘nerves; tendons; blood vessels; sinew; artery’
/ts ^h /	ts ^h á	‘salt’

Both affricates may only occur as syllable onsets and do not form clusters with any other segment. The Kurtöp voiceless unaspirated dental affricate is shown preceding all five vowels below in Table 39.

Table 39. Kurtöp /ts/ before each vowel

Vowel	Example	Gloss
/i/	tsí	‘sticky’
/e/	tsé	‘apex’
/ɑ/	tsá	‘holy; divine; sacred’
/o/	tsó	‘talk’
/u/	tsún	‘lime (Calcium Oxide)’

⁴⁹ Van Driem (1995a) lists /dz/ as a phoneme in Bumthang but I have been unable to find any examples of it. Andvik (2003) lists /dz/ as a phoneme in Tshangla, but notes that it is only used in loan words by those with enough familiarity with Dzongkha or Chöke (p.c.).

The aspirated dental affricate is also found in front all five vowels, as show in Table 40.

Table 40. Kurtöp /ts^h/ before each vowel

Vowel	Example	Gloss
/i/	ts ^h í	‘squeeze’
/e/	ts ^h é	‘apex’
/a/	ts ^h á	‘shine; heat; reheat’
/o/	ts ^h ó	‘lake’
/u/	ts ^h ú	‘make; create; cook’

6.2.1.3. Fricatives

Kurtöp has fricatives at two places of articulation: dental and palatal. The voicing contrast between the dental fricative is still apparent in all speakers’ production, but the voicing contrast amongst the palatal fricatives has been lost. Thus, as step in tonogenesis, the Kurtöp palatal fricatives are now both voiceless, displaying a contrast in tone on the following instead (see §6.4 for more details).⁵⁰ The contrast between the three fricatives is illustrated in Table 41.

Table 41. Kurtöp fricatives

⁵⁰ As I suggest in Hyslop (2009) and articulate in fuller detail in §6.4 below, the tendency for fricatives to undergo tonogenesis first appears to be a common phenomenon, in Bodic especially. For example, Beyer (1992: 26, 24fn) offers three pieces of historical evidence that tonogenesis had happened amongst the fricatives (but not elsewhere) for Tibetan. In the first instance a Nepalese scholar between 1290-1364 writes the voiced palatal fricative as voiceless (presumably he heard the devoicing but not the tonal difference). Second, in 1478 the historian རོ་ལོ་ལྷོ་བ་གཞོན་ནུ་དཔལ་ <ngos lo-tsä-ba gzhon-nu-dpal> noted that the graphs for the voiced palatal and dental fricatives were both pronounced as voiceless during his time. And third, the Si-tu Mahāpaṇḍita listed <zh> and <z> as ‘voiceless’ in his grammatical commentary, likely to be dated to 1744. Importantly, in all these instances, it is only the fricatives which are mentioned.

Phoneme	Example	Gloss
/s/	sá	‘earth; ground; place’
/z/	zà	‘fruit’
/ç/	çá	‘meat’

6.2.1.3.1. Alveolars

The voiceless dental fricative /s/ has a greater distribution than its voiced counterpart. In addition to serving in onset position, it may also occur as a coda. Several dialects of Kurtöp, including that of Dungkar geok, have recently lost word-final /s/ in favor of vowel length, so that ‘seven’ in Tangmachu dialect is /ní:s/ but /ní:/ in Dungkar, for example.⁵¹ Other dialects have changed coda /s/ word-internally to /t/; for example Dungkar /ròspa/ ‘bone’ is [ròtpa] in Wawe. (8) shows /s/ as an onset and coda.

(8)	/s/	onset	coda
		sáɪn	kás
		‘unpolished.rice’	‘ladder’ (Tangmachu dialect)

The voiceless dental /s/ is found preceding all Kurtöp vowels, as shown in Table 42.

⁵¹ Verbs with a historically open stem may also exhibit a coda in front of the imperfective verbal morphology, but this is mainly conditioned by dialect; it is associated with Gangzur and Ne, for example, though some speakers from Dungkar geok also evidence this from time to time. See §7.3 for more details.

Table 42. Kurtöp /s/ before each vowel

Phoneme	Example	Gloss
/i/	sí	‘pluck’
/e/	sé	‘louse’
/a/	sápl̥ŋ	‘sparrow’
/o/	só	‘feed’
/u/	sú	‘bamboo.type’

While historically voiced /j/ is always devoiced in the synchronic language (see §6.4), the voiced dental fricative /z/ may still be realized as a voiced segment. The voiced dental /z/ is found in onset position only, as shown in front of all five vowels in Table 43.

Table 43. Kurtöp /z/ before each vowel

Phoneme	Example	Gloss
/i/	zì	‘fish.bones’
/e/	zè	‘ridge’
/a/	zàt	‘finish’
/o/	zò	‘appearance’
/u/	zù	‘eat’

6.2.1.3.2. Palatals

As I have argued elsewhere (Hyslop 2008; Hyslop 2009), Kurtöp has recently merged voiced and voiceless palatal fricatives in the first step of tonogenesis spreading to

the obstruents.⁵² The arguments are summarized here. First, the category of voiced is found amongst all stops and amongst the other fricatives /s/ and /z/. Second, in the first publication on Kurtöp, Michailovsky and Mazaudon (1994) reported a voiced palatal fricative but that it always occurred with low tone on the following vowel and tended to be devoiced. Third, the voiceless palatal fricative is the only obstruent to contrast high and low tone on the following vowel; otherwise voiced obstruents condition low tone on their following vowel and voiceless obstruents condition high tone on their following vowel. The role of palatal fricative in tonogenesis is discussed in §6.4 in more detail. The data in (9-10) show the contrast in tone following the voiceless palatal fricative /ç/.

(9) çám ‘shoes’

(10) çàm ‘man’s.length.measurement’

The palatal fricative is shown preceding the five Kurtöp vowels in Table 44.

Table 44. Kurtöp /ç/ before each vowel

Phoneme	High tone	Gloss	Low tone	Gloss
/i/	çí	‘bamboo.shoot’	çì	‘basis’
/e/	çé	‘wander; loiter’	çè	‘spin (thread)’

⁵² Tonogenesis, the development of tonal contrasts in a language, has been the focus of study for several decades. While I address the issue in greater depth in §6.4, I will briefly outline the relevant processes here. Tone may take a variety of pathways into a language, but a very common one is for 1) obstruents to condition tone on the following vowel, with voiceless condition high tone and voiced conditioning low; and 2) for the voiced segments to devoice. The result is a contrast of high versus low tone following voiceless obstruents: ba, pa > bà, pá > pà, pá.

/a/	çák ~ çáʔ ~ çá:	‘boil’	çà:	‘what’
/o/	çó	‘dice’	çò	‘exhaustion’
/u/	çú	‘DBT’	çù	‘melt’

6.2.2. Sonorants

Kurtöp has eleven sonorant consonants. The sonorants differ from most obstruents in that they may occur preceding both high and low tone (recall that, with the exception of the voiceless palatal fricative, Kurtöp obstruents redundantly mark tone on the following vowel: high tone follows the voiceless obstruents and low tone follows the voiced). The exceptions to this are the voiceless lateral, which has a very limited distribution and only occurs preceding high-toned vowels/. The glottals /h/ and /ʔ/ are also not typical sonorants in that 1) they appear with very little frequency and it is not clear that /ʔ/ itself should be considered a phoneme; and 2) they do not occur preceding both high and low tone (see §6.4 for more phonetic and phonological details on Kurtöp tone). The contrast between high and low tone following the nasals, liquids and glides is shown below in Table 45.

Table 45. Kurtöp tone following nasals, liquids and glides

Phoneme	High tone	Gloss	Low tone	Gloss
/m/	máŋ	‘community; crowd; everyone’	màŋ	‘be.excessive’
/n/	nám	‘ <i>Perilla frutescens</i> ’	nàm	‘sky; weather’
/ɲ/	ɲú	‘be.crazy’	ɲù	‘borrow’

/ŋ/	ŋáɸ	‘dry.out’	ŋàɸ	‘be.thin’
/r/	rúŋ	‘make.stand; get up’	rùŋ	‘small.storage.basket’
/l/	léɸ	‘flat.spoon’	lèɸ	‘be.delicious’
/w/	wáŋ	‘blessing’	wàŋ	‘pit’
/j/	jáɸ	‘awning’	jàɸ	‘wear.on.shoulders’

The remainder of this section discusses the nasals /m, n, ɲ, ŋ/ in §6.2.3, the liquids /l, l̥, r/ in §6.2.4, and the glides /w, j/ and glottals /h, ʔ/ in §6.2.5.

6.2.3. Nasals

Kurtöp contrasts nasals at four places of articulation: labial, dental, palatal and velar, as illustrated below in Table 46.

Table 46. Kurtöp nasals

Phoneme	Example	Gloss
/m/	mám	‘female.pheasant’
/n/	nám	‘sky; weather’
/ɲ/	ɲám	‘lessen; diminish; fade’
/ŋ/	ŋám	‘many; a lot’

The Kurtöp bilabial /m/ has a distribution similar to the voiceless bilabial stop /p/; it may occur as a sole onset, as the first member of an onset cluster with /r/ or /j/ and as a coda. Like the complex onsets described above with an initial obstruent, complex onsets involving /m/ are very rare in the language. Six out of over 5,500 lexical items begin with

/mr-/ in Kurtöp and only two begin with /mj-/. Both complex obstruents appear to be limited to the dialects of Dungkar and Ne geoks and /mj-/ is only found in the speech of elders. Kurtöps under approximately sixty pronounce /mj-/ as /ɲ/. Both /mr-/ and /mj-/ have been found preceding only low tone, despite the fact that van Driem (Driem 1995a: 54) reports words with high tone following /mr-/ in Bumthap.

The distribution of /m/ across the Kurtöp syllable is illustrated in (11).

(11)	/m/	onset	onset cluster with /r/	onset cluster with /j/	coda
		mùja	mrà:	mjàŋ	bàm
		‘radish’	‘rice.paddy’	‘receive’	‘holdable.bundle’

The data in Table 47⁵³ illustrates Kurtöp /m/ preceding all vowels.

Table 47. Kurtöp /m/ before each vowel

Phoneme	Example	Gloss
/i/	mì	‘person’
/e/	mè:	‘house’
/a/	mà	‘wound’
/o/	mòkaliŋ	‘bamboo.hat’
/u/	múŋ	‘Ameranthus’

⁵³ The attribution of bamboo in *mòkaliŋ* appears to be found only in the dialect of Dungkar geok, where it is different from /tsakaliŋ/ ‘cloth.hat’. The Gangzur dialect, for example, uses /mòkaliŋ/ for all varieties of hats.

The dental /n/ is found in onsets and codas but not in any tautosyllabic clusters.

This distribution is demonstrated in (12).

(12)	/n/	onset	coda
		nám nampa	nín
		‘Dogwood (<i>Benthamidia capitata</i>)’	‘2.PL’

Kurtöp /n/ is found before all five vowels, as shown in

Table 48.⁵⁴

Table 48. Kurtöp /n/ before each vowel

Phoneme	Example	Gloss
/i/	nì	‘sit; stay’
/e/	néŋ	‘year’
/ɑ/	nát	‘leave; place; put.down’
/o/	nò	‘younger.brother’

⁵⁴ The verb *nì* ‘sit; stay’ is also used to mark durative modality; see §21.2.5.5.

/u/	nùp	‘be.covered’
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The palatal /ɲ/ is the only nasal to be found only in onset position and not as a coda. Table 49 illustrates /ɲ/ before each of the vowels.

Table 49. Kurtöp /ɲ/ before each vowel

Phoneme	Example	Gloss
/i/	ɲíɲ	‘pity’
/e/	ɲèrma	‘wrinkles’
/a/	ɲám	‘branch’
/o/	ɲòt	‘swallow’
/u/	ɲùm	‘be.unintentionally.burned’

The Kurtöp velar nasal /ŋ/ is found both in onset position as the only and coda position, as shown in (13).

(13)	/ŋ/	onset	coda
		ŋát	táŋ
		‘1.ABS’	‘nest’

The distribution of the velar nasal preceding front vowels is not entirely clear. Dzongkha appears to have merged the velar and palatal nasal preceding front vowels and as such Dzongkha borrowings in Kurtöp with a following front vowel are variably pronounced as [ŋ] and [ɲ]. Nonetheless, the Kurtöp velar nasal /ŋ/ is found preceding all five Kurtöp vowels, as shown in Table 50.

Table 50. Kurtöp /ŋ/ before each vowel

Phoneme	Example	Gloss
/i/	ŋì	‘large pestel’
/e/	ŋètaŋ	‘walking.stick’
/a/	ŋakpa	‘cold’
/o/	ŋò	‘cry’
/u/	ŋúnti	‘blue/green’

6.2.4. Liquids

Three liquids are found to be contrastive in Kurtöp: /r, l, ɭ/ as evident in Table 51.

Table 51. Kurtöp liquids

Phoneme	Example	Gloss
/r/	rá	‘hair’
/l/	lá	‘month’
/ɭ/	ɭá	‘god’

The rhotic and voiced lateral have a wide distribution, both occurring in onsets as the sole member as well as second member in tautosyllabic clusters. The rhotic also occurs regularly as a coda but the lateral only occurs in loans in the synchronic language. There is morphological evidence that /-l/ was also recent coda in native verb stems in the language (see §7.3) but is no longer present. The rhotic and voiced lateral occur preceding both high and low tone. The voiceless lateral is found only in a small handful of words and allows only for high tone on the following vowel. The rhotic is discussed further in 6.2.4.1 and I address the laterals in 6.2.4.2.

6.2.4.1. Rhotic

In my previous description of Kurtöp phonology (mainly Lowes 2006), I describe a great deal of phonetic realization with respect to the Kurtöp rhotic.⁵⁵ This work, however, was based primarily on the speech of one speaker. Further research has shown that the described variation was a unique feature of that speaker. This is not a surprising finding given that the speaker had left the village near the age of seven, and went to live with his grandparents in Bumthang and was exposed to the Bumthap language, where a contrast amongst rhotics is reported (Driem 1995a).

In terms of distribution across the syllable, the Kurtöp /r/ may occur as a sole onset, as the second member in an onset preceded by a labial stop, and as a coda, as shown in (14).

(14)	/r/	onset	onset cluster with labial	coda
		rùi	p ^h rúm	mâr
		‘pheasant’	‘cheese’	‘butter’

The Kurtöp /r/ is found preceding all five vowels, shown below in Table 52.

⁵⁵ In (Lowes (Hyslop) 2006: 55-60) I demonstrated that the Kurtöp rhotic could be realized as an approximant, a trill, a voiced retroflex fricative and a voiceless retroflex fricative.

Words with sole onset /l/ are prevelant in the data with numerous occurrences of both high and low tone on the following vowel. The phoneme /l/ is very limited as the second member of an onset cluster. It occurs in three words with initial /b/, in one word with initial /p/⁵⁶ and not at all with initial /p^h/.

Table 53. Kurtöp coda /l/ in borrowed words

Kurtöp	Gloss	Source
káɲel	‘difficulty’	Chöke <dkaa.ngal>
kélchen	‘great.eon’	Chöke
kélpai-me	‘apocalyptic.fire’	Chöke <bskalpaime>
gètshul	‘8-vowed.monk’	Chöke <gedtshul>
ɲáɲel	‘sin.of.pride’	Chöke
ts ^h áɲel	‘hot.hell’	Chöke
zùm ^h ul	‘supernatural.powers’	Chöke
cápal	‘sandal; slipper’	Hindi <cappal>
mòbail	‘mobile.phone; cell.phone’	English <i>mobile</i>
ískul	‘school’	English <i>school</i>

Coda /l/ appears in loanwords, primarily from Chöke. Some examples are in

Table 53.^{57,58,59}

⁵⁶ Michailovsky and Mazaudon (1994: 551) report the word *plot-* ‘come.off’ as their only example of onset *pl-*. However, the only word in my database with initial /pl-/ is *plik* ‘circumcize’.

⁵⁷ The source for *káɲel* is Dhongthong (1988: 109).

⁵⁸ The source for *kélchen* is the DDC Dictionaries.

⁵⁹ The source for *kélpai-me* is the DDC Dictionaries.

When some words with coda /l/ are borrowed the /-l/ is interpreted as being an allomorph of the individuating suffix *-la* (see §11.4.2). For example, the English word ‘bottle’ renders both *bòtol* and *bòtola* in Kurtöp.

Coda /l/ also appears in native Kurtöp words, but as a reduction of morphemes that end in *-la* or *-le*, namely *-pala* ‘PFV’, *-male* ‘FUT’ and *-la* ‘IDZ’. The final subset of words which may have coda *l* are onomatopoeic words, as in *relp^hol* ‘rolling around; roly.poly’.

The fact that coda *l* is found only in borrowed words, due to allophonic variation, or only used in onomatopoeia, is underscored by the data in Table 54, illustrating the correlation between coda *l* in reconstructions of Proto-Tibeto-Burman and open syllables in Kurtöp. Presumably, this indicates that coda *l* at Proto-state in the language has deleted in modern reflexes of PTB, sometimes, though not necessarily, in favor of vowel length.

Table 54. Loss of coda /l/ from Proto-Tibeto-Burman

PTB	Kurtöp	gloss
*tal	t ^h ewa	‘dust’
*ŋul	ŋoi	‘silver’
*m-kul	k ^h édi	‘twenty’
*d-pral	p ^h élaŋ	‘forehead’
*m-kal	k ^h é:do	‘kidney’

*gro:l	t ^h ó	‘wash’
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As illustrated in (15), Kurtöp /l/ may also appear marginally as the second member in an onset cluster with initial voiceless and voiced labial stops. In addition to words with this combination being very rare, a sound change is currently in progress which is merging /bl-/ with /br-/, so that for many speakers /bre/ ‘measure.cup’ and /ble/ ‘four’ are synonymous.

The voiceless lateral is much rarer than its voiced counterpart, occurring in less than thirty words in our database. Unlike the voiced lateral, which may occur preceding both high and low tones, the voiceless later only occurs before high tone. It is found only in syllable initial position, preceding four of the five vowels, as in Table 55. The lack of the voiceless lateral preceding the high, back vowel /u/ is likely due to an accidental gap, given the rare occurrence of this phoneme in the language in general.

Table 55. Kurtöp /l/ before /i, e, a, o/

Phoneme	Example	Gloss
/i/	lík ~ líʔ ~ lí:	‘come.apart’
/e/	lénk ^h a	‘ministry’
/a/	láp a	‘extra’
/o/	ló	‘South’

Despite the limited distribution of /l/ in Kurtöp, it is found productively in a few onomatopoeic words, such as *chɔp* ‘flapping sound, such as prayer flag flapping in the wind’ and *wɛɔn em* ‘shiny’.

6.2.5. Glides and glottals

Kurtöp has two glides: a labiovelar /w/ and palatal /j/ plus a glottal fricative that occurs in less than thirty words and a glottal stop which is not a phoneme on its own. As onsets, the glides may precede either high- or low-toned vowels, while the glottal fricative appears only preceding high tone. The more complicated relationship of the glottal stop with tone is discussed below.

The labiovelar glide is found in syllable onset position on its own or in a cluster with velar stops. This distribution is shown in (16).

(16)	/w/	onset	onset cluster with velar stop
		wá	kwá
		‘trough’	‘tooth’

Like complex onsets elsewhere in Kurtöp, velar-labiovelar clusters are found only minimally in the language. The set of words for which complex onsets are found is small, and in fast speech velar-labiovelar clusters with a following low back vowel tend to be simplified to a velar stop plus mid round back vowel /o/.

Kurtöp /w/ is found as a phoneme preceding the unrounded vowels /i, e, a/ but is redundant preceding vowel-initial words beginning with low-toned round vowels, so that words such as /ò/ ‘DEM.PROX’ and /ùr/ ‘nod; swing.side.to.side’ may be pronounced with or without the labiovelar glide present in initial position, so that [ò] ~ [wò] ‘DEM.PROX’ and [ùr] ~ [wùr] ‘nod; swing.side.to.side’ (see §6.3.1 for more details on Kurtöp vowels). The phonemic presence of /w/ preceding /i, e, a/ is shown in Table 56.

Table 56. Kurtöp /w/ before /i, e, a, /

Phoneme	Example	Gloss
/i/	wit	‘2.SG’
/e/	wèŋ	‘Tibet’
/a/	wāgam	‘chin’

The palatal glide is also found in onset position as the sole consonant as well as in limited consonant clusters (17).

(17)	/j/	onset	onset cluster with labial stop	onset cluster with labial nasal
		jám	pjáŋtsi ~ pcáŋi ~ cáŋtsi	mjà ~ ja
		‘road; path’	‘Yellow-billed Blue Magpie (<i>Urocissa flavirostris</i>)’	‘arrow’

Kurtöp /j/ as the second member of an onset cluster is found in a very limited subset of words and only amongst more conservative speakers. While the palatal glide may follow all labial consonants (/p, p^h, b, m/), most speakers today pronounce labial

stop-palatal glide clusters as labial-palatal stop sequences with the youngest generation of speakers omitting the labial stop altogether. Likewise, most speakers today have merged the /mj-/ sequence with the palatal nasal. The trend of simplifying these complex onsets follows the general trend of onset simplification that has been occurring since Proto Mainstream-East-Bodish (see §3.5 for more details).

Like the labiovelar glide, the palatal glide is contrastive preceding a subset of vowels, and redundant preceding a separate set. Kurtöp /j/ may occur as a phoneme preceding the non-front vowels /ɑ, o, u/ but preceding low-toned front vowel-initial words is redundant, so that /igu/ ‘letter’ may be pronounced [igu] or [jigu] and /èn/ ‘roam’ may be either [èn] or [jèn]. The phonemic distribution of /j/ following the three non-front vowels is shown in Table 57.

Table 57. Kurtöp /j/ before ɑ, o, u /

Phoneme	Example	Gloss
/ɑ/	jɑŋɑ	‘five’
/o/	jòʔ ~ jó:	‘sheep’
/u/	jùwɑ	‘storage.basket’

The voiceless glottal fricative /h/ occurs minimally in Kurtöp but does nonetheless have phonemic status as an onset. For some dialects of Kurtöp, [h] is a possible realization of the voiceless aspirated velar /k^h/. In the variety of Kurtöp spoken in Ne, for example, /k^hák / ‘up’ is pronounced as [háɰ]. Nevertheless, there is evidence of /h/ as a phoneme, as shown in Table 58.

Table 58. Evidence of Kurtöp /h/

Phoneme	Example	Gloss
/h/	hámpa	‘incensitive.person’
/kh/	khámpa	‘Kham.Tibetan’

Like most other voiceless consonants,⁶⁰ Kurtöp /h/ is found preceding high-toned vowels. The voiceless glottal fricative is not found robustly in the data, occurring in less than 30 words. Table 59 shows /h/ preceding all five Kurtöp vowels.

Table 59. Kurtöp /h/ before vowels.

Phoneme	Example	Gloss
/i/	híktum	‘hiccup’
/e/	héma	‘spade’
/a/	hápa	‘tom.cat’
/o/	hórhoma	‘Bhutanese.accordian’
/u/	húrdup	‘sling’

The glottal stop in Kurtöp is found word-initially and word-finally, but in both cases is a redundant feature. Word-initially the glottal may occur preceding a vowel-initial high-toned syllable. Word-finally, the glottal stop can be conceived of as a secondary feature of vowel length or tone. The glottal stop, when present, is a reflex from a coda /k/, which is often present in other dialects of Kurtöp or at least Kurtöp’s closest

⁶⁰ Recall that tone is predictably high following voiceless consonant onsets and predictably low following voiced onsets. As a tonogenetic step, Kurtöp voiced fricatives have recently conditioned low tone on their following vowel and devoiced. Thus, the voiceless palatal fricative is the only voiceless phoneme in Kurtöp to contrast both high and low tone on its following vowels. See Hylop (2009) and §6.4 of this dissertation for more details.

relatives. This is discussed in greater details in the sections on vowel length (§6.3.3) and tone (§6.4).

6.3. Vowels

Kurtöp contrasts five vowels /i, e, a, o, u/ and four diphthongs /ai, iu, ui, oi/. Educated speakers, influenced by Dzongkha and Tibetan, also have front rounded vowels [ø] and [y], which are variably used in the same phonological environments as their Dzongkha counterparts. Kurtöp also contrasts length on vowels. Monophthongs are discussed in §6.3.1, diphthongs in §6.3.2, and length in §6.3.3.

6.3.1. Monophthongs

6.3.1.1. Native vowels

Native, uneducated speakers of Kurtöp contrast the five cardinal vowels shown in Table 60.

Table 60. Kurtöp native vowels

i	u
e	o
	a

Diphthongs is illustrated in Table 61.

Table 61. Contrast amongst Kurtöp native vowels.

Phoneme	Example	Gloss
/i/	c ^h i	‘lips’

/e/	c ^h é	‘ten’
/a/	c ^h á	‘seedling’
/o/	c ^h ó	‘religion’
/u/	c ^h ú	‘devour’

6.3.2.1. Dzongkha influence

The influences of Dzongkha, the national language, and Chöke, the liturgical language, are powerful. In addition to the lexical influences the languages have had over Kurtöp over the centuries, Kurtöp phonology continues to be influenced. Amongst the vowels, the primary influence has been the introduction of the front rounded vowels /ø/ and /y/. Thus, speakers who have been highly educated (say, up to class 10 and beyond) in the Bhutanese education system, and/or have grown up in a bi- or multilingual environment (such as Kurtöps born in Thimphu), usually have front rounded vowels in the environments they would be expected to be found in Dzongkha or Chöke, viz. before coronal codas or in place of the diphthongs /ui/ and /oi/. Table 62 shows some Kurtöp words with Chöke cognates and the difference between educated and uneducated pronunciation.

Table 62. Kurtöp front-rounded vowels with Chöke cognates

Gloss	Uneducated/village pronunciation	Educated pronunciation	Chöke
‘Kunga (name)’	kúŋga	kýŋga	ཀུན་དགའ་ <kun.dga’>

‘religion’	c ^h ó	c ^h oi ~ c ^h ø:	ཚོས་ <chos>
‘offer.HON’	p ^h ui	p ^h y:	ཕུལ་ <phul>

While several words with Chöke-influenced pronunciation are clearly borrowings from Chöke, such as those in Table 62, the borrowed pronunciation is not limited to borrowed words.

Table 63. Kurtöp front-rounded vowels in non-Chöke cognates

Gloss	Uneducated/village pronunciation	Educated pronunciation	Chöke
‘two’	zón	zón	གཉིས་ <gnis>
‘rain’	jui	jy:	ཇར་པ་ <charpa>

Fronting of rounded back vowels before coronal consonants is commonly reported in Tibeto-Burman languages of the Himalayas (e.g. DeLancey (2003b) for Lhasa Tibetan and Genetti (1992) for Sunwar). The Kurtöp data, however, indicates that this sound change is borrowed.

6.3.3. Length

Vowel length is also contrastive on open syllables though the contrast is neither very salient nor very productive. Nonetheless, some minimal pairs can be found, as shown in Table 64.

Table 64. Contrast between long and short vowels in Kurtöp

Kurtöp	Gloss
--------	-------

ía	‘deities’
ía:	‘excess’
çé	‘over.pour’
çé:	‘glass’
tsí	‘sticky’
tsí:	‘calculation’
kó	‘door’
kó:	‘hoe’
mù	‘mushroom’
mù:	‘COP.EXIS.NEG’

In Figures 18 and 19, taken from (Lowes (Hyslop) 2006: 82), I show the results of an acoustic study where I examined vowel duration as a correlate of vowel length.

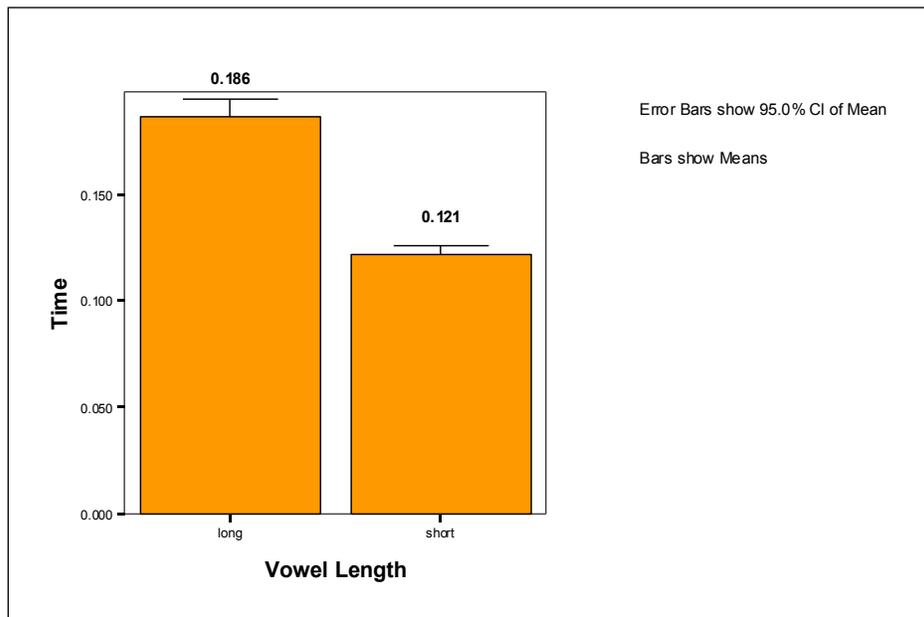


Figure 18. Graphical representation of mean long vs. short vowels for speaker PC

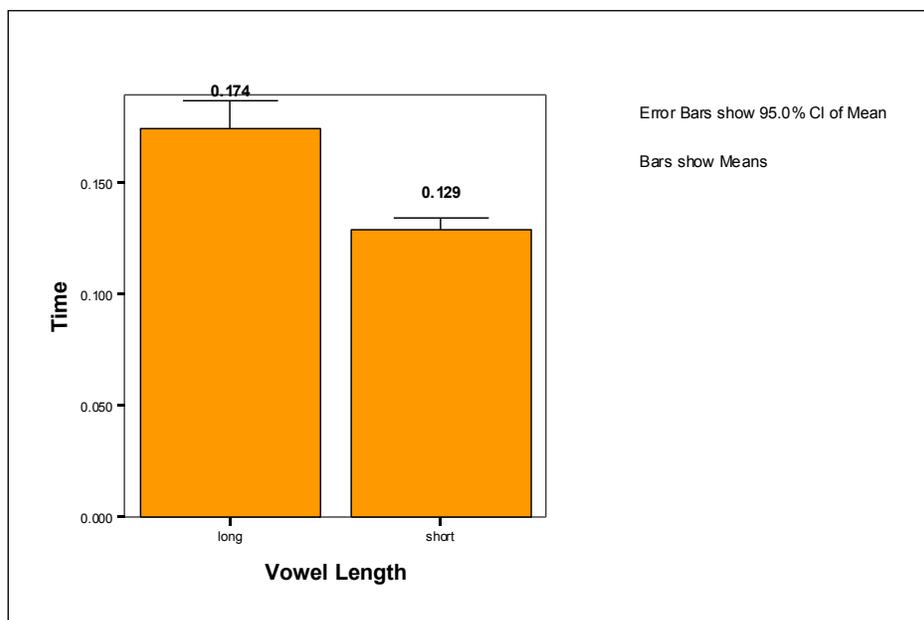


Figure 19. Graphical representation of mean long vs. short vowels for speaker KW

The long vowels are an average of 65 ms longer than short vowels for P.C., and 45 ms longer for K.W. The ratio of short to long is 1:1.5 for P.C. and 1:1.3 for K.W. This difference was found to be significant for both speakers [$F(1,665)=182.68, p<.001$] for P.C. and [$F(1,432)=46.682, p<.001$] for K.W. The mean, maximum, minimum and standard deviation for short and long vowels for both speakers are summarized in Table 65. Mean, minimum and maximum values are given in milliseconds.

Table 65. Mean and standard deviation of duration in ms as a correlate of long vs short vowels for two speakers of Kurtöp (Lowes (Hyslop) 2006: 83)

Length	P.C.					K.W.				
	N	Mean	SD	Min.	Max.	N	Mean	SD	Min	Max
long	122	186	.046	70	285	72	174	.051	60	284

short	545	121	.048	27	283	362	129	.052	39	262
-------	-----	-----	------	----	-----	-----	-----	------	----	-----

Note that for both speakers there was a great deal of overlap between the short and long vowels. This may be the result of transcription error, or representative of the little functional weight vowel length seems to carry in Kurtöp. When salient, that is, when the only feature distinguishing two words in a minimal pair, vowel length was transcribed without question. In other instances, vowel length was more difficult to ascertain. When in question, we deferred to the speakers' intuitions regarding the length of vowels. As I mentioned, vowel length has minimal functional weight in Kurtöp; it is contrastive in open syllables of monosyllabic words, only.

There are at least three diachronic pathways which have led to vowel length in the synchronic language: loss of coda /k/, loss of /-ba/ suffix and monophthongization. Each will be considered in turn below.

The attribution of vowel length, and often falling tone, from the loss of coda /k/ is an established phenomenon in Tibeto-Burman. Coda velars were lost from Classical Tibetan, leading to long vowels with a glottalized pitch in the modern Lhasa dialect (DeLancey 2003b). As discussed in §6.2.1.1.5, in the synchronic language Kurtöp coda /k/ follows the trend of many other TB languages in that it is often realized as a glottal stop or vowel length (however, where it deviates from the expected tonal pattern will be discussed in Chapter Seven below). In Table 66 below I provide some comparative data for the development of vowel length from loss of coda /k/.

Table 66. Comparative evidence for source of long vowels in Kurtöp by way of a lost coda *k*

Classical Tibetan	Kurtöp	
ཕགས་ <phags>	p ^h a:	‘pig’
ནག་ <rnag>	na:	‘pus’
སྟག་ <stag>	ʼta:	‘tiger’
འབྲུག་ <ḥbrug>	ḍu:	‘dragon’

Vowel length has also entered the synchronic language via loss of an old *-ba* suffix, as illustrated by the data in Table 67.

Table 67. Comparative evidence for source of long vowels in Kurtöp by way of a lost coda *-ba* suffix

Classical Tibetan	Kurtöp	
ཀའ་ <ka.ba>	káw	‘post’
ཐོ་ <tho-ba>	thówa ~ thó:	‘hammer’
རྟོ་ <rko-ba>	kó:	‘hoe’

The data for ‘post’ demonstrate the intermediate change /ba/ > /wa/ and the data for ‘hammer’ indicate this /ba/ then develops into vowel length. Finally, the data for ‘hoe’ show that the sound change has finished for some items in the synchronic language.

The final source we have identified for vowel length in Kurtöp is monophthongization. As I mentioned in §6.3.2, diphthongs /ui/ and /oe/ are often realized as the front rounded vowels /y:/ and /ø:/ by educated speaker familiar with Chöke and

Dzongkha. In addition, the old diphthong /ai/ has become /e:/, as can be seen by comparison with Bumthap in Table 68.

Table 68. Comparative evidence for source of long vowels in Kurtöp by way of recent monophthongization

Bumthap	Kurtöp	
gai	gè:	‘go’
khaido	k ^h é:do	‘kidney’

Further argument that this is a recent sound change comes from a consideration of Michailovksy and Mazaudon (1994) who reported a diphthong /ai/ being in variation with /e:/. This finding suggests that the form /ai/ was still present in at least some speech varieties in the 1970s.

A broader comparative study of monophthongization suggests we can ultimately attribute this source to old coda consonants, as shown in Table 69.

Table 69. Comparative evidence for source of long vowels in Kurtöp by way of a lost coda -l

Classical Tibetan	Kurtöp	
མཁལ་མ་ <mkhal-ma>	k ^h é:do	‘kidney’

Note also that the data in Table 69 also evidence vowel fronting in conjunction with vowel lengthening.

Note also that the sound change /ai/ > /e:/ has not happened across morpheme boundaries; that is, only diphthongs and not /a/ /i/ vowel sequences have undergone this change, as suggested by the data in (18).

- (18) ʔa-iki
 watch-HORT
 ‘let’s watch’

Vowel length has a minimal functional load in Kurtöp. Contrasts only exist in open syllables and, even the best conditions, the difference may be between 45 - 65 ms, or a ratio of between 1:1.3 and 1:1.5. In connected speech, the difference is neutralized in multisyllabic words, so that vowel length is only audible on monosyllabic words.

6.4. Tone

Kurtöp makes minimal use of tone in marking phonemic contrast and comparative evidence suggest tone has recently entered the language and is currently spreading from its current place of contrast following the sonorant consonants to other phonological environments (namely, following the obstruents). In this section I outline the phonology of tone and phonetic correlates in §6.4.1 and the diachronic development in §6.4.2.

6.4.1. Synchronic contrast

As I discussed in §6.2.1.3.2 and §6.2.2, tone in Kurtöp is synchronically contrastive on the first syllable following sonorant consonants and palatal fricatives.

Examples of this contrast, shown initially in Table 45 and (9-10), are repeated below in Table 70.

Table 70. Contrastive (high/low) tone following sonorant consonants of initial syllables and palatal fricative

Phoneme	High tone	Gloss	Low tone	Gloss
/m/	máŋ	‘community; crowd; everyone’	màŋ	‘be.excessive’
/n/	nám	‘Ameranthus’	nàm	‘sky; weather’
/ɲ/	ɲú	‘be.crazy’	ɲù	‘borrow’
/ŋ/	ŋáp	‘dry.out’	ŋàp	‘be.thin’
/r/	rúŋ	‘make.stand; get up’	rùŋ	‘small.storage.basket’
/l/	lém	‘flat.spoon’	lèm	‘be.delicious’
/w/	wáŋ	‘blessing’	wàŋ	‘pit’
/j/	jáp	‘awning’	jàp	‘wear.on.shoulders’
/ç/	çám	‘shoes’	çàm	‘man’s.length.measurement’

Following all other consonants tone is not contrastive. That is, in the environment following obstruents except the palatal fricative, tone is predictably high when following the voiceless obstruents and predictably low when following the voiced obstruents. This correlation is illustrated in Table 71.

Table 71. Predictable (high/low) tone following voiced vs. voiceless obstruent consonants of initial syllables

High tone	Gloss	Low tone	Gloss
pá	‘meat slice’	bà	‘target’
p ^h át	‘leech’		
tá	‘axe’	dà	expletive

t ^h á	weaving pattern		
ʈá	‘change of color’	ɖá	‘EXCL’
t ^h áŋ	‘climb’		
ʈáɒ	‘friend’	ja	‘tea’
c ^h á	‘pair’		
ká	‘snow’	gá	‘saddle’
k ^h á	‘language; mouth’		
tá	‘nerves’		
ts ^h á	‘salt’		
śá	‘soil’	zám	‘bridge’

The voiceless palatal fricative is the only obstruent which does not have a voiced or aspirated counterpart and is further the only obstruent to occur preceding both high and low tone (cf. the discussion on tonogenesis in §6.4.2).

Monosyllabic words which were historically closed by a consonant are often realized with glottalization as a concomitant feature to vowel length (§6.3.3). For many speakers the glottalization disappears in connected speech, but in isolation it may quite salient. Consider Figures 20 and 21 below.

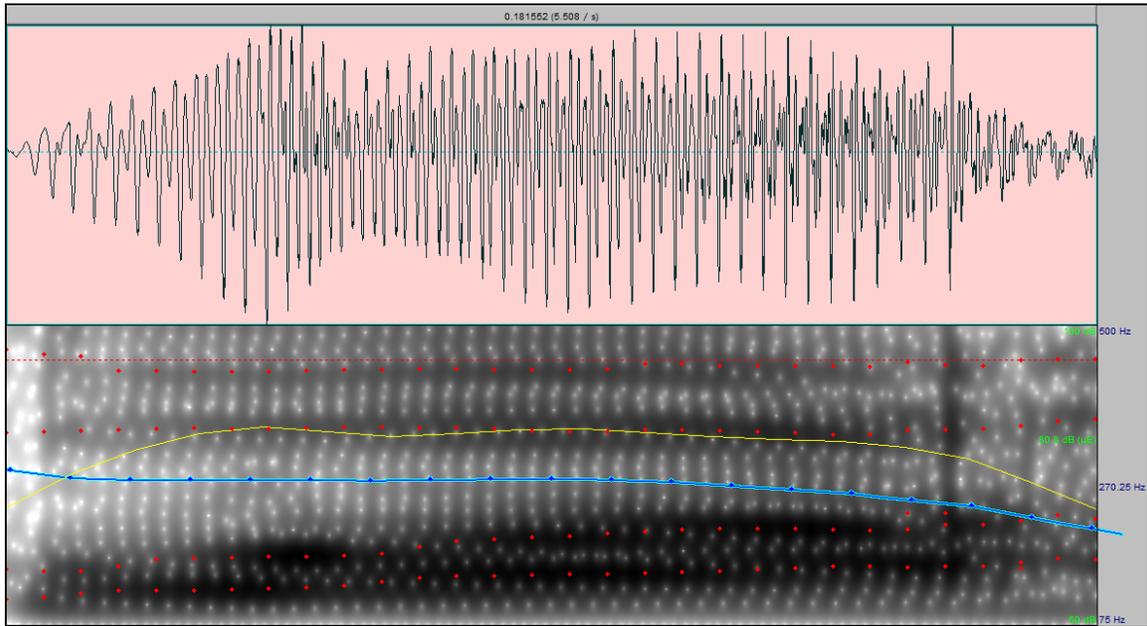


Figure 20. Spectrum and spectrogram for *kwa* ‘tooth’ as spoken by Ch

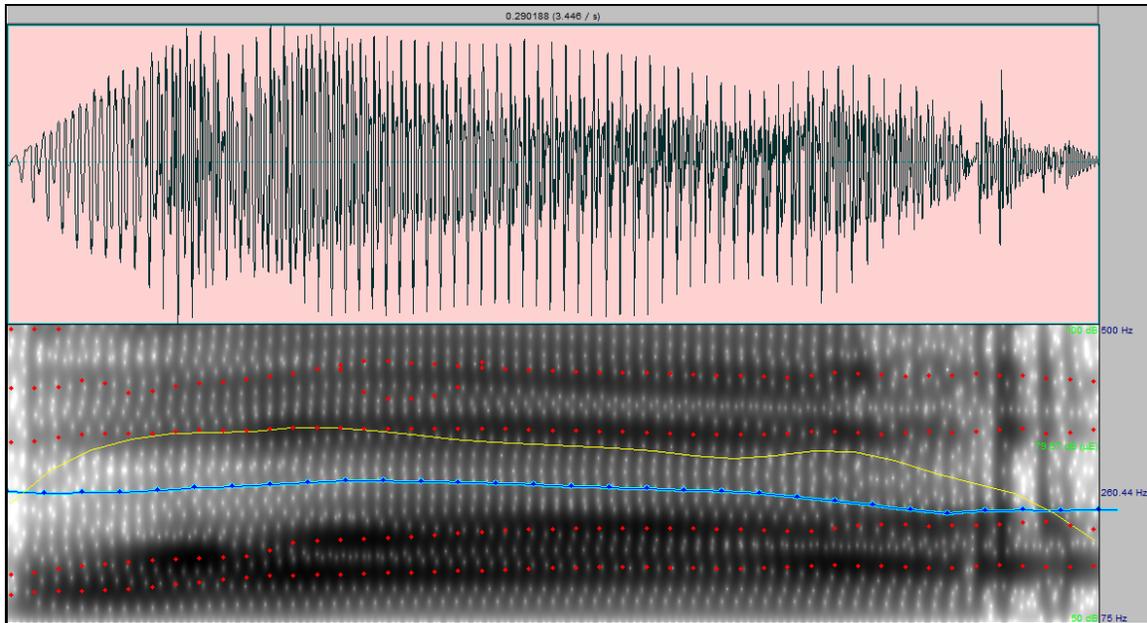


Figure 21. Spectrum and spectrogram for *kwâ* ‘upper arm’ as spoken by Ch

The spectrum and spectrogram for *kwá* shows a smooth syllable of approximately 176 ms while the spectrum and spectrogram for *kwá:* show a syllable of approximately 238 ms with obvious glottalization, particularly toward the end of the vowel. In theory, then, there exists a contrast in monosyllables with long vowels that do not have glottalization versus long vowels that do. However, I have not found any minimal pairs to show that this contrast is phonemically contrastive.

6.4.2. Tonogenesis⁶¹

Some of the mechanisms and motivations underlying tonogenesis have been established over the last several decades by such pioneering work as (Maspero 1912; Haudricourt 1954; Hombert 1978; Matisoff 1973; Matisoff 1999; Mazaudon 1977; Kingston 2004) and many others. Conventional wisdom suggests that tone usually enters a language via lost coda consonants which condition contour tones. Later, the tones may be split with high register being diachronically conditioned by voiceless initials and low register being conditioned by voiced initials. Thurgood (2002) recently updated the model by arguing that voice quality plays a mediating role in tonogenesis. That is, between a contrast in voicing on a consonant and tone on a vowel, an intermediate stage of contrastive voice quality on the vowel is present. However, despite these advances in the study of tonogenesis, many questions remain unanswered. For example, the manner in which the sound change occurs remains unknown. We do not yet know whether the

⁶¹ This section is drawn from Hyslop (2009), with some modification.

sound change happens across all segments at the same time or same rate, or whether certain segments are likely to undergo tonogenesis first.

As I will argue, the results of a production study suggest that Kurtöp is gradually acquiring tone following the consonantal onsets in word-initial position, commencing with the sonorants. I illustrate in detail that tone has entered the language following the sonorant consonants and is now proceeding through the system following the obstruents. I will demonstrate that tone has phonologized first in Kurtöp following the nasal and liquid consonantal onsets in initial syllables. The next step in the process was for Kurtöp to develop tone following the palatal fricative. The remainder of the obstruents in the language is now in place to undergo tonogenesis.

An investigation of tonogenetic properties of other languages may suggest that Kurtöp is not the only language to acquire tone in this manner. Lhasa Tibetan and arguably some Tai languages may have acquired tone in the manner described for Kurtöp, that is, by phonologizing tone following the sonorants before phonologizing tone following the obstruents.

Because many speakers of Kurtöp are also speakers of Dzongkha (the national language of Bhutan), which is tonal, one could argue that Kurtöp tonogenesis is a contact-induced phenomenon. However, regardless of whether tonogenesis in Kurtöp is contact-induced or motivated by other language-internal factors, Kurtöp tonogenetic properties merit further investigation.

Comparative evidence suggests that tone following the sonorants has developed in Kurtöp by means of historically present onset clusters in which the first member was a

voiceless fricative /s/. The historical pattern of a complex onset is reflected in the written Tibetan forms while Kurtöp words have reduced their onsets but added high tone to the nucleus. For each Kurtöp form we include the cognate in Written Tibetan. In Table compare Kurtöp forms with their cognates in Written Tibetan. Note that where Kurtöp forms have a high tone, an *s*- initial onset cluster is present in Written Tibetan.⁶²

Table 72. Written Tibetan correspondences for high tone following nasals and liquids in Kurtöp

Kurtöp	Gloss	Written Tibetan	Kurtöp	Gloss	Written Tibetan
ŋá	‘drum’	<rŋa>	ná	‘ear’	<rna-ba>
ŋá:	‘pillow’	<sŋas>	ná	‘nose’	<sna>
rá	‘hair’	<skra>			
rá	‘root’				

The sound change in which high tone is conditioned by an *s*- sonorant onset cluster can perhaps be envisioned in two steps. In the first step the *s*- sonorant cluster yields a voiceless sonorant. The voiceless sonorant then conditions high pitch on the following vowel, according to the established model. At this point in the language a

⁶² Note I have not found a Classical Tibetan cognate for Kurtöp ‘root’. Whether the Kurtöp form is innovative or is a retention remains unknown. The possibility that a cognate form existed in Classical Tibetan but does not appear in our sources cannot be ruled out either.

contrast would exist between voiceless and voiced sonorants, with high tone predictably following the voiceless sonorants and low tone predictably following the voiced sonorants.⁶³ Over time a second sound change would occur in which high tone phonologizes following the voiceless series, low tone phonologizes following the voiced series, and the voicing distinction is neutralized in favor of voiced sonorants. Other motivations for tonogenesis following sonorants remain less clear.

Comparative data suggesting the source of high tone on other sonorants are displayed below in Table 73.

Table 73. Written Tibetan correspondences Kurtöp words with high tone following a liquid and approximate. Note no cognate for Kurtöp ‘hole’ has been found.

Kurtöp	Gloss	Written Tibetan	Kurtöp	Gloss	Written Tibetan
lǎ	‘mountain’	<la>	wǎŋ	‘hole’	
lǎ	‘month’	<zla>	wǎŋ	‘blessing’	<bde., gro>

Possible phonetic motivations for the tonogenesis suggested by the data in Table 2 are less clear, though there is general agreement that the handful of Tibetan forms with initial <zl> represent some idiosyncratic Tibetan-internal development from earlier forms

⁶³ A contrast between voiceless and voiced sonorants is not uncommon for Tibeto-Burman languages, and in many instances high tone follows only the voiced series. Dzongkha (van Driem 1998), for example, has a voiceless rhotic and lateral which precede only high tone while high and low contrast following voiced sonorants.

with *s-. The sound change /db/ > /w/ with a high tone on the following vowel is also characteristic of modern Tibetan dialects.⁶⁴

A third plausible means by which Kurtöp has obtained tone is areal influence. As Kurtöp has borrowed a large amount of its vocabulary from Dzongkha (a tonal language), it may be more fitting to propose that Kurtöp tonogenesis is a contact-induced phenomenon. Under this hypothesis, as loan words with tones were borrowed into Kurtöp, tone eventually became a component of the phonology of Kurtöp. However, even in this scenario an explanation would need to be sought in order to motivate the current synchronic presence of contrastive tone in Kurtöp following only the sonorants and palatal fricative. Regardless of the source of tone in Kurtöp -- via one of the possible acoustic motivations, borrowing, or a source not mentioned here -- the fact remains that tone has first phonologized following the sonorant consonants. It is this observation we believe to be significant.

While the source for tone following the sonorant consonants may be debatable, the source for tone following the palatal fricative appears straight-forward. The tone following the palatal fricative has developed directly via the loss of contrast in voicing. Evidence for this development comes in two forms. First, Michailovsky and Mazaudon (1994) reported a voiceless and voiced palatal fricative in Kurtöp but no contrastive tone

⁶⁴ Contrastive high tone in Lhasa Tibetan and Dzongkha differs from Kurtöp in that it has developed by way of any onset cluster. The first step in the development of Dzongkha and Lhasa Tibetan tone involved the initial member of the onset cluster devoicing, which could have invoked a sound change similar to the one described above for the Kurtöp sonorants. That is, a voiceless initial could have perturbed higher pitch on the following vowel, which would have then phonologized as tone while the initial member in the cluster disappeared.

following either. The instances in which they report a voiced palatal fricative we find a voiceless palatal fricative with low tone. Note that Michailovksy and Mazaudon (1994) collected their data in the 1970's. The approximately 30 years which have passed between the two studies may be taken to represent generational differences; that is, perhaps the generation of Kurtöp speakers represented by Michailovsky and Mazaudon (1994) had the voicing contrast in the palatal fricative but the generations considered today have neutralized the contrast in favor of tone on the following vowel.⁶⁵ The second line of support in favor of the argument that Kurtöp has neutralized a voicing contrast on the palatal fricatives in favor of a contrast in tone on the following vowel comes from comparative evidence. Consider the data in Table 4.

Table 74. Comparative palatal fricatives in Kurtöp and Tshangla

Kurtöp	Gloss	Tshangla	Kurtöp	Gloss	Tshangla
çòr	'wine'	ju	çònba	'young'	jonma

Tshangla is a Tibeto-Burman language spoken east of the Kurtöp language area in Bhutan and Arunachal Pradesh in India. In many instances where Tshangla has a voiced palatal fricative, Kurtöp utilizes a voiceless palatal fricative with low tone on the following vowel. This, in conjunction with the fact that for at least one variant of Kurtöp

⁶⁵ I do not need to suggest that tonogenesis has completed for the palatal fricative in the past approximately 30 years. Though spoken by a small community, Kurtöp purports a handful of mutually intelligible dialects. Michailovsky and Mazaudon (1994) do not mention where in Kurtöp their speakers come from and therefore we do not know which variety of Kurtöp they spoke. It is entirely plausible the dialect represented in their study is different from that discussed here. As we have not completed a full dialect survey, the possibility remains that some dialects of Kurtöp have retained a voicing contrast for palatal fricatives.

in the 1970s (Michailovsky and Mazaudon 1994) a voiced palatal fricative corresponds with a voiceless low-toned palatal fricative in the dialect of Kurtöp represented in this study, suggests that tonogenesis following the palatal fricative is more recent than the genesis of tone following the sonorants.^{66,67}

While data from Tshangla (Andvik 2003) and Kurtöp (Michailovksy and Mazaudon 1994) provide synchronic evidence for the source of tone following the fricatives, evidence for the source of tone following the sonorants is found only in comparison with written forms of Tibetan, which we presume represent an older synchronic state of Classical Tibetan. Variation amongst the palatal fricatives exists between Kurtöp and neighboring languages and has been noted in a prior publication on Kurtöp (Michailovsky and Mazaudon 1994), while variation amongst the sonorants is not found in either. Thus, we argue that the development of tone following the palatal fricative has followed the phonologization of tone following the sonorants.

⁶⁶ In instances where tone develops via a contrast of voice it is often the case that phonation is an intermediate contrast as Thurgood (2002) articulates. However, it is not clear this is the case in Kurtöp even though it appears to be in Dzongkha. For example, in Dzongkha, historically voiced consonants may be followed by high or low tone. In instances with low tone, a salient feature is breathy voice on the following vowel, often with a concomitant devoicing of the initial (van Driem 1998, personal field notes). Such salient breathy voice is not audibly present in Kurtöp, though no acoustic measures for breathy voiced such as H1-H2 or H1-F2 (Gordon and Ladefoged 2001) have been taken.

⁶⁷ Note that the direction of the change in voicing is reversed from that proposed for the sonorants. That is, while we posited a mediating stage of voiceless sonorants which voiced as part of the tonogenesis process, here we see a consonant become voiceless with tonogenesis. We do not see this as a problem; in both instances the neutralization of voicing contrast is in favor of markedness – voiceless sonorants are more marked than voiced sonorants and voiced obstruents are more marked than voiceless obstruents.

6.4.2.1. Experimental study

In this section I investigate the correlation between tone (measured as fundamental frequency) and voicing (measured as voice onset time⁶⁸). The focus of this study was on production of the stop consonantal onset and vowel in monosyllabic words. Mean fundamental frequency was computed across the duration of the vowels, taking standard deviation for the mean f0 at the approximate vowel midpoint. Mean and standard deviation of voice onset time (VOT Lisker and Abramson (1964)) of stops was also measured. The goals were (1) to determine whether the observation that high and low tones correlated with voiceless and voiced obstruents,⁶⁹ respectively, held true across the entirety of the vowel; (2) determine whether the high and low tones would represent statistically distinct categories; (3) determine mean and standard deviation of VOT for the three voicing categories of stops (voiceless, aspirated, voiced) and mode for the voiced series; and (4) ascertain whether the VOT means represent significantly disparate categories.

If Kurtöp obstruents are undergoing tonogenesis we would predict high tone to phonologize following voiceless obstruents, low tone to phonologize following the

⁶⁸ While I have not done perception studies confirming this observation, it is my impression that voice onset time is the primary cue to voicing in Kurtöp. We are basing this conclusion on two observations. First, acoustic measurements not mentioned in this article have shown no salient distinction in other possible cues, such as duration of closure or vowel length preceding voiceless versus voiced consonants, for example. Second, mean VOT is statistically significant for the categories of voiceless unaspirated compared to voiceless aspirated, suggesting that Kurtöp could also employ VOT as a means by which to distinguish the voiced category from the other two categories of voice.

⁶⁹ In order to simplify wording, here and throughout the remainder of this section when I refer to ‘obstruents’ we are excluding the palatal fricative, which has already undergone tonogenesis.

voiced series, and that the voiced series of obstruents would be devoicing. For the present experiment, then, we predict that f_0 measurements will display significantly distinct categories following voiceless versus voiced stops. If Kurtöp voiced stops are collapsing with the voiceless series we might expect some utterances of voiced stops to be realized as voiceless. If voiced stops were at times realized as voiceless stops we would find VOT values associated with the voiceless series of stops alongside the negative VOT values expected for the voiced stops. Therefore, if Kurtöp were neutralizing a contrast in voice on stops we predict this would manifest a very high standard deviation from the mean VOT of voiced stops and possibly a bimodal distribution.

6.4.2.1.1. Speakers

Data from two native speakers of Kurtöp were recorded and analyzed. The participants were two male native Kurtöp speakers. The first speaker, P.C. was in his 20s at the time of the study and is from Tabi, within the village of Dungkar. K.W. is the second speaker, is in his 40s and is from Thunpe, within Dungkar. Both speakers P.C. and K.W. are also fluent speakers of Dzongkha and English. The speakers were chosen due to their proximity with the researcher (both resided in the western United States at the time of study) and it is by accident that both happen to be males but of different generations. However, the fact that speaker K.W. is approximately 20 years older than speaker P.C. will be of interest when we discuss the findings in terms of sound change.

6.4.2.1.2. Methodology

A total of 1,041 monosyllabic stop-initial tokens between two speakers were recorded and analyzed acoustically for f0 on the vowel and VOT of onset. In order to control for possible word stress or tone variation in multi-syllabic words, only monosyllabic words have been chosen for this study. The attempt was made to design a list of tokens which were equally balanced for place (bilabial, dental, retroflex, palatal, velar), and voicing (voiceless, aspirated, voiced) of stop, while also controlling for the quality of the following vowel (non low front, non low back, low). Because vowel quality can minimally influence f0, it was hoped that by controlling for quality the current study would rule out the possibility that vowel quality had influenced the results. We examined only stop consonants in this study but expect the results we find would extend to the entire category of obstruents which have not already undergone tonogenesis. This expectation is based on our impressions and observations that high and low tones also follow voiceless and voiced affricates and fricatives.

Both speakers produced each target word in the study four times: three times in isolation and a fourth time in the carrier phrase shown below in (19).

- (19) ɲai ɗaŋ _____ ləp-mi
 1.ERG yesterday _____ say-TAG
 ‘I said _____ yesterday’

Each utterance of the word was included in the acoustic analysis, yielding a total of four tokens for every word. List intonation was often association with the three words

in isolation; a rising contour was often present on the first token and a falling contour was often present on the third. This was true regardless of whether the word began with a voiceless, aspirated or voiced onset. Because I was interested in mean f_0 , and not contour of the pitch, I did not exclude any tokens on the basis of intonation. By systematically including each of the four utterances for a given word, rather than choosing one utterance, for example, I was able to increase the overall number of tokens for each category. I assume that by systematically including all tokens in the analyses, any effect intonation might have on mean f_0 would be consistent throughout the voicing categories and therefore not affect the overall results.

However, due to unforeseen difficulties in gathering the data, there were some gaps and the data were not completely balanced for place, voicing and vowel quality. Of considerable importance is the fact that for speaker K.W. voiced retroflex tokens were entirely lacking. At times the speakers repeated an incorrect word, in which case the word was not counted. During the recording a few iterations were omitted, also reducing the number of tokens in a given category. Sometimes additional words in a particular category were recorded, leading to categories with a greater number of tokens. In total, 610 (155 words) tokens were analyzed for speaker P.C. and 431 (108 words) tokens were analyzed for speaker K.W. Despite the lack of precise balance in the tokens analyzed for this study we believe the main argument of this section remains tenable. The number of tokens for each place of articulation combined with voice category is listed by speaker in Table 75.

Table 75. Total number of tokens analyzed in acoustic study, organized according to voicing type for each speaker

Speaker	# Voiceless Tokens	# Aspirated Tokens	#Voiced Tokens	# Combined Tokens
P.C.	194	223	193	610
K.W.	142	156	133	431
TOTAL	336	379	326	1041

All recordings were done using a head-mounted Shure brand microphone, placed approximately 3 cm from the speaker's mouth. The data were recorded at a sampling rate of 22.05 KHz. into a Marantz PMD 660 flash digital recorder and saved as .wav files on a computer. All acoustic analyses on the tokens were carried out using Praat (Boersma, Paul & Weenink, David (2007)) phonetics software.

Voice onset time was measured between the first voicing cycle and the initial release of the stop. We computed the measurement by hand, using the computer cursor to identify the initial release of the stop and the first voicing cycle. Frication was sometimes present in the velar and especially in the palatal stops. This frication was always included in the measurement of VOT. Fundamental frequency (f0) on each vowel was measured using a script at eight equidistant points on the vowel, beginning with the first glottal pulse.

6.4.2.1.3. Results

The results of this acoustic study demonstrate that (1) the high tone following voiceless stops and low tone following voiced stops is maintained across the duration of the vowel and that (2) these tones are statistically significant categories. The study also

(3) calculated mean and standard deviation for VOT of all three stop types (voiceless unaspirated, voiceless aspirated, voiced); and while the standard deviation for the voiced categories, especially, was quite high, the results of this study also show that (4) VOT measurements for each stop type is a statistically significant category. However, the results of this study also illustrate a trend for the voiced category of stops to be merging with the voiceless category of stops. The results for fundamental frequency following each stop type will be considered first, followed by an examination of the VOT results.

6.4.2.1.3.1. Fundamental frequency

Figures 22 and 23 below represent the fundamental frequency following voiceless unaspirated, voiceless aspirated and voiced tokens for speakers P.C. and K.W., respectively. Recall that speaker P.C. is one generation younger than speaker K.W.

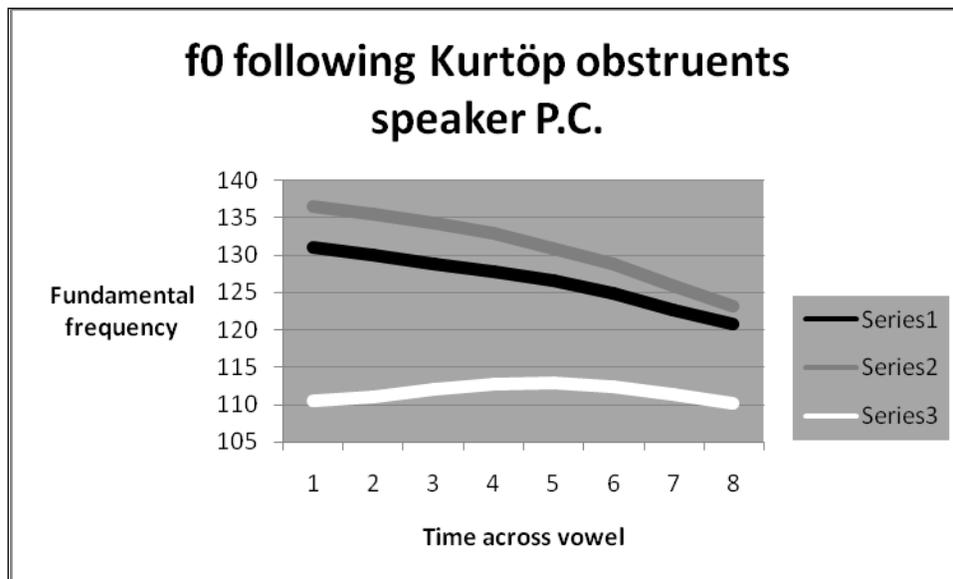


Figure 22. Mean F0 (610 tokens) on vowels following obstruents for speaker P.C. Series 1 represents mean f0 on vowels following aspirated stops; series 2 represents f0 following voiceless stops and series represents f0 following voiced stops.

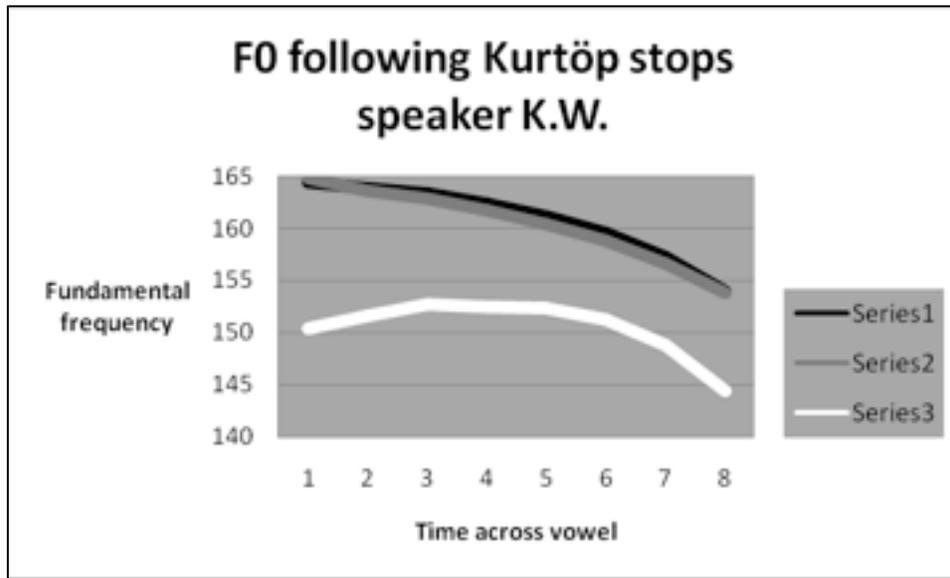


Figure 23. Mean F0 (431 tokens) on vowels following stops for speaker K.W. Series 1 represents mean f0 on vowel following aspirated stops; series 2 represents f0 following voiceless stops and series 3 represents f0 following voiced stops.

Figures 22 and 23 offer a visual illustration of the fact that both speakers demonstrate a clearly disparate f0 following voiced stops compared to when the vowel is following voiceless stops. Note also this difference is maintained across the entire length of the vowel, not neutralizing at some point, as would be expected in a simple intrinsic difference. Hombert (1978), for example, found that English speakers showed a great degree of individual differences with respect to their fundamental frequency following voiceless versus voiced obstruents, but the averaged result showed a drastic decrease of the intrinsic pitch difference over time. These results illustrate that the difference in f0 is maintained across the entire duration of the vowel.

Statistical analysis also confirms an effect of consonant voice type on f0 at the near mid point of the vowel (time interval 4). A univariate analysis of variance showed [F(2, 610)=60.95, $p<.001$] for P.C and [F(2,431)=26.261, $p<.001$] for K.W. A Tukey’s HSD post-hoc test confirmed that f0 mean values at the fourth interval on the following vowel for the categories of voiceless unaspirated and voiceless aspirated were both statistically distinct from the f0 measure following the voiced category of stops ($p<.01$). The difference of f0 following voiceless unaspirated stops versus that following voiceless aspirated stops for P.C., the younger speakers, was significant ($p=.017$) but not at all significant for K.W., the older speaker ($p=.946$). This difference is also evident in a visual comparison of Figures 22 and 23.

6.4.2.1.3.2. Voice onset time

Mean and standard deviation of voice onset time following voiceless unaspirated, voiceless aspirated and voiced tokens was calculated for both speakers. The results are illustrated in Table 76.

Table 76. VOT Summary for P.C. and K.W. Mean, Standard deviation, minimum and maximum values are shown for each speaker and each stop type (place*voice). The results are representative of 610 tokens for speaker P.C. and 429 tokens for speaker K.W.

POA	Voice Type	N	Speaker - P.C.			Speaker - K.W.			
			Mean	St. Dev.	Range	N	Mean	St. Dev.	Range

Lab	vless	48	19.04	8.7	9 to 57	12	25.26	3.57	19 to 31
	asp	60	77.42	18.66	41 to 133	36	65.02	16.82	33 to 105
	vd	44	-55.63	56.56	-160 to 33	36	-74.27	40.14	-176 to -14
Dent	vless	28	26.93	22.72	11 to 109	32	22.63	5.66	14 to 42
	asp	24	73.45	22.62	33 to 123	28	59.05	16.06	36 to 90
	vd	20	-74.23	75.56	-253 to 16	24	-62.23	30.43	-142 to -21
Retro	vless	28	31.68	13	14 to 67	36	22.23	6.97	12 to 50
	asp	28	75.23	15.63	47 to 108	32	60.62	14.09	35 to 88
	vd	40	-55.08	57.94	-137 to 38				
Pal	vless	27	70.61	23.11	44 to 146	28	75.27	33.44	44 to 150
	asp	44	115.9	27.03	77 to 187	28	99.31	22.31	75 to 172
	vd	40	-33.87	57.2	-115 to 65	36	-32.48	61.22	-156 to 72
Vel	vless	35	46.22	13.25	19 to 76	33	50.17	16.2	19 to 78
	asp	30	97.99	19.35	55 to 133	35	76.97	16.53	38 to 117
	vd	31	-41.47	65.55	-211 to 52	36	-11.27	49.96	-104 to 76
Total	vless	166	36.62	23.93	9 to 146	141	39.65	27.16	12 to 150
	asp	186	89	26.97	33 to 187	159	71.75	22.23	33 to 172
	vd	179	-50.11	61.5	-253 to 65	132	-41.12	55.74	-176 to 76

Glancing at the values underneath the mean columns for the speakers we see evidence that voiceless unaspirated, voiceless aspirated, and voiced stops are separate categories. For speaker K.W. the mean VOT of voiceless unaspirated stops was +39.65 ms; the mean VOT of voiceless aspirated stops was +71.75 ms; and the mean VOT of voiced stops was -41.12 ms. These values are similar to those reported for the younger speaker P.C. For speaker P.C. the mean VOT of voiceless unaspirated stops was +36.62 ms; the mean VOT of voiceless aspirated stops was +89.0 ms; and the mean VOT for voiced stops was -50.11 ms.

In terms of the current study, however, as I am interested in sound change it will be useful to consider the variation within these means. A large degree of variation could

be suggestive of a change in progress. Considering the data presented in the columns underneath standard deviation in Table 76, we note that both speakers tended to display the least variation for the voiceless unaspirated category, with an overall standard deviation of 27.16 for speaker K.W. and 23.93 for speaker P.C. Considering each place of articulation separately, we note that the lowest reported standard deviation was 3.57 (speaker K.W. labials) and the highest was 33.44 (speaker K.W. palatals).

The aspirated category of stops displayed slightly more variation than the unaspirated category of stops. The overall standard deviation for speaker K.W. was 22.23 and for speaker P.C. the overall standard deviation was 26.97. The lowest standard deviation of 14.09 was found amongst speaker K.W.'s retroflex stops while the highest standard deviation of 27.03 was found amongst speaker P.C.'s palatal stops.

For both speakers the voiced category of stops displayed the greatest amount of variation with a standard deviation of 55.74 for speaker K.W. and 61.5 for speaker P.C. Amongst the voiced stops, speaker K.W.'s dentals displayed the least amount of variation with a standard deviation of 30.43, while the same set for speaker P.C. -- dentals -- displayed the most variation with a standard deviation of 75.56.

Despite the large standard deviations, however, the difference between the three groups is statistically significant for both speakers: $[F(2,610)=60.95, p<.001]$ for speaker P.C. and $[F(2,429)=349.504, p<.001]$ for speaker K.W. A Tukey HSD post-hoc test confirmed $p<.01$ for both speakers for each of the three possible pairwise comparisons of the three stop types.

On the other hand, it could be argued that voiced segments inherently display more variation than voiceless segments. However, a consideration of VOT in other languages suggests the variation in Kurtöp is unusual. For example, Lisker and Abramson (1964) reported mean and range of VOT in eleven languages, two of which report a three-way contrast in voicing similar to Kurtöp. Thai and Armenian both contrast voiceless unaspirated, voiceless aspirated and voiced stops. The ranges reported by Lisker and Abramson (1964:396) for the Thai and Armenian voiced category were always negative. That is, the Thai and Armenian voiced stops in their study were always prevoiced. In Kurtöp, however, with the exception of K.W.'s dental stops, the voiced categories always revealed iterations with positive VOT values. Histograms displaying the distribution of VOT for each stop type for each speaker will enable us to visually compare the findings across categories. Consider Figures 24 and 25.

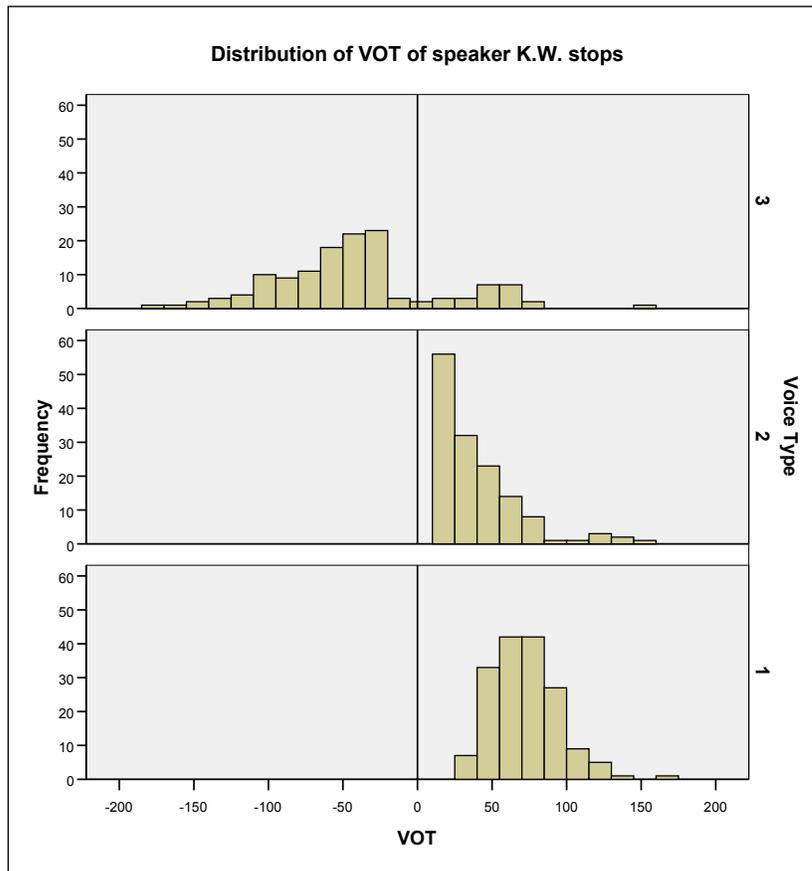


Figure 24. Histogram displaying distribution of VOT values for speaker K.W. stops. Series 1 represents voiceless aspirated stops; series 2 represents voiceless unaspirated; and series 3 represents the voiced series of stops. Each bar represents an interval of 15 ms.

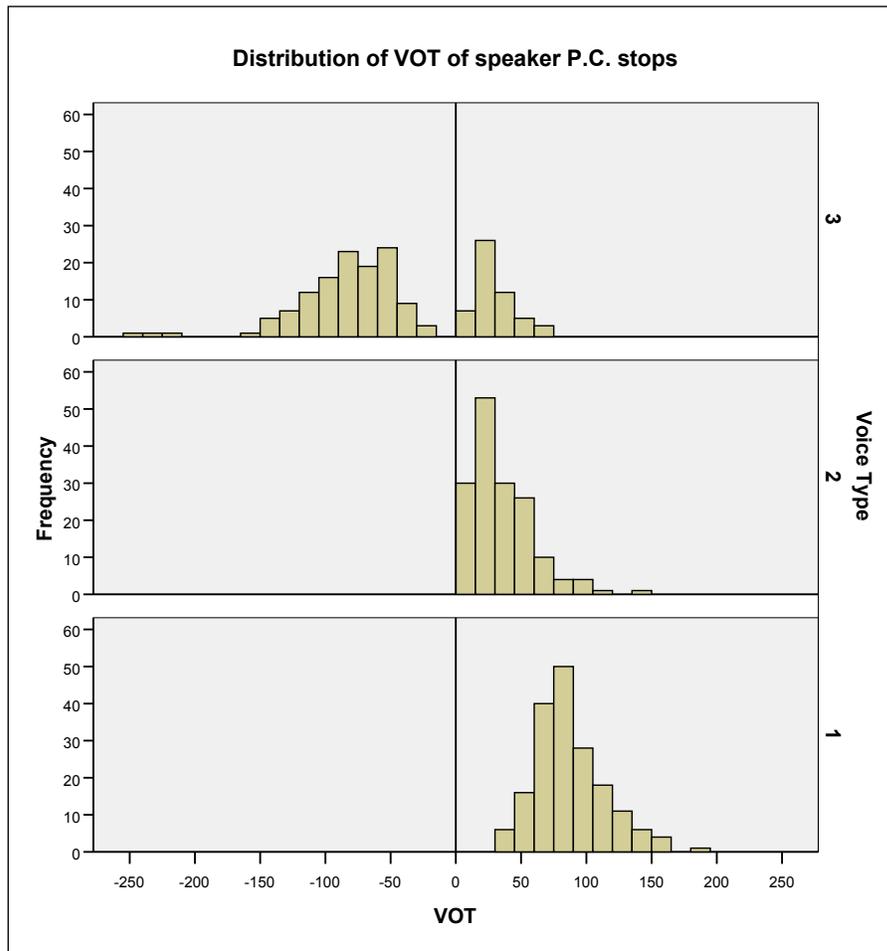


Figure 25. Histogram displaying distribution of VOT values for speaker P.C. stops. Series 1 represents voiceless aspirated stops; series 2 represents voiceless unaspirated; and series 3 represents the voiced series of stops. Each bar represents an interval of 15 ms.

These histograms illustrate that the distribution of VOT of voiced stops indeed differs from the distribution of VOT of the other stop categories. Let us consider first the relationship between the distribution of voiceless aspirated (series 1) and voiceless unaspirated (series 2) values. There is some overlap between these two categories for both speakers. However, the histograms offer a visual illustration of the findings that

distinct means were found for the voiceless aspirated and voiceless unaspirated categories for both speakers.

The distribution of voiced VOT values, on the other hand, demonstrates much more overlap with the voiceless categories. Further, the distribution of voiced stop VOT values is much greater than either the voiceless aspirated or the voiceless unaspirated category. VOT values for voiced stops are distributed widely between values of mainly -150 ms and +100 ms, with a few outliers. For the younger speaker P.C., this overlap is even more pronounced, with a second mode apparently overlapping closely with the mode illustrated for the voiceless unaspirated stops.

Because we are particularly interested in the possibility that the category of voiced stops is merging with the category of voiceless stops as part of tonogenesis, let us consider exclusively the distribution of voiced VOT for both speakers in Figures 26 and 27.

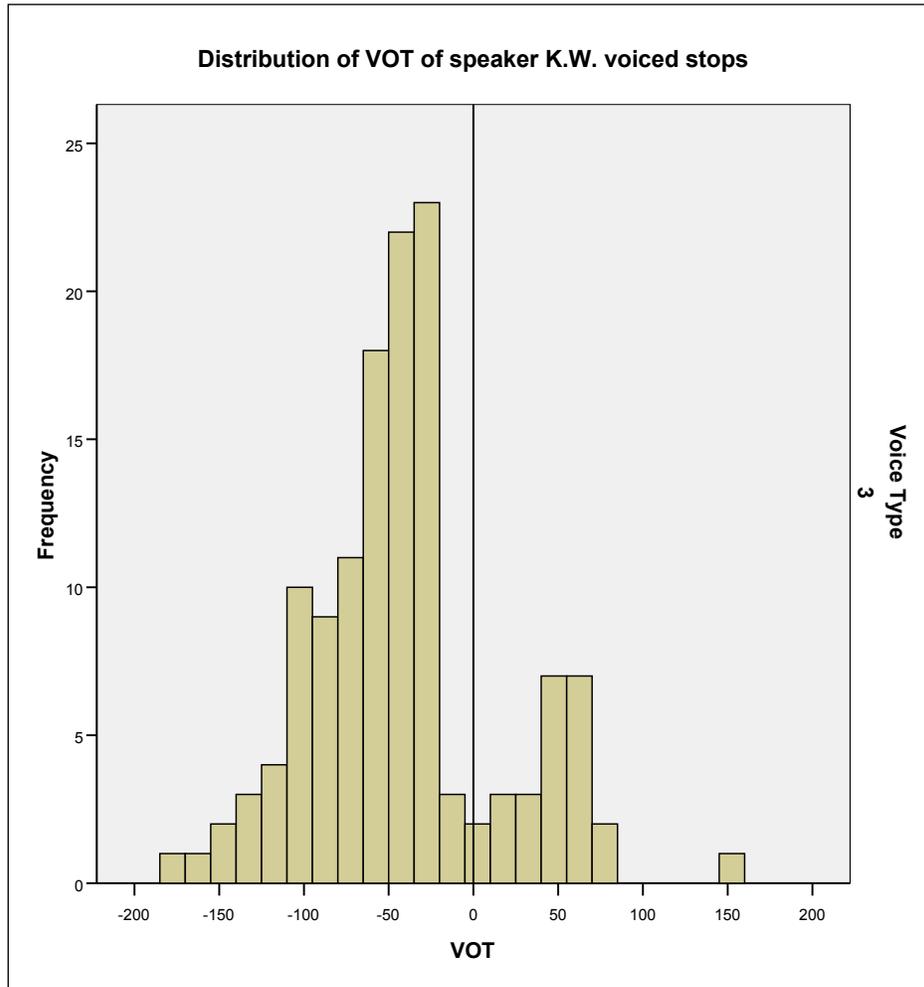


Figure 26. Histogram displaying distribution of VOT values for K.W. voiced stops. Each bar represents an interval of 15 ms.

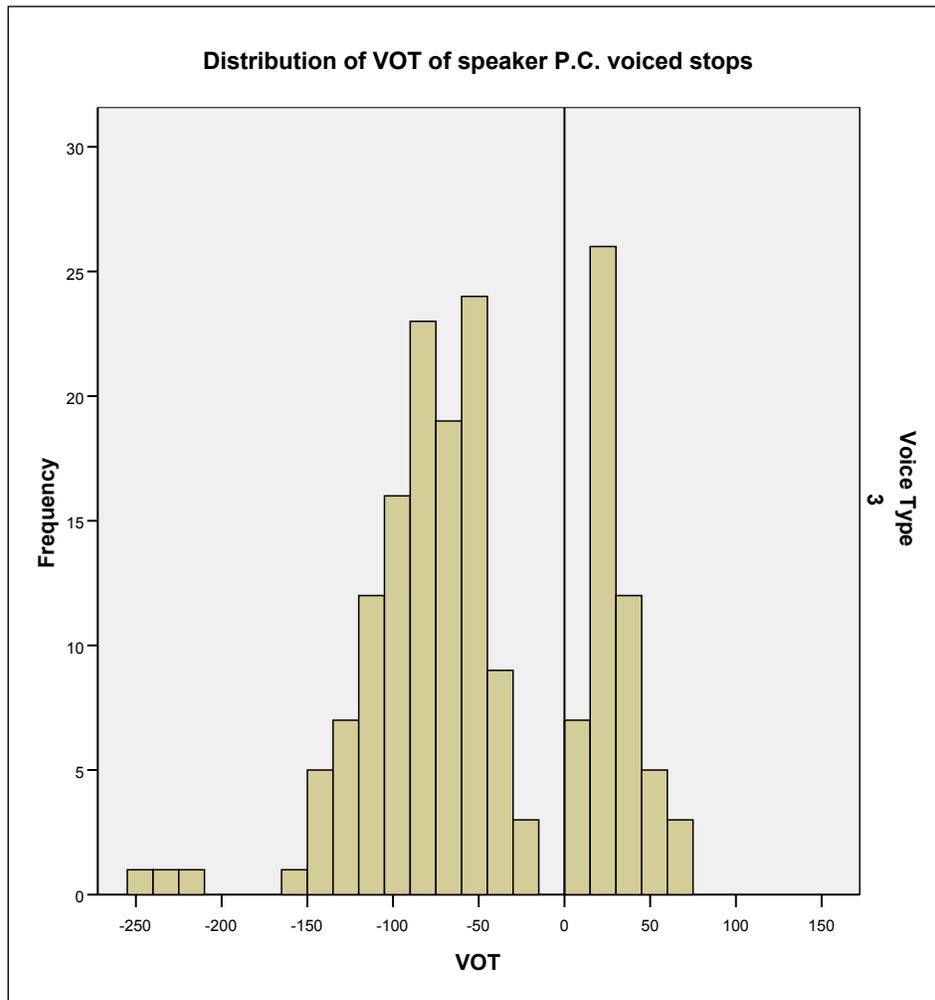


Figure 27. Histogram displaying distribution of VOT values for P.C. voiced stops. Each bar represents an interval of 15 ms.

Figure 27 displays the frequency of VOT values of voiced stops for the older speaker, K.W. Both speakers appear to have one mode with a negative VOT and a second mode emerging with the VOT associated with voiceless unaspirated stops. The majority of the utterances have a negative VOT around approximately -60 ms. It is noteworthy, however, that a second mode appears to be developing in the positive VOT range, around

+50 ms. This trend is even stronger for the younger speaker, P.C. This figure shows a clear bimodal distribution, with one mode at approximately -70 ms and the other mode around +30ms. Recall that VOT mean values were recorded between +35 ms and +40 ms for both speakers.

6.4.2.1.4. Discussion

The acoustic study has confirmed the impression that high tone follows voiceless stops and low tone follows voiced stops. We expect this difference to be true of the entire series of obstruents that have not already undergone tonogenesis. The difference in f_0 between the two tones ranged from approximately 12 Hz for the older speaker K.W. to approximately 20 Hz for the younger speaker P.C. The difference between high and low tone was maintained across the entirety of the vowel.

Mean f_0 was calculated at the approximate midpoint (time interval four) for both speakers and a univariate analysis of variance confirmed the two mean values (high tone following voiceless and low tone following voiced) to be statistically distinct. I argue these results suggest that tone is a salient property of these words' production. That is, I argue that these results suggest high tone has phonologized following voiceless obstruents and low tone has phonologized following voiced obstruents.

In this experimental study I also computed mean and standard deviation of VOT of voiceless unaspirated, voiceless aspirated, and voiced stops. Because I am interested in researching the possibility that the voiced category of obstruents is devoicing as part of the tonogenesis process, I will discuss only the voiceless unaspirated and voiced results here.

For the older speaker K.W., the mean VOT of voiceless unaspirated stops at all places of articulation was 39.65 (St. Dev. 27.16). For the same speaker, the mean VOT of voiced stops was -41.12 (St. Dev. 55.74). Findings were similar for the younger speaker P.C., who had a mean VOT of 36.62 (St. Dev. 23.93) for voiceless unaspirated stops and a mean VOT of -50.11 (St. Dev. 61.5) for voiced stops. This large amount of deviation from the mean for both speakers is indicative of the great deal of variation within the realization of both speakers' category of [voiced] as VOT. For the older speaker K.W., we found one mode around -60 ms with a possible second mode emerging around +50 ms. illustrated an even stronger trend for the younger speaker P.C. to have a bimodal distribution, with one mode centered around -70 ms and the second emerging around +30 ms. Based on these findings we can speculate that the large amount of variation within the voiced category of stops is attributed to the trend for voiced stops to be realized with positive VOT values. I argue this tendency suggests that a negative VOT is no longer the important cue in producing the voiced series in stops.

A bimodal trend is indeed what we would expect if the category of voiced stops were merging with the category of voiceless stops in favor of a contrast in tone on the following vowel. Sound change is not instantaneous and it thus follows that when voiced stops are merging with voiceless stops there would exist an intermediate stage in which some iterations are voiceless and some are voiced. As the language places phonemic importance on tone and decreases the importance in voicing, voiced stops are free to devoice and merge with their less marked voiceless counterparts. Such variation within the voiced category of stops is precisely what the VOT study has shown. That is, these

results illustrate a trend for “voiced” stops to be realized with the positive VOT associated with voiceless stops.

The combined findings of the experimental study suggest that tone has phonologized following obstruents; high tone has phonologized following voiceless obstruents and low tone has phonologized following voiced obstruents. The results further suggest that a three-way contrast in voicing of stops is collapsing in favor of a two-way contrast, and that the voiced series is merging with the voiceless unaspirated series. These findings are consistent with the argument that Kurtöp obstruents are undergoing tonogenesis.

I must be clear that the nature of these findings represent the synchronic state of Kurtöp as spoken by speakers K.W. and P.C., and cannot taken to be absolute predictors of future sound change. The findings in our acoustic study indeed suggest that f_0 is a salient acoustic cue following voiceless versus voiced stops. This study also suggests that the contrast between voiced and voiceless unaspirated stops is neutralizing, with the voiced category merging with that of the voiceless unaspirated. However, it is clear that absolute neutralization has not taken place as voiced stops are still often produced with a negative VOT. I am unable to say whether or not voiced stops will completely merge with voiceless unaspirated stops in the future.

Despite the fact that we are not able to know the future outcomes of sound change, we can consider the results of both speakers separately, as representing subsequent generations of synchronic states of Kurtöp, and make a prediction. While both speakers displayed the results described in this study (disparate tone following voiced

versus voiceless stops and the tendency to realize voiced stops with the VOT associated with voiceless unaspirated stops), the younger speaker P.C. consistently displayed results more consistent with the notion that tone, and not voicing, was the relevant category. That is, the difference in Hertz of high versus low tone following voiceless unaspirated versus voiced obstruents was greater for speaker P.C. (25-10 Hz) than for the older speaker K.W. (15-8 Hz). The younger speaker P.C. also showed a stronger trend to produce voiced stops with the VOT associated with voiceless unaspirated stops.

Indeed, if these speakers can be taken to represent different stages of Kurtöp diachronically, then we have further evidence that tonogenesis is occurring in the language. Crucially, both speakers have disparate tones associated with the vowels following voiceless and voiced stops. The older speaker K.W. illustrated a tendency to realize voiced stops with the VOT associated with voiceless stops. The younger speaker is even more pronounced in displaying this trend. If this trend continues, perhaps we can expect the next generation of Kurtöp speakers to completely neutralize the contrast of voiced versus voiceless stops altogether.

6.4.2.1.5. Summary of study

Kurtöp provides a unique opportunity to examine a gradual tonogenesis in progress and in doing so we have seen that tone has entered the language following the sonorant consonants. The fact that tone first phonologized in Kurtöp following sonorant consonant onsets is illustrated by the synchronic state of the language. Comparative evidence suggests that, at least in the case of the nasals, high tone has been conditioned by *s- initial members of sonorant onset clusters in a historically attested stage of the

language. The conditioning environment for high tone following the remaining sonorant consonants remains unclear but we feel this does not detract from the central point, which is that in the synchronic state of the language tone is contrastive only following the sonorants.

In the time since the development of tone following the sonorant consonants, the palatal fricative has collapsed its contrast in voicing in lieu of a tonal contrast on the following vowel. Our main source of evidence for this ordering (that is, that tonogenesis following the palatal fricative followed the development of tone after sonorant onsets) is the fact that there has been variation reported regarding the palatal fricative in Kurtöp (Michailovksy and Mazaudon 1994) and in the related language Tshangla (Andvik 2003), where the voiced segment is still present. However, such variation is not found amongst the sonorants in Tshangla or in previous descriptions of Kurtöp. Recall that Michailovksy and Mazaudon (1994) reported a voiced palatal for Kurtöp where we find only the voiceless palatal fricative with ensuing low tone but otherwise found the same tonal system. Whether the variation represents a completed sound change, dialectal or speaker differences, while an interesting question, does not affect the fact that there has been variation reported for this segment while none has been observed among the nasals.

The experimental study and results described in Section 3 suggest that the remainder of the obstruents is also in place to undergo tonogenesis. Pitch, measured at the rough midpoint, on vowels following the voiceless obstruents is statistically higher than when following voiced obstruents. Graphs representing pitch on vowels following voiceless versus voiced obstruents provided a visual representation of the fact that tone is

higher (10-25 Hz) across the entire length of the vowel following voiceless stops compared to when following voiced stops. The study also examined VOT and found that the voiced obstruents displayed greater variation than would be expected, suggesting that VOT is no longer the primary cue for voiced segments. More importantly, VOT values for both speakers' voiced stops suggest a bimodal distribution, supporting the idea that the category of [+voice] is being replaced by the category of [-voiced]. The fact that the bimodal distribution is more exaggerated for speaker P.C. is consistent with his trend for tone to be a more distinct category. That is, it appears that tonogenesis amongst the obstruents is further progressed for the younger speaker P.C. than for the older speaker K.W.

To summarize, for Kurtöp, it appears tonogenesis is a gradual process; tone has developed first following the sonorant consonants, spread to the palatal fricative and now is spreading to the remainder of the obstruents. Kurtöp is unusual in that it is developing tone for the first time following onsets, rather than codas, which is the most common pathway for tone to enter a language for the first time. As Kingston (2004) notes, initial tonogenesis in a given language triggered by onsets is unusual and is reported primarily in the context of areal influence. Kurtöp is likely under influence from Dzongkha, a tonal language, and thus could also be considered as an example of contact-induced tonogenesis.

That tone enters languages following the sonorants first has also been reported for other languages of Asia. Tshangla, a Tibeto-Burman language of eastern Bhutan and western Arunachal Pradesh in India (Andvik 1999, 2003), exhibits tone following only

the sonorants but in some dialects the obstruents are also conditioning tonogenesis. Andvik (pc) further reports that the palatal fricative is the only segment amongst the obstruents to have triggered tonogenesis. Mazaudon (1977) states that tone first phonologized in Tibetan following the historically prefixed nasals and resonant. She states that this has also happened in Tawang, a Tibeto-Burman language of Nepal (pc). Finally, in Tai languages it has been suggested that the shift from voiceless nasals to tone on the following vowel preceded the shift from a voiced contrast in obstruents to a tonal contrast on vowels (L-Thongkum 1997).

The findings of this study, in light of tonogenesis reported for Tibetan, Tshangla and Tai, suggest that sonority may play a role in tonogenesis, or to be more explicit we suggest that sonorants tend to phonologize tone on their following vowels before a contrast in voice is neutralized in favor of tone. Finally, in an ongoing typological study (Hyslop 2010), I have also found that sonority is an important predictor of tonogenesis.

6.5. Summary and conclusion

Kurtöp contrasts stop consonants at five places of articulation (bilabial, dental, retroflex, palatal, velar) which contrast three voicing types (voiceless unaspirated, voiceless aspirated, voiced), though the contrast between voiceless and voiced may be merging as a result of tonogenesis (cf. §6.4.2). Kurtöp has two dental fricatives and two dental affricates. A recent sound change has collapsed an old contrast in voicing for the palatal fricative, yielding one palatal fricative which precedes high tone and one palatal fricative which precedes low tone, as part of tonogenesis. There are a few complex onsets in the language, though this number has lessened since Proto-East-Bodish (§3.5), with

this trend continuing in the synchronic state of the language (cf. the discussion of complex onsets in §6.2.1.1.1 and §6.2.1.1.5).

In terms of sonorants, Kurtöp utilizes four nasals (bilabial, dental, palatal, velar), two laterals and one rhotic. Kurtöp has the five cardinal vowels and three diphthongs, plus educated speakers also produce front-rounded vowels (cf. §6.3.2.1).

Suprasegmentals in Kurtöp are particularly interesting. Vowel length is contrastive in open syllables and minimal pairs have been found for all five of Kurtöp's vowels. However, the contrast is not very productive and the difference in duration between short and long vowels is between 45 and 65 ms. Tone is contrastive following sonorant consonants and predictable following obstruents, so that voiceless obstruents condition high tone and voiced obstruents condition low tone. The one exception to this is the palatal fricative, for which tonogenesis has already happened, leaving a voiceless palatal fricative with high/low tone on the following vowel. In §6.4.2, I provide evidence for the tonogenetic developments in Kurtöp. Long vowels which developed via the loss of an old coda obstruent are often associated with glottalization, while long vowels whose source is another diachronic pathway are pronounced with smooth vowels. However, the glottalization is often lost in connected speech and there are no minimal pairs contrasting long, smooth vowels with long, glottalized vowels.

CHAPTER VII

NON-CONTRASTIVE PHONOLOGY

This chapter examines the non-contrastive elements of Kurtöp phonology, beginning with syllables in §7.1, stress in §7.2, allomorphy in §7.3, and a summary and phonological words in §7.4. In §7.1 I continue to represent Kurtöp data using the International Phonetic Alphabet but switch to the Kurtöp Roman orthography in §7.2 and beyond. The orthography is relatively transparent and, in general, should not lead to confusion; however, details may be found in §8.3.

7.1. Syllables

Kurtöp syllables consist minimally of a rhyme and maximally of a complex onset and rhyme. Complex onsets may consist of two consonants (from a restricted subset) and a rhyme may be a short vowel, long vowel, diphthong, or short vowel and coda consonant. Long vowels never co-occur with a coda consonant. The nine possible syllable shapes in Kurtöp are illustrated in Table 77.

Table 77. Possible Kurtöp syllable shapes

Syllable Type	Example Word	Gloss
V	í.p ^h ɑ	‘food, cooked rice’
VV	é:	‘who’
VC	ím	‘hide’
CV	bɑ̀	‘target’
CVV	kó:	‘hoe’
CVC	gòr	‘rock’
CCV	prá	‘monkey’
CCVV	mrɑ̀:	‘rice.paddy’
CCVC	p ^h rúm	‘cheese’

Possible syllable onsets and codas are discussed in §6.1. In the discussion of Kurtöp phonemes I also indicate how the contrast made by complex onsets is fading and how many complex onsets are simplifying. For example, in §6.2.1.1.1 I described how /bl-/ is merging with /br-/ and the labial-palatal conset clusters have become palatal stops for the youngest, most educated members of the speech community. These changes appear to follow a trend from Proto-East Bodish (§3.5.2) to move away from segmentally complex syllables.

7.2. Stress

Hyman (2006: 252) points out that ‘Concerning word-prosodic systems, the primary typological questions are whether a prosodic system has tone (‘an indication of pitch enters into the lexical realisation of at least some morphemes’) and/or stress accent (‘every lexical word has at least one syllable marked for the highest degree of metrical

prominence’). With regard to prosody, Hyman (2006) proposes a four-way typology: languages with both stress accent and tone, languages with tone but without stress accent, languages without tone but with stress accent, and finally languages that have neither tone nor stress accent.

Hyman (2006: 237-238) identifies several languages that have both tone and stress systems, including Ma’ya (Remijsen 2001; Remijsen 2002) Usarufa (Bee and Glasgow 1962), Faso (May and Loeweke 1964), and Serbo-Croatian (Zec 1999). In addition to these, one could add Zapotec languages (e.g. Chavez-Peon (2008) for San Lucas Quiavini Zapotec), Pirahã (Everett 1998) and Hup (Epps 2008).

Kurtöp is another example of a tonal language that also has word-level stress and I argue that stressed syllables in Kurtöp can be identified by the following properties: 1) the obligatory presence of high or low tone; 2) the possibility of a complex onset or long vowel; and 3) the acoustic correlate of duration. I discuss the first two points in the paragraph that follow below in this section and the acoustic correlates in §7.2.1.

The first defining characteristic of stress in Kurtöp is the obligatory presence of tone (high or low). Recall that all Kurtöp monosyllables, or the first syllable of Kurtöp words, have either high or low tone. In the case of sonorant initials, the tone will be contrastive, so that a syllable with a sonorant onset and following high tone may contrast with a sonorant-initial syllable with low tone. Following obstruents, however, tone is predictably high following voiceless or low following (historically) voiced obstruents. Thus, verb roots, which are almost exclusively monosyllabic must have either a high or

low tone. Verbal negation in Kurtöp is done by way of a negative prefix *má-*. The negative prefix will take the tone of the root and the root will lose its tone.

Table 78. Movement of tone to first syllable in a word

Tone	Verb stem	Negated form
High	k ^h ór	má ^h or
Low	gè	máge

In summary, the first syllable of words must bear a tone (either high or low). This obligatory presence of tone is a feature of Kurtöp stress. In addition to the obligatory presence of tone, stressed syllables are slightly longer. In order to quantify stress in Kurtöp, a small production study was designed and carried out. This is described in §7.2.1.

7.2.1. Production study

The following production was designed in order to ascertain correlates of stress in Kurtöp. External evidence for first-syllable stress in Kurtöp comes from several sources. First is the intuition I share with native speakers that first syllables are somehow more prominent than other syllables. Second is the movement of tone to the leftmost edge of the word (i.e. the first syllable) when prefixed.

Beckman (1986) shows that pitch, intensity and duration may be acoustic cues of stress. Later, Rietveld and Koopmans-van Beinum (1987) show that unstressed syllables may also have reduced vowel space. Thus, a production study was designed to examine each of these correlates in Kurtöp disyllabic words.

Table 79. Words used in the stress production study

Kurtöp	Gloss	Kurtöp	Gloss
<i>kangshang</i>	‘filled.PFV.EGO’	<i>gangshang</i>	‘fall.backwards PFV.EGO’
<i>kamshang</i>	‘dry.PFV.EGO’	<i>ngakshang</i>	‘do.PFV.EGO’
<i>’ngapshang</i>	‘make.evaporate.PFV EGO’	<i>jangshang</i>	‘open.PFV.EGO’
<i>cakshang</i>	‘slip.PFV.EGO’	<i>drangshang</i>	‘count.PFV.EGO’
<i>’nyamshang</i>	‘fancy.PFV.EGO’	<i>damshang</i>	‘tie.PFV.EGO’
<i>pratshang</i>	‘wrestle.PFV.EGO’	<i>brangshang</i>	‘be.born’
<i>korto</i>	‘turn.LOC’	<i>branshang</i>	‘(I) knew (it)’
<i>khiksi</i>	‘be.cold.NF’	<i>garna</i>	‘it became thick’
<i>ciksi</i>	‘separate.rice.NF’	<i>ginzi</i>	‘having put on’
<i>chakna</i>	‘land.PFV.MIR’	<i>girzi</i>	‘having turned around’
<i>’nyamna</i>	‘fancy.PFV.MIR’	<i>jangna</i>	‘opened’
<i>tashang</i>	‘watch.PFV.EGO’	<i>nyangna</i>	‘received’
<i>phashang</i>	‘cross.PFV.EGO’	<i>jashang</i>	‘(I) invited’
<i>tshashang</i>	‘heat.up.PFV.EGO’	<i>rashang</i>	‘(I) came’
<i>pizi</i>	‘be.late.NF’	<i>zashang</i>	‘(I) became (angry)’
<i>’lana</i>	‘become.thin.PFV.MIR’	<i>rizi</i>	‘having believed’
<i>phizi</i>	‘open.NF’	<i>gizi</i>	‘having gone’
<i>tasa</i>	‘watch.NMZ:LOC’	<i>nata</i>	‘(I) am sick’
<i>trizi</i>	‘wrap.around.NF’	<i>nizi</i>	‘having stayed’
<i>kangthrap</i>	‘treadle’	<i>bizi</i>	‘having given’
<i>kamzar</i>	‘dried.snacks’	<i>drikthrim</i>	‘discipline’
<i>karjan</i>	‘butter.offering’	<i>dringdring</i>	‘steady’
<i>kuspung</i>	‘4.days.from.now’	<i>droncong</i>	‘hospitality’
<i>kerker</i>	‘extended.up’	<i>donggor</i>	‘face to face’
<i>chitni</i>	‘seventeen’	<i> nangshap</i>	‘inner part of go’

<i>kapca</i>	‘hinge’	<i>ngangpa</i>	‘duck’
<i>karma</i>	‘Karma (name)’	<i>drupchu</i>	‘holy water’
<i>kuntu</i>	‘Kuntu (name)’	<i>ngakpa</i>	‘cold’
<i>khampa</i>	‘Khampa (Tibetans)’	<i>natpa</i>	‘patient, sick person’
<i>keseng</i>	‘alder.tree’	<i>jangpa</i>	‘northerner’
<i>kodrom</i>	‘leather.box’	<i>jachang</i>	‘tea and alcohol’
<i>khathan</i>	‘verbal.message’	<i>darung</i>	‘again’
<i>kheble</i>	‘eighty’	<i>dralham</i>	‘Bhutanese boots’
<i>chagam</i>	‘religious.cabinet’	<i>dining</i>	‘year before last’
<i>kawa</i>	‘eagle’	<i>dolom</i>	‘eggplant’
<i>khasha</i>	‘barking.deer’	<i>ngala</i>	‘wild banana’
<i>cara</i>	‘buckwheat’	<i>guku</i>	‘cup’
<i>châwa</i>	‘frost’	<i>nama</i>	‘bride’
<i>caya</i>	‘banana’	<i>dogo</i>	‘nine’
		<i>drapa</i>	‘middle class’

I attempted to balance the words for syllable shape, but this was not always possible, especially given the fact that complex onsets are found only in syllable-initial position. The number of syllable shapes present in this study is shown in Table 80.

Table 80. Syllable types in stress production study by number

Syllable shape	Number
CV	220
CVC	236
CCV	6
CCVC	14

Words were recorded on a Marantz digital recorder using a Shure brand head-mounted microphone. The words were analyzed and saved as .WAV files using Praat software. For each token I identified the vowel visually in the spectrogram and wave form. For the most part, the wave form showed the most pronounced cycles during the obvious vowel portion of the spectrogram. Occasionally, particularly if the word ended in an open syllable, I relied on the declination of f2 to dictate the end of the vowel.

7.2.1.2. Results

I will present the results in the following order: intensity, pitch, length, vowel space.

7.2.1.2.1. Intensity

Due to possible intrinsic differences in intensity associated with vowel quality, I first examined intensity as a function of vowel and syllable. The results in Figure 28 show that intensity is slightly higher in first syllables for /a/ and /e/ but higher in second syllables for /i/, /o/ and /u/. The intravowel differences were collapsed and averaged across all vowels for first versus second syllables. This is shown in Figure 29.

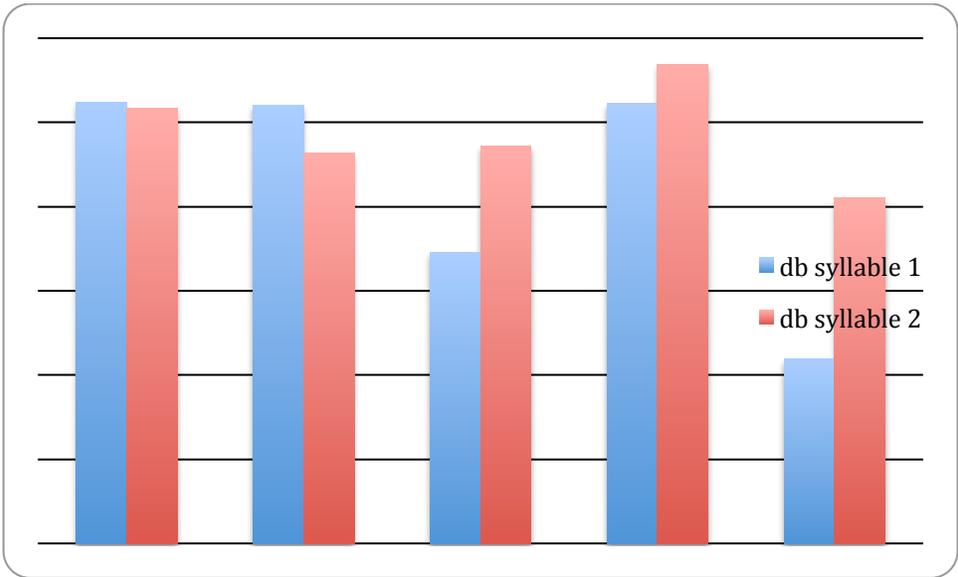


Figure 28. Mean db arranged by vowel quality.

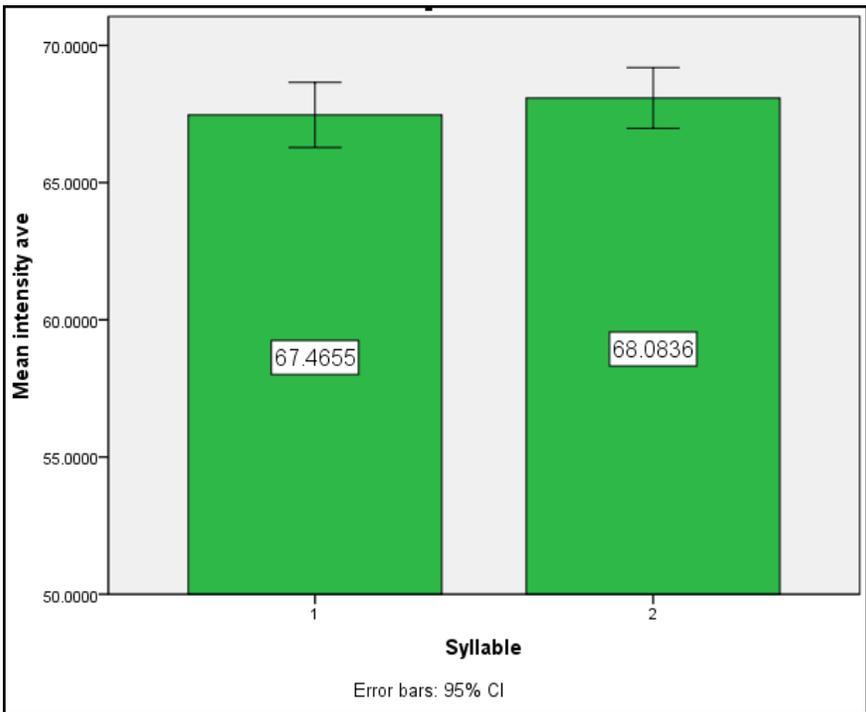


Figure 29. Mean db averaged across all vowels

A univariate analysis of variance was performed and the results, illustrated in Figure 30 below, show that the overall difference for second syllables to be approximately .5db higher in intensity than first syllables is not significant ($p = .453$).

Tests of Between-Subjects Effects					
Dependent Variable: intensity ave					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	45.459 ^a	1	45.459	.564	.453
Intercept	2186455.388	1	2186455.388	27104.462	.000
Syllable	45.459	1	45.459	.564	.453
Error	38236.504	474	80.668		
Total	2224737.350	476			
Corrected Total	38281.962	475			

a. R Squared = .001 (Adjusted R Squared = -.001)

Figure 30. ANOVA showing non-significance of intensity difference on vowels, with syllables (first vs. second) being a fixed factor

7.2.1.2.2. Pitch

Because the initial syllable of every Kurtöp word is obligatorily marked for high or low tone, we computed pitch measurements based on initial tone of the word. The mean pitch for initial syllables with high tone was 192 Hz while the mean pitch for initial syllables with low tone was, unsurprisingly, 25 Hz less at 167 Hz. By the second syllable, these tonal differences have nearly neutralized. High-toned words had a mean pitch of 184 for second syllables and low-toned words had a mean pitch of 181 Hz for second syllables.

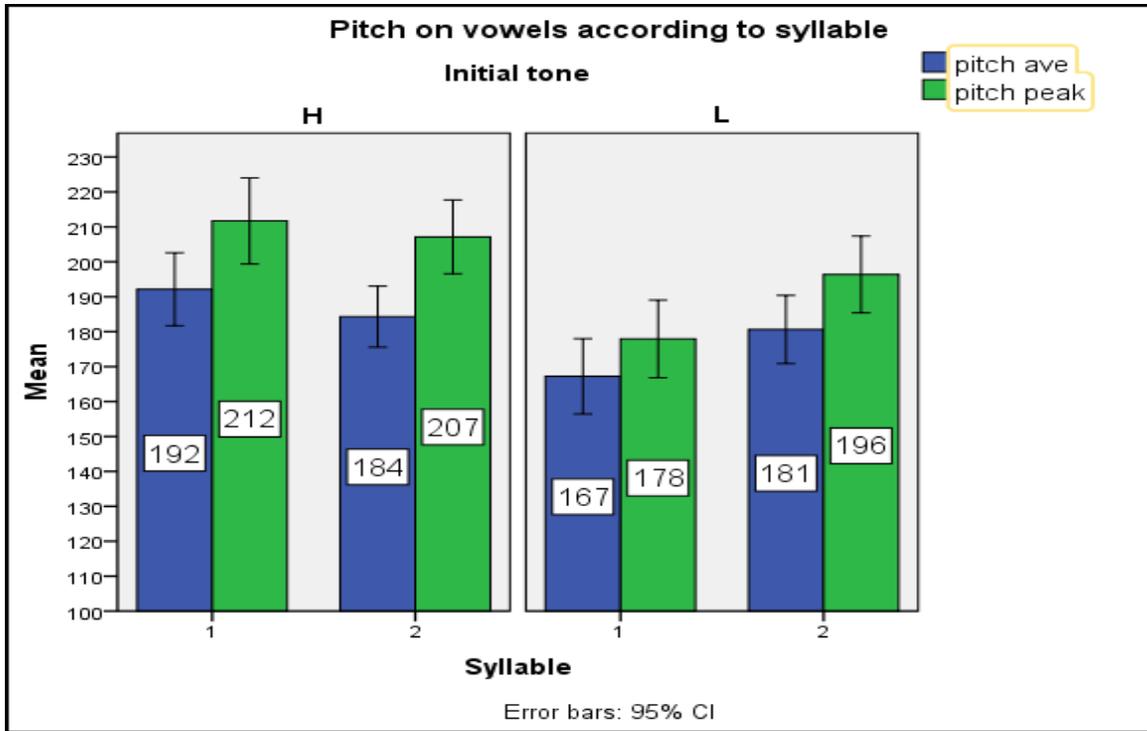


Figure 31. Mean and peak f0 by syllable based on initial tone

An ANOVA shows that pitch does not correlate on its own with syllable ($p = .579$), but initial tone is significant by itself ($p = .005$) and the interaction of initial tone with pitch is significant ($p = .035$). The fact that pitch is significant with initial tone is further illustration of the tone present following all word-initial consonants in Kurtöp (cf. §6.4). The fact that syllable (first vs. second) by itself does significantly correlate with tone, but that it does when initial tone is considered, is interesting. The significant correlation of initial tone * syllable * pitch suggests that the difference shown in Figure 32, comparing the pitch in first syllables with the pitch in the second syllables is a property of Kurtöp disyllables. That is, an important feature of Kurtöp disyllabic words is

that the pitch on the second syllable is neutralized with regard the pitch (reflective of phonological tone) of the first syllable.

Tests of Between-Subjects Effects					
Dependent Variable: pitch ave					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	38150.417 ^a	3	12716.806	4.264	.006
Intercept	1.551E7	1	1.551E7	5199.095	.000
Syllable	921.880	1	921.880	.309	.579
Initialtone	24144.122	1	24144.122	8.095	.005
Syllable * Initialtone	13334.196	1	13334.196	4.471	.035
Error	1398854.387	469	2982.632		
Total	1.695E7	473			
Corrected Total	1437004.803	472			

a. R Squared = .027 (Adjusted R Squared = .020)

Figure 32. ANOVA showing significance of initial tone and initial tone * syllable with pitch

7.2.1.2.3. Length

This study mainly examined words with CVC and CV syllable shapes. Because vowel length would presumably be longer in CV syllables, I will first present the vowels by syllable shape.

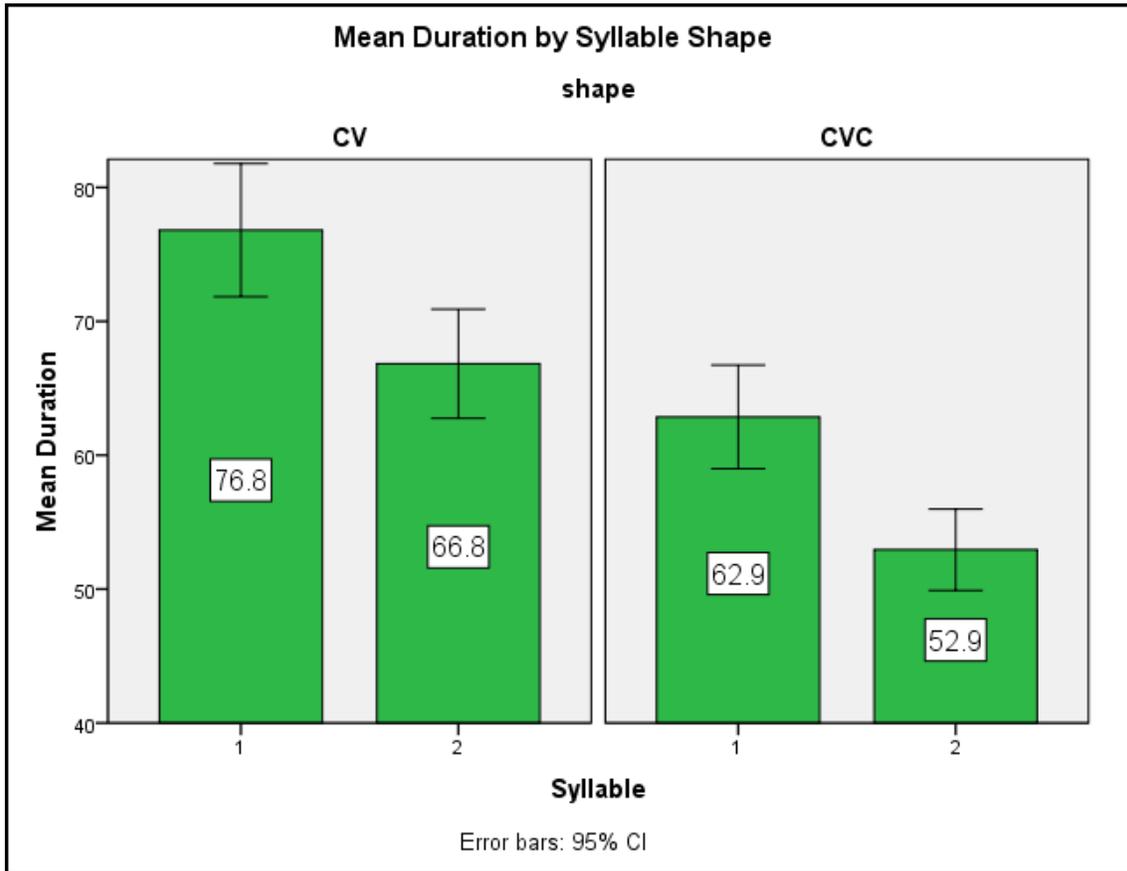


Figure 33. Mean duration in vowels by syllable shape and syllable

As the results in Figure 33 illustrate, duration in first syllables is greater than duration in second syllables. For first syllables with CVC shape the mean duration is 76.8 ms while second syllables are 66.8 ms. In CVC syllables mean duration is 62.9 ms for first syllables and 52.9 ms for second syllables. In both instances the mean duration for second syllables is exactly 10 ms less than for first syllables.

Figure 34 illustrates the mean duration across all syllable shapes by syllable. Here again we notice that first syllables are nearly 10 ms longer than second syllables.

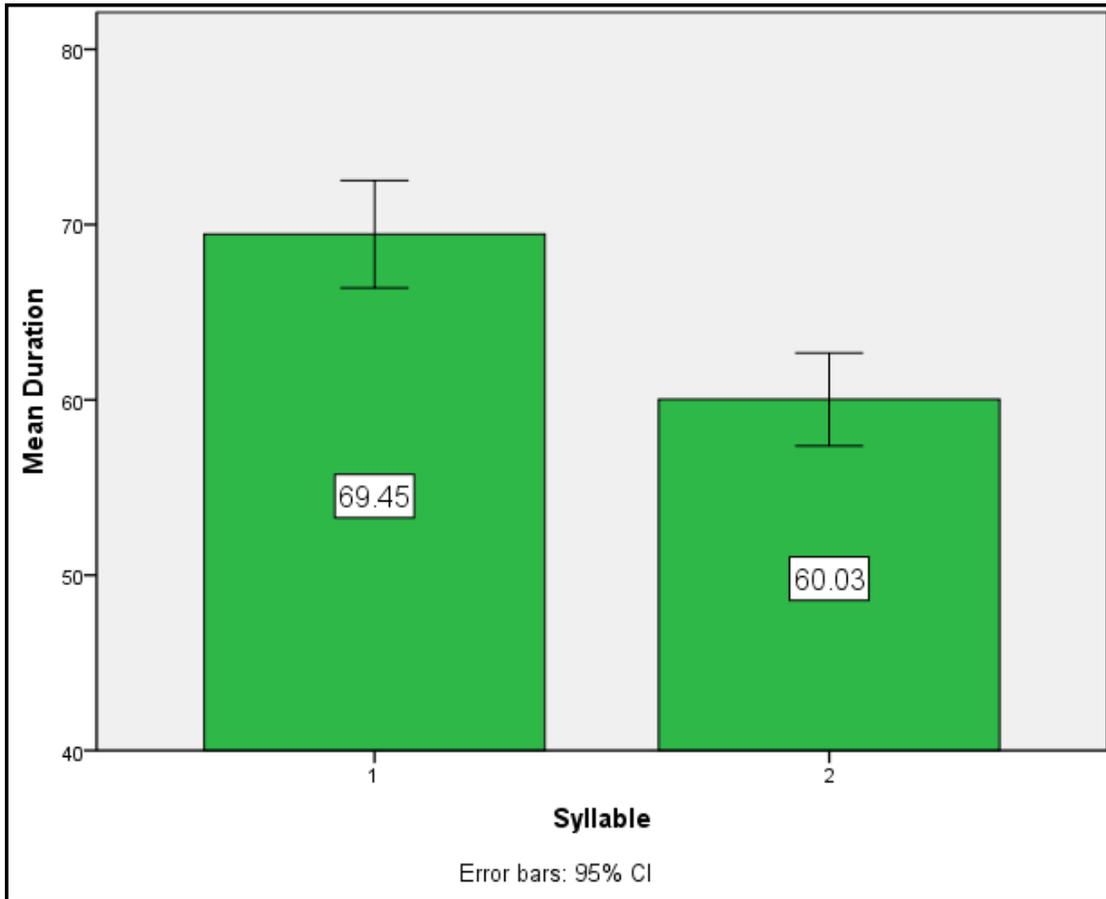


Figure 34. Mean duration in vowels for all syllables

Figure 35 displays the results of an ANOVA examining the relationship between duration and syllable. Though the mean difference is small (10 ms), the finding is highly significant ($p < .001$). The fact that first syllables in Kurtöp disyllables are significantly longer than second syllables indicates that duration is a correlate of first-syllable stress in Kurtöp, unlike intensity.

Tests of Between-Subjects Effects					
Dependent Variable: length					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	10560.008 ^a	1	10560.008	20.968	.000
Intercept	1995012.303	1	1995012.303	3961.348	.000
Syllable	10560.008	1	10560.008	20.968	.000
Error	238715.689	474	503.620		
Total	2244288.000	476			
Corrected Total	249275.697	475			

a. R Squared = .042 (Adjusted R Squared = .040)

Figure 35. ANOVA showing the significant interaction between duration and syllable

7.2.1.2.4. Vowel space

The final potential acoustic correlate of stress I will examine is vowel space, that is, formant structure of vowels in first syllables versus second syllables. The results, combined across all three speakers, are illustrated in Figure 36.

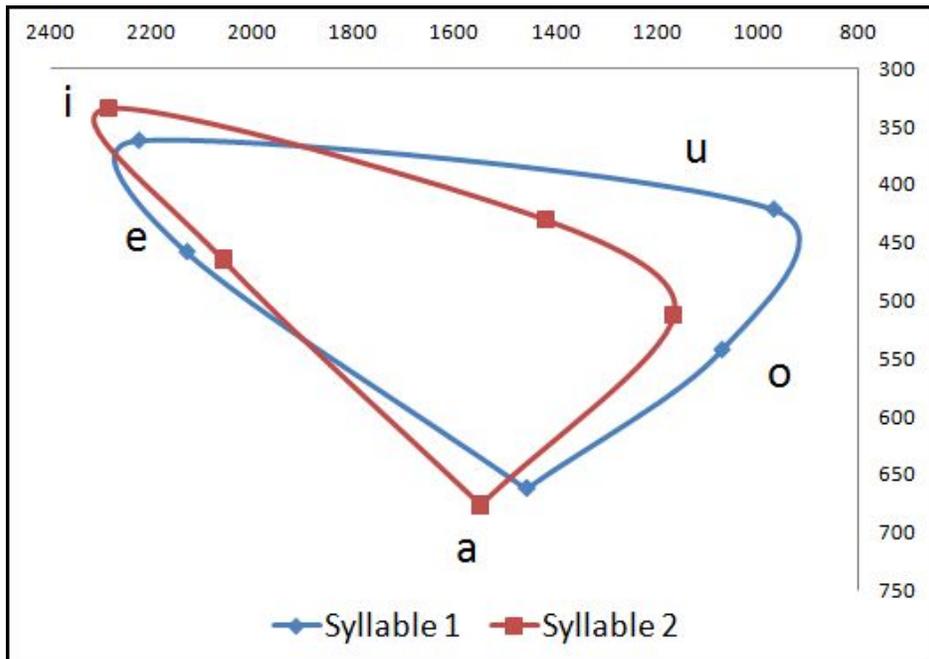


Figure 36. Vowel space in first (stressed) versus second syllables - all speakers

We would expect second syllables to have reduced formant structure compared to first syllables, since first syllables are stressed. However, this is not obviously the case. The high and mid back vowels are reduced in second syllables when compared to first syllables; the mid front vowel shares almost the same formant averages in both syllables; and the high front and low vowel are, surprisingly, somewhat more peripheral in second syllables than in first syllables, contrary to our predictions.

To see if this unusual finding was perhaps due to inter-speaker variations, I considered the results for each speaker individually. Figures 37 to 39 illustrate the results for each speaker.

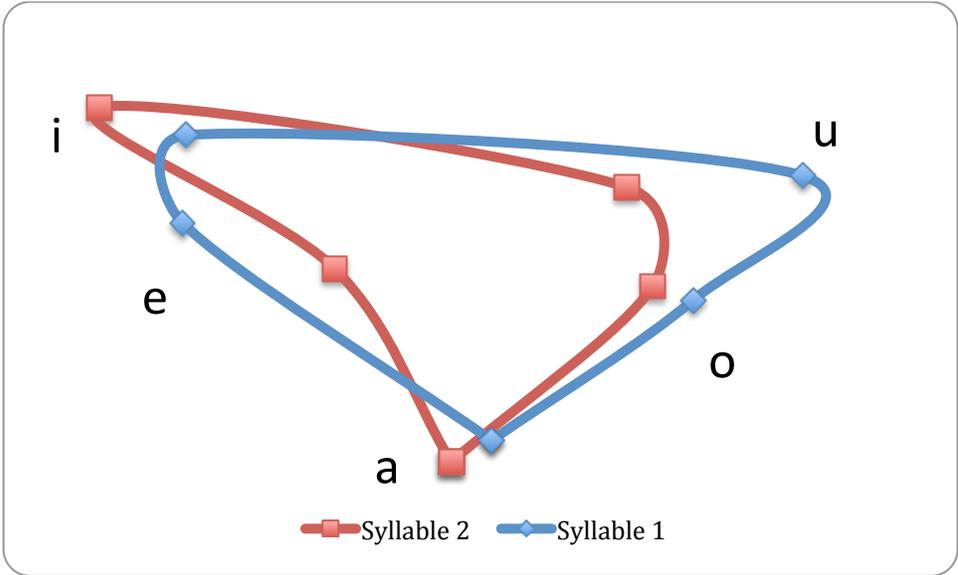


Figure 37. Vowel space in first (stressed) versus second syllables - Ch

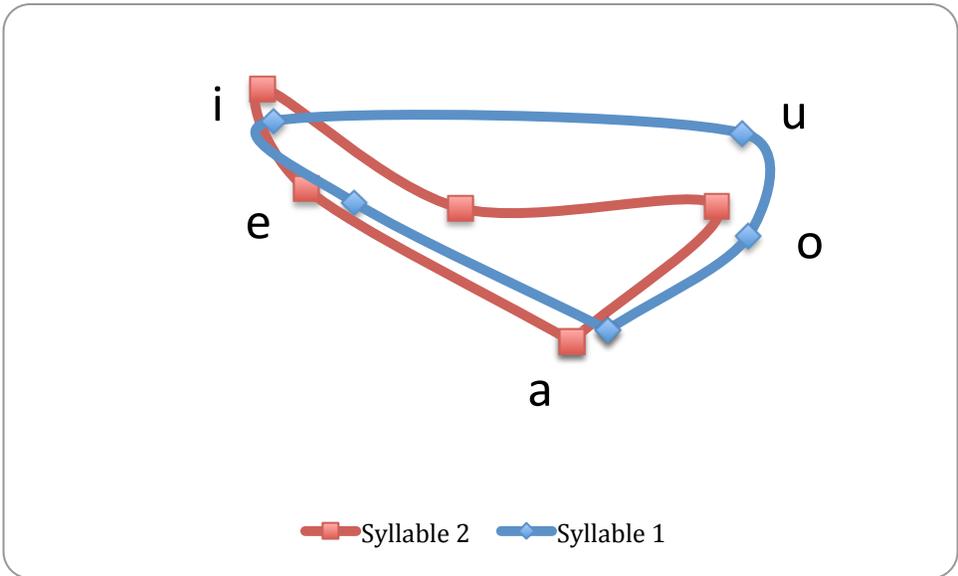


Figure 38. Vowel space in first (stressed) versus second syllables - KT

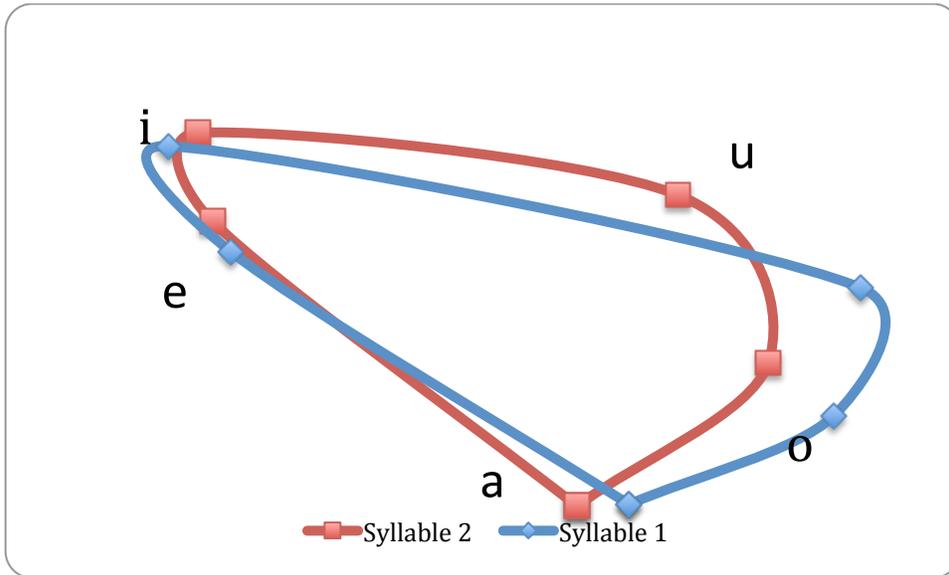


Figure 39. Vowel space in first (stressed) versus second syllables - KL

The female speaker Ch (also the oldest), evidences the same pattern that was averaged across the speakers; the /e/, /o/, and /u/ vowels are more reduced in the second syllable, while the vowels /i/ and /a/ were more peripheral in the second syllable. The male speaker in his forties, KT, shown in Figure 38, followed almost the same pattern. However, for KT the vowel /e/ is slightly more peripheral in the second syllable as well, similar to /i/ and /a/. Interestingly, KT also had a very fronted /u/ in the second syllable. As he is also the speaker with the most education in Dzongkha and Classical Tibetan, perhaps many of his /u/ iterations in the second syllable are actually realized as /y/. The results for the youngest speaker (also male), KL, are again different. His syllable 2 vowel space can be described as being slightly reduced when compared to vowel space for syllable 1, however the /u/ in second syllables is higher than in the first and the mean vowels /i/, /e/, /a/ almost overlap in both syllables.

The motivation for these findings is unclear. I might suspect there is something unusual about /i/ and /a/, for example, in second syllables, but to my knowledge the vowels in those tokens do not have a different quality when compared to the other /i/ and /a/ vowels. One might also expect a correlation between more peripheral vowels and intensity, but again this does not always hold. Recall that the intensity for /a/ is slightly greater in first syllables when compared to second syllables. Conversely, however, the vowel space for /a/ is more pronounced in second syllables. There is a correlation for the vowel /i/; it has increased intensity in second syllables as well as more peripheral vowel space in that context. More work is needed; perhaps an expanded version of this study, looking at disyllabic words in several phrasal contexts would show more expected results with regard to vowel space.

7.2.1.2.5. Summary of results

The acoustic study demonstrated that intensity and vowel quality are not good measures for Kurtöp stress. Pitch and duration, on the other hand, are useful measures for Kurtöp stress. Pitch is phonemically determined but is also a property of word-level stress. If the initial syllable has phonemic high tone, this will be manifest by high pitch in the first syllable and significantly lowered pitch in the second syllable. Conversely, if the initial syllable as a phonemic low tone, this will be manifest by low pitch in the first syllable and a significantly higher pitch in the second syllable. In both instances (that is, phonemic high tone or phonemic low tone) the pitch of the second syllable of the word is almost identical, varying approximately 12 Hz from the pitch of the first syllable. Vowel

duration in first syllables is approximately 10 ms longer than in second syllables, with the difference being statistically significant.

Like Hup, San Lucas Quiavini Zapotec, Ma'ya, Hup, and many other languages, Kurtöp uses tone as a phonological feature to make contrasts in words yet also relies on stress as a means to delineate words. The primary acoustic correlates of Kurtöp stress are duration and tone.

7.3. Allomorphy

Kurtöp has a moderate amount of allomorphological alterations beyond the basic phonological erosion described occasionally for various morphemes (e.g. §11.6.6.1 and §6.2.4.2 for deletion of final vowels in suffixes ending with *-la*). These alternations can be divided into four categories: alternations in verb stems, alternation in verbal morphology, alternations in nominal morphology, and one phonological process which affects suffixes ending in velar nasals. I describe these each in turn below.

7.3.1. Verbal stems

Verb stems adhere to the Kurtöp syllable structure, which is maximally CCVC (§7.1) with the following possible codas: *-k*, *-ng*, *-t*, *-n*, *-r*, *-p*, *-m*, or an open syllable. Open syllables can be divided into two sets: those which were historically closed with coda *-l* and those which were not. This division will become important for morphophonological reasons discussed below.

Unlike other Bodish languages such as Tibetan (Beyer 1992) and Dakpa (Hyslop and Tshering (2010); personal field notes) which exhibit alternation in vowel quality of

verbal stems, depending on aspectual and other factors, Kurtöp stems exhibit variation in the realization of stem-final *-k*, voicing of stem-final consonants, and presence/absence of *-s* following historically open verbal stems (not diachronically closed with coda *-l*). I first discuss the loss of coda *-k* in some contexts and then describe the voicing of stem-final codas in the imperative construction.

7.3.1.1. Loss of stem-final *k*

Verb stems with final /k/ lose their coda consonants in a few morphological instances. When the verb takes the finite suffixes *-ta*, *-na*, *-mu*, *-ki*, or *-shang* the stem-final consonant /k/ is present but while the suffixes *-mo*, *-nani*, *-male*, *-wa* (allomorph of *-pa*, as described in §17.1.1.2) are used, the stem-final /k/ is absent and vowel length is found in its place.

81 shows morphological instances in which coda /k/ is present and **Error!**

Reference source not found.82 provides examples of when coda /k/ is lost. There are no exceptions of this alternation to date.

Table 81. Presence of stem-final *k* in some morphological contexts

Example	Gloss	Example	Gloss
<i>drak-ta</i>	‘sound-IPFV.MIR’	<i>tshok-ta</i>	‘cook- IPFV.MIR’
<i>drak-shang</i>	‘sound-PFV.EGO’	<i>tshok-shang</i>	‘cook-PFV.EGO’
<i>drak-na</i>	‘sound-PFV.MIR’	<i>tshok-na</i>	‘cook- PFV.MIR’
<i>drak-mu</i>	‘sound-PFV.IND’	<i>tshok-mu</i>	‘cook-PFV.IND’

<i>drak-ki</i>	‘sound-HORT’	<i>tshok-ki</i>	‘cook-HORT’
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Table 82. Loss of stem-final *k* preceding *-pa* and *-male*

Example	Gloss	Example	Gloss
<i>drâ-male</i>	‘sound-FUT’	<i>tshô-male</i>	‘cook-FUT’
<i>drâ-wala</i>	‘sound-PFV’	<i>tshô-wala</i>	‘cook-PFV’

7.3.1.2. Voicing of non-coronal stem-final stops

Following the phonotactic rules for Kurtöp syllables, verbal stem coda consonants are typically voiceless. The non-coronal stem-final consonants, however, become voiced when suffixed with the imperative suffix. Table 83 and Table 84 show voiceless labial and velar stops, respectively, in verbal stems when word-final, suffixed with the egophoric perfective *-shang*, or the mirative imperfective *-ta*.

Table 83. Voicelessness of labial stops stem-finally

Example	Gloss	Example	Gloss
<i>phap</i>	‘take.down’	<i>bap</i>	‘go.down’
<i>phap-shang</i>	‘take.down-PFV.EGO’	<i>bap-shang</i>	‘go.down-PFV.EGO’
<i>phap-ta</i>	‘take.down-IPFV.MIR’	<i>bap-ta</i>	‘go.down-IPFV.MIR’

Table 84. Voicelessness of velar stop stem-finally

Example	Gloss	Example	Gloss
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<i>trû</i>	‘stir’	<i>kû</i>	‘gather’
<i>truk-shang</i>	‘stir-PFV.EGO’	<i>kuk-shang</i>	‘gather-PFV.EGO’
<i>truk-ta</i>	‘stir-IPFV.MIR’	<i>kuk-ta</i>	‘gather-IPFV.MIR’

When affixed with the imperative suffix, however, stem-final /p/ and /k/ become voiced, as shown in Table 85.

Table 85. Voicing of non-coronal stops preceding imperative suffix

Example	Gloss	Example	Gloss
<i>phab-e</i>	‘take.down.IMP’	<i>bab-e</i>	‘go.down-IMP’
<i>trug-e</i>	‘stir-IMP’	<i>kug-e</i>	‘stir-IMP’

Note that the voicing described for verb stems in this environment (that is, when suffixed with the imperative) is unique to this morphological environment. The imperative suffix has allomorphs *-le* ~ *-ye* ~ *-e* and stem-final voicing of consonants occurs when the allomorph is *-e*. Importantly, however, is the fact that intervocalic voicing is not a regular morphological process in the synchronic language; for example, the denizen *-pa* does not evidence a voiced allomorph when suffixed to a vowel-final stem, such as *Hâpa* ‘one from Hâ’.

7.3.1.3. Optional presence of *-s* following open stems

Open verb stems which were not historically closed by coda *-l*, that is, historically open stems (CV), may alternate with CVs in a few morphological contexts. Open verb stems are always open following the verbal suffixes *-shang*, *-male*, *-na*, and the forms or allomorphs of *-para*, *-pala*, *-pa*. Interestingly, however, these same verbs (with

historically open stems) condition a *s*- initial allomorph in these latter three forms (see §7.3.2.2 for more details) and when preceding *-ta*, *-taki* or when unsuffixed, an *-s* coda may be present.

First, consider examples (21) and (22) below, showing the verb *se* ‘die’ as verb stem without a coda consonant.⁷⁰

- (21) *tshe daning **semaleki** namungcham nimaleki wenta la*
tshe daning se-male=ki naming-cham
 so this.year die-NMZ:IRR=GEN next.year-until
ni-male=ki wenta la
 stay-NMZ:IRR=GEN COP.EQ.MIR POL
 ‘So if we are going to die this year then we will stay until next year’
 SaT.SW20090917.SW

- (22) *ngaci mem the **sehangmi** trongna*
ngaci meme the se-shang-mi trong=na
 1.GEN grandfather one die-PFV.EGO-TAG village=LOC
 ‘One of my grandfathers died in the village’

In contrast to this, consider the examples below; (23), (24) and (25) show the verb *se* ‘die’ with a *-s* coda.

⁷⁰ When representing data in this dissertation I will bold the relevant form in the example, in order to aid identification.

- (23) *gepcuyang methubnami **sestami** tshe la*
gepcu-yang me-thup-na-mi ses-ta=mi tshe la
 eighty-even NEG-reach.age-PFV.MIR-TAG die-IPFV.MIR=TAG DM POL
 ‘(one) dies and does not even reach eighty (years)’
 SPh.TsC20081022.SPh

- (24) *kwan **ses** gemo daru 'nadung ngâ*
kwan ses ge-mo darung 'nadung ngak
 resin.kindling die go-CTM again dark do
 ‘When the resin kindling dies it is again dark’
 SPh.TsC20081022.SPh

- (25) *'amin khepo tshe 'nama khepo tshe **sesmi***
'amin khepo tshe 'nama khepo tshe ses=mi
 second.wife FOC DM wife FOC do die=TAG
 ‘(His) second wife, his wife, (she) died, right’
 SPh.TsC20081022.TsC

The alternation *se ~ ses* when suffixed with the imperfective or as a bare stem, representative of any verbal stem with a historically open coda consonant, is not obligatory, however. In contrast to this are the data in (26), which do not evidence *-s* following the vowel in the verb stem.

- (26) *nya zhiksi da seta ngaksi*
mya zhik-si da se-ta ngaksi
 arrow be.hit-NF now die-IPFV.MIR QUOT
 ‘(he) was hit by the arrow and now they said he was dying’
 SBC200511277.KW

Speakers report that this variation is dialectal. Speakers from Ne and the southern end of the Kurtö speaking area tend to have a coda *-s* in open-stemmed verbs in the morphological contexts described above (preceding imperfective suffixes or when occurring as a bare stem). My observations also support this, as I have no recordings of speakers from Dungkar *geok* who exhibit this phonological alternation. The examples in (23), (24), and (25) came from speakers in Gangzur. However, though I have no such utterances in my recorded and transcribed database, I have heard speakers in Tabi and Jasabi (in Dungkar *geok*) pronounce coda *-s* in the same contexts, such as in *sem gas* ‘(I) enjoyed (it)’ and *sem gasta* ‘I enjoy (it)’. When asked about this pronunciation, others will say such pronunciation is not indicative of ‘proper Kurtöp’.

The alternation between *-s* and *-ø* is clearly somewhat sociolinguistic and/or dialectal in nature. There may also be interesting historical ramifications here. There is evidence that in Classical Tibetan an *-s* suffix was associated with perfective aspect (Beyer 1992). It is possible this is the same *-s* present in these Kurtöp alternations. The strongest evidence for this potential link comes from an examination of the allomorphy

for the Kurtöp *-pa* suffixes (§7.3.2.2) wherein following historically open verb stems always condition a *-sa* allomorph. Given that *-pa* suffixes are always associated with perfective aspect, the idea that a stem-final perfective *-s* was suffixed to the verb stem, followed by other verbal morphology, is intriguing. However, if the Kurtöp *-s* seen in the alternations preceding *-ta* ‘IPFV.MIR’ is the same ‘perfective *-s*’ suffix, then an explanation for its presence preceding imperfective verbal morphology would be in order. It is premature to solve this problem at present, but let it suffice for the question of the relationship between Kurtöp *-s*, the *-sa* allomorphs in perfective aspect, and the perfective *-s* in Classical Tibetan, to remain unclear.

7.3.1.4. Summary

§7.3.1 illustrated alternations in Kurtöp verbal stems. I have shown that Kurtöp stem-final *-k* is lost, with the preceding vowel lengthening, when suffixed with *-wala*, and stem-final non-coronal stops (i.e. *-k*, *-p*) are voiced in the context of the imperative suffix. Note that the former sound change (loss of *k* leading to long vowel) is familiar within the Tibeto-Burman family. For example, loss of /k/ led to a long vowel with a falling tone in Lhasa Tibetan (DeLancey 2003b). Loss of final *-k* in other contexts in Kurtöp has led to a long vowel and glottalized tone in some dialects of Kurtöp. The voicing of *-k* and *-p* in the environment preceding the imperative suffix (*-e* in both instances) can be seen as the voicing of a stop inter-vocally. Thus, Kurtöp stem alternations can perhaps be better envisioned as reflecting straight-forward phonological processes, unlike the instances in Classical Tibetan (Beyer 1992) and Dakpa (Hyslop and Tshering 2010) in which stem alternations are also associated with grammatical differences. The one challenge to this

hypothesis is the optional alternation of *-s* with *-ø* following open stems which were not historically closed by another consonant. As I stated above, it remains unclear whether or not the described alternation between *-s* and *-ø* is at all related to the perfective *-s* described for Classical Tibetan (Beyer 1992) and/or a potential trigger for the alternation *-pa > -sa* (§7.3.2.2).

7.3.2. Alternations in verbal morphology

There is a small amount of allomorphy associated with verbal affixes. The negative prefix may occur with high or low tone, as dictated by the tone of the verb stem (§7.3.2.1), three verbal suffixes with *-pa* exhibit allomorphic alternation of the initial consonant (§7.3.2.2), and the imperative suffix *-le* also has different realizations depending on the phonology of the verbal stem (§7.3.2.3).

7.3.2.1. Tonal alternations of negative prefix

Verbal negation in Kurtöp is done by way of prefixation to the verbal stem (§16.2.1). The negative prefix itself can be considered atonal and when affixed to the verb stem takes the tone (high or low) of that stem. The verbal stem then becomes toneless, according the phonological process described for phonological words in §7.4. Recall from §6.4 that high tone is conditioned by voiceless syllable-initial consonants and low tone is conditioned by voiced syllable-initial consonants. A negated high-toned verb is shown in (27). The high tone from *shong* ‘fit’ is conditioned by the voiceless obstruent. But instead of being realized on the verbal stem, as would be the case if the verb were not negated, the high tone is realized on the first syllable, in this case the negative prefix.

- (27) *tshe me cing ge chopa gap 'meshongtami tshe la*
tshe me cing ge chopa gapo me-shong-ta=mi
 so house be.small go monk PL.FOC NEG-fit-IPFV.MIR=TAG
tshe la
 so POL
 ‘(Since) the house is small the monks don’t fit’
 SaT.SW20090917.SaT

A negated low-toned verb is shown in (28). Again, the low tone is conditioned by the voiced initial in *dot* ‘sleep’. But instead of being realized on the verbal stem, it moves to the prefix.

- (28) *tshe medotto ni tshe botya sang thung*
tshe me-dot-to ni tshe bot-yang sang thung
 so NEG-sleep-INF stay so 3.PL-also incense do
 ‘They sold stay without sleeping, doing the incense offering’
 KZ20080515.KZ

7.3.2.2. Alternation of *-pa*

Three verbal suffixes in Kurtöp are derivatives of the old Tibeto-Burman nominalizer *-pa*. These are *-pa*, for perfective polar questions, *-pala*, for perfective aspect (§17.1.1.2), and *-para*, for dubitative perfective aspect (§17.1.1.5). These three forms, in

addition to sharing a perfective aspectual function, also share the same allomorphy, described below. I will exemplify the allomorphy with *-pala*.

The perfective *-pala* has the form *-wala* when following *-k*, *-ng*, *-r* and open syllables which were historically closed by a coda *-l*. The allomorph *-sala* is found when suffixed to an open syllable which was not historically closed by coda *-l*, and the form remains *-pala* in all other contexts. This allomorphy is summarized in Table 86.

The motivation for the allomorphy surrounding *-pala* is less clear than for that associated with the verbal stems. In case of the stem-final velars, it might be best to hypothesize that $/p/ > [w]$ involves assimilation to velar place of articulation, and that the change $/p/ > [w]$ following *r* and *l* involves assimilation in sonority. Regarding the allomorph *-sala*, there is evidence that in Classical Tibetan an *-s* suffix was associated with perfective aspect (Beyer 1992). Perhaps this was also true of an older stage of Kurtöp, in which case it remained in the context of open syllables and the *p-* of *-pala* fully assimilated to the *-s*, or deleted in place of it. Table 86⁷¹ illustrates the allomorphy of the *-pa* suffix.

⁷¹ Note that there are two different types of open stems: those that were historically closed with coda *-l* and those that were not. Because synchronic open syllables in verbs may come from at least two different sources (i.e. open syllable remains open or coda *-l* is lost and fronts the vowel) a verbal stem in it of itself does not show whether or not a coda *-l* was present historically. Thus, comparative data is used to discern whether or not the stem had a *-l* coda historically. For example, with regard to the present data, comparison with Classical Tibetan སྤྲལ་པ་ <spralpa> supports the hypothesis that this form had a historically present *-l* final stem. In addition to comparative data, synchronic morphophonological alternations also provide evidence of this difference. As I show in Table , old coda *-l* stems condition a *-wa* allomorph and as I describe in 7.3.2.3, the imperative suffix takes the form of *-le* when attached to an old *-l* coda stem, in a sense, preserving the old *-l* coda.

Table 86. Allomorphy of perfective *-pa* suffix

Stem Type	Example Bare Stem	Gloss	Stem with <i>-pala</i>
-k	<i>kuk</i>	‘gather’	<i>kû-wala</i>
-ng	<i>thong</i>	‘drink’	<i>thong-wala</i>
-r	<i>chir</i>	‘chop’	<i>chir-wala</i>
historical -l	<i>phre</i>	‘separate’	<i>phre-wala</i>
-t	<i>dot</i>	‘sleep’	<i>dot-pala</i>
-n	<i>gin</i>	‘wear’	<i>gin-pala</i>
-p	<i>phap</i>	‘bring.down’	<i>phap-pala</i>
-m	<i>ngom</i>	‘be.excessive’	<i>ngom-pala</i>
open syllable	<i>se</i>	‘die’	<i>se-sala</i>

7.3.2.3. Alternation of imperative *-IV*

Kurtöp has three imperatives, all of which begin with the consonant *-l*. As I describe in §19.2, the vowel changes depending on level of politeness and whether the clause is realis or irrealis. Regardless, the *-l* of the imperative undergoes the same allomorphy. Following non-coronals a vowel is found and following open syllables which were not historically closed by *-l* the form *-y* is used. In all other contexts *-l* remains unchanged. The allomorphy associated with the imperative construction is illustrated with *-le*, the polite imperative, in Table 87.

Table 87. Allomorph of polite imperative *-le* suffix

Stem Type	Example Bare Stem	Gloss	Imperative
-k	<i>kuk</i>	‘gather’	<i>kug-e</i>
-ng	<i>thong</i>	‘drink’	<i>thong-e</i>
-p	<i>phap</i>	‘bring down’	<i>phab-e</i>
-m	<i>ngom</i>	‘cry’	<i>ngom-e</i>
-r	<i>chir</i>	‘chop’	<i>chir-le</i>
historical -l	<i>phre</i>	‘separate’	<i>phre-le</i>
-t	<i>dot</i>	‘sleep’	<i>dot-le</i>
-n	<i>gin</i>	‘put on’	<i>gin-le</i>
open syllable	<i>se</i>	‘die’	<i>se-ye</i>

The allomorphy of the imperative suffix *-le* is also interesting. If the verbal stem terminates (or terminated, in the case of stems which had an *-l* coda at a previous stage of the language) in a coronal consonant, then there is no change in the form of the imperative. However, following a non-coronal consonant, the *l-* of the imperative will delete. Such restrictions on deletion seem intuitive if we assume two adjacent consonants must agree in coronality in this context. Of further interest is the alternation *-le* → *-ye* between vowels in light of the sound change /l/ > [y]. While it may be considered another example of assimilation in terms of sonority (c.f. /p/ > [w] _{l, r} in the case of *-pala*, above), the sound change *l* > *y* has happened elsewhere in the language and in fact is used

as one of the sound changes to define a subsection of the East Bodish languages (§3.5.2.2).

7.3.2.4. Alternation of *-ki*

The hortative marker *-ki* (§17.3.3) exhibits the allomorphy shown in Table 88.

Table 88. Allomorph of hortative *-ki* suffix

Stem Type	Example Bare Stem	Gloss	Imperative
-k	<i>kuk</i>	‘gather’	<i>kuk-ki</i>
-ng	<i>thong</i>	‘drink’	<i>thong-ki</i>
-p	<i>phap</i>	‘bring down’	<i>phap-ci</i>
-m	<i>ngom</i>	‘cry’	<i>ngom-ci</i>
-r	<i>khor</i>	‘carry’	<i>khor-ci</i>
historical -l	<i>phre</i>	‘separate’	<i>phre-ci</i>
-t	<i>dot</i>	‘sleep’	<i>dot-ci</i>
-n	<i>gin</i>	‘put on’	<i>gin-ci</i>
open syllable	<i>co</i>	‘make’	<i>co-iki</i>

7.3.3. Alternation in nominal morphology

Clitics that attach primarily to noun phrases also evidence phonological alternations. One of these changes appears to be stylistic, while the other four changes are dictated by morphophonological rules, albeit sometimes somewhat opaquely. I discuss the allomorphy associated with the locative =*ro* in §7.3.3.1, the ablative in §7.3.3.2, the ergative in §7.3.3.3, the genitive in §7.3.3.4 and the stylistic alternation between the presence and absence of velar nasals in the locative =*nang* and ablative in §7.3.3.5

7.3.3.1. Locative =to

The Kurtöp locative =to has several allomorphs, the distribution of which, for the most part, is predicted phonologically. The predictable distribution is summarized in Table 89.

Table 89. Allomorphy of locative =to

Phonological Environment	Form of locative	Example	Gloss
-t	=to	<i>tutto</i>	‘to roast’
-p	=to	<i>phapto</i>	‘to bring down’
-r	=to	<i>kerto</i>	‘carry’
old -l	=to	<i>phuito</i>	‘to give.HON’
-n	=do	<i>'nando</i>	‘to add’
-m	=do	<i>domdo</i>	‘to come together’
-k	=ko	<i>tshoko</i>	‘to cook (curry)’
-ng	=go ~ =o	<i>thonggo ~ thongo</i>	‘to drink’
Open syllable	=ro	<i>coro</i>	‘to make’

The allomorphy described in Table 89 is relatively straightforward in terms of assimilation. The coronal obstruent assimilates in terms of sonority when between two vowels and the alternate =ro is found. Following non-velar nasals, the /t/ is voiced yielding =do. Following velars, the =t assimilates to velar place of articulation, and in the case of the velar nasal the =t assimilates in terms of voicing as well, yielding =go. However, the =g is often dropped, yielding simply =o. DeLancey (2008) points out that

this allomorphy closely matches the irregular allomorphy of locative *-ru* described for Tibetan.⁷²

It would be too simple to state that the rules outlined in Table are always followed, however. In place of *=ro* following vowels, *=ko* is sometimes used, as in (29), where the locative following *Paro* is *=ko* instead of *=ro*, as expected. However, speakers will accept either *=ro* or *=ko* in elicitation. Likewise, in (30) and (31) a *=ko* allomorph is found in place of *=ro*.

- (29) *Paroko yumgi ngak zonshangmi*
Paro=ko yum=gi ngak zon-shang=mi
 Paro=LOC mother.HON=ERG do send-PFV.EGO=TAG
 ‘The mother sent me to Paro’
 SBC20051127KW

- (30) *tshe yar^{ko} 'imzi*
tshe yar=ko 'im-si
 so go=LOC hide-NF
 ‘... then (should) go hidingly ...’
 SPh.TsC20081022.SPh

⁷² Jäschke [1883] (1954:22-23) describes the following allomorphy for Tibetan terminative *-ru*: *-ru* or *-r* after vowels, *-tu* following *g* and *b*, *-d*, *-r*, *-l* in certain words; *-su* after *s*, *-du* generally after *n*, *r*, *l* and the other final consonants.

- (32) *tshe Rimpoche o Trashigang Zongnang 'wang 'nang yangi Zonggi nangni*
tshe Rimpoche o Trashigang 'wang 'nang
 DM Rimpoche DEM.PROX Trashigang blessing give.HON
yangi Zong=gi nang=ni
 UP.ABL Dzong=GEN inside=ABL
 ‘And Rimpoche blessed (the people at) Trashigang Dzong from up there.’
 SBC20051127.7.KW

7.3.3.3. Ergative

The ergative form =*gi* may occur in all phonological contexts. Consider (33-36), in which a word may end in *-n*, *-e*, *-u* or *-a* and co-occurs with the ergative form =*gi*.

- (33) *Rinzingiyang melapta*
Rinzin=gi=yang me-lap-ta
 Rinzin=ERG=also NEG-tell-IPFV.MIR
 ‘Even Rinzin wasn’t telling (us)’
 SBC20051127.7.KW
- (34) *tshe Kinlegiyang darung zhanma am-the zongwal wentami ngai ta-mo*
tshe Kinle=gi=yang darung am-the zong-wala
 DM Kinle=ERG=also again woman-one hold-NMZ:PFV
wenta-mi ngai ta-mo
 COP.EQ.MIR-TAG 1.ERG see-CTM
 ‘I guess Kinle got a hold of another woman again, in my opinion.’
 SBC20051127.7.KW

- (35) *tshe oyeni akugi 'ngazi 'nganman 'ipa cozi tshe net gap net 'ruzi*
tshe oye=ni 'aku=gi 'ngazi 'nganman
 DM DEM.UP=ABL uncle=ERG morning morning
'ipa co-zi tshe net gapo 'ru-zi
 food make-NF DM 1.PL.ABS PL.FOC wake.up-NF
 ‘Sot the uncle from up there made food early in the morning and woke us...’
 SBC20051127.7.KW

- (36) *puragi zhor 'otsi puragi zhor gapoya 'lamaro drang nisal wenta tshe*
pura=gi zhor 'ot-si gapo-yang 'lama-ro drang
 all=ERG alcohol bring-NF PL.FOC-also lama=LOC give.HON
ni-sala wenta tshe
 stay-NMZ:PFV COP.EQ.MIR DM
 ‘Everyone brought wine, everyone brought wine and all and was offering it to the
 Lama.’
 KS20061212.118.188.KL

However, if the word ends with a vowel, the vowel may be replaced with *i* as a means to mark ergative, as in (37), where the plural focus marker *gapo* becomes *gapi* in the ergative.

- (37) *'napata melapta bot gapi*
'napa-ta me-lap-ta bot gapo=gi
 earlier-EMPH NEG-tell-IPFV.MIR 3.PL.ABS PL.FOC=ERG
 ‘Earlier they weren’t telling (us)’
 SBC20051127.7.KW

In another possible form, the ergative may be realized as *-li*, as in (38).

- (38) *tshe yapni yum zonli shumzi*
tshe yap-ni yum zon=li shum-si
 DM father.HON-CMT mother.HON two=ERG cry.HON-NF
 ‘So the two mother and father cried...’
 PS20061206.786.646.P

The *=li* allomorph of the ergative is in very limited distribution in the texts and does not occur in elicitation. Speakers report that *=li* can be replaced with *=gi* and like the *=i* allomorph, the form *=li* also occurs as a genitive, as I describe in §7.3.3.4.

In summary, the Kurtöp ergative *=i* may be used in place of a vowel word-finally and *=li* may be used following a coronal nasal final, but neither is required. The marker *=gi* may be used in any instance. This distribution is not dictated fully by phonology. Rather, it seems that there are two systems at work. In one system, *=li* is used. Another system seems to be replacing this; *=gi* can now be cliticised to the end of any word and a word-final vowel may be replaced with *=i*. Assuming this analysis is correct, I speculate the *=gi* ergative is a borrowing from Classical Tibetan. The forms of the ergative are summarized in Table 90.

Table 90. Allomorphy of ergative

Environment	Form of ergative	Example
All	<i>=gi</i>	<i>Kinle-gi</i>
Vowel final	<i>=i</i>	<i>Pemi</i>
All	<i>=li</i>	<i>zonli</i>

7.3.3.4. Genitive

The Kurtöp genitive is homophonous to the ergative and shares the same allomorphy, as described in §7.3.3.3. That is, the genitive enclitic has the same form as the ergative enclitic: =*gi* ~ =*li* ~ =*i*.

The exception to this is the pronouns, which have different forms for the ergative and the genitive. In general, the genitive forms have a palatal initial while the ergative forms have a lengthened vowel. The second person plural genitive form, however, may occur with either a voiceless coronal stop or a palatal stop, as *ninti* or *ninci*. The difference between genitive and ergative maintained elsewhere is neutralized for the first person plural inclusive pronoun, which is *neri* in both instances. The different genitive and ergative pronouns are illustrated in Table 91.

Table 91. Kurtöp personal ergative and genitive pronouns

	Singular		Plural	
	Ergative	Genitive	Ergative	Genitive
1 st	<i>ngai</i>	<i>ngaci</i>	<i>nei</i> (EXL) <i>neri</i> (INCL)	<i>neci</i> (EXL) <i>neri</i> (INCL)
2 nd	<i>wî</i>	<i>wici</i>	<i>ningi</i>	<i>ninti</i> ~ <i>ninci</i>
3 rd	<i>khî</i>	<i>khici</i>	<i>boi</i>	<i>boci</i>

Like the ergative, the Kurtöp genitive also exhibits a =*li* allomorph, but rarely, as in (39).

- (39) *meli 'ama*
me=li 'ama
 house=GEN mother
 'Housewife'
 PS20061206

7.3.3.5. Stylistic alternation *-ng* ~ *-∅*

Several grammatical suffixes in Kurtöp optionally end with a final velar nasal, though it is not clear, in many instances, that the final velar nasal is historically present for all forms, or whether speakers may choose to add the final velar nasal as a stylistic device. The forms which may have the *-ng* present are: *=na* 'LOC', *=ni* ~ *=ngi* 'ABL', *=ya* 'also', *=ra* 'EMPH', and *-mo* 'CTM'.

7.4. Phonological Words

There has been much recent work in phonological words, such as Hall and Kleinhenz (1999), (Dixon 2002), *inter alia*. Hall (1999: 3) states 'the pword derives motivation as the constituent that defines the domain for various phonological generalizations' and 'these generalizations can be reduced to three types: a) the domain of phonological rules; b) the domain of phonotactic generalizations; 3) the domain for minimality constraints'. In addition, many authors cite phonological words as the domain for stress assignment and syllabification (Hall 2002:4).

In Kurtöp, phonological words can be identified by first syllable stress and the obligatory presence of tone. Grammatical words, which are often phonological words, may undergo final vowel deletion when consisting of more than one syllable. A phonological word in Kurtöp is a somewhat broader domain, in that it may consist of a grammatical word plus a particle.

CHAPTER VIII

ORTHOGRAPHY

This chapter outlines the orthographies used to represent the Kurtöp language, including a discussion of the history of writing in Bhutan and the argumentation used in making decisions regarding Kurtöp’s two orthographies. Because this grammar represents the first in-depth collaborative language documentation in the country, I have had to approach description and conservation issues with a full understanding of the relevant history. §8.1 discusses the history of writing in Bhutan, beginning with purported events in the 8th century A.D. up to recent events I have been involved with. §8.2 outlines the ’Ucen-based Kurtöp orthography and §8.3 outlines the Roman alphabet-based Kurtöp orthography. Note that the remainder of this dissertation will present Kurtöp data using the Roman-based orthography described below.

8.1. History of writing in Bhutan

A discussion of writing in Bhutan begins with the history of དབུ་ཅན་ <dbu.can> ’Ucen , the script developed to write Tibetan in the 7th century A.D. The general belief is that Thonmi Sambhotra was sent from Tibet to India to learn the art of writing and brought back with him a modified North Brahmi⁷³ script designed exclusively for the

⁷³ The origin of the Brahmi script itself is somewhat of a mystery. The first specimens appear on the Ashokan edicts, in the 3rd century BC, with scholars debating four possible origins. The indigenous theory speculates that Brahmi was home-grown in India, independent of the Indus Valley writing, Semitic,

Tibetan language as it was spoken in the 7th century. However, some scholars question the validity of this belief (e.g. van Driem (2001: 835) cites Snellgrove (1987)).

Writing in Bhutan probably has a long history, but it has been difficult to obtain facts. Today, two versions of 'Ucen are in wide use, viz. ལྷོགས་ཡིག་ <tshugs.yig> *Tshui* and མཐོགས་ཡིག་ <mgyogs.yig> *Joyi*. General knowledge in Bhutan is that writing was first brought into Bhutan through Padma Sambhava,⁷⁴ when he visited Bhutan in the 8th century A.D. According to local beliefs, Padma Sambhava was accompanied by ལྷན་མ་རྩེ་མང་ <lden.ma rtse.mang> *Denma Tsenmang*, a disciple of his who was also a renowned Tibetan translator. Denma Tsenmang is attributed with the creation of the Joyi, which is a sort of cursive used today for writing Dzongkha in Bhutan.⁷⁵

Bhutanese children begin to learn to read and write Dzongkha in Bhutan from the beginning of their education. In addition to being able to read and write in the Joyi script, Bhutanese children will also learn to read the Tshui script, but writing of Tshui is generally reserved for monks. As such, children's books and Dzongkha education materials are all produced in Joyi script.

Chinese or any other writing system, but this is mainly speculative. Another theory, that Brahmi is the descendent of the older Indus Valley writing, is intriguing but lacking in evidence, since a gap of around 1400 years exists between the two. The theory that Brahmi was borrowed from Semitic orthographies, specifically Aramaic, is plausible, though refutable evidence remains to be seen. Finally, scholars speculate that Brahmi may be based on Kharoṣṭhi, a script that is generally believed to have derived from Aramaic and was present at the time of Brahmi (Rogers 2005: 205-211).

⁷⁴ *Padmasambhava*, also widely known as ཨོ་རྒྱན་གྱི་རུ་འཇིག་པོ་ཆེ་ <o.rgyan.gu.ru.rin.po.che> '*Ugen Guru Rimpoche*, or simply *Guru*, is the 8th century Tantric master who also founded the 'Nyingmapa school in Bhutan (Tshering 2010).

⁷⁵ Joyi is also known as ལྷོ་ཡིག་ <lho.yig> *lhoi* or མོན་ཡིག་ <mon.yig> *mönyi* (Tshering 2010).

Though Tshui and Joyi have been used for centuries by educated elite, primarily religious figures, to write Dzongkha and Chöke, writing was only adopted by common people with the introduction of western-style education during the reign of the first King, His Majesty 'Ugyen Wangchuck (ruled 1907-1926). Education remained out of reach for the vast majority of Bhutan's population until the time of the third King, His Majesty Jigme Dorji Wangchuck (ruled 1952-1972), also called 'The father of modern Bhutan', when an attempt was made to make education more accessible. However, many Bhutanese are still illiterate.

Nonetheless, Bhutanese policy has recently placed an increased effort on the promotion of Dzongkha as a written and spoken language. In 1989, the Dzongkha Development Commission was created with the sole expressed purpose of promoting the national language. Since then, countless workshops have been held with the attempt of simplifying and standardizing Dzongkha 'Ucen spellings; yet, despite these efforts, most Bhutanese are still uncomfortable reading and writing Dzongkha.⁷⁶ This unfortunate fact is also echoed in (Namgyel 2003: vii).

⁷⁶ The sources for these difficulties are manifold. Dzongkha spellings are by and large based on their Chöke counterparts. While Dzongkha may be argued to be a dialect of Tibetan (see van Driem (1998) and Tournadre (2008), e.g.), there are enough innovations in Dzongkha that purely Chöke spellings will not work. For example, where Chöke words have <kr, kh, gr, pr, phr, br>, Dzongkha native words have <ky, khy, gy, py, phy, by>. Where Chöke underwent the change *ky, khy, gy* > c, c^h, j, Dzongkha native words appeared to have simply lost the palatal offset (these illustrate one of several differences between Dzongkha and Central Tibetan). However, because Dzongkha has been heavily influenced by Chöke for several centuries, and literally thousands of Chöke words have been borrowed into Dzongkha, it is not possible to ascertain whether a given word is a native inheritance or borrowed from Chöke. This fact is compounded by the retention of most elements of Chöke spellings, even if they have no overt phonetic manifestation in modern spoken Dzongkha. A few examples illustrate the fact that, like Mandarin Chinese, the spelling of most words, for the most part, simply has to be memorized: ཅུ་ཅེ་ <brgyad> [gæ] 'eight',

8.2. 'Ucen

8.2.1. Introduction to 'Ucen

Before delving into the details of Kurtöp 'Ucen, a brief overview of the 'Ucen orthography and the traditional terminology used to discuss the orthography should be introduced. Like other Brahmi based orthographies, 'Ucen is abugida.⁷⁷

Figure 40 represents the 'Ucen syllable, with Dzongkha and English names for the various positions within the syllable. Each box represents a particular position in the syllable, where a given subset of available characters may be assigned. The maximal

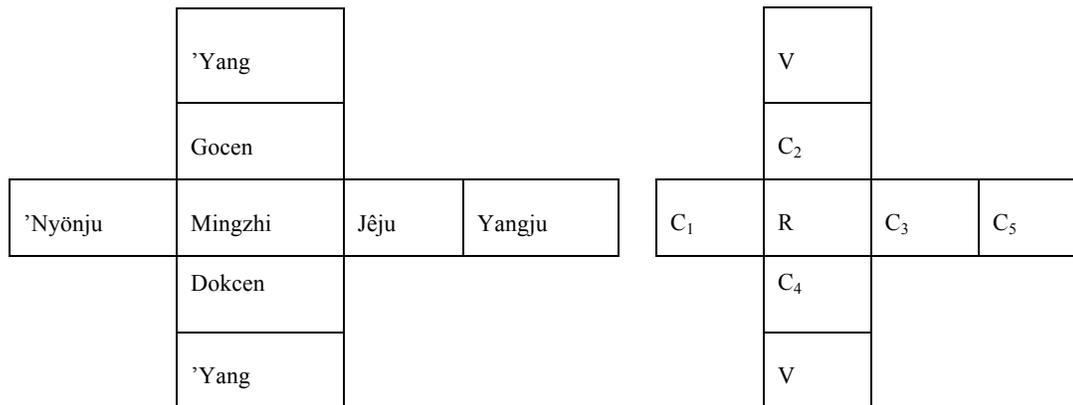


Figure 40. The 'Ucen syllable in Bhutanese (left) and English (right) conventions.

'ལྷ་མོ་' <gyangkha> [ʤəŋkʰə] 'counting; number', དམར་མོ་ <dmarpo> [ˈmá:p] 'red', མིག་པ་ <rmak.pa> [ˈmóp] 'husband', མིག་ཏོ་ <mig.to> [ˈmito] 'eye', ཚོས་ <chos> [cʰó] 'religion', མོན་པ་ <mon.pa> [mø̃m] 'Monpa (an ethnolinguistic group in Bhutan)', དབང་མོ་ <dbangmo> [ˈó:m] 'Wangmo (name)', ཀ་མ་ <kar.ma> [karma] 'Karma (name)'.

⁷⁷ Rogers (2005: 205) defines an abugida writing system as “similar to an alphabet: all vowels are indicated, but normally, vowels are written as diacritics, and one vowel is not written.”

'Ucen syllable will consist minimally of a *mingzhi* (R) and maximally of a *'nyönju* (C₁), *mingzhi* (R), *gocen* (C₂), *dokcen* (C₄), *'yang* (V), *jêju* (C₃), and *yangju* (C₅). In English terminology, the R represents the 'root' (usually a consonant, but can be a vowel if the word is onset-less), C represents a consonant, and V represents a vowel. Lack of any V character signals a low back vowel.

Classical Tibetan, which was toneless, allowed for complex onset and coda consonant clusters. The *mingzhi*, or root, is the minimum position required in a Classical Tibetan word. A *mingzhi* by itself represents a simple consonant onset. *'nyönju* (C₁), *gocen* (C₂), and *dokcen* (C₄) positions could also be filled to represent a complex onset. The vowels /i/, /e/, and /o/ are indicated by symbols in the upper *'yang* (V) position while /u/ is indicated with a symbol in the lower *'yang* (V) position. If the syllable onset consisted of more than one consonant, a *'nyönju* (C₁) would be used. If the syllable was closed with a coda, a *jêju* (C₄) would be used. In the unusual case that a complex coda was present, a *yangju* (C₅) could also be present.

Since Classical Tibetan was codified as a written language, several phonological changes have taken place. Complex onsets and codas have simplified, expanding the number of places of articulation and many codas have in fact disappeared, leaving lengthened vowels, tonal splits, nasalized vowel or other vowel changes in their places. Tone has also developed as conditioned by contrasts on syllable onsets. Modern Tibetan is still fairly easy to read, to the extent that one is aware of the sound changes that have taken place since the language was put to writing. However, the current use of Tibetan conventions to represent a language that exhibits nearly 1400 years of phonological

change poses some serious challenges to the application of 'Ucen to Kurtöp in Bhutan (where the literate population is well-schooled in the Chöke conventions). I describe these challenges, and how we have overcome them, below.

8.2.2. Application of Kurtöp to 'Ucen

When I began working in collaboration with the Dzongkha Development Commission in 2007, plans for orthography were an immediate focus of discussion. Bhutanese officials and scholars, as well as Kurtöp community members, agreed that an 'Ucen-based orthography would be integral to the preservation and development of Kurtöp, primarily because 'Ucen still forms an integral part of education in Bhutan, and also 'Ucen has been the writing system with the longest history in Bhutan. In short, the 'Ucen writing system is an important facet of Bhutanese culture.

Between 2007 and 2009, I spoke with several officials, administrators, scholars, teachers, and Kurtöp speakers (both literate and non-literate). I tested several versions of various 'Ucen orthographies with several different Kurtöps and non-Kurtöps in several different communities. Kurtöp speakers who helped test the orthographies were Kuenga Lhendup and Karma Tenzin. High school educators and native Kurtöp speakers Karma Penden (Dzongkha Instructor) and Dorji Wangdi (Principal) at Tangmachu High School also provided feedback to previous versions of the 'Ucen orthography. Tendzin 'Lodró, former Instructor of Semtokha Rigzhing Institute and Ugen Tenzin at the National Library, a native speaker of Dzala and educated in Classical Tibetan (Simtokha Rigzhung Institute) and Buddhism (Varanasi), offered also offered suggestions and corrections to previous versions.

By January, 2009, the majority of decisions regarding Kurtöp 'Ucen had been made. Rather than use the Tshui script, which was reserved for more formal uses of Dzongkha and also shared with Tibetan, the cursive Joyi script would be used for Kurtöp. This was decided because 1) students mainly read and write Dzongkha in Joyi; 2) it is easier to learn than Tshui (less strokes per symbol); and 3) because it was developed in Bhutan it is uniquely Bhutanese and should be used to represent any Bhutanese language.

In February, 2009 Pema Wangdi (MA Linguistics from Australian National University and native speaker of Tshangla) and Namgay Thinley (MA Linguistics from LaTrobe University and native speaker of Dzongkha), of the DDC arranged a workshop in Thimphu to address the issue of writing Bhutan's un- and under-documented languages. Scott DeLancey and I gave presentations on topics pertinent to writing Bhutan's languages, namely the development of Dzongkha from Classical Tibetan and the use of 'Ucen to write both Chöke and Dzongkha, and the development of 'Ucen to write Kurtöp. Amongst the attendees were Lungtaen Gyatsho (Principal of the Semtokha Institute for Language and Cultural Studies), Chris Fynn (font developer for the DDC), Karma Tshering (native Dzongkha speaker and Chöke expert), Thakur S. Powdyel (Education Minister) , and Dorji Wangdi (Labour Minister). The final decisions regarding the representation of Kurtöp complex onsets and tone was decided upon as a result of the discussion from this workshop.

Meeting participants also stressed the importance of writing Bhutan's other undocumented languages. In creating the Kurtöp 'Ucen orthography, we were urged to consider other Bhutanese languages and a devise a system that could be equally adapted

to any other undocumented language in the country. Thus, in making decisions regarding Kurtöp orthography, we considered the phonologies of other Tibeto-Burman languages of Bhutan – to the extent that we had enough data – and made decisions that would also apply to other TB languages in Bhutan.

In designing an orthography for Tshangla, Andvik (in press) highlights the importance of learnability and transferability in orthography development. As Andvik (in press) articulates, a principle of “one symbol for one sound” makes an orthography maximally learnable. Following learnability, the principle of transferability must be taken into consideration. That is, an ideal Kurtöp orthography would help children transition into the Dzongkha. Thus, in creating the Kurtöp ’Ucen orthography, we had aimed for a one symbol to one sound correspondence, while also aiming to minimize the differences from Dzongkha. The remaining sections of §8.2 outline the decisions that were made and how we reached them.

8.2.2.1. Consonants

With regard to consonants, Kurtöp ’Ucen follows basic Dzongkha conventions for representing simple syllable onsets, coda consonants, and vowels, as shown in Table 92.

Table 92. Kurtöp Joyi consonant symbols with a one to one relationship which will directly transfer to Dzongkha.

	labial	dental	palatal	velar	glottal
stops	p, p ^h , b པ པ བ	t, t ^h , d ཏ ཐ ཌ	c, c ^h , ɟ ཅ ཇ ཉ	k, k ^h , g ཀ ཁ ག	
affricates		ts, ts ^h ཅ ཇ			
fricatives		s, z ས ཟ	ʃ ཤ		
nasals	m མ	n ན	ɲ ཉ	ŋ ང	
laterals		l, l̥ ལ ལ̥			
rhotics		r ར			
glides	w ཡ		j ཡ		
aspirates					h ཏ

Retroflex consonants are more challenging to represent. When Classical Tibetan was first written down, retroflex consonants were not present. They are now present in Lhasa Tibetan and other Tibetan dialects, having been innovated from a series of stop plus rhotic clusters (e.g. cf. 6.2.1.1.3). Thus, words with retroflex consonants in Dzongkha are generally written as stop plus rhotic clusters, such as in ཕྱེད་ཀྱ་ <phyed.kra> [p^héʈə] ‘adultery.fine’. With many recent borrowings from Nepali, Hindi, and English,⁷⁸ and without a prescribed standard, many Bhutanese are using the same strategy to represent retroflex sounds. Thus, ཀྱ <kr>, ཀྲ <chr>, ཀླ <gr> are often used to represent [ʈ, ʈ^h, d], respectively, in borrowed words.

In theory, there is an alternative to representing retroflex consonants in non-Tibetan words in Bhutan. Throughout the history of Written Tibetan, a special series of *lokpa*, or reversed characters, has been used to represent sounds in Sanskrit borrowings that were not present when Tibetan was first codified into a written system. Three were used, in particular, to represent retroflex consonants which were present in Sanskrit. These were: ཅ [ʈ], ཅྱ [ʈ^h], and ཅྲ [d]. For the Kurtöp ’Ucen orthography, then, we had two choices: 1) use a combination of stop plus rhotic cluster; or 2) use the *lokpa* series of symbols. When presented with these options, the members of the DDC orthography preferred the former option while tending to disprefer the latter option. The reasons for this dispreference were generally that most Bhutanese were unfamiliar with these

⁷⁸ Though English does not have retroflex consonants, Bhutanese, like Hindi and other South Asian language speakers, map the English alveolar stops to their retroflex series. Interestingly, then, the English dental fricatives are mapped to the dental series of stops.

symbols in general, and those who were familiar with these symbols associated them with a Sanskrit religious context.

Thus, we opted for the former option. Rather than use the velar series (ཀལལ) or labial series (ཕལལ) with the rhotic diacritic, we decided to use the dental series with the rhotic diacritic, which, we felt, would be easier to learn than the previous two options (velar or labial). There would be no problem with transference, since this combination is also used as one of the strategies to represent retroflex sounds in Dzongkha. Kurtöp retroflex stops are represented in 'Ucen in Table 93.

Table 93. Kurtöp Joyi consonant symbols representing retroflex stops

retroflex stops
ཅ ཅྱ ཅྲ
[t] [tʰ] [d]

The largest obstacle to overcome when devising the Kurtöp 'Ucen orthography was the complex onset clusters that are present in Kurtöp, but no longer present in Dzongkha. Classical Tibetan has complex onsets which, among other possible options, were represented by combinations of symbols, representing the first member of the cluster, and diacritics, representing the second member of the cluster. Some examples are: ཀྲ <kr> ཀླ <ky> ཀྷ <kl>.

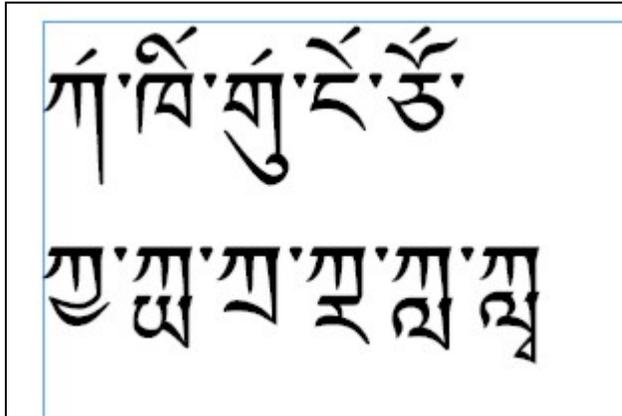
Because of sound changes that took place since Tibetan was put into writing, most Tibetan dialects today do not have the same phonemic sequences that these symbols

initially represented. In Bhutan, children studying Dzongkha learn to pronounce ཐ as [t], ཅ as [c], and འ as [l] with a high tone on the following vowel. Adopting the same conventions that were used to represent complex onsets in Chöke, then, in Kurtöp, leads to difficulties in transference from Kurtöp to Dzongkha. For example, if Kurtöp children learn to read རྩ་ <pra> as [pʰɑ], the fact that the same combination of characters would be pronounced as [tʰɑ] in Dzongkha leads to added difficulty in transference.

We explored several alternatives to the Chöke conventions, and a decision was finalized during the DDC orthography convention in 2009. A known, but rarely used convention in 'Ucen orthography is the ability to combine 'half' consonants in vertical arrangements. This convention was historically devised in order to represent other combinations in Sanskrit or other languages. Scholars and administrators decided this would also be the most viable option to represent the complex onsets present in Kurtöp and other Bhutanese languages. Learnability is enhanced by the fact that no new characters are introduced, though a new convention must be learned. Transferability to Dzongkha will not pose too great a problem, since the combination of two full characters in one vertical alignment is not a Dzongkha convention. At the time of the DDC orthography workshop in 2009, the Bhutanese 'Ucen fonts were not equipped to handle this vertical stacking. At the behest of the researchers, Chris Fynn, font developer for the DDC, agreed to revise the Joyi font in order to accommodate these combinations. Anticipating the application of this font to other Bhutanese languages, Chris Fynn has

arranged for a wide selection of complex onsets to be represented. The complex onsets in Kurtöp are represented in Tshui in Table 94.

Table 94. Kurtöp 'Ucen consonant symbols representing complex onsets



Recall (cf. §6.2.1.1.2 and §6.2.3) that Kurtöp labial-initial onset clusters involving a palatal glide as the second member (/pj/, /p^hj/, /bj/, /mj/) have rapidly undergone change, such that it is only the oldest generation of speakers who have retained the pronunciations with palatal glide offsets. In case of the obstruents, later generations of speakers have fortified the palatal glide into a fricative or stop, with the youngest and most educated speakers having lost the labial altogether and retaining only a palatal stop in lieu of the older cluster. Regarding the sonorant, most speakers today have a palatal nasal /ɲ/ in place of /mj/. Because these sound changes mirror the sound change of Classical Tibetan <pj>, <phy>, <by>, <my> to Lhasa Tibetan /c/, /c^h/, /ʃ/, /ɲ/, we decided to adopt the Chöke/Dzongkha conventions in these cases. Transference to Dzongkha in these cases is straightforward. The representation of Kurtöp labial-glide onsets is shown in Table 95.

Table 95. Kurtöp Joyi consonant symbols representing complex onsets

ᄁ	[pj ~ pɛ ~ pc ~ c]
ᄂ	[p ^h j ~ p ^h ɛ ~ p ^h c ~ c ^h]
ᄃ	[bj ~ bj ~ bj ~ j]
ᄄ	[mj ~ n]

8.2.2.2. Representing vowels and tone

Kurtöp vowels would be handled similarly to their Chöke counterparts, so that the vowels /i, e, o, u/ are represented as diacritics attached to the consonant and /a/ is considered an ‘inherent’ vowel; that is, given the lack of any diacritic and evidence of a complete syllable (the ^ˈ tshâ), the vowel is marked as /a/. The Kurtöp vowels represented in Joyi orthography are shown in Table 96.

Table 96. Kurtöp vowels, shown here following the consonant /k/.

	Front	Back
High	i ཀེ (kiku)	u ཀུ (zh'abju)
Mid	e ཀེ (drembo)	o ཀོ (naro)
Low		a ཀཱ (kaka)

A potential problem in transference arises with Kurtöp vowels. Several Dzongkha words have fronted round vowels in pronunciation but are written with either *zh'abju* or *naro*. This is usually the case when /a/, /o/ or /u/ was followed by a coda /t/ or /n/ in the Proto-language. As such, children learning to read Dzongkha expect a fronted pronunciation of /a/, /o/ and /u/ when the word is closed by /t/ or /n/ in Chöke. This may be an added difficulty in transference, since children learning Kurtöp will not have learned the front pronunciation in the environment preceding coronal stop and nasal codas. *Naro*, *zh'abju*, and no vowel diacritic followed by a coda nasal or stop in Kurtöp will be associated with a back vowel, whereas the same sequence in Dzongkha would usually require a fronted vowel. This issue was presented several times at various stages in orthographic development and all proposed solutions led to more problems than were solved. Further support for the current orthography is the fact that educated speakers pronounce fronted vowels in Kurtöp, anyway, in the described environments. Thus, even if special accommodations were made to orthographically distinguish Kurtöp /-at, -

an, -ot, -on, -ut, -un/ syllable rhymes from their Dzongkha counterparts, it's not likely that they would entail different pronunciations in the end.

The other aspects of Kurtöp phonology which have been difficult to represent in 'Ucen are tone and vowel length. Neither was present in Classical Tibetan but both have developed in Lhasa Tibetan and other Tibetan dialects. Thus, tone and vowel length can be inferred from Written Tibetan in most modern dialects based on the sound changes (tonogenesis and compensatory lengthening) which have happened since Tibetan was written down. However, since Kurtöp is not a Tibetan dialect, there must be independent ways to mark vowel length and tone. These are discussed in turn below.

To mark high tone following sonorant consonants, Chris Fynn has designed a tone diacritic that appears above the *mingzhi* in the same space as a 'yang (if present). The Joyi font is still under construction at the time of writing this chapter, but the high tone mark can be seen above all the letters in the top row of Table 94.

Table 97. Kurtöp long vowels represented in Joyi

Long	ནྱ་ <nâ> 'COP.EXIS .MIR'	ཚྱི་ <tshî> 'calculation'	ཤྱི་ <shê> 'glass'	ཚྱོ་ <tshô> 'here'	མྱ་ <mû> 'NEG.COP.EX IS'
Short	ན་ <na> 'ear'	ཚྱི་ <tshi> 'sticky'	ཤྱེ་ <she> 'over.pour'	ཚྱོ་ <tsho> 'lake'	མྱ་ <mu> 'mushroom'

To represent the distinction made by vowel length, the letter ^ˆ is written below the mingzhi as a dokcen, above a vowel diacritic, if one is present. Examples of vowel length indicated in 'Ucen is shown in Table 97.

8.3. Roman-based orthography

The Kurtöp Roman-based orthography is based on the orthography George van Driem and Karma Tshering designed for Dzongkha (van Driem 1991). The Kurtöp Romanization has been simplified somewhat. Dzongkha makes a tonal contrast following voiced obstruents while Kurtöp only has predictably low tone following voiced obstruents. Thus, tone marks are only employed to mark the tone following sonorants. Most academic publications of Kurtöp are written using the Roman orthography and in the remainder of this dissertation I will also represent Kurtöp data using the Roman orthography.

8.3.1. Consonants

Place of articulation, voicing, and manner are represented in the Kurtöp Romanization. Whenever possible, consonants are represented by monographs and digraphs, but there are a few trigraphs as well. Retroflexion is represented by <r> following <t> or <d> (depending on voice quality) and aspiration is represented as <h>. Because tone is predictable for all but one obstruent, tone following the obstruents is not marked.

As I described in §6.2.1.1.4 and §6.4, the voicing contrast amongst the palatal fricatives has recently collapsed in favor of a contrast in tone, so that the voiceless palatal fricative is now voiceless with following high tone and the previously voiced palatal fricative is now voiceless with following low tone. However, because all voiced obstruents are also associated with a following low tone, and speakers do not appear to be aware of the VOT difference in pronunciation of the previously voiced palatal fricative, and the voiced stops, for example, we felt it was suitable to represent the palatal fricative with low tone as <zh>, to contrast with <sh>, the palatal fricative with following high tone. Because the glottal stop can be considered a concomitant feature associated with other contrasts, it is not represented. The Roman representation for each Kurtöp consonant is shown in Table 98.

Recall that Kurtöp has complex onsets and as I illustrated in §6.2.1.1.1, there is tremendous variability with regard to pronunciation of complex onsets involving labial-initial members. For example, /mj-/ is often realized as /ɲ/ and /py/ may be realized as /c/. In such instances, we represent the most conservative spelling, as this is the way the words are also listed in the lexicon.

Table 98. Orthographic representation of Kurtöp consonants

	labial	dental	retroflex	palatal	velar	glottal
stops	p <p> p ^h <ph> b 	t <t> t ^h <th> d <d>	ʈ <tr> ʈ ^h <thr> ɖ <dr>	c <c> c ^h <ch> ɟ <j>	k <k> k ^h <kh> g <g>	
affricates		ts <ts> ts ^h <tsh>				
fricatives		s <s> z <z>		ɕ ^h <sh> ɕ ^l <zh>		
nasals	m <m>	n <n>		ɲ <ny>	ŋ <ng>	
laterals		l <l> ɭ <lh>				
rhotics		r <r>				
glides	w <w>			j <y>		
aspirates						h <h>

8.3.2. Vowels and suprasegmentals

As I described in §6.3.2.1, the Kurtöp vowel inventory varies depending on education and exposure to Dzongkha and Tibetan. Uneducated speakers unfamiliar with received Dzongkha and Tibetan pronunciation have the vowel and diphthong inventory: /a, e, i, o, u, au, iu, oi, ui/ while educated speakers and those who have spent a lot of time outside of the village have /ø/ and /y/ as well. For the present proposal we have decided to represent all of these sounds while keeping in mind the possibility that the community may decide to systematize the representation of words where speakers differ with regard to presence or lack of the front rounded vowels. The use of two dots above the vowels to

represent the front-rounded vowels is again based on the representation for the Dzongkha equivalents.

Table 99. Orthographic representation of Kurtöp vowels and diphthongs

	front	back	diphthong
high	i <i> y <ü>	u <u>	iu <iu> ui <ui>
mid	e <e> ø <ö>	o <o>	oi <oi>
low		a <a>	au <au>

Kurtöp contrasts vowel length on the five cardinal vowels (§6.3.3) and is represented by the use of a circumflex (^) above the vowel, as in *mrâ* /mra:/ ‘paddy’. High versus low tone is contrastive following sonorant consonants and high tone is represented with a an apostrophe (') preceding the sonorant, as in *'na* ‘nose’.

CHAPTER IX

LEXICON

The Kurtöp lexicon consists primarily of monosyllabic verb roots and di- or tri-syllabic nouns that are clearly historically derived from a monosyllabic stem plus a derivational suffix. More details about phonological words can be found in §7.4 and nouns and verbs are discussed in §10.5.2 (as lexical classes), §11.3 (in the grammar) and §10.5.5 (as a lexical class) and §16.1 (in the grammar), respectively. The aim of this chapter is to describe the lexicon in terms phonological shape and etymology.

9.1. Word shape

As I describe in §7.4, phonological words in Kurtöp generally consist of a verb plus suffixal or (rarely) prefixal morphology and are characterized by having stem-initial stress plus tone on the first syllable of the word which is usually, though not necessarily, also the stem⁷⁹. Verbs usually have two or more syllables, based on productive morphology. Nouns usually have two or three syllables -- with the last syllable being historically derived -- but phonological words involving nouns can be longer, depending on nominal suffixes or enclitics.

⁷⁹ Recent observations, after the defense of this dissertation but before the submission of the final draft suggest that word-level stress and tone can be separated in the case of verbal negation. Stress actually seems to stem-initial on verbs and does not shift to the negative prefix, when present. Tone, however, does shift to the negative prefix.

9.2. Etymologies

The majority of the Kurtöp lexicon is clearly Tibeto-Burman, though it is harder to ascertain the precise Tibeto-Burman origin of given forms, since there has clearly been heavy influence from Dzongkha and Classical Tibetan.

9.2.1. TB Inheritences

A large subset of the Kurtöp lexicon is clearly inherited from Proto-Tibeto-Burman but not obviously borrowed from Dzongkha or Classical Tibetan. I expect these forms to be native Kurtöp.

Table 100. Kurtöp inheritances from Proto-Tibeto-Burman, not shared with Central Bodish, based on reconstructions in Matisoff (2003a)

Kurtöp	Written Tibetan	PTB	
<i>bi</i>	<skur-ba>; <ster-ba>	*bəy	‘give’
<i>mipaŋ</i>	<gzhug-gu>	*may	‘tail’
<i>ju</i>	<nu-ma>; <braŋ;	*dz(y)o(:)p	‘breast’
<i>po</i>	sbrul>	*bəw; *rul; *wəy	‘snake’
<i>byo</i>	<i>d’ou</i> (Dzongkha)	*blum	‘taro’
<i>phre</i> (< <i>phral</i> >)		*pral	‘separate’
<i>brang</i> (be borne of an animal)		*brang	‘give birth’
<i>zhong</i>		*dyung	‘insect/bug’
<i>zhinti</i>		*dzya-n	‘blush/red’
<i>nin</i> (‘2.PL’)		*nang	‘2’

9.2.2. Borrowings

It is not always possible to ascertain borrowings from inherited lexicon and in fact the distinction is not always clear. In the idealized, perceived world of traditional historical linguistics, a language changes over time, in a relative vacuum without much interaction with other languages, and without much socio-cultural influences. When addressed, the issue of other languages is usually mentioned as borrowing. In this scenario, a language “borrows” a word, usually, but sometimes a phoneme or morpheme, from neighboring languages. Linguists address more intensive contact under the umbrella term of ‘areal influence’ but the details of what this involved have yet to be investigated in rigorous detail. For example, ‘areal influence’ may turn out to involve a complex combination of various stages of creolization, language loss, shift, and replacement, and/or simply borrowing.

Indeed, I expect the true history of Kurtöp is more complex than it has been laid out here, especially given the likely fact that historical tribal conflicts, Buddhism, Chöke, mainstream Bhutanese, and, more recently, Indic languages and English have been heavily influencing Kurtöp speakers for centuries. With this all being said, it is possible to concretely identify several types of borrowings into Kurtöp. The sections below, §9.2.2.1 through §9.2.2.3, represent relatively recent borrowings. It is quite possible that much of Kurtöp’s vocabulary has been borrowed at earlier stages of the language but more research is needed to definitively ascertain older borrowings from native words. Of course, this difficulty is compounded by the fact that possible many source languages for borrowings are likely to also be closely related.

9.2.2.1. Chöke

As the liturgical language, Chöke has a huge influence on Kurtöp, an influence that probably goes back several centuries and the extent of which we probably still underestimate. Nonetheless, a large subset of Kurtöp vocabulary can obviously be identified as being borrowed from Chöke, especially because they violate phonological generalizations made about Kurtöp. Obvious Chöke borrowings come from the domain of religion. Table 101^{80,81} shows some Chöke borrowings into Kurtöp.

Table 101. Kurtöp Chöke borrowings

Kurtöp	Gloss	Written Tibetan
kaḥ	‘difficulty’	Chöke དཀའ་ངལ་ <dkaa.ngal>
kélchen	‘great.eon’	Chöke བསྐལ་ཆེན་ <bshal.chen>
gètshul	‘8-vowed.monk’	Chöke <ged.tshul>

9.2.2.2. Indic

Kurtöp has a number of words of obvious Indic etymology. In many instances, however, it is not possible to ascertain whether the ultimate source was Hindi, Nepali, or perhaps an eastern Indo-Aryan language, such as Assamese or Bengali. Some Indic borrowings are illustrated in Table 102.

⁸⁰The source of *kaḥ* is Dhongthong (1988: 109).

⁸¹ The source of *kélchen* is the DDC Dictionaries.

Table 102. Kurtöp Indic borrowings

Kurtöp	Gloss	Indic
<i>capal</i>	‘sandal; slipper’	Hindi <i>cappal</i>
<i>pariwa</i>	‘pigeon’	Nepali <i>pariwa</i>
<i>karkung</i>	‘window’	Hindi <i>kirkiā</i> (plural)
<i>pura</i>	‘all’	Hindi <i>pura</i>

9.2.2.3. English

There are also a few English borrowings into Kurtöp, probably via Dzongkha. Some of these are illustrated in Table 103.

Table 103. Kurtöp English borrowings

Kurtöp	Gloss	English
<i>beskop</i>	‘movie’	bioscope
<i>jarkan</i>	‘jerry can’	jerry can

9.2.2.4. Unknown etymology

There are a few words of unknown etymology in Kurtöp, some of which are shown in Table 104.⁸²

⁸² The Khasi obtained were from my personal fieldnotes.

Table 104. Words of unknown etymology in Kurtöp

Gloss	Kurtöp	Other possible sources
‘foxtail millet (<i>Setaria Italica</i>)’	<i>ran</i>	
‘well’	<i>'um</i>	Khasi <i>um</i> ‘water’

9.3. Honorific/Phelke སཔ་སྐད་

Like Tibetan and Dzongkha, Kurtöp has a subset of honorific vocabulary, all of which is ultimately Chöke in source. Honorific vocabulary, or སཔ་སྐད་ <phal.skad> *phelke* as it is referred to in Bhutan, has already been the source of much scholarly study (e.g. DeLancey 1998; Ahga 1998; Beyer 1992). *Phelke* vocabulary is a subset of lexical items used, in theory, exclusively in situations in which speakers wish to respect, or show honor to their interlocutor or the person about whom they are speaking. In practice, the use of *phelke* is more varied, as the prescribed rules are usually not followed. Indeed, the actual use of *phelke* vocabulary in Kurtöp would be an interesting study, but it beyond the scope of this dissertation. Table 105 illustrates some *phelke* vocabulary in Kurtöp.

Table 105. *Phelke* vocabulary in Kurtöp

Phelke Form	Normal Kurtöp	Gloss
<i>kuzu</i>	<i>luspu</i>	‘body’
<i>cen</i>	<i>mî</i>	‘eye’
<i>kusha</i>	<i>sha</i>	‘flesh’
<i>'nang</i>	<i>bi</i>	‘give’
<i>ke</i>	<i>throng</i>	‘give.birth’
<i>thuk</i>	<i>'neng</i>	‘heart’

CHAPTER X

OVERVIEW OF KURTÖP SYNTAX

The aim of this chapter is to provide a foundation from which the following thirteen chapters can be understood. The first four sections provide a typological overview of syntactic properties of Kurtöp, including word order (§10.1), morphological profile (§10.2), alignment (§10.3), and predicate types (§10.4). The final section, §10.5, describes and defines the major syntactic classes in Kurtöp.

10.1. Word order

Kurtöp, like almost all other Tibeto-Burman languages⁸³ and the languages of South Asia, has verb-final syntax. Core arguments generally precede the verb and in the case of bivalent verbs, the A argument will precede the O argument. However, this SOV order is a generalization; in natural speech speakers may move the S, A and/or O argument to come after the verb, depending on pragmatic factors.

Greenberg (1963) noticed that languages with OV syntax tended to have the correlations illustrated in Table 106.

⁸³ Karen and Chinese languages have SVO word order.

Table 106. Some of Greenberg's (1963) universal OV correlations

Parameter	Correlation
adpositions	postpositions
head noun/genitive	GEN-N
head noun/modifier	MOD-N
head noun/relative clauses	RELC-N
comparatives	STANDARD-MARKER-ADJECTIVE
auxiliaries	V-AUX
question particles	sentence final
affixes	suffixes

Much of the work in typology subsequent to Greenberg has focused on disproving some of these correlations or attempting to motivate others (e.g. Payne 1985; Dryer 1988; Mithun 1987) and today many of these correlations remain, even if not universally.

The typological patterns often associated with verb-final syntax are also present in Kurtöp. For example, Kurtöp has postpositions,⁸⁴ genitive-head order (as opposed to head-genitive), verbs followed by auxiliaries, sentence final question particles, suffixes and in the comparative construction the standard comes first, followed by the marker of comparison and then the adjective (or verb, as the case may be in Kurtöp; cf. §12.4) and suffixal, rather than prefixal, morphology. Grammatical relations are encoded by case-marker enclitics. The basic word order in noun phrases is: determiner, noun, adjective, numeral.

⁸⁴ Technically, Kurtöp has only one postposition but uses a relator noun construction to encode the locational relations normally encoded by adpositions. See §11.3.7 for a detailed discussion of this topic.

10.2. Morphological typology

Croft (1990: §2.3) provides an overview of the history of morphological typology, beginning with von Schlegel (1808)'s two types of languages: affixal and inflectional. Since then, Greenberg (1954), Keenan and Comrie (1977), and others have expanded the typology to the current terminology. Languages may be *analytic*, showing a low ratio of morphemes to words, synthetic, with a small ratio of morphemes per word, or *polysynthetic*, with a large number of morphemes (often including roots) per word. With regard to the morphology itself, languages may be classified as being *isolating* (with no affixation), *agglutinative* (simple affixation), or *fusional* (remarkable morphophonological alterations).

Kurtöp tends toward polysynthetic, with many words consisting of more than one morpheme. Verbs are usually composed of two to three morphemes within three to four syllables and it is not unusual for verbs to consist of five syllables. A clause exhibiting typical morphology is illustrated by (40). The two nouns in this clause disyllabic: the genitive-marked *gonpai* 'temple=GEN' and *pangkap* 'roof'. The other disyllabic word is the relator noun *jedo* 'RN:TOP'LOC', comprised of two morphemes. The only monosyllabic word is the demonstrative *yau* 'DEM:UP' and the verb *thrangwalari* 'climb-PFV=HSY' has three morphemes across its four syllable.

- (40) *gonpai yao pangkap jedo thrangwalari*
gonpa=i yau pangkap je=do thrang-wala=ri
 temple=GEN DEM:UP roof RN:TOP=LOC climb-PFV=HSY
 ‘(She) climbed up there on top of the roof (it is said)’
 PS20061206P

On the isolating to fusional cline, Kurtöp is agglutinating, or has simple affixation/cliticization. There are suffixes/clitics that attach to nouns, numerals, adjectives and verbs, so that a large number of words are composed of a stem and at least one affix. While there is a considerable amount of affixation in Kurtöp, there is little allomorphemic alternation

10.3. Alignment and grammatical relations

Our understanding of alignment and grammatical relations in Kurtöp is still poor, due no doubt in part to the fact that grammatical relations are encoded largely by *semantic* as opposed to *syntactic* factors. For example, even though Kurtöp verbs do not mark verbal objects morphologically, the rich evidential possibilities (cf. §20) inherently limit possible referents, depending on the larger context, in any given clause. Nonetheless, a few observations can be made regarding transitivity, case-marking, and subject control, which are discussed in §10.3.1, §10.3.2, and §10.3.3, respectively.

10.3.1. Transitivity and core arguments

In Kurtöp, as in many languages of Asia, core verbal arguments are not obligatory in the sense they are obligatory in English. For example, a felicitous Kurtöp clause could

consist of a monovalent verb with its argument overt or suppressed. Likewise, a bivalent verb could occur with both of its arguments overt, with only the A argument suppressed, with only the O argument suppressed, or with neither object present. Andvik (2010: §6), describing a similar system in Tshangla, wherein arguments may be omitted if they are recoverable from discourse or even when they are not relevant. In Kurtöp, also, arguments are not overt when they are recoverable from the context, when they are not relevant, and perhaps for other reasons. The factors that predict the suppression of overt arguments in Kurtöp are complicated and beyond the scope of this dissertation.

Kurtöp verbs can be divided into two categories: monovalent and bivalent verbs.⁸⁵ Monovalent verbs are those which may take one and only one argument while bivalent verbs may take two arguments.⁸⁶ This difference is illustrated by (41–42). The data in (41) show that the verb *throng* ‘grow’ cannot take a second argument, while the verb *ke* ‘bear’, illustrated in (42–44), can take two arguments. The verb *throng* ‘grow’ is therefore monovalent while *ke* ‘bear’ is bivalent.

Note that (43) shows *ke* ‘bear’ with only the A argument overt while (44) shows *ke* ‘bear’ with only the O argument present. The presence of only the relevant argument is typical of Kurtöp discourse. Arguments can be omitted if they are not needed, either because they are recoverable from the context or not relevant.

⁸⁵ Although the analysis is still ongoing, at present, there is no evidence in Kurtöp for trivalent verbs.

⁸⁶ Bivalent verbs may be used in discourse with neither argument present, with only the A argument, or only the O argument present. What distinguishes the bivalent verbs from monovalent verbs is the *possibility* of two overt arguments; one overt argument is possible with bivalent verbs.

core argument of a monovalent verb. The term A is used for the agent-like argument of a bivalent verb while O is used for the patient-like argument of a bivalent verb.

There is no strong evidence in Kurtöp for a particular alignment type. In terms of case-marking, as I describe in §14, Kurtöp can be roughly analyzed as having a split S or active/stative system of case-marking. A arguments tend to be marked with the ergative postposition and those monovalent verbs with agentive S arguments may be optionally marked ergative for a variety of pragmatic factors. S arguments with theme semantics do not allow for this optional ergative marking. However, this description is an over simplification of the system, as the ergative is optional (the use of it depends on pragmatic factors) for some bivalent verbs while required for others.

10.3.3. Argument control

An important syntactic question that informs alignment and grammatical relations is one of argument control across clause boundaries. For example, given a transitive matrix clause and intransitive embedded clause, which argument (A or O) determines the referent of the S argument in the embedded clause is an interesting question. This is particularly relevant question in a language like Kurtöp, in which core arguments are usually suppressed yet the average sentence consists of several clauses. More work is required to fully understand the factors involved in argument control, but some observations can be made based on elicitation.

In natural speech, the sort of syntactic minimal pairs linguists like to use rarely exist, and speakers tend to disprefer these sorts of examples. Nonetheless, some

interesting observations can be made. Consider the data in (45) and (46), which were offered to me by a speaker based on translation from English.

- (45) *Tshewanggi Karma garo khanta*
Tshewang=gi Karma ga-ro khan-ta
Tshewang=ERG Karma like-INF know.how-IPFV.MIR
'Tshewang knows how to love Karma'

- (46) *Tshewanggi Karmai khitna ga ngak branta*
Tshewang=gi Karma=gi khit=na ga ngak bran-ta
Tshewang=ERG Karma=ERG 3.ABS=LOC like do know-IPFV.MIR
'Tshewang knows that Karma loves him'

The matrix clause in (45) and (46) consists of an ergative-marked A argument and a verb in imperfective aspect but the embedded clauses are different, causing a difference in the interpretation of the embedded A argument. In (45) there are no overt arguments in the embedded clause and A argument of the matrix clause has control over the S argument in the embedded clause. When the intention is for the O argument in the embedded clause to be controlled by the A argument in the matrix clause, then a different construction is required, as in (46). The fact that *Tshewang* automatically control the A argument in the embedded clause, and overt referents are required to yield control over the O, provides evidence in favor of subject control.

To say that Kurtöp always exhibits subject control, however, is premature. There is potentially some evidence against this. Consider (47) and (48):

(47) *Karma Tshewanggi jazi bito gezi...*
Karma Tshewang=gi ja-si bito ge-si
 Karma Tshewang=ERG call-NF outside go-NF
 ‘Karma_i was called by Tshewang and \emptyset_i went outside...

(48) *Tshewanggi Karma jazi bito gezi...*
Tshewang=gi Karma ja-si bito ge-si
 Tshewang=ERG Karma call-NF outside go-NF
 ‘Tshewang called Karma_i and \emptyset_i went outside...

The first example, (47), provides evidence for subject control. Although *Karma* is the O argument in the matrix clause, it is used clause-initially, focusing the argument in what could be called a passive. This argument is then co-referential with the S argument in the embedded clause. The following example (48), however, is problematic. Here, the argument *Karma* is clearly the O argument in the matrix clause but still controls the reference of the S argument in the embedded clause.

The finding that the O argument in a matrix clause would determine the co-reference in an embedded clause is surprising given 1) the fact that the A argument controls co-reference in (45); and 2) given that in both Tshangla (Andvik 2010: 120) and Dzongkha,⁸⁷ the control would be licensed by the first argument in the clause. Future

⁸⁷ The Dzongkha equivalents are:
Tshewanggi Karma b’o-di pchikha jo-di...
 Tshewang=ERG Karma call-NF outside go-NF
 ‘Tshewang_i called Karma and \emptyset_i went outside’

work with more speakers examining more contexts is needed, as is more work with the natural texts.

10.4. Sentence constructions

Kurtöp has three primary sentence types: 1) clause ending with finite verb; 2) clause ending with copula (which may or may not also consist of a nominalized clause); 3) wh-question. I illustrate each of these in the subsections below.

10.4.1. Finite verb construction

A predicate in Kurtöp may be identified by a final, finite verb or auxiliary, where a suffix encodes some tense/aspect/evidential value or imperative mode. An example is

(49):

(49) *dangninya thraksi tap geshang*

<i>dangnin-ya</i>	<i>thrak-si</i>	<i>tap</i>	<i>ge-shang</i>
yesterday-also	arrive-NF	return	go-PFV.EGO

‘Yesterday also (they) arrived
and returned back.’

PS20061206.

Karma Tshewanggi b'ô-di pchikha jo-di...
Karma Tshewang=ERG call-NF outside go-NF
‘Karma_i was called by Tshewang and ø_i went outside’

The final verb in this clause is *ge* ‘go’ which receives the suffix *-shang* ‘PFV.EGO’, and marks the clause as finite. I refer to this type of predicate as Type 1 clause structure elsewhere in the dissertation.

10.4.2. Copula

Another very common structure of a Kurtöp predicate involves a final copular verb (cf. §18.1 for a definition and discussion of verbal copulas), as opposed to finite-verb. The copula may be used to encode the normal range of copular functions, such as location, existence, or equation, but is more commonly used in conjunction with a nominalized clause, as in (50), where a clause, ending with the verb *thrak* ‘arrive’ is nominalized and immediately followed by the mirative equative copula *wenta* ‘COP.EQ.MIR’.

- (50) *wudi zimcung duimi lhakhanggi meto durmi nanggo tap thrawal wenta*
wudi zimcung duimo=i lhakhangg=gi meto durma=i
 DEM:DIST palace Demoness=GEN temple=GEN flower garden=GEN
nang=ro tap thra-pala wenta
 inside=LOC return arrive-NMZ:PFV COP.EQ.MIR
 ‘The returned back to inside the flower garden of that palace Demoness’s Temple.’
 PS20061206.1269.772P

10.4.3. Wh-question

wh- questions differ from the previous sentence types in that a particle, rather than a finite verb or verbal copula, is required at the the end of the clause. Consider (51):

- (51) *wo zhâ yo?*
wo zhâ yo
 DEM:PROX what QP.COP
 ‘What is this?’
 **wo zhâ?*

In this example there is no verb or verbal copula, simply a demonstrative, question word *zhâ* ‘what’ and the particle *yo*. The sentence is ungrammatical without *yo*. For further argumentation and examples involving the question particle copula *yo*, see §18.2.

10.5. Word classes

Several major and minor word classes in Kurtöp can be identified by their syntactic properties. Kurtöp syntactically distinguishes nouns from verbs in terms of morphology, while adjectives are distinguished from nouns primarily by their syntax. There is syntactic evidence for a category of determiner as well as numerals, which may also take special numeral morphology. With the category of verbs there is syntactic evidence for auxiliaries and copulas being a distinct class from lexical verbs. Adverbs are distinguished by their syntax as well as tend to have distinct morphological and phonological structures. These word classes are discussed below in greater detail.

10.5.1. Determiners

Determiners in Kurtöp comprise a small, closed class of elements drawn from the categories of possessive pronouns and demonstratives. Determiners are not obligatory to a NP but when present a determiner is always the first element of the NP. Within the NP there is actually room for both a genitive pronoun (first) and a demonstrative (second), suggesting that either there are actually two determiner positions or that a genitive and demonstrative together can form a genitive phrase. More work is needed to ascertain which of these options best captures the Kurtöp syntactic facts.

In (52) I illustrate a NP with one determiner (*wosi* ‘DEM:PROX’) and in (53) I illustrate a NP with two determiners (*ngaci* ‘1.GEN’, *wosi* ‘DEM:PROX’).

(52) *wosi khwi khepo*
 wosi *khwi* *khepo*
 DEM:PROX dog FOC
 ‘This dog’

(53) *ngaci wosi khwi khepo*
 ngaci *wosi* *khwi* *khepo*
 1.GEN DEM:PROX dog FOC
 ‘This dog of mine’

Determiners are discussed in more detail in §11.1.

10.5.2. Nouns

Nouns are defined by the following syntactic criteria: 1) occur in a NP with other nominal constituents (e.g. demonstrative, genitive, modifier, etc.); 2) serve as A, S or O of a verb phrase; 3) receive a nominal suffix (described in §11.4). Nouns on their own (i.e. without determiner or modifier) may constitute a NP. Adjectives and numerals, however, may also serve as a NP, and thus constituting a NP is not a defining character of a noun. There are a number of nominal suffixes, described in §11.4, but these attach to other parts of speech as well.

I describe and illustrate nouns in greater detail in §11.3, including two grammatical offshoots of nouns: relator nouns and light verb nominals. Relator nouns are a functional subset of nouns that, in contrast to general nouns, cannot follow a determiner or precede a modifier. They occur exclusively in the relator noun construction (cf. §11.3.7), following a genitive and preceding a case marker. Light verb nominals are a subset of nouns which exhibit a distribution more restricted than relator nouns. These nominals are noun-like in that they seem to serve as a direct object for verbs and always immediately precede the verb, but are unlike nouns in that they cannot be modified syntactically.

10.5.3. Numerals

Numerals are a constituent of the noun phrase. They follow the noun and, if present, the adjective. Numerals may also function as a NP on their own, serving as A, S, or O of a verb. In addition to their unique syntactic position, numerals in Kurtöp can be defined by the ability to take a small set of numeral suffixes, shown in Table 107.

Table 107. Kurtöp numeral suffixes

Kurtöp	Gloss
<i>-laka</i>	‘both/all’ (Hindi <i>-ō</i>)
<i>-bakti</i>	‘around’

The form *-laka*, often shortened to *-ka* can be roughly glossed as ‘all’ or ‘both’ in English. In this way it is more like Mandarin Chinese 都 *dōu* or Hindi *-ō* than English ‘all’; that is, it is used with all numerals above one, not just numerals above two. For example, *zon-laka* ‘two-all’ translates to ‘both’ while *sum-laka* ‘three-all’ translates to ‘all three’. The suffix *-laka* has also been found with the quantifier *rita* ‘all’, as in (54), suggesting that *rita* is a numeral.

The other numeral suffix *-bakti*, sometimes shortened to *-ba* translates roughly into English ‘-ish’, or ‘approximately’. Thus, *yanga-bakti* means ‘around five’ or ‘five or so’.

- (54) *zû ritakanang patma throngzi*
zû rita-laka=nang patma throng-zi
 body all-ALL=LOC river.weed grow-NF
 ‘River weeds were growing all over
 (her) whole body.’
 PS20061206.1733.549.P

10.5.4. Adjectives

There are primarily two ways Kurtöp can modify nouns in terms of attributes or property concepts. The first way is via a genitive construction [$N_{\text{MOD}}=\text{GEN } N_{\text{HEAD}}$], which I describe in §11.2. The second way Kurtöp may modify a noun in terms of attribution is with an adjective. The syntactic class of adjectives is characterized by 1) syntactic position between noun and numerals; 2) ability to receive the individuating suffix *-la*; 3) tendency to be disyllabic with the second syllable being *-pa* or *-ti*. Like numerals, adjectives can also function as a NP. Adjectives are like verbs in that they may occur in the comparative construction (cf. §12.4). Chapter 12 is devoted to a discussion of nominal modifiers, including adjectives, which are described in §12.1.

The syntactic position of adjectives is illustrated in (55), where *khwi* ‘dog’ is the noun, *chitpu* ‘big’ is the adjective, and *’nî* ‘seven’ is the numeral.

- (55) *khwi chitpu ’nî*
 khwi *chitpu* *’nî*
 dog big seven
 ‘Seven big dogs’

10.5.5. Verbs

Verb stems in Kurtöp are almost exclusively monosyllabic. In unmarked position they follow their nominal arguments (if any). Kurtöp verbs are identified by their ability to take the negative prefix or any of the wide selection of verbal suffixes described in §16.2.2. However, there are two additional sub-classes of verbs, that is, auxiliaries and

copulas. Each of these categories is syntactically defined, as I describe below. Within these categories there are a few verbs which do not readily fit into the definitions; I describe these as well. (56) illustrates several verbs, including a lexical verb (*zut* ‘eat’), and auxiliary (*ni* ‘stay’) and a copula (*wenta*).

- (56) *tshe tongphui za sizi zut nisala ngaksi wenta*
tshe tongphu=i za si-si zut ni-sala ngaksi wenta
 DM pine=GEN fruit pluck-NF eat stay-PFV QUOT COP.EQ.MIR
 ‘Then it is said that he stayed plucking and eating the pinenuts.’
 Lama200812311.2851.770LC

10.5.5.1. Lexical verbs

Lexical verbs constitute the majority of Kurtöp verbs. Syntactically, they take the full range of verbal morphology. They differ from auxiliaries in that, when immediately following a non-final marked verb in a clause chain, the non-final marking is obligatory.

10.5.5.2. Auxiliaries

Auxiliaries are a subset of verbs, comprising a small class of verbs with semantics typically associated with grammaticalization (e.g. such as ‘go’, ‘send’, ‘sit’, etc.). When both lexical verbs and auxiliary verbs are present, the auxiliary will follow the lexical verb. Auxiliaries are syntactically identical with main verbs with the one exception that auxiliaries, when used the final verb in a clause-chain, do not require the converb to be

suffixed with non-final marking, as a lexical verb would, resulting in a serial verb construction⁸⁸ (cf. §21.2.5.5.1).

Compare (57) with (58):

- (57) *mojani pra bjur geshang ngaksi wenta*
moja-ni pra byur ge-shang ngaksi wenta
 woman-CFOC monkey transform go-PFV.EGO QUOT COP.EQ.MIR
 ‘The the woman is said to have transformed into a monkey.’
 Lama200812311. 2896.567.LC

- (58) *dangninya thraksi tap geshang*
dangnin-ya thrak-si tap ge-shang
 yesterday-also arrive-NF return go-PFV.EGO
 ‘Yesterday also (they) arrived and returned back.’
 PS20061206.

In (57) the converb *bjur* ‘transform’ is immediately followed by the auxiliary *ge* ‘go’ and thus *bjur* is unmarked; it does not have the non-final suffix. In (58), on the other hand, the converb *thrak* ‘arrive’ is followed by another lexical verb *tap* ‘return’ and thus the converb must receive the non-final suffix. This is the only difference which syntactically separates the auxiliaries from the lexical verbs.

⁸⁸ As will be noted in the discussion on clause-chaining and converbs (§21.2.5), I do not analyze verb-auxiliary sequences as serial verb constructions because of the fact that the non-final suffix *-si* is always recoverable on the converb.

For a full list of Kurtöp auxiliaries, refer to §16.1.4. A thorough analysis of converbs and the Kurtöp clause-chaining construction is in §21.2.5.

10.5.5.3. *ngak* ‘do’

The verb *ngak* ‘do’ maintains a unique position as a verb in Kurtöp syntax. It may function as a main verb meaning ‘do’, as an auxiliary, or as a quotative. The full form of the quotative is actually *ngaksi*, or the verb plus non-final morphology, but in comfortable speech and natural discourse the form is often realized simply as *ngâ*.

10.5.5.4. The quasi-verb *mik*

The word *mik* defies classification as a straightforward verb; it cannot receive the negative prefix and may be suffixed only with the non-final verbal suffix.

Etymologically, *mik* derives from the word for ‘eye’ but as a quasi-verb it does not evidence fully nominal behavior. The morphosyntactic behavior of quasi-verb *mik* is demonstrated in (59), where *mik* receives the non-final clause-chaining suffix *-si*.

Despite the seemingly idiosyncratic behavior of this word, it is very common and in fact the only way to translate English ‘see’ into Kurtöp.

- (59) *pon mikisra methung*
 pon mik-si-ra me-thung
 king eye-NF-EMPH NEG-do
 ‘(Some) haven’t seen the king at all’
 SPh.TsC20081022.SPh

10.5.5.5. Copular verbs

Copular verbs, often simply referred to as ‘copulas’ and distinguished from the ‘copular particle’ (cf. §18) in this dissertation, are similar to verbs in that they canonically occur at the end of a clause, preceding any nominal or nominalized arguments. Unlike verbs, they cannot be negated; instead there are separate negative forms of each copula. Synchronically, they cannot take any verbal suffix but there are several forms of the copulas, depending on evidential or evidential-like value, which are obviously historically derived from current and former verb suffixes (see §18 for a full treatment of Kurtöp copulas). Copulas are like verbs in that they may occur with any verbal clitic, as in (60) and (61) below.

- (60) *'mantsha wenri*
'man-tsha *wen=ri*
medicine-salt COP.EQ=HSY
'(They) say it's medicinal salt'
DungkarTS20081231.DT
- (61) *'aku Tshewang Tenzin nâmi*
'aku Tshewang Tenzin nâ=mi
uncle Tshewang Tenzin COP.EXIS.MIR=TAG
'There's uncle Tshewan Tenzin, right'
SBC20051127.KW

10.5.5.5.1. The existential copulas

Within the syntactic category of copulas it is possible to identify a sub-category of copulas, consisting of the existential copulas *nâ* (affirmative) and *mû* (negative). While existential copulas do not take the range of finite verbal suffixes synchronically, they can be nominalized.⁸⁹ This is clearly evidence of their relative recent recruitment into the category of copulas from previous lexical verbs.

The affirmative existential verb is shown nominalized with *-khan* and *-sa* in (62) and (63), respectively.

- (62) *tshemo tshe nâkhan soso wentami*
tshemo tshe nâ-khan soso wenta-mi
 but DM COP.EXIS.MIR-NMZ:IPFV different COP.EQ.MIR-TAG
 ‘But the one that is there is different.’
 SaT.SW20090917.1359.553.SaT

- (63) *tshe zasa thungsa naksa thenang yoi kholu ngaksi*
tshe za-sa thung-sa nak-sa the=nang yoi
 DM eat-NMZ do-NMZ:LOC COP.EXIS-NMZ:LOC DEF=LOC reach
khor-lu ngaksi
 take-IMP QUOT
 ‘saying “take me a place where there is food and water.”’
 Lama200812311. 2818.738-2820.161LC

⁸⁹ Note that the formally nominalized form of the affirmative copula, *nawala*, no longer retains any nominal semantics and has grammaticalized as the affirmative, unmarked copula (cf. §18.1.2.1 and §20.2.1.1.1).

The negative existential copula can also be nominalized with *-sa* and *-khan*, as in (64) and (65).

(64) *ta mutkhan gap gepana kerzi*
ta mut-khan gapo gepa=na ker-zi
horse COP.EXIS.NEG-NMZ:IPFV PL.FOC back=LOC carry-NF
‘.. those without horses, carrying (the luggage) on their backs...’
SPhTsC20081022.379.483SPh

(65) *gari yam mutsa*
gari yam mut-sa
car road COP.EXIS.NEG-NMZ:LOC
‘Where there is no car road’

10.5.5.5.2. The equational copulas

The affirmative and negative equational copulas are *wen* and *min*, respectively. These forms can also be nominalized with *-khan* and *-sa*, as I show in the elicited examples below; there are no examples of these in the texts. The data in (66-67) illustrate nominalization of the affirmative equational copula and (68-69) show nominalization of the negative equational copula.

(66) *wensa*
wen-sa
COP.EQ-NMZ:LOC
‘The right place’

(67) **wenkhan**
wen-khan
COP.EQ-NMZ:IPFV
'The one which is right'

(68) **minsa**
min-sa
COP.EQ.NEG-NMZ:LOC
'The wrong place'

(69) **minkhan**
min-khan
COP.EQ.NEG-NMZ:IPFV
'The one that is wrong'

10.5.6. Adverbs

Kurtöp also has a set of adverbs, which are always composed of at least two syllables and are analyzeable diachronically. The second syllable is often *-pa* or *-ba* or a reduplication of the first syllable. Adverbs themselves are often reduplicated as well.

- (72) *'langpochegi thrangthrang gewani tshe wo seng lodongnang ge ngaksi*
'langpoché=gi thrang-thrang ge-wa=ni tshe wo
 elephant=ERG straight-straight go-NMZ=ABL DM DEM:PROX
seng lodong=nang ge ngaksi
 tree hole=LOC go QUOT
 'It is said that the elephant, having gone straight away, went into this hole
 in the tree.'
 PS20061206

10.5.7. Morphemes smaller than the word

This section discusses morphemes in Kurtöp which are smaller than words and require a stem or word in order to be realized. I make a distinction between affixes, clitics, and particles, as described below.

10.5.7.1. Affixes

I will use the term 'affix' for the category of bound morphemes which generally affix to one category of speech. The largest subset of these forms is found as suffix to the verb, though there are nominal suffixes as well. There is one verb prefix in the language.

10.5.7.2. Clitics

Clitics, like affixes, are bound forms that form phonological words with their hosts, though unlike affixes, do not necessarily do so. Kurtöp clitics generally attach at the phrasal level, though there are instances in which it is ambiguous whether the clitic is attaching to a word or a phrase. There are only enclitics in Kurtöp and no proclitics.

10.5.7.3. Particles

Kurtöp particles are primarily defined as the structural category of forms that can join with other lexical items as one phonological word, but have a grammatical, rather than lexical, function. In this way, particles can be contrasted with nouns and verbs, which are their own phonological words. Particles are also separate from affixes and clitics in that they *may* form their own phonological words and are not *necessarily* phonologically bound.

The question copula *yo* is an example of a particle in Kurtöp. In (73) I show how it retains its status as a word in slow, careful speech while in (74) the copula has attached to the previous word phonologically.⁹⁰

(73) '*au gewala yo?*
 '*au* *ge-pala yo*
 where go-PFV QP.COP
 'Where did (you) go?'

(74) '*au gewalyo?*
 '*au* *ge-pala=yo*
 where go-PFV=QP.COP
 'Where did (you) go?'

⁹⁰ Note that (74) also illustrates the difference between grammatical and phonological words. The fact that the final *-a* of *gewala* is deleted is evidence of *gewala*'s status as a grammatical word. The attachment of the particle *yo* forms a phonological word composed of the grammatical word *gewala* plus the particle *yo*.

CHAPTER XI

NOUNS AND THE NOUN PHRASE

Noun phrases in Kurtöp consist of a noun or pronoun, plus optionally a determiner and/or genitive phrase preceding the noun, and optionally an adjective or numeral/numeral phrase following the noun. The noun itself may actually be a nominalized phrase (cf. §15). Case suffixes are clitics which suffix to the right-most boundary of the noun phrase. This chapter first presents the syntactic categories in the noun phrase (immediately below) followed by a more thorough description of each. Determiners are discussed in §11.1; genitive expressions are discussed in §11.2; nouns are discussed in §11.3; Nominal suffixes are described in §11.4; modifiers (adjectives and numerals) are outlined in §11.5; and §11.6 describes the category of phrasal clitics, including case markers. The topics of classifiers (§11.7) and reduplication (§11.8) conclude this chapter.

The order of NP constituents is summarized by Figure 41.

[(DET) (GEN P) N (ADJ P) (QUANT)] (Case Clitic)

Figure 41. The order of nominal constituents in the Kurtöp Noun Phrase.

An example of a NP with a genitive phrase, noun and adjective from natural conversation is shown in (75).

- (75) *khiri jachunggi 'usha jikpa*
khiri jachung=gi 'usha jikpa
 3.REFL.GEN garuda=GEN hat.HON big
 'his big garuda hat'
 SPh.TsC20081022.3162.852SPh

In all text examples where numerals and adjectives co-occur the adjective is affixed with the individualizer as in (76-77).

- (76) *phâ jikpal the khor ngaksi*
phâ jikpa-la the khor ngaksi
 pig big-IDZ one carry QUOT
 'taking one big pig...'
 SPh.TsC20081022.3162.852SPh

- (77) *wo gor 'lep jikpal the nâ ngaksi*
wo gor 'lep jikpa-la the nâ ngaksi
 PROX stone flat.one big-IDZ one COP.EXIS.MIR QUOT
 'There is this one big stone slab.'
 Lama200812311.1446.182LC

It seems that the concomitant presence of the individuator *-la* suffixed to the adjective with a numeral is due to the pragmatic fact that when addressing a number of a particular noun while also modifying it in terms of an adjectival property the entity being discussed is inherently individuated. Thus, the individuator *-la* is present in all textual

examples. However, in elicitation, speakers agree that a non-individuated adjective may precede a numeral, as in (78). See §11.4.2 for a detailed discussion of individuator *-la*.

- (78) *khwi chitpu 'nî rata*
khwi chitpu 'nî ra-ta
dog big seven come-IPFV.MIR
'Seven big dogs are coming.'
KTElicitation20080218

A demonstrative and genitive can co-occur in a NP, unlike in English. An example is (79), where the demonstrative *wo* and possessive pronoun *ngaci* are both present.

- (79) *wo ngaci nga*
wo ngaci nga
DEM:PROX 1.GEN drum
'this drum of mine'
Lama200812311.2569.938LC

11.1. Determiners

The first position in the Kurtöp NP is the syntactic position of determiner. The position is optional and can be filled by a demonstrative or genitive pronoun, or, more rarely, both a demonstrative and genitive personal pronoun. Demonstrative determiners, though they can function as NPs on their own, should be be confused with other

proforms, such as pro-adverbials (cf. §13.2), which cannot fulfill the syntactic position of determiner. I illustrate the demonstrative determiners immediately below but reserve a discussion of genitive pronouns for §13.1.

Demonstratives in Kurtöp comprise a small, closed set of forms that occupy the first syntactic position of a noun phrase. The four forms demonstrate values of proximity or topographical deixis, as summarized in Table 108.

Table 108. Kurtöp demonstrative determiners

Form	Gloss
<i>wo ~ wozi</i>	PROXIMATE
<i>wudi</i>	DISTAL
<i>wome</i>	PROXIMATE.DOWN
<i>woye</i>	PROXIMATE.UP

The proximate demonstrative *wo* is illustrated in (80).

(80) *wo seshu metona khi 'nga butsi*

wo *seshu* *meto=na* *khi* *'ngâ* *but-si*
 DEM:PROX marigold flower=LOC 3.ERG blessing blow-NF

‘He blew the blessing on the marigold...’

LC200812311.2882.427LC

In (81) the distal demonstrative follows the locative adverb *thu* as the first member in the NP *wudi kwekpani* ‘DEM.DIST crown=ABL’.

(81) *thu wudi kwekpani yot gwar cangko khormal ngak*

thu wudi kwekpa=ni yoto gwar cang-to khor-male
DIST DEM:DIST crown=ABL DIR:DN turn throw-INF take-NMZ:IRR

‘Taking to throw over there from the top...’

PS20061206.1342.577P

The other two demonstratives specify location of a noun as being higher or lower than the deictic center; *woye* is used for referents higher than the deictic center and with *wome* used for referents below the deictic center. These forms are shown in (82) and (83), respectively.

(82) *woye khwei zurna thang pang cingkul the nâ*

woye khwe=gi zur=na thang pang cingu-la the
DEM:UP water=GEN edge=LOC field open.space small-IDZ DEF

nâ

COP.EXIS.MIR

‘At the edge of the water down there there is a small, open plane.’

SBC20051127.7KW

(83) *wome thrî ranarang dorti shawalari la*

wome thri=gi ra=na=rang dorti sha-wala=ri la
DEM:DN throne=GEN root=LOC=EMPH once die.HON-PFV=HSY POL

‘At the root of the throne down there he died once (it is said).’

PS20061206.0486.435P

The form *wo* also appears as *wozi*, both in the syntactic position of demonstrative as well as noun. In (84) the demonstrative *wozi* is used as a pronoun and in (85) is used as a demonstrative.

- (84) *wozi nawala*
wozi *nawala*
 DEM:PROX COP.EXIS
 ‘We had this.’
 SBC2051127KW

- (85) *wozi chösham nanggo*
wozi *chösham* *nang=go*
 DEM:PROX alter.room inside=LOC
 ‘Inside this alter room’
 PS20061206.0342.988P

The alternate *wo* is also found in texts as a simple (uncliticized) noun as well, as in (86), but in general the form *wozi* is found much commonly as a simple pronoun. I suspect this may be due to a preference for minimally disyllabic word structure.

- (86) *tshe wo nâmi*
tshe *wo* *nâ=mi*
 DM DEM:PROX COP.EXIS.MIR=TAG
 ‘We have this, right.’
 Rice.Harvest20081022.77.408PS

- (87) *wudi zimchung duimi lhakhanggi meto durmi nanggo tap thrawal wenta*
wudi zimchung duimo=gi lhakhangg=gi meto durma=gi
 DEM:DIST palace Demoness=GEN temple=GEN flower garden=GEN
nang=ro tap thra-wala wenta
 inside=LOC return arrive-NMZ:PFV COP.EQ.MIR
 ‘The returned back to inside the flower garden of that palace Demoness’s Temple.’
 PS20061206.1269.772P

11.2. Genitive phrases

Genitive phrases in Kurtöp NPs follow demonstratives and precede nouns. An example of a genitive followed by the demonstrative is (88), in which case the proximate demonstrative *wo* is followed by the first person reflexive genitive *ngaragi*.

- (88) *tshé wo ngarigi semna rakhan pong*
tshé wo ngara=gi sem=na ra-khan pong
 DM DEM:PROX 1.REFL=GEN mind=LOC come-NMZ:IPFV PL
 ‘These things which come to my mind’
 PS20061206.1269.772P

There were limited such examples in the texts but it is easy for speakers to create such examples during elicitation. For example, a speaker could contrast (89) with (90) in a context where they had two houses, one located close to the deictic center and one located further away.

(89) *wo ngaci me*
wo ngaci me
 DEM:PROX 1.GEN house
 ‘This house of mine’
 Elicitation20100611.KL

(90) *wudi ngaci me*
wudi ngaci me
 DEM:DIST 1.GEN house
 ‘That house of mine’
 Elicitation20100611.KL

Noun phrases involving genitives in Kurtöp usually have the structure: POSSESSOR=GEN POSSESSED, though occasionally the genitive is simply omitted. The possessor may be a noun or an entire NP; in this sense, the genitive is a clitic (cf. §11.6.6.4). Identifying the form of the genitive is not straightforward, as it appears as though two, or perhaps more, systems have collapsed over time, which I speculate has happened under influence from Dzongkha and Chöke. The general distribution of the Kurtöp genitive forms is summarized in Table 109.

Table 109. Kurtöp genitive forms

Form	Environment
= <i>gi</i>	all
= <i>li</i>	Following nasal, vowel
= <i>i</i>	Following vowel

The forms =*gi* and =*i* are identical to ergative forms in Tibetan but =*li* is not found in Tibetan. While it is tempting to propose that the -*gi* genitive is a shared innovation with Classical Tibetan, there are some problems with this hypothesis. First, it is not clear that =*gi* reconstructs throughout East Bodish. There is no evidence for it in Khengkha and though it is found in Bumthap, it co-occurs with the genitive -*le*. A form *-*ku* is shared between Chali,⁹¹ Dakpa and Dzala, though it is not clear if this form reconstructs to the parent language for all of East Bodish, or if it is unique to an intermediate parent for these three languages.

Speakers will allow =*gi* in any context and it is commonly found throughout the textual database. Likewise, =*i* is predictably found in place of a word-final vowel; for example, *Pema*=*GEN* > *Pemi*. The distribution of =*li*, on the other hand, is impossible to predict and it rarely occurs. I have never witnessed it myself but it does occur on occasion throughout the textual database from a variety of speakers. When asked about the difference between =*gi* ~ =*i* and =*li*, speakers report the forms have the same function. Van Driem (1995a) describes the ergative for Bumthap as -*le* but also states that the form -*gi*, under the influence of Dzongkha and Chöke, is also used (1995a: 22). Given that Bumthap and Khengkha are Kurtöp's sister languages, that there is no evidence of =*gi* in Khengkha, that =*li/le* is shared between Kurtöp and Bumthap, and that the presence of =*gi* in Bumthap is argued to be due to influence from Dzongkha and Chöke, I argue that =*gi* ~ =*i* is a borrowing in Kurtöp, and =*li* is the native Kurtöp form, now

⁹¹ The reflex in Chali is -*u*.

Table 110. Kurtöp genitive pronouns

	Singular		Plural	
	Plain	Reflexive	Plain	Reflexive
1 st	<i>ngaci</i>	<i>ngari/ngaragi</i>	<i>neci</i>	<i>neri/neragi</i>
2 nd	<i>wici</i>	<i>weri/weragi</i>	<i>ningi</i>	
3 rd	<i>khici</i>	<i>khiri/khiragi</i>	<i>boci</i>	<i>bori/boragi</i>
who	<i>'eci</i>			

The following is a brief illustration of the difference of the native versus borrowed pronoun construction. (93) is extracted from a conversation between two friends, residing in the U.S. The entire conversation between these two friends contains very little honorific vocabulary and no use of the honorific particle *la*. When present, the honorific vocabulary is limited to discussions about Rinpoches.⁹² The pronoun *ngaci* ‘1.GEN’ in (93) is the expected form.

- (93) *da ngaci nomi...*
da *ngaci nomi*
 now 1.GEN younger.sister
 ‘Now my younger sister...’
 SBC20051127.KW

⁹² Rinpoches are highly-respected Buddhist leaders.

(93) contrasts with (94), which is extracted from a narrative by a former lay monk. The narrative was intended to be a formal introduction to the Kurtöp language community and the speaker, KZ, dressed in a *g'o* (formal Bhutanese attire) for the recording. The narrative is scattered with honorific vocabulary directed at the audience (the author and Karma Tshering), frequently including the honorific particle *la*. Note that, in addition to the non-native *ngara=gi*, '1.REFL=GEN', the speaker slips into Dzongkha with the word *yü* 'village', and has to self-correct to the proper Kurtöp form *trong*.

(94) *tshe ngaragi kesa khepo tshe Kurtö geo 'yü** Tabining wen -- trong khep Tabining wen la*

<i>tshe</i>	<i>ngara=gi</i>	<i>ke-sa</i>		<i>khepo</i>	<i>tshe</i>	<i>Kurtö</i>	<i>geo</i>
DM	1.REFL=GEN	give.birth-NMZ:LOC	FOC	DM	Kurtö	district	
<i>'yü**⁹³</i>		<i>Tabi=ning</i>	<i>wen</i>	<i>trong</i>	<i>khepo</i>	<i>Tabi=ning</i>	
village		Tabi=ABL	COP.EQ	village	FOC	Tabi=ABL	

'My own birth place, it's from the Kurtö Geok village Tabi, from the village Tabi.'

KZ200505151.9.137-13.593KZ

11.2.2. Double genitive marking⁹⁴

Possessive pronouns can also be suffixed with the morpheme *-ki*, probably an old nominalizer (cf. §15.3 and §16.2.2.14). The general tendency in these 'doubly-marked'

⁹³ The use of two stars (**) here and throughout the dissertation indicates a borrowed form.

⁹⁴ My designation of this construction as 'double genitive' is due to the assumption that the synchronic genitive pronouns are derived historically from the nominalizer *-ki* affixed to the pronominal base. However, more work is needed to prove this. It may turn out that the origin of the genitive in the genitive pronouns is not at all related to the nominalizer *-ki* and therefore 'double genitive' would be an infelicitous term.

pronouns is for them to stand in as a full NP, similar to the English forms *mine*, *yours*, *his*, *hers*, etc. Examples are (95), (96) and (97).

(95) *gir thungna dar gewa sho ngaciki*

gir thung-nani dar ge-wa sho ngaci-ki
 revolve do-COND fall go-NMZ EMPH 1.GEN=GEN

‘Mine fell while it was turning around.’

SPh.TsC20081022.TsC

(96) *wo bank**gi me khapo bociki wentami*

*wo bank**=gi me khapo bociki wenta-mi*
 DEM.PROX bank=GEN house FOC 3.PL.GEN=GEN COP.EQ.MIR-TAG

‘This house of the bank’s was theirs, right.’

SBC20051127.KW

(97) *ner lhuntshiki pong draksho khirakorang*

neri lhuntshi=gi-ki pong draksho khira=ro=rang
 1.PL.INCL.GEN Lhüntshi=GEN=GEN PL Dr’âsho 3.REFL=LOC=EMPH

‘Our Lhüntshi’s (were) for Dr’âsho himself only.’

SPh.TsC20081022.2997.009.SPh

A doubly-marked genitive, however, may also occur as a modifier to a noun, as the elicited example in (98) illustrates. It is not yet clear what the difference between (98) and *boci me* ‘their house’ would be.

- (98) *bociki me*
boci-ki *me*
 3.PL.GEN=GEN house
 ‘Their house’
 KLElicitation.201006

11.2.3. Lack of genitive marking

There are several examples in the texts in which the genitive marking is lacking from the possessor, despite the fact that the genitive function is understood. The tendency to drop the genitive has led, I believe, to compounds. However, the examples described in here are not compounds; they are separate phonological words, rather than one word with compound stress.

- (99) *bjar mar she dro*
bjar *mar* *she* *dro*
 summer butter cube six
 ‘six cubes of butter (made in the) summer’
 SPh.TsC20081022.669.897.SPh

11.3. Nouns

Nouns in Kurtöp constitute a rich lexical class and may be monosyllabic, disyllabic or tri-syllabic. As I described in §10.5.2, nouns are defined by the ability to occur in a NP with other nominal constituents (e.g. demonstrative, genitive, modifier,

etc.), serve as the subject or object of a verb phrase and receive a nominal suffix. Nouns follow determiners but precede modifiers.

In this section I describe nouns in terms of word shape (§11.3.1–§11.3.4), gender (§11.3.5), and count/mass distinction (§11.3.6). In §11.3.7 I describe relator nouns, a grammaticalized offshoot of nouns used in specifying locational relationships.

11.3.1. Monosyllabic nouns

Many nouns that denote basic concepts are monosyllabic, some of which are shown in Table 111.

Table 111. Some monosyllabic nouns in Kurtöp

Kurtöp	Gloss
<i>khwe</i>	‘water’
<i>khwi</i>	‘dog’
<i>wa</i>	‘trough’
<i>me</i>	‘house’
<i>ju</i>	‘milk’
<i>zhong</i>	‘insect’
<i>kwa</i>	‘tooth’
<i>yâ</i>	‘hand’
<i>seng</i>	‘tree’
<i>mî</i>	‘eye’
<i>pheng</i>	‘clay pot’

11.3.2. Disyllabic nouns

Disyllabic nouns probably constitute the most common shape of nouns. These can be subdivided into three types: compounds, those with a historically analyzable suffix, and those without historically analyzable morphemes. Phonologically, the words illustrated in Table 112 are different. Words which are obvious synchronic compounds, such as *phokhwi*, have compound stress; while words like *khauti*, which are not as synchronically transparent, receive normal stress. Table 112 provides examples of disyllabic nominal compounds in Kurtöp.

Table 112. Some disyllabic compound nouns in Kurtöp

Kurtöp	Gloss	Etymology
<i>khauti</i>	‘egg’	<i>khawa</i> ‘chicken’ + <i>ti</i> ‘egg’
<i>phokhwi</i>	‘male dog’	<i>pho</i> ‘male’ + <i>khwi</i> ‘dog’
<i>phrumkam</i>	‘dried cheese’	<i>phrum</i> ‘cheese’ + <i>kam</i> ‘dry’
<i>badu</i>	‘cowherder’	<i>ba</i> ‘female mithun’ + <i>du</i> ‘herd’
<i>bamar</i>	‘local butter’	<i>ba</i> ‘female mithun’ + <i>mar</i> ‘butter’
<i>mikco</i>	‘sleep’	<i>mik</i> ‘eye’ + <i>co</i> ‘feces’
<i>kammrâ</i>	‘dry rice’	<i>kam</i> ‘dry’ + <i>mrâ</i> ‘rice’

Another set of disyllabic nouns in Kurtöp can be analyzed as being composed of a root plus a suffix. While there are still synchronic nominalizers in the language (cf. §15), for most of the nouns of this type, the suffix is no longer synchronically transparent.

Table 113. Disyllabic nouns in Kurtöp, composed of a root + suffix

Kurtöp	Gloss	Etymology
<i>tawa</i>	‘leg’	<i>ta</i> ?? + <i>-wa</i> ‘NMZ’
<i>kwekpa</i>	‘crown’	<i>kwek</i> ?? + <i>pa</i> ‘NMZ’
<i>kangpu</i>	‘balloon’	<i>kang</i> ?? + <i>pu</i> ‘NMZ’
<i>kawa</i>	‘eagle’	<i>ka</i> ?? + <i>-wa</i> ‘NMZ’
<i>kitpa</i>	‘ice’	<i>kit</i> ?? + <i>pa</i> ‘NMZ’
<i>garba</i>	‘thickness’	
<i>garpa</i>	‘personal attendant’	
<i>garwa</i>	‘blacksmith’	

A third set of disyllabic nouns in Kurtöp is composed of syllables of unknown etymology. Some of these are illustrated in Table 114.

Table 114. Disyllabic nouns in Kurtöp, composed of unknown syllables

Kurtöp	Gloss	Etymological notes
<i>gami</i>	‘fire’	<i>me</i> ‘fire’
<i>khauya</i>	‘chick’	<i>khawa</i> ‘hen’ + <i>ya</i> ‘baby’?
<i>bauya</i>	‘calf’	<i>bawa</i> ?? + <i>ya</i> ‘baby’?
<i>guyung</i>	‘head’	<i>gunu</i> ‘head’ (Phobjip), <i>guto</i> ‘head’ (Dzongkha)

11.3.3. Trisyllabic nouns

A substantial number of nouns in Kurtöp are trisyllabic, usually containing a final syllable which is historically analyzable. For example, in Table 115, several nouns end with the formative *-ling*, some with *-la*, and others with *-wa* or *-ma*. The formative *-ling*

is found most commonly in bird names, and given the fact that it means ‘jump/fly’ synchronically, I suspect the form in the nouns below has its origins as a verb meaning jump or fly. The diachronic trajectory in these instances would be something like ‘jump/fly’ > bird suffix > generic nominalizer, with its current function somewhat akin to a more grammaticalized ‘thing’, ‘thingy’, or ‘thingamajig’ in English.

Table 115. Trisyllabic nouns in Kurtöp

Kurtöp	Gloss	Etymological notes
<i>khashaling</i>	‘plant used in making curry’	
<i>cukaling</i>	‘armpit’	
<i>khukshaling</i>	‘Common Hoopoe’	
<i>khuntula</i>	‘wooden spatula’	
<i>khuntola</i>	‘fist’	
<i>gaziwa</i>	‘centipede’	
<i>galingma</i>	‘lizard’	
<i>cangmaling</i>	‘plant type’	
<i>curcuma</i>	‘spike-throwing game’	
<i>banggala</i>	‘chile’	
<i>zhimbula</i>	‘cat’	Dzala <i>zhimu</i> (Genetti 2009)

The history of the formative *-la* is tied with its use as an individuator (§11.4.2). While it is clearly still synchronically productive, I believe it has grammaticalized as a syllable in several nouns, such as *banggala* ‘chile’ and *zhimbula* ‘cat’. The trajectory here would be one of reanalysis, such that an individuated entity becomes understood to be the entity itself. Presumably, the words ending with *-wa* or *-ma* reflect the same old nominalizer described above.

11.3.4. Compounds

Compounds are a productive aspect of Kurtöp grammar. The overall meaning is often greater than the sum of the parts and the same meaning is not present if the order of the two constituents is reversed. This is illustrated in (100) wherein the composition of *brangsa* ‘shelter’ plus *mong* ‘woven bamboo’ yields the interpretation ‘woven bamboo shelter’ while reversing the order of the nouns does not.

(100) *brangsa-mong*

brangsa *mong*

shelter woven.bamboo

‘woven bamboo shelter’

SPh.TsC20081022.1568.900SPh

**mong brangsa*

11.3.5. Gender

Kurtöp, as is common amongst Tibeto-Burman languages, does not code gender in the sense of Romance or German nouns, in which each noun receives an obligatory male or female (or neuter in the case of German) gender. Neither is gender in Kurtöp similar to gender in Hindi, in which the verb is obligatorily coded for the gender of the A, S, or O.⁹⁵ Rather, a subset of animate nouns may be marked for gender. As I show in

⁹⁵ In Hindi, the verb in perfective aspect will agree in gender with the O, while in all other tenses/aspects the verb will agree with the A/S argument.

Table 116 below, forms denoting males often involve a voiceless labial stop while forms for females involve a labial nasal.

Table 116. Kurtöp “gendered” nouns

Female	Male
<i>matsang</i> ‘wife and daughters’	<i>patsang</i> ‘father and sons’
<i>moja</i> ‘girls’	<i>phoja</i> ‘boys’
<i>mokhwi</i> ‘female.dog’	<i>phokhwi</i> ‘male.dog’
<i>mochu</i> ‘female.hot spring’	<i>phochu</i> ‘male.hot spring’
<i>mopzang</i> ‘glamorous.woman’	<i>phopzang</i> ‘handsome.man’
<i>mopsa</i> ‘wife’	<i>phopsa</i> ‘husband’
<i>mopun</i> ‘female.relative’	<i>phopun</i> ‘male relative’
<i>modre</i> ‘females’	<i>phodre</i> ‘males’
	<i>phochen</i> ‘gelding’
<i>ganmo</i> ‘old.woman’	<i>gatpo</i> ‘old.man’
<i>mogo</i> ‘female.dress’	<i>phogo</i> ‘male.dress’

The lexical status of *mo* in the language is somewhat unclear. On the one hand, it occurs mainly in the forms shown in Table 116 and is not generally used productively as a prefix or suffix. However, speakers can understand examples such as *mowam* ‘female.bear’ or *mongiya* ‘female.mouse’, given the appropriate context. Neither *mo* nor *pho* may be used as a noun on its own, as is shown by the negative examples in (101) and (102).

(101) **mo gapo*

<i>mo</i>	<i>gapo</i>
female	PL.FOC

(102) **pho gapo*

<i>pho</i>	<i>gapo</i>
female	PL.FOC

11.3.6. The count/mass distinction

Unlike English, which has a grammaticalized count/mass distinction in nouns, the difference in Kurtöp is not grammaticalized, but nonetheless notable in semantics. When count nouns are pluralized the result is an increase in number of a same type. For example *khwi* ‘dog’ + *pong* ‘PL’ → ‘many dogs’ or ‘a group of dogs’, while *mrâ* ‘rice’ + *pong* ‘PL’ → ‘many varieties of rice’.

11.3.7. Relator nouns and postpositions

The fact that adpositions have a relationship with nouns -- specifically having grammaticalized from nouns -- has been noted in several different language families. For example, Lillehaugen (2004) discusses ‘body part prepositions’ in Zapotec languages, a syntactic category of prepositions which are clearly derived from body parts. This phenomenon is also widespread in Tibeto-Burman languages and Asian languages more broadly. Following Starosta (1985) and DeLancey (1997), I used the term ‘relator noun’ to define the functional subclass of nouns that perform the same function as an adposition.

Kurtöp relator nouns can be envisioned as a subset of nouns in terms of their structural properties. Like nouns, relator nouns may follow a genitive phrase and may be suffixed with a case marker. However, unlike nouns, relator nouns may not be modified or quantified. Nor are relator nouns full-fledged postpositions, as they often (and sometimes necessarily) occur following a genitive-marked noun and preceding a case-marker.

DeLancey (1997) describes the tendency for relator nouns to grammaticalize into postpositions in Tibeto-Burman languages as the result of further reanalysis. This development can be illustrated by the schematization in Figure 42.

$$[[N\text{-GEN}]_{\text{MOD}} [N]_{\text{NP}}]\text{CASE} \rightarrow [[N\text{-(GEN)}] [\text{RN}]_{\text{NP}}\text{-(CASE)} \rightarrow [N\text{-P}]$$

Figure 42. The development of post position from relator nouns, ultimately from a genitive-head-case construction.

The remainder of this section illustrates the various relator nouns in Kurtöp. The final section, §11.3.7.8, describes the only true postposition *cham* ‘until’.

11.3.7.1. *chan* ‘near’

The relator noun *chan* encodes a sense of nearness and occurs in a range of syntactic possibilities.

In (103) *chan* occurs as a canonical relator noun, following the genitive-marked noun *Zangpo* and followed by the locative case marker =*to*.

- (103) *tshe thu Rochen 'Ngödrup Zangpogi chando thramo*
tshe thu Rochen 'Ngödrup Zangpo=gi chan=to thrak-mo
 DM DIST Rochen 'Ngödrup Zangpo=GEN RN:NR=LOC arrive-CTM
 'When (we) get near Rochen 'Ngödrup Zangp'
 KZ20080515.KZ

An example of *chan* 'RN:NR' following a genitive construction but lacking the locative is (104).

- (104) *neri chan gapona wotor*
neri chan gapo=na wotor
 1PL.GEN RN:NR PL.FOC=LOC like.this
 'Near us all like this'
 SaTSW20090917.2194.343.SW

In a distribution more similar to that of a postposition, *chan* occurs immediately following the head noun, without a genitive in (105).

- (105) *da gari yam chando wenta*
da gari yam chan=to wenta
 now car road near=LOC COP.EQ.MIR
 'Now a car road is nearby.'
 SPh.TsC20081022.SPh

The relator noun *chan* also occurs in the texts as a full postposition, in the sense that the preceding genitive and following locative may be completely absent. This is exemplified in (106).

- (106) *tshe zong **chan** thramo...*
*tshe dzong **chan** thrak-mo*
 DM dzong near arrive-CTM
 ‘So when (we) reach near the Dzong...’
 SPh.TsC20081022.3108.941.SPh

11.3.7.2.*bar* ‘middle’

The relator noun *bar* ‘RN:MID’ occurs in a range of constructions. The expected distribution, following a genitive phrase and preceding a locative case marker is shown in (107).

- (107) *cala gapgi **bar**to wenta*
*cala gapo=gi **bar=to** wenta*
 thing PL.FOC=GEN RN:MID=LOC COP.EQ.MIR
 ‘(He) was in the middle of the things.’
 SBC20051127.KW

The relator noun *bar* ‘RN:MID’ may also occur with an ablative case marker, rather than with a locative case marker. An example is (108). Note that in this example the

- (110) *yau gemotako nâ tshemo yam **barto** mi 'nguntil the domshangri*
*yau ge-mo-tako nâ tshemo yam **bar=to** mi*
 DEM:UP go-CTM-IPFV COP.EXIS.MIR while path middle=LOC person
'ngunti-la the dom-shang=ri
 black-IDZ one meet-PFV.EGO=HSY
 'While (they) were going up there, while on the path, (they) met a black person.'
 SaT.SW20090917.2133.597-2137.116.SaT

A relator noun combined with the locative =*to* can also function as a locative adverbial, as exemplified in (111).

- (111) *zai ngai jukshang Taktshangngi yoto **barto** khako yoto*
*zai ngai juk-shang Taktshang=ngi yoto **bar=to***
 EXCL 1.ERG run-PFV.EGO Taktshang=ABL DIR:DN RN:MID=LOC
khako yoto
 DIR:UP DIR:DN
 'Wow, I ran up and down and everywhere from Taktshang'
 SBC2005112.KW

In (111) I have glossed *barto* as a relator noun with an attached locative suffix. An alternative would be to analyze *barto* as an adverb apropos the direction adverbs *khako* 'DIR:UP' and *yoto* 'DIR:DN'. However, to my knowledge there is no external evidence for *barto* as a class separate from relator noun plus locative while *khako* and *yoto* are clearly adjectives and only adjectives. Further, *barto* was also a relator noun plus locative postposition in Chöke (DeLancey, pc).

That the relator noun *bar* ‘RN:MID’ has its historical source as a noun is supported by the data in (112). Here, *barma* ‘medium’ semantically denotes a property but functions as a noun, as evidenced by the fact that the numeral *thê* ‘one’ follows.

- (112) *mapa ringku ni barma... barma thê shiki la*
mapa ringku ni barma barma the shi-ki la
 originally tall and medium medium one narrate-HORT POL
 ‘(From) a long and medium one, I will narrate (a) medium (one).’
 SPh.TsC20081022.947.194SPh

11.3.7.3. *su* ‘bottom’

The relator noun that translates into ‘below’ or ‘underneath’ in English is *su* ~*sus*, with the coda *-s* alternate found in Gangzur. An example of *su* ‘RN:BOT’ is (113), where *su* follows the genitive construction *basgi* ‘bus=GEN’ and is cliticized with the locative case marker.

- (113) *basgi suko ge ngaksi dot nisala*
bas=gi su=ko ge ngak-si dot ni-pala
 bus=GEN below=LOC go do-NF sleep stay-PFV
 ‘(I) went under the bus and slept there.’
 SBC20051127KW

As is common with relator noun constructions, *su* can also occur without a genitive on the preceding noun, as in (114), in which the demonstrative *wo* functions as the head noun.

- (114) *the wo suko nawal la*
thek wo su=ko nawala la
 one DEM:PROX below=LOC COP.EXIS pol
 ‘One is below (it).’
 SaT.SW20090917.2522.961SW

Like *bar* ‘RN:MID’, *su* ‘RN:BOT’ can also be used in a relator noun construction but with an ablative instead of a locative. The example in (115) comes from Gangzur, and thus note the presence of the *-s* coda.

- (115) *yam susning gomale*
yam sus=ning go-male
 road bottom=ABL go-NMZ:IRR
 ‘Walking from the bottom’
 ElicitationPL20090114

Like *chando* ‘RN:NR=LOC’ and *barto* ‘RN:MID=LOC’, *suko* ‘RN:BOT=LOC’ is also used as an adverbial. An example is (116).

- (116) *suko nawal soso la*
suko nawala soso la
 below COP.EXIS different POL
 ‘There is a different one at the base’
 SaT.SW20090917.2417.347SaT

(118) *ko dongningthebe*

ko

door

‘Just a door from the front’

SaT.SW20090917.1458.441SaT

dong=ning-the-be

front=ABL-DEF-only

11.3.7.5.gang ‘time’

The relator noun *gang* ‘RN:TIME’ is probably related to Dzongkha གས་ <*sgaŋ*> used with verbs to encode ‘at the time of V-ing’. For example, in Dzongkha འབད་བའི་གས་ <*ḥbad.bai.sgaŋ*> becomes ‘at the time of doing’. The Kurtöp correspondence is used exclusively as a relator noun, however. Whether the two forms are cognate or whether Kurtöp *gang* is borrowed from Dzongkha གས་ <*sgaŋ*> remains to be discerned.

Example (119) shows *gang* ‘RN:TIME’ as a relator noun in the expected syntactic distribution; it follows the genitive-marked focus plural marker *gapo* and is cliticized with the locative =*nang*. It is interesting that this is the only example of a relator noun with the locative enclitic =*nang*; elsewhere the locative =*to* is used. It is not yet known whether this is an idiosyncratic use, or if in fact there is a grammatical generalization to be drawn.

- (119) *phama gapi gangnang tshe 'namisami kau chut nina la*
phama gapo=gi gang=nang tshe 'namisami kau chut
 parents PL.FOC=GEN time=LOC DM very pillar cut
ni-na
 stay-PFV.MIR
 During (our) parents' time (they) really had to suffer.'
 SPh.TsC20081022.SPh

There is evidence that *gang* is used as a noun meaning 'time'. Consider (120).

- (120) *zai... ngat nimota thang chuci gangbe wen tshe*
zai ngat ni-mo-tako thang chut=ki gang-be wen
 wow 1.ABS stay-CTM-IPFV ground cut=GEN time-only COP.EQ
tshe
 DM
 'Wow... (they) were just making the ground when I was staying there.'
 SaT.SW20090917.1427.157.SW

There are no examples of *gang* in the texts occurring without a genitive. Perhaps this fact, combined with the observation that =*nang*, rather than =*to*, is support in favor of *gang* being a borrowing from Dzongkha.

11.3.7.6. *korni* 'about'

There is form in Kurtöp which, on the one hand, has a distribution suggestive of relator nouns, but on the other hand, cannot fully be analyzed as a relator noun. The form *korni* 'ABT' usually (but not always) precedes a genitive-marked noun but there are no

examples of it with a locative enclitic. The form itself looks suspiciously as though it is composed of two morphemes: *kor* + *-ni*, but there is little evidence internal to Kurtöp for this. Similar to the ablative enclitic, *korni* evidences a stylistic alternation *korning*. There is also external evidence for the analysis that *korni* is historically composed of *kor* + ABL, as that is the etymology of the cognate form in neighboring languages. For example, the Dzongkha equivalent is *kôle* -- where *-le* is an ablative -- and the use is identical: *gekhapgi kôle* ‘about the country’. I have a suspicion that this construction may be borrowed into Kurtöp from Chöke and/or Dzongkha.

While the origin of *korni* ‘ABT’ may be subject to debate, its presence in the language is undoubtable. The data in (121) and (122) provide two examples of *korni* ‘ABT’. In both instances *korni* follows a genitive-marked noun. It is interesting in (122), however, that the genitive proximate demonstrative *woci* is doubly-marked as a genitive with the addition of =*gi*. It is possible the =*gi* comes as part of the construction, also borrowed from Chöke.

- (121) *'napani dasum yampai korni madrau zha mik thungmo thungu*
'napa-ni dasum yampa=i korni ma-drau zhâ mik
 earlier-ABL today tomorrow=GEN ABOUT NEG-be.like what eye
thung-mo thung-u
 do-CTM do-IMP.FAM
 ‘Talk about the differences that you see between earlier and nowadays.’
 JT

- (124) *Trashigi mik thungkhan yau pokpana nawal minla yau Gelongphogi **jedo***
Trashig=gi mik thung-khan yau pokpa=na nawala minla
 Trashig=ERG eye do-NMZ UP hill=LOC COP.EXIS COP.EQ.NEG.MIR
Gelongpho=gi je=to
 Gelongpho=GEN RN:ABV=LOC
 ‘The one Trashi saw is there on the hill, right, up there on the top of Gelongpho.’
 SaT.S20090917.1363.127.SaT

In (125) the genitive is missing:

- (125) *doska **jed** driksi*
doska je-do drik-si
 step RN:ABV =LOC arrange-NF
 ‘arranged on the steps...’
 SaT.S20090917.1239.021SaT

An example of *je* ‘RN:ABV’ preceding the ablative case marker is shown in (126).

- (126) *tshe sako tsho ngakhang **jeni** yot gwar cang khormong...*
tshe Sako tsho ngak-khan=gi je-ni yoto
 DM Sako lake do-NMZ:IPFV=GEN RN:ABV=ABL DIR:DN
gwa-ro cang khor-mong
 turn-INF throw take-CTM
 ‘While turning to throw (it) down from (the lake) called Sako Lake...’
 PS20061206.P

In (127) the relator noun *je* occurs without the genitive and is followed by the ablative case marker.

- (127) *Phuntsholing jening dangma 'numkhor** bas the*
*Phuntsholing je=ning dangma 'numkhor** bas the*
 Phuntsholing top=ABL yesterday bus (< Ch.) bus one
 ‘yesterday a bus⁹⁷ from above Phuntsholing...’
 SPh.TsC20081022.2632.182.TsC

11.3.7.8. *cham* ‘until’

There is one fully grammaticalized postposition in Kurtöp: *cham* (occasionally pronounced as *tsham*) ‘until’. The evidence in Kurtöp suggests that *cham*, as a full-fledged postposition, is a class separate from the relator nouns. I suspect that *cham* could have historically historically been part of a relator noun construction and exemplifies, as a post position, the end point in this continuum of grammaticalization. However, more research is needed to confirm this.⁹⁸

Examples of the post position *cham* are shown in (128) and (129).

⁹⁷ There is no native word for ‘bus’. The of the English borrowing is unsurprising in this instance, but the co-presence of *'numkhor*, literally ‘oil-wheel’, borrowed from Chöke here is unusual.

⁹⁸ If we found evidence of a form cognate with *cham* as a relator noun or noun with semantics compatible with the more bleached meaning of ‘until’ in on of Kurtöp’s closest neighbors, this would be evidence in support of the claim that *cham* has grammaticalized as a postposition from a relator noun construction.

(128) *net gapoya Khanpalung chamta gewala tshe*

<i>net</i>	<i>gapo</i>	<i>yau</i>	<i>Khanpalung</i>	<i>cham-ta</i>	<i>ge-wala</i>	<i>tshe</i>
1.PL	PL.FOC-also	DEM:UP	Khanpalung	until-EMPH	go-PFV	DM

‘We went up until Khanpalung.’

SaT.SW20090917.37.560SW

(129) *woyeni thun deksi pcheka cham dek zatpala*

<i>wo-ye-ni</i>	<i>thun</i>	<i>dek-si</i>	<i>pcheka</i>	<i>cham</i>	<i>dek</i>	<i>zat-pala</i>
DEM:PROX-UP=ABL	DIST	enter-NF	half	until	enter	finish-PFV

‘From way up there we entered, (we) entered halfway.’

SaT.SW20090917.37.560SW

11.4. Nominal suffixes

Nominal suffixes in Kurtöp are phonologically bound and attach to nouns. There are several nominal suffixes in Kurtöp; the definite suffix *-the* is described in §11.4.1 and the individuator *-la* is described in §11.4.2. Clitics, which may attach to nouns but also to categories larger than simply the noun, are described in section §11.6.

11.4.1. Definite particle *-the*

The definite particle *-the* ~ *-te* is clearly derived from the numeral ‘one’ *-thê*, itself from Proto East Bodish **thek*. The phonological difference between the definite particle and the numeral ‘one’ is slight and often difficult to discern. Basically, the difference is that the numeral *thê* is one phonological word and thus receives stress, while suffix *-the* is bound; it does not receive its own stress but is instead incorporated into the stress pattern of the word it has suffixed to. Note that the numeral *thê* has a long vowel

while as a suffix it does not. However, as illustrated in §6.3.3, the difference between short and long vowels is slight. It is not a robust contrast in the language, either in terms of functional load or in terms of acoustic correlates. Indeed, many phonemically long vowels often surface as short in natural speech and the speakers rely on the context to distinguish the two.

The example in (130) illustrates the use of *thê* as a numeral, which can be contrasted with (131), where *the* is a definite article.

- (130) *po the razi tshemo tsantsanna trizi gizi...*
po thê ra-zi tshemo tsantsan=na tri-zi gi-zi
 snake one come-NF HES cypress=LOC creep-NF go-NF
 ‘One snake came, uh, creeping on the cypress tree...’
 Lama200812311.2695.277.LC

- (131) *drinlenthe je gomal wenta ngaksi*
drinlen=the je go-male wenta ngaksi
 repayment=DEF return need-NMZ:IRR COP.EQ.MIR QUOT
 ‘Thinking that (they) have to repay...’
 Lama200812311. 2795.749.LC

11.4.2. Individuator *-la*

The suffix *-la* functions as an individualizer and attaches to adjectives. Examples are (132) and (133).

- (132) *phusana 'aring nakhanla gapo*
phu-sa=na 'aring nak-khan-la gapo
UP-NMZ=LOC terrace COP.EXIS-NMZ:IPFV-IDZ PL.FOC
'Those who have terraces up there'
Rice.Harvest20081022.678.597PS

- (133) *khartilathe, Forestgi*
kharti-la-the Forest=gi
white-IDZ-DEF Forest (<ENG.)=GEN
'The white one, Forest's'
SBC20051127

11.4.3. Comitative *-ni*

The comitative suffix *-ni* translates into English 'and', but, unlike in English, joins only nouns, more similar to Mandarin Chinese 跟 *gēn*. Thus, I believe a better analysis of Kurtöp *-ni* is as a comitative suffix. Like the ablative *=ni* but unlike the contrastive focus *-ni*, the comitative *-ni* occasionally occurs as *-ning*, which I expect is an allomorph conditioned by a higher social register.

11.5. Modifiers

Adjectives and quantifiers comprise nominal modifiers in Kurtöp. Syntactically, these forms share the fact that they all occur within the NP and follow the noun while preceding case markers. Nominal modifiers are discussed in detail in §12.

11.6. Phrasal clitics

Phrasal clitics in Kurtöp attach to the edge of nouns or phrases in Kurtöp and are phonologically bound to the preceding word.

11.6.1. Also =*yang*

The clitic =*yang* ~ =*ya* translates into English roughly as ‘also’. An example is in (134).

- (134) *mrasyang limu rasta*
mras=yang limu ras-ta
paddy=also good come-IPFV.MIR
‘Paddy also comes well’
Rice.Harvest20081022.PS

11.6.2. Emphatic =*rang*

=*rang* is a clitic in Kurtöp that functions as an emphatic marker is probably related to the Chöke word ʀʌ <*rang*> ‘self’. =*rang* may be reduced to =*ra* in natural speech and the reflexive pronouns (§13.1.1) have undoubtedly developed from a combination the pronominal root plus this clitic.

An example of =*rang* providing the emphatic function is shown in (135):

- (135) *wera sem 'namtorang malangu ngaksi*
*wera sem 'namto=**rang** ma-lang-u ngaksi*
 2.REFL mind excitement=EMPH NEG.be.full-IMP QUOT
 “‘Now you don’t too excited” (she said)’
 PS20061206

11.6.3. Only =be

The clitic =be attaches to nouns as a way to signal the noun as being the only entity from a group of potential entities. This is similar in function to the English word ‘only’ or ‘just’ or perhaps more like Hindi *hii*.

In (136), =be follows the ablative-marked place name *Raukho*.

- (136) ***Raukhonibe** yau thrawala*
*Raukho-ni=**be** yau thrak-wala*
 Raukho-ABL-only DEM:UP arrive-PFV
 ‘We reached up just from Raukhon.’
 SaT.SW20090917.75.076.SW

In (137), =be is shown following a numeral.

- (137) *dor **sumbe***
*dor sum=**be***
 ORD three=only
 ‘Only three times’
 SaT.SW20090917.158.630.SW

The clitic =*be* may also follow an adverb, as shown in (138). In this example, *tsamtsam* is an adverb formed by reduplication of the first syllable of the word *tsama* ‘a little; some’.

- (138) ***tsamstambe*** *wotore brekna*
tsamtsam=***be*** *wotor-re* *blek-na*
 partially=only like.this.-one keep-PFV.MIR
 ‘(They) have thrown (it) away only partially...’
 SaT.SW20090917.525.744.SaT

In the textual database, =*be* is shown to also follow what I have analyzed as a discourse marker. For example, see (139), where =*be* is cliticized to *tsheni*, a word that occurs very commonly in discourse, and roughly translating to English ‘and then’.

- (139) ***tshenibe*** *ged chowalik*
tsheni=***be*** *ge-ro* *chok-wala-ki*
 then=only go-INF allow-NMZ:PFV-GEN
 ‘Just then (we’re) allowed to go.’
 SaT.SW20090917.525.744.SaT

Although I have analyzed =*be* as a noun modifier, it can modify verbs as well, as shown in (140-142)

(140) *wo pcha gap droizibe wen*
wo pcha gapo droi-si=be wen
 DEM.PROX pcha (a bon festival) PL.FOC finish-NF=only COP.EQ
 ‘It’s only after the Pcha finishes...’
 KZ200805151.217.908KZ

(141) *'lama shakinibe tshe...*
'lama shak-kini=be tshe
 lama die.HON-FUT=only DM
 ‘Only after the lama died...’
 Lama200812311.2510.663LC

(142) *yam barto thramobe...*
yam bar=to trak-mo=be
 road RN:MID=LOC arrive-CTM=only
 ‘Just when (they) reached the middle...’
 SaT.SW20090917.404.783.SaT

11.6.4. Emphatic =*ta*

Kurtöp =*ta* emphasizes or highlights a referent. I cannot yet explain how =*ta* differs from contrastive focus =*ni* (§11.6.5), or the pragmatic ergative (§14.1.3). Examples of the emphatic =*ta* are (143) and (144).

(143) *dortibe ngaita*

dor-ti=be

ngai=ta

ORD-one=only

1.ERG=EMPH

‘I (have been) only once.’

SaT.SW20090917.700.489SW

(144) *tshe mapa ’êwa ’namisamita zhaya mutna*

tshe mapa ’ê-wa ’namisami=ta zhâ=ya mutna

DM originally who-COMP very=EMPH what=also COP.EXIS.NEG.MIR

‘Originally there is not much difference between them.’

KZ200505151.KZ

11.6.5. Contrastive focus =*ni*

The clitic =*ni* marks contrastive focus on nouns or noun phrases. Unlike the ablative and comitative =*ni*, the contrastive focus =*ni* does not allow for an allomorph with a final velar nasal. The use of =*ni* in (145) singles out the group of people who do contract work, as opposed to the group of people who do a different type of work.

(145) *la wo thrikha thungkhan gaponi mir la wono thungta tshe*

la wo thrikha thung-khan gapo=ni mira

work DEM:PROX contract do-NMZ:IPFV PL.FOC=CFOC others

la wo=na thung-ta tshe

work DEM:PROX=LOC do-IPFV.MIR DM

‘And those who do contract work, do (their) work here’

SPh.TsC20081022.2466.963SPh

In (146) the contrastive focus particle =*ni* cliticizes to the nominalized VP *Thimpuro bjonkhan* ‘what emerges at Thimphu’ and separates that from whatever is found in the village. In this example the speaker is asserting that everything found in Thimphu can also be found in the village. When pressed about the use of =*ni* in this example, speakers report that the use =*ni* indicates the speaker’s opinion about those who go to Thimphu for shopping; the speaker believes it is unnecessary -- since whatever they need can be found in the village -- and is trying to convince the interlocutor that /she does not need to go.

- (146) *da thu Thimpuro bjonkhanni dangsana wono nyangta tshe zhayang purara*
da thu Thimphu=ro byong-khan=ni dangsanga
 now DIST Thimphu=LOC emerge-NMZ:IPFV=CFOC everything
wo=no nyang-ta zha=yang pura=ra
 PROX=LOC receive-IPFV.MIR what=also all=EMPH
 ‘And everything that is found in Thimphu is found here, whatever, absolutely everything.’
 SPh.TsC20081022.2568.7TsC

Like other nominal affixes and clitics, the contrastive focus particle =*ni* can attach to a coterporally-marked verb, as way to signal the action out of a set of other actions. For example, consider (147).

- (147) *wonong ramoni tshe Mewang Ngada Rimpoche 'lama cham zhayang pura*
wonong tshe 'aye cabsu cheu ngaksi pon jonta ngaksi harzi mi gapo la
wo=nang ra-mo-ni tshe Mewang Ngada Rimpoche
 DEM:PROX=LOC come-CTM=CFOC DM Mewang Ngada Rimpoche
'lama cham zha=yang pura
 Lama dance what=also all
wo=nang tshe 'aye cabsu cheu ngaksi pon
 DEM:PROX=LOC DM may.I.be.protected (<Ch.) QUOT king
jon-ta ngaksi har-si mi gapo la
 come.HON-IPFV.MIR QUOT feel.happy-NF person PL.FOC POL
 ‘When (he) comes, His Majesty (Mewang Ngada Rimpoche is the formal name
 to refer to the king), lama dances, what-all, everything, well here, with lots of
 cherishing, upon saying “may I be protected; the king is coming” the people are
 happy.’
 SPh.TsC20081022.2592.523-2600.545SPh

The contrastive focus =*ni* particle follows *wonong ramo* ‘when coming here’, underscoring a particular instance of someone coming to the village over other instances. As the speaker later describes, the event he is signaling is the arrival of the King.

Elicited examples may make the distinction somewhat clearer. Consider (148) and (149).

(148) *khit ramo hingsangsa nâ*
khit *ra-mo* *hingsangsa* *nâ*
 3.ABS come-CTM clean COP.EXIS.MIR
 ‘When he comes, it’s clean’
 Elicitation.KL.20100606

(149) *khit ramoni hingsangsa nâ*
khit *ra-mo=ni* *hingsangsa* *nâ*
 3.ABS come-CTM=CFOC clean COP.EXIS.MIR
 ‘The time when *he* comes, it is clean.’
 Elicitation.KL.20100606

Example (148) would be the unmarked scenario, simply stating a fact about someone’s arrival. The marked situation is (149), with =*ni* attaching to the co-temporal marked verb *ramo*. In this instance *ramoni* indicates that there is something unique about this arrival; the speaker is contrasting it with a set of other possible arrivals.

There are several examples in the discourse with the contrastive focus maker =*ni* attached to pronouns. For first person, =*ni* occurs six times with the ergative form of the pronoun and four times with the absolutive form of the pronoun. (150) illustrates =*ni* with an ergative first person pronoun and (151) illustrates =*ni* with the absolutive form.

The context for (150) is a conversation between two friends about a third person back in Bhutan. Speaker KW is asserting his understanding of the person, as opposed to someone else’s knowledge.

(150) *ngaini kha brewali pholab theyang nâ*
ngai-ni kha brek-wala-i pholap thek=yang
 1.ERG-CFOC mouth separate-NMZ:PFV=GEN talks one=also
nâ
 COP.EXIS.MIR
 ‘I heard they were divorced.’
 SBC200511277KW

In (151) the context again involves another person, other than the speaker and interlocutor. Speaker SW is telling speaker SaT about a time when he and a friend were exploring a cave. One friend keeps luring SW to go further in the cave, which SW tries. After a few moments, however, SW turns back, exiting the cave, using the contrastive focus marker =*ni*, showing that he is to be contrasted with the friend who kept going deeper into the cave, without fear.

(151) *wenmal pretchakka razi ngatni*
wenmale pretchakka ra-zi ngat=ni
 indeed very.scared come-NF 1.ABS=CFOC
 ‘I was quite scared.’
 SaTSW20090917.1003.460SW

11.6.6. Case markers

Case markers in Kurtöp are enclitics. Kurtöp has two locative case markers, a genitive, an ergative and an ablative. These are summarized in Table 117.

Table 117. Kurtöp case marker postpositional clitics

Gloss	Kurtöp
LOC	= <i>na ~ nang</i>
LOC	= <i>ro~to~ko~ngo</i>
ABL	= <i>ni~ning</i>
ERG	= <i>gi~i~li</i>
GEN	= <i>gi~ci~i~li</i>

In addition to expressing information pertaining to location, the locative case markers are also used in encoding grammatical relations, as discussed in greater detail in §14.

11.6.6.1. Locative =*ro*

An example of the locative case markers is (152).

- (152) *ner lhuntsiki pong draksho khirakorang*
ner lhuntsi-ki pong draksho khira=ko=rang
 1.PL.INCL.GEN Lhüntsi-GEN PL Drâsho 3.REFL=LOC=EMPH
 ‘Our Lhüntsi’s were only for himself.’
 SPh.TsC20081022.2997.009.SPh

11.6.6.2. Locative =*na*

An example of the locative =*na* is (153).

(153) *chipna zhed jonmale*

chip=na *zhe-ro* *jon-male*
horse.HON=LOC ride-INF go.HON-FUT

‘(His Majesty) will come riding on a horse.’

SPh.TsC20081022. 3119.570.SPh

It is not yet clear what the difference is between the locative =*na* and the locative =*ro*, though some differences in the case-marking system are discussed in §14.3.

11.6.6.3. Ablative =*ning*

The ablative =*ning~ni* encodes relation from something or somewhere. The example (154) is one of hundreds found throughout the textual database.

(154) *Caksomning?*

Caksom=ning

Caksom=ABL

‘From Caksom?’

SaT.SW20090917.675.479SW

11.6.6.4. Genitive =*gi*

The Kurtöp genitive =*gi~i* encodes the functions of possession and attribution. There is some evidence in the language that =*li*, which I analyze here as an allomorph of

(personal field notes), neighboring Indic languages (such as Nepali (personal field notes) and Assamese (Chowdhary (in press); Borah (in press)) and Phake and Aiton Tai (Morey 2005) languages have classifiers, but classifiers are only marginally present in Bhutan in Dzongkha (Thinley 2009) and Nepali. There is some evidence of classifier-genesis in Kurtöp. Consider (156).

(156) *zedroranggi shiki lep the thung go megosta*
zedro=rang=gi shiki lep the thung go me-gos-ta
 zedro=EMPH=GEN coin flat.one one do need NEG-need-IPFV.MIR
 ‘(We) don’t even need to do (spend) a single coin’
 SPh.TsC20081022. 1724.579.SPh

While *lep* is a noun meaning something like ‘flat thing’, its use as a pseudo-classifier seems to be limited to the counting context, as in (156), where it follows the noun and precedes the numeral. It also appears, sometimes, during elicitation of numerals in the context of counting coins. The word *lep* belongs to a subset of words that can be identified as pan-Bhutanese; they are found in many Tibeto-Burman languages and speakers identify the word as not necessarily being unique to a given language. Other words in the category are the cardinal directions *lho*, *jang*, *shar*, *nup*, Chöke borrowings (including honorific terms), greetings, and exclamations, including some swear words.

11.8. Reduplication

Echo formation, well-known in Hindi in the South Asia context, is considered to be a feature of South Asia (Masica 2005) but is not found in Kurtöp. Echo formation is a

particular kind of reduplication in which the reduplicated word shares all but the initial consonant. The resulting echo formation adds ‘and what not’ or ‘and the like’ to the gloss. For example, Hindi *cai* ‘tea’ becomes *cai vai* ‘tea and what not’.

Echo formation does not appear to be widely reported in the Tibeto-Burman languages of South Asia. Darma, a Tibeto-Burman language of North India does make use of echo formation, but the pattern differs from that in Hindi (Willis 2007: 187). The phenomenon in Kurtöp closest to echo formation is illustrated in (157).

- (157) *tsheni thiphinni wo gapoyang **tangkaling tongkaling** ngaksi yamni thundo gwarzi*
- | | | | | | |
|---------------|-------------------|---------------|------------------|-------------------|-------------------|
| <i>tsheni</i> | <i>thiphin-ni</i> | <i>wo</i> | <i>gapo=yang</i> | <i>tangkaling</i> | <i>tongkaling</i> |
| then | tiffin-CMT | DEM:PROX | PL.FOC=also | tangkaling | tongkaling |
| <i>ngaksi</i> | <i>yam=ni</i> | <i>thundo</i> | <i>gwar-zi</i> | | |
| QUOT | road=ABL | DIST:LOC | turn-NF | | |
- ‘Then the tiffins (were) all ‘tang~~k~~aling tong~~k~~aling’ turning from the road.’
- SBC20051127.KW

In this example the onomatopoetic base is *tongkaling*, meant to represent the sound a hard, non-spherical object makes rolling down a paved road. The word is reduplicated but the quality of the vowel in the first syllable changes from *a* to *o*.

CHAPTER XII

NOMINAL MODIFIERS

This chapter describes those elements which occur as free words in the NP as modifiers to the head noun. I describe adjectives in §12.1 and quantifiers in §12.2. In §12.3 I describe Kurtöp nominal particles, a subclass of words which, though they are their own phonological words, have a clitic-like distribution. The next section, §12.4, describes how comparatives and superlatives are made in Kurtöp. The final section, §12.5, describes words that translate as English ‘like’ or ‘as’.

12.1. Adjectives

There exists a class of words in Kurtöp which I call ‘adjectives’. This class of words is characterized by the syntactic position between a noun and a numeral. Morphologically, adjectives may be suffixed with *-la*, which provides an individuating function and thus fulfill the sentential role of a N. The majority of Kurtöp adjectives are composed of two morphemes, at least diachronically. Often, the second morpheme is *-pa* or *-ti*. Color terms are characteristic of the latter form.

12.1.1. Colors

Kurtöp identifies five basic colors: *kharti* ‘white’, *nyunti* ‘black’, *zhinti* ‘red’, *serti* ‘yellow’, and *ngunti* ‘grue’. It is interesting to note that the second syllable in each of these words is *-ti*, suggesting *-ti* to have a nominalizing or adjectivalizing function historically. All the color roots, with the exception of *zhin* ‘red’, have cognates in Written

Tibetan. Table 118 presents Kurtöp color terms with Written Tibetan and Dzongkha reflexes.

Table 118. Kurtöp color terms with Written Tibetan and Dzongkha reflexes

Gloss	Kurtöp	Written Tibetan	Dzongkha
‘white’	<i>kharti</i>	དཀར་པོ་ <dkarpo>	<i>kâp</i>
‘black’	<i>nyunti</i>	གནག་པོ་ <gnakpo>	<i>’nap</i>
‘red’	<i>zhinti</i>	དམར་པོ་ <dmarpo>	<i>’mâp</i>
‘yellow’	<i>serti</i>	གསེར་པོ་ <gserpo>	<i>sêp</i>
‘grue’	<i>’ngunti</i>	སྨོན་པོ་ <sngonpo>	<i>höm</i>

12.1.2. Adjective phrases

The modifying *’namisami* ‘very’ provides evidence for an adjective phrase, as it may occur modifying an adjective, as in (158).

- (158) *phetse ’namisami gong wenta tshe khwi*
phetse ’namisami gong wenta tshe khwi
 some very price COP.EQ.MIR DM dog
 ‘Some dogs are very expensive.’
 SBC20051127PC

12.2. Quantifiers

In this section I describe numerals (§12.2.1) and the plural suffix *-pong* (§12.2.2). Particles with quantifying functions are described in §12.3.2, §12.3.3 and §12.3.4.

12.2.1. Numerals

Kurtöp employs several systems of numerals which can be defined by the ability to take the following suffixes: *-laka* and *-bakti*. The numerals systems comprise an older, vigesimal system (§12.2.1.2.1), a newer vigesimal system (§12.2.1.2.2), and a recent decimal system (Dzongkha?) (§12.2.1.2.3). In addition, English numerals are also used. Two special numerals *bleng* ‘one.CT’ and *gwa* ‘two.CT’ are used for measurements (§12.2.1.3.1). A separate system of numerals, borrowed from Tibetan but with interesting poetic twists, is used for counting numbers thrown on dice while playing the game *parala*. Plurality is not obligatorily marked in the NP, but the forms *gapo* and *pong* may be optionally used, as described in §12.2.2.

12.2.1.1. Reduplication of numerals

Reduplication of numerals results in a distributive sense; the numeral applies to more than one of a group. An example is (159), where the numeral *yanga* ‘five’ is reduplicated, distributing the numeral so that each person involved in the context is assigned five of the *tiru* ‘money’.

(159) *net tiru yanga yang bishang*

<i>net</i>	<i>tiru</i>	<i>yanga</i>	<i>yanga</i>	<i>bi-shang</i>
1.PL.ABS	money	five	five	give-PFV.EGO

‘We gave five bucks (’ngultram) each’

SBC20051127.KW

12.2.1.2. Cardinal numbers

Table 119. Kurtöp and Dzongkha numerals ‘one’ to ‘twenty’

Gloss	Kurtöp	Dzongkha
‘one’	<i>thê</i>	<i>ci</i>
‘two’	<i>zon</i>	<i>'nyi</i>
‘three’	<i>sum</i>	<i>sum</i>
‘four’	<i>ble</i>	<i>zhi</i>
‘five’	<i>yanga</i>	<i>'nga</i>
‘six’	<i>dro</i>	<i>dr'û</i>
‘seven’	<i>'nî</i>	<i>dün</i>
‘eight’	<i>jat</i>	<i>gä</i>
‘nine’	<i>dogo</i>	<i>gu</i>
‘ten’	<i>che</i>	<i>cutham</i>
‘eleven’	<i>chauri</i>	<i>cûci</i>
‘twelve’	<i>chauni</i>	<i>cûnyi</i>
‘thirteen’	<i>chausum</i>	<i>cûsu</i>
‘fourteen’	<i>cheble</i>	<i>cüzhi</i>
‘fifteen’	<i>chenga</i>	<i>cênga</i>
‘sixteen’	<i>chedro</i>	<i>cûdru</i>
‘seventeen’	<i>chitni</i>	<i>cupdü</i>
‘eighteen’	<i>cherjat</i>	<i>côpge</i>
‘nineteen’	<i>chedogo</i>	<i>cûgu</i>
‘twenty’	<i>khedi</i>	<i>kheci/nishu</i>

In practice, Kurtöp uses three variations of the system of cardinal numerals, an older vigesimal system, a newer vigesimal system, and the Dzongkha decimal system.⁹⁹ In all instances, the numerals ‘one’ to ‘twenty-nine’ are identical. The first twenty numerals are illustrated in a comparative light below in Table 119. Table 120 presents Kurtöp numerals twenty to twenty-nine.

Table 120. Kurtöp numerals ‘twenty-one’ to ‘twenty-nine’

Gloss	Kurtöp
‘twenty-one’	<i>khedi-ni-thê</i>
‘twenty-two’	<i>khedi-ni-zon</i>
‘twenty-three’	<i>khedi-ni-sum</i>
‘twenty-four’	<i>khedi-ni-ble</i>
‘twenty-five’	<i>khedi-ni-yanga</i>
‘twenty-six’	<i>khedi-ni-dro</i>
‘twenty-seven’	<i>khedi-ni-’nî</i>
‘twenty-eight’	<i>khedi-ni-jat</i>
‘twenty-nine’	<i>khedi-ni-dogo</i>

12.2.1.2.1. Older vigesimal system

For counting beyond twenty, the indigenous Kurtöp system is one which is vigesimal based. The word for twenty is *khedi*, probably cognate with PTB **khal*. Words beyond twenty are formed by combining the first syllable of the word for ‘twenty’, *khe*

⁹⁹ The native Dzongkha counting system is also vigesimal. For an unknown reasons, the Dzongkha vigesimal system itself is also being replaced, as most younger generations of speakers do not know it.

with a numeral, as multiplier. For example, ‘40’ is formed by conjunction of *khe* ‘20’ plus *zon* ‘two’ and ‘60’ is *khe* ‘twenty’ + *sum* ‘three’. Numerals that are multiples of ten but with odd initial digits (such as ‘50’, ‘70’, etc.), are formed by the addition of the word *phedang* after *khe* ‘twenty’. For example, the word for ‘30’ can be roughly translated directly into English as ‘twenty multiplied by two minus ten, or $20 \times 2 - 10$.

Table 121. Kurtöp multiples of ten in the native vigesimal system

Gloss	Kurtöp
‘twenty’	<i>khedi</i>
‘thirty’	<i>khe phedang zon</i>
‘forty’	<i>khe zon</i>
‘fifty’	<i>khe phedang sum</i>
‘sixty’	<i>khe sum</i>
‘seventy’	<i>khe phedang ble</i>
‘eighty’	<i>khe ble</i>
‘ninety’	<i>khe phedang yanga</i>
‘one hundred’	<i>khe yanga</i>
‘one hundred twenty’	<i>khe dru</i>

12.2.1.2.2. Newer vigesimal system

Beside the older vigesimal system, Kurtöp uses a newer system, which is a combination of the older vigesimal system and a decimal system. The numbers ‘twenty’, ‘forty’, sixty, ‘eighty’ and ‘one hundred’ are the same, but to reach the numbers ‘thirty’, ‘fifty’, etc., *ni che* ‘and ten’ is added to the previous base of twenty. Refer to Table 122 for a full list of these numbers, in multiples of ten, from twenty to one hundred.

Table 122. Kurtöp multiples of ten in the newer vigesimal system

Gloss	Kurtöp
‘twenty’	<i>khedi</i>
‘thirty’	<i>khe the ni che</i>
‘forty’	<i>khe zon</i>
‘fifty’	<i>khe zon ni che</i>
‘sixty’	<i>khe sum</i>
‘seventy’	<i>khe sum ni che</i>
‘eighty’	<i>khe ble</i>
‘ninety’	<i>khe ble ni che</i>
‘one hundred’	<i>khe yanga</i>
‘one hundred ten’	<i>khe yanga ni che</i>

12.2.1.2.3. Decimal system

The third system in Kurtöp is a decimal system, essentially borrowed from Dzongkha. These numerals, in multiples of ten beginning with twenty, are illustrated in Table 123.

Table 123. Kurtöp multiples of ten in the borrowed decimal system

Gloss	Kurtöp
‘twenty’	<i>nyisho</i>
‘thirty’	<i>sumcu</i>
‘forty’	<i>zhipcu</i>
‘fifty’	<i>’ngapcu</i>
‘sixty’	<i>drukcu</i>
‘seventy’	<i>duncu</i>
‘eighty’	<i>gepcu</i>
‘ninety’	<i>gupcu</i>
‘one hundred’	<i>cikja</i>
‘one hundred ten’	<i>khe yanga ni che</i>

12.2.1.3. Measurement

12.2.1.3.1. Numerals for measurement

Kurtöp has special terms for counting measurements: *bleng* ‘one’ and *gwa* ‘two’. These numbers are used following terms of measurement, such as those terms described in §12.2.1.3.2, which are used exclusively for measurement, as well as terms that may be used in measuring but have other contexts as well.

There are a few examples of *bleng* and *gwa* in texts and most of the understanding of these two terms has come from elicitation. Nonetheless, a few examples can illustrate these uses in natural discourse. In (160) the noun *guku* ‘cup’ is used as a measurement and thus the count numeral *bleng* ‘one’ is used to quantify the measurement.

- (160) *woci zhor thekthe bishang 'wai, zhor guk breng breng ngawal the*
woci zhor thek-thek bi-shang 'wai zhor guku
 DEM:PROX.GEN alcohol one-one give-PFV.EGO EXCL alcohol cup
bleng bleng nga-walthe
 one.CT one.CT do-PFV.IMM
 ‘(She) gave one of her wines each, hey, (she) only gave one cup of wine each.’
 SpHTsC20081022.3042.332SPh

In (161) the term *zham* is a measurement equivalent to approximately one man. The count numeral *gwa* ‘one’ quantifies the measurement immediately following.

- (161) *zham gwakpakti sumbakti ngawalthena o kâ thungzi sai dong nâ*
zham gwak-pakti sum-bakti nga-walthe=na wo kâ
 man.MS one.CT-APRX three-APRX do- PFV.IMM =LOC DEM:PROX ladder
*thung-zi sa=i dong** nâ*
 do-NF earth=GEN hole COP.EXIS.MIR
 ‘There is a ladder of around one to three man’s lengths beneath the soil.’
 SaT.SW20090917.945.527.SaT

Other uses of *gwa* and *bleng* are for counting measurements of grain, using the *bre* measurement, when counting bottles of a substance, when counting points in an archery match, etc. The Kurtöp terms *bleng* and *gwa* appear to have Dzongkha equivalents in *g’ang* and *d’o*, which Kurtöp-Dzongkha bilinguals assert to have the same function. It is unclear throughout Tibeto-Burman how common a set of numerals especially reserved for quantifying measurements is. However, the similarity of Kurtöp *gwa(k)* and Dzongkha *d’o* with Mandarin 兩 *liǎng* cannot be overlooked.

12.2.1.3.2. Terms of measurement

Kurtöp has traditional terms of measurement that quantify length and volume. The terms *sor*, *tho*, *zham* refer to length while *phui* and *bre* are measurements of volume. The approximate value of each is summarized in Table 124.

Table 124. Terms of measurement

Form	Approximate value
<i>sor</i>	the length of the thickness of one finger, approximately an inch
<i>tho</i>	the length of the length of one hand, approximately six inches
<i>zham</i>	the length of the height of one person, approximately a meter and a half
<i>phuya</i>	the approximate volume of uncooked grain that one person would eat; there are also different, less common <i>phuyas</i> which hold different amounts
<i>bre</i>	the volume of approximately 1.5kg of rice

When used with numerals ‘one’ and ‘two’, these terms condition the numerals for measurement of *bleng* and *gwa*. As there are no separate measurement numerals beyond ‘two’, there is no way to determine whether a measurement numeral has been conditioned or not. (162) Exemplifies the measurement term *bre*.

- (162) *bre yang yang dro dro de la*
bre yanga yanga dro dro dek la
 bre five five six six enter POL
 ‘(It) fits five or six *bres*.’
 SPh.TsC20081022. 2872.952.TsC

12.2.2. Plurality

Plurality, like gender, is something many Tibeto-Burman languages can encode, though not in the same way as many Indo-European languages, such as English, need to. For example, Willis (2007: §6.3) discusses how Darma speakers can encode plurality via numerals, quantifiers, or a plural participle *jen*, a particle probably borrowed from Indo-European, which follows the noun.

Kurtöp has two distinct plural particles: *gapo* and *pong*. The origin of *gapo* is unknown but *pong* is probably derived from a word meaning something like ‘a bunch’ or ‘large number of’ as it also found in Dzala as the numeral ‘400’. Both are used optionally to encode plurality but with slightly different functions. *gapo* also serves to focus the noun in follows while *pong* is neutral; its only function is to indicate plurality.

12.2.2.1. Plural *pong*

The plural particle *pong* is functionally a modifier and cannot occur on its own in a NP. It follows the noun, or adjective or numeral, if present. A quantifier meaning ‘all’, such as *rita* or *pura* may follow *pong*. Some elicited examples below show this distribution. (163) and (164) show the ordering of *pong* with respect to an adjective:

(163) *khwi kharti pong*

khwi

dog

‘white dogs’

kharti pong

white PL

Elicitation.KL.20100606

(164) **khwi pong kharti*
Elicitation.KL.20100606

Example (165) provides evidence that *pong* cannot function as a NP on its own, in the way adjectives can, for example. These negative data support the observation in the texts that *pong* cannot occur without a nominal head.

(165) **pong nâ*
intended meaning: ‘there is a group.’
Elicitation.KL.20100606

When a numeral is present in the NP, *pong* will follow it, as in (166). Here, the NP consists of a noun *kau* ‘crow’, the numeral *dogo* ‘nine’ and finally the plural marker *pong*.

(166) *kau dogo ponggi mi dogona truizi*
kawa dogo pong=gi mi dogo=na trui-si
crow nine PL=ERG person nine=LOC transform-NF
‘The nine crows transformed into nine humans and..’
Lama200812311. 599.833LC

Perhaps the most common use of *pong* is following a pronoun, as in (167), when the speaker wishes to indicate a group of someone or something.

- (167) *zai... kau chutshang wona net pong*
zai kau chut-shang wo=na net pong
 EXCL pillar cut-PFV.EGO DEM:PROX=LOC 1.PL.ABS PL
 ‘Wow.. what a difficult time we had.’
 SBC20051127.KW

The plural marker *pong* is also a convenient means by which to pluralize a noun that it not inherently plural (in the way that *net* ‘1.PL’ is, for example). In (168) *rakhan* is a nominalizer form of the verb *ra* ‘come’, allowing the plural particle *pong* to follow it.

- (168) *phancha rakhan pong nerira thung*
phancha ra-khan pong neri-ra thung
 gumption come-NMZ:IPFV PL 1.PL.REFL-EMPH do
 ‘Wow.. what a gumption we used to use!’
 SBC20051127.KW

The plural marker *pong* may comprise a NP with only a demonstrative, as in (169) and (170), giving a sense of English ‘these’ or ‘those’.

- (169) *wo pong woktibe?*
wo pong wokti=be
 DEM:PROX PL this.much=only
 ‘These, only this much?’
 Rice.Havest20081022. 400.750.PS

- (170) *wome pong pura zhong bjurzi*
wome pong pura zong byung-si
 DEM:DN PL this.much insect transform-NF
 ‘Having transformed all those (beads) down there into insects...’
 Lama200812311

The plural marker *pong* may also occur with a noun that has been marked as a genitive. In (171) and (172) *lhuntsiki* ‘Lhüntsi’s’ and *bociki* ‘theirs’ are followed by *pong* which makes the referent understood in *lhuntsiki* and *bociki* plural.

- (171) *ner lhuntsiki pong draksho khirakorang*
ner lhuntsi-ki pong draksho khira=ko=rang
 PROX Lhüntsi-GEN PL Drâsho 3.REFL=LOC=EMPH
 ‘Our Lhüntsi’s were only for himself.’
 SPh.TsC20081022.2997.009.SPh

- (172) *tshe bocik ponggi tshondo net Kurtotpikina tshondo Tapa pongna drang necik ponggi thun Shaupa pongna drang*
tshe bocik-ki pong tshon=to net Kurtotpa=gi-ki=na
 DM 3. PL.GEN PL here=LOC 1.PL.ABS Kurtöp=GEN-GEN=LOC
Tapa pong=na drang neci-ki pong=gi thun
 Tapa PL=LOC offer 1.PL-GEN PL=GEN DIST
Shaupa pong=na drang
 Shaupa PL=LOC offer
 ‘Theirs will be offered to the Kurtöps here and the Tapas here and ours will be offered to the Shaupas over there.’
 KZ20080515.636.475-638.447KZ

To equate *pong* with English plurality would be inaccurate; while its function is often to make a singular concept directly plural, it also often gives the sense of something like English ‘and all’. In other words, *pong* does not necessarily encode plurality *per se*.

Consider (173).

- (173) *mem zatkhan pong tapti genami tshe yau*
meme zat-khan pong tapti ge-na-mi tshe yau
 grandfather die-NMZ:PFV PL together return-PFV.MIR-TAG DM DEM:UP
 ‘The dead grandfather and all had apparently gone together up there.’
 SaTSW.373.687.SaT

Here, *pong* follows *meme zatkhan* ‘dead grandfather’ but does not mean ‘several dead grandfathers’. Instead, it translates into ‘the dead grandfather and all’, or perhaps more specifically, ‘the dead grandfather and all associated with him’.

In an interesting use, perhaps related to the use of English plural *-s* with mass nouns, the use of *pong* with some nouns denotes plurality of type, as in (174). In this example *mras pong* does not mean ‘grains of rice’ or ‘rice paddies’; instead, it denotes ‘varieties of rice’.

- (174) *mras pongni lemmalta oye lem wangda karmo lem*
mras pong=ni lem-male-ta o-ye lem
 rice PL=ABL be.delicious-NMZ:IRR-EMPH DEM:PROX-UP be.delicious
 ‘From the rice types, in terms of deliciousness, wangda karmo is
 delicious.’
 Rice.Havest20081022. 434.784.PS

The other plural marker, *gapo*, is discussed immediately below in the category of particles, as it has a different syntactic distribution than *pong*.

12.3. Particles

I use the term ‘particle’ within the nominal domain to refer to those elements which are phonologically free but syntactically bound; that is, they must occur in a NP with other elements.

12.3.1. Focus marker *khepo*

The focus marker *khepo* is the singular counterpart of *gapo*. Like *gapo*, it cannot function as a N and must occur with another element. A typical use is following a noun, as in (175) and (176).

- (175) *'awa kheponi Karma Temphel*
'awa khepo-ni Karma Temphel
 elder.sister FOC-CMT Karma Temphel
 ‘The elder sister and Karma Temphel’
 SBC20051127KW

- (176) *wo khalas khepo*
wo khalas khepo
 DEM:PROX handy.man FOC
 ‘The handy man’
 SBC20051127.KW

The focus marker *khepo* may occur following other modifiers. In (177) *khepo* ‘FOC’ follows an adjective while in (178) *khepo* follows a numeral.

- (177) *tshê khir ’lam ngoma khep*
tshê khir ’lama ngoma khepo
 DM 3.REFL lama original FOC
 ‘So he (was) the original lama.’
 KS20061212.88.084KL

- (178) *thê khepo wona thrâmo zuyu ngak*
thê khepo wo=na thrak-mo zu-yu ngak
 one FOC PROX=LOC arrive-CTM eat-IMP QUOT
 ‘Eat one when you get there’ (he said).’
 SBC20051127

In a distribution it shares with the plural focus particle *gapo*, the singular focus particle can also follow plural noun phrases, such as NPs with numerals greater than one or plural pronouns. In (179) *khepo* ‘FOC’ follows the plural pronoun *bot* ‘3.PL.ABS’ plus the numeral *zon* ‘two’. This is possible because *bot zon* is conceived of as a group.

- (179) *tsheni bot zon **khep***
*tsheni bot zon **khepo***
 then 3.PL.ABS two FOC
 ‘Then the two of them’
 KZ200805152.219.777KZ

12.3.2. Plural focus *gapo*

The plural focus particle, like the singular focus particle, has a broader distribution than *pong*. As a general rule, *gapo* can follow any element except a verb.

The most common use of *gapo*, similar to *pong* (§12.2.2.1) is immediately following a noun. Here, the function is to pluralize the noun while also focusing the element *gapo* modifies, as in (180)

- (180) *khwi **gap** tshe*
*khwi **gapo***
 dog PL.FOC
 ‘The dogs’
 SBC20051127PC

In (181) *gapo* immediately follows a determiner and in this sense functions as the head of the noun phrase. Again, this is a similar distribution to *pong* and the difference in function appears to be one of focus.

(181) *tshe wo gapo nguitami*

tshe wo gapo ngui-ta=mi
DM DEM:PROX PL.FOC buy-IPFV.MIR=TAG
'They buy these things, no'
SBC20051127PC

gapo can also modify a derived noun, as shown in (182).

(182) *zikorna bjonpala gapo*

zikor=na byon-pala gapo
tour=LOC go-NMZ:PFV PL.FOC
'Those who went on a tour and all'
SPhTsC20081022.2637.165.SPh

In (183) *gapo* 'PL.FOC' follows the modifier *zhanma* 'other' but precedes the quantifier *pura* 'all'.

(183) *mi zhanma gapo pura zon ngak*

mi zhanma gapo pura zon ngak
person other PL.FOC all send QUOT
'(He) sent all the other people (it is said).'
'KS20061212.0132.929KL

In (184) *gapo* 'PL.FOC' follows the individuated adjective *jikpa* 'big', which is itself a modifier of the noun *'yuitsshan*.

- (184) *trong 'yuitshan** jikpa jikpala gapo thamcana thrakshang*
*trong 'yuitshan** jikpa jikpa-la gapo thamca=na*
 village villages (< Dz.) big big-IDZ PL.FOC all=LOC
thrak-shang
 arrive-PFV.EGO
 ‘(The electricity) arrived in all the big big villages.’
 SPh.TsC20081022.2322.967SPh

The plural focus marker *gapo* may also come between a relator noun and a case marker, as in (185).

- (185) *neri chan gapona wotor*
neri chan gapo=na wotor
 1PL.GEN RN:NR PL.FOC=LOC like.this
 ‘Near us all like this’
 SaTSW20090917.2194.343.SW

gapo may also follow a simple pronoun, as in (186). Note in this example the pronoun *nin* ‘2.PL’ is already plural, and thus the plural function of *gapo* is redundant.

- (186) *nin gapi ngato mi tsama zonlare*
nin gapi ngat=to mi tsama zon-le-'are
 2PL PL.FOC.ERG 1.ABS=LOC person some send-IMP.POL-EXCL
 ‘You guys send me some people.’
 SBC20051127KW

In (187), *gapo* ‘PL.FOC’ follows the modifier *woksoso*.

- (187) *tshemo kaladi woksoso gapona zang woksoso gapona shama*
tshemo kaladi woksoso gapo=na zang woksoso gapo=na
 but pots like.this PL.FOC=LOC bronze like.this PL.FOC=LOC
shama
 sometime
 ‘But for for the size of metal pots.’
 SPh.TsC20081022.2801.348SPh

12.3.3. Quantifiers meaning ‘all’

There are several quantifying modifiers in Kurtöp that translate into English as ‘all’. In this section I outline the syntactic distribution and function of each of these quantifiers.

12.3.3.1. *pura*

Quantifying *pura* has its original source in Hindi *puraa* ‘all’. Whether this word was directly borrowed into Kurtöp from Hindi, or through Dzongkha or Tshangla, is difficult to determine, as it used in each of these languages with a similar functions. Though speakers are generally aware that *pura* is a borrowed form, it is used readily, regardless of age, gender, and socio-economic status. The native fom, *rita*, is discussed in the next section, §12.3.3.2.

An example of *pura* following a noun and adjective is found in (188).

(188) *tshemo khwe ngakpa pura oyeni thundo*

tshemo khwe ngakpa pura o-ye=ni thun=to
and.then water cold all PROX-UP=ABL DIST=LOC

‘ And then all the cold water (was diverted) from there to over there.’

SaT.SW20090917.2100.371.SW

Unlike the focus particles, *pura* ‘all’ can stand on its own as a NP, as illustrated in

(189).

(189) *pura teksi ramo*

pura teksi ra-mo
all all.together come-CTM

‘ When everybody comes (without any being left behind)’

KZ200805152.411.953.KZ

Like numerals and *rita* ‘all’, *pura* ‘all’ may also be suffixed with *-ka* ‘all’. An example is (190).

(190) *bjasa thungzi puraka*

bjasa thung-si pura-ka
sand do-NF all-all

‘applied sand in all...’

SaT.SW20090917.1228.102SaT

When *pura* ‘all’ and *khepo* ‘FOC’ or *gapo* ‘PL.FOC’ occur simultaneously in a NP, the tendency is for *pura* to follow *gapo*. This has been illustrated through numerous examples in the texts, one of which is shown in (191).

- (191) *natsha khepo pura=ra dak-si woci*
natsha khepo pura=ra dak-si woci
disease FOC all=EMPH improve-NF DEM:PROX.GEN
‘All the diseases being cured by this...’
SaT.SW20090917.1660.882SW

Despite the word being a borrowing from Hindi, it is widely used throughout the speech community, including by elderly speakers. The example (192) was drawn from a narration by an elderly lama.

- (192) *wome pong pura zhong bjurzi*
wo-me pong pura zhong byur-si
DEM:PROX-DN PL all insect become-NF
‘All those down there turned into insects...’
Lama200812311.723.893.LC

12.3.3.2.rita

The quantifier *rita* is a native version of *pura* and appears to have the same distribution. *rita* ‘all’ can also function as a NP, as illustrated in (193).

(193) *rita copsi...*

rita cop-si

all mix-NF

‘Mixing everything...’

Rice.Harvest20081022.178.795.PS

In (194) *rita* modifies the noun *zû* ‘body’.

(194) *zû ritakanang patma throngzi*

zû rita-ka=nang patma throng-si

body all-all=LOC river.weed grow-NF

‘River weeds were growing all over (her) whole body.’

PS20061206.1733.549.P

Like *pura*, *rita* follows the plural focus marker *gapo*, if present. This ordering is illustrated in (195).

(195) *dasum phoja gap rita khakto ge*

dasum phoja gapo rita khakto ge

today males PL.FOC all DIR:UP go

‘Today all the males went up.’

Rice.Harvest20081022.1070.775.PS

Interestingly, *rita* may co-occur with *pura*, as in (196). This co-occurrence is not common in the texts, but speakers report it is not unusual. The relative order shown in (196) is not fixed; *rita* may also follow *pura*.

- (196) *tshe 'ip zumal rita pura yau yoido go*
tshe 'ipa zu-male rita pura yau yoi-to go
 DM food eat-FUT all all go reach-INF need
 ‘So all food for eating, everything, we have to reach up.’
 SPh.TsC20081022.534.914.SPh

12.3.3.3. *thamca*

thamca is ultimately of Chöke origin,¹⁰⁰ though it could have been borrowed into Kurtöp (and Dzongkha) via Tshangla, where it analyzed as a native quantifier. *thamca*, like *pura* and *rita* also translates into English ‘all’. The difference between these three quantifiers is part of ongoing research.

Like *rita* and *pura*, *thamca* ‘all’ may constitute a NP on its own; this is illustrated in (197).

- (197) *o cot thungwani jam ... thamcara kitpa jongwa sho la*
wo co-to thung-wa=ni jam thamca=ra kitpa
 DEM:PROX make-INF do-NMZ=ABL easy all=EMPH peaceful
jong-wa sho la
 emerg-NMZ EMPH POL
 ‘After making this, it’s easy ... everyone became happy!’
 SPh.TsC.20081022625.263.TsC

¹⁰⁰ Jäschke (2003: 230) lists the definition of ལྷོ་ཅན་ <tham.cad> as ‘whole, all’.

In (198) *thamca* ‘all’ is a modifier following the noun *khwe* ‘water’.

- (198) *khwe thamca 'rona nga*
khwe thamca 'ro=na ngak
water all 'ro=LOC do
‘All water being in the valley...’
SPh.TsC20081022.2020.225.SPh

Again like the other particles meaning ‘all’, *thamca* tends to follow the plural focus marker *gapo*, if both are present in the NP.

- (199) *trong 'yuitshan** jikpa jikpala gapo thamcana thrakshang*
trong 'yuisthan jikpa jikpa-la gapo thamca=na thrak-shang
village village (<Dz.) big big-IDZ PL.FOC all=LOC arrive-PFV.EGO
‘(It) arrived in the big, big villages’
SPh.TsC20081022. 2322.967.SPh

12.3.4. Quantifiers meaning ‘some’

12.3.4.1. *phetse*

The quantifier *phetse* is originally a noun meaning ‘half’ though has broadened its syntactic distribution and function to a quantifier which translates into English as ‘some’. An example of *phetse* as a noun meaning ‘half’ is shown in (200).

(200) *'la zonni phetse wenta*
'la zon-ni phetse wenta
 month two-and half COP.EQ.MIR
 'It was two and half months.'
 SBC20051127.KW

In (201), however, *phetse* has a more generalized meaning of 'some' but maintains its syntactic status as a noun.

(201) *phetsegi dogo che man 'mekhor la*
phetse=gi dogo che manto me-khor la
 some=ERG nine ten unless NEG-take POL
 'Some only take nine or ten.'
 SPh20081022.489.835.SPh

In (202) the noun *mi* 'person' is followed by *phetse* functioning as a quantifier. Note that in addition to the semantics of 'some' *phetse* is in the quantifier slot, syntactically.

(202) *da neri tshô wennani mi phetseni nornang getakiri yasto getak*
da neri tshô wen-nani mi phetse-ni nor=nang
 now 1.PL.REFL.GEN here COP.EQ-COND person some-CFOC cow=LOC
ge-taki-ri yas=to ge-taki
 go-IPFV -HSY work=LOC go-IPFV
 'Now if it's out here then some for cows and some go for work.'
 SPh20081022.1625.310.SPh

12.3.4.2. *zhanma*

The quantifier *zhanma* means roughly ‘other’. As a modifier it follows the noun but may also constitute a NP on its own. (203) illustrates *zhanma* as a modifier and (204) provides an example of *zhanma* functioning as a NP.

- (203) *cala zhanma wen na throt thungmal na tshe*
cala zhanma wen-nani throt thung-male nâ
thing other COP.EQ-COND wash do-NMZ:IRR COP.EXIS.MIR
‘If it’s other things, we can wash (it).’
SPh20081022.1901.510.SPh

- (204) *zhanmagi pcha gapo*
zhanma=gi pcha gapo
other=GEN Bon.fesitival PL.FOC
‘Other Bon festivals’
KZ20080515.KZ

12.3.4.3. *tsama*

The form *tsama* has a broader syntactic distribution than the other quantifiers discussed in this section. Specifically, *tsama* may act a quantifier and adverb, and as an adverb *tsama* may modify the action in terms of manner or may be used to soften a request.

An example of *tsama* as a quantifier is (205).

- (205) *nin gapi ngato mi tsama zonlare*
nin gapi ngat=to mi tsama zon-le-'are
 2PL PL.FOC.ERG 1.ABS=LOC person some send-IMP.POL-EXCL
 ‘You guys send me some people.’
 SBC20051127KW

Like other quantifiers, *tsama* may function as a NP on its own. The data in (206) may be heard nearly everytime a guest eats a meal in Kurtöp-speaking area.

- (206) *tsama soile*
tsama soi-le
 some eat.HON-IMP.POL
 ‘Eat some!’
 SBC20051127KW

Examples (207) and (208) illustrate the use of *tsama* as an adverb. The first instance shows *tsama* modifying the manner of the verb, while in (208) the function of *tsama* is to soften the request. The use of a quantifier ‘some’ to soften requests is also found in Dzongkha and Hindi, and likely other languages of the region.

(207) *khako ngana tsama gorta*
khako ngak-nani tsama gor-ta
 DIR:UP do-COND some take-IPFV.MIR
 ‘If it is uphill, it takes a while.’
 SBC20051127KW

(208) *tsama Lhüntshi zongna tsham kadrin cang biye ngak*
tsama Lhüntshi dzong=na cham kadrin cang bi-ye
 some Lhüntshi Dzong=LOC until gratitude throw give-IMP.POL
ngak
 QUOT
 ‘(I said) “kindly (take us) until Lhüntshi Dzong.”’
 SBC20051127KW

12.3.4.4.dakti

The Kurtöp modifier *dakti* translates into English ‘some’ or ‘a few’, as in *khauti dakti* ‘a few eggs’. Two examples drawn from the texts are shown in (209) and (210).

(209) *'onga daktigi tshe tsakalinggi shorning thamung thungta ngaksi wenta*
'onga dakti=gi tshe tsakaling=gi shor=ning thamung thung-ta
 child some=ERG DM hat=GEN reason=ABL fight do-IPFV.MIR
ngaksi wenta
 QUOT COP.EQ.MIR
 ‘Some children were supposed to have been fighting due to a hat.’
 Lama200812311 2060.864LC

(210) *zhâ dakti*

zhâ dakti

night some

‘A few nights’

Lama200812311.2688.858LC

12.3.4.5.mira

The morpheme *mira* has a different distribution than the other modifiers discussed in this section and has been the most elusive in terms of function.

mira often occurs preceding the noun, in the syntactic position of a determiner, as in (211).

(211) *mira 'lama gapo*

mira 'lama gapo

mira lama PL.FOC

‘Lamas and all...’

SPh.TsC20081022.2889.004SPh

When *mira* occurs on its own as a NP, it is translated as ‘others’, as in (212).

(212) *tshe mira Trashigi mikthungkhan*

tshe mira Trashi=gi mik-thung-khan

DM other Trashy=ERG eye-do-NMZ:IPFV

‘The one which Trashy saw is another one.’

SPh.TsC20081022.2889.004SPh

12.4. Comparatives and superlatives

In order to make comparatives and superlatives, Kurtöp employs the construction NP₁-COMP NP₂, in which NP₁ is the base of comparison, COMP is the marker of comparison *-wa*, probably an old ablative, and NP₂ is the object of comparison.

Comparison in Kurtöp is done by way of suffixation of the comparative suffix *-wa* to source of comparison, followed by the object of comparison and then an adjective and copula or a verb. This strategy for comparison is typical throughout the region. Hindi and Dzongkha, for example, also make use of a NP NP-COMP V construction.

The use of NP NP-*wa* can also be used to make a superlative, in which case the first NP is a question word. For example, *'êwa chitpu* ‘who-COMP big’ translates as ‘bigger than anyone’ or ‘biggest’ in English, as (213) illustrates.

- (213) *jikpal the mutna ke kwekpa gap zhâwa chesana*
jikpa-la the mutna ke kwekpa gapo zhâ-wa
big-IDZ DEF COP.EXIS.NEG.MIR QP crown PL.FOC what-COMP
che-sa-na
be.big-PFV-COP
‘Isn’t there a big one, whose head is bigger than anything?’
SaTSW20090917.673.793- 675.479.SaT

12.5. ‘Like’

Kurtöp makes use of two words are translated into English ‘like’ or ‘as’. The first, *woktila*, is discussed in §12.5.1; the second, *shisa*, is discussed in §12.5.2.

12.5.1. *woktila*

When the adverb *wokti* ‘like.this’ is affixed with the individuator *-la*, it becomes an adjectival modifier, as in (214).

- (214) *seng woktilthe thungna*
seng wokti-la-the thung-na
tree like.this-IDZ-DEF do-PFV.MIR
‘Wood of this size has been done (laid over)’
(Speaker shows with hand how big)
SaT.SW20090917.556.752SaT

There is also an example in the text of *woktikti* serving as a modifier, though I am unsure of the function or source of the added material following *wokti*. (215) provides an example.

- (215) *gor woktikti*
gor woktikti
stone like.this
‘(a) stone of this size’ (speaker indicating the size with hands)
SaT.SW20090917. 2192.676SaT

12.5.2. *shisa*

The form *shisa* is a true adjectival modifier, always following the noun it modifies. For example, *phrengma shisa* translates into English as ‘like prayer beads’, or ‘similar to prayer beads’.

CHAPTER XIII

PROFORMS

This chapter presents a discussion of what I refer to as ‘proforms’, following Post (2007). I use the term *proform* to capture pronouns, including personal pronouns and deictic demonstratives, deictic adverbs, and question words. These words comprise different syntactic classes (i.e. function as determiner, NP, Adverbial Phrase) but share the ability to function as an entire phrase

Proforms in Kurtöp are a closed set of forms that share the ability to function as entire phrases. Pronouns, the forms which have the ability to function as a noun phrase, comprise the largest set of forms. Demonstratives, similarly, also have the ability to stand in as a NP. Question words are proforms as well, though their syntactic categories vary. For example, Kurtöp *'ê* ‘who’, functions as a pronoun while *'arwa* ‘when’ could be considered a ‘pro-adverbial’. Other pro-adverbials in Kurtöp reflect topographical deixis,¹⁰¹ more specifically, location or direction to or from upward, downward, toward, or away the deictic center.

The first section, §13.1, describes personal pronouns. In §13.2 I discuss the forms that are involved in topographical deixis, including demonstratives and adverbials. The final section, §13.3, discusses the forms used in making questions. Like pronouns,

¹⁰¹ Post (in press) introduces the term ‘topographical deixis’ to identify the means in a language to reference the location or trajectory of a referent in terms of a topographically oriented plane, i.e. upward, downward or same level.

demonstratives, and pro-adverbials, question words have the ability to function as a phrase on their own.

13.1. Personal pronouns

Kurtöp uses a set of pronouns to mark 1st person singular, plural exclusive, plural inclusive, 2nd person singular, plural, and third person singular and plural. In addition to these, a separate set of reflexive pronouns is found. The reflexive first plural forms are homophonous with the first plural inclusive forms. Presumably, this is due to the fact that both have developed out of the suffix *-rang*, cognate with Written Tibetan རང་ <rang> ‘self’. All pronouns except the second person plural forms have separate absolutive, ergative and genitive forms, though for the reflexive/inclusive forms, the genitive and ergative are homophonous. For second personal plural the same forms are used for reflexive as well as non-reflexive function.

Table 125. Kurtöp personal pronouns

	Singular			Plural		
	Absolutive	Ergative	Genitive	Absolutive	Ergative	Genitive
1 st	<i>ngat</i>	<i>ngai</i>	<i>ngaci</i>	<i>net</i> (EXL) <i>ner</i> (INCL)	<i>nei</i> (EXL) <i>neri</i> (INCL)	<i>neci</i> (EXL) <i>neri</i> (INCL)
2 nd	<i>wit</i>	<i>wî</i>	<i>wici</i>	<i>nin</i>	<i>ningi</i>	<i>ninti ~ninci</i>
3 rd	<i>khit</i>	<i>khî</i>	<i>khici</i>	<i>bot</i>	<i>boi</i>	<i>boci</i>

Table 126. Kurtöp personal pronouns: reflexive forms

	Singular			Plural		
	Absolutive	Ergative	Genitive	Absolutive	Ergative	Genitive
1 st	<i>ngar(a)</i>	<i>ngari/gi</i>	<i>ngari/gi</i>	<i>ner(a)</i>	<i>neri</i>	<i>neri</i>
2 nd	<i>wir(a)</i>	<i>wiri</i>	<i>wiri</i>	<i>nin</i>	<i>ningi</i>	<i>ninci</i>
3 rd	<i>khir(a)</i>	<i>khiri</i>	<i>khiri</i>	<i>bor(a)</i>	<i>bori</i>	<i>bori</i>

The first person pronoun *ngat* is clearly cognate with forms found throughout Tibeto-Burman and descended from the PTB form **nga* (Matisoff 2003a). Forms with the velar nasal initial are found throughout East Bodish languages, with the exception of Black Mountain, which has a velar stop, as in *kö* (Driem 1995b). Jacques (2007) provides convincing evidence in favor of two series of pronouns (one with velar stop; one with velar nasal) for first person at the PTB/PST level and thus the Black Mountain form *kö* could also be reconstructable to PTB.

While the etymology of the first person forms in Kurtöp is relatively straightforward, the etymology of the second and third person forms is less so. Before speculating further on etymology of the second and third person form, I will first review what we know about personal pronouns in other East Bodish languages. In Table 127. I repeat the comparative East Bodish pronouns, originally introduced in §3.5.

Table 127. Comparative East Bodish pronouns

Gloss	Krt	Kh	Bm	Ph	Ch	Da	Dz	Black Mountain
1.SG	<i>ɲat</i>	<i>ɲa/ɲat</i>	<i>ɲat</i>	<i>ɲa</i>	<i>ɲat</i>	<i>ɲe</i>	<i>ɲe</i>	<i>kö</i>
1.PL	<i>ner</i> (INCL) <i>net</i> (EXL)		<i>ɲet</i>		<i>ne</i>	<i>ɲar</i>	<i>ɲata</i> (INCL) <i>ɲara</i> (EXL)	<i>ɔɲdat, ɔɲnak</i> (INCL), <i>anak</i> (EXL)
2.SG	<i>wit</i>	<i>we</i>	<i>wet</i>	<i>yi</i>	<i>i</i>	<i>i</i>	<i>i</i>	<i>iɲ, andat</i>
2.PL	<i>nin</i>		<i>win</i>			<i>ir</i>	<i>ita(ɲ)</i> (INCL) <i>ira(ɲ)</i> (EXL)	<i>iɲnak, iɲ</i>
3.SG	<i>khit</i>	<i>gon</i>	<i>gon/khit</i>	<i>khi</i>	<i>khi</i>	<i>be</i>	<i>be</i>	<i>hoɽma</i> (M), <i>hoɽmet</i> (F)
3.PL	<i>bot</i>		<i>bot</i>			<i>ber</i>	<i>beta(ɲ)</i> (INCL) <i>bera(ɲ)</i> (EXL)	<i>hoɽoɲ, hoɽnak</i>

Based on these forms I can tentatively reconstruct for Proto East Bodish the forms illustrated in **Error! Reference source not found.**^{128, 102,103,104,105}

¹⁰² The source for the Pre-classical Tibetan form is Wolfenden (1929: 94-95).

¹⁰³ The source for the Proto-Tani form is Post and Modi (ms.).

¹⁰⁴ The source for the Proto-Boro-Garo form is Burling and Joseph (2006).

Table 128. Proposed Proto East Bodish pronouns

Gloss	*PEB	Other TB
1	<i>ŋa/kV</i>	* <i>ŋa</i> (PTB; (Matisoff 2003); (Jacques 2007) provides convincing evidence in favor of two series of pronouns (one with velar stop; one with velar nasal) for first person at the PTB/PST level.
2	<i>i/nVN</i>	PTB * <i>na, naŋ</i> (Matisoff 2003: 639)
3	<i>khi/bV</i>	Pre-classical Tibetan <i>ba</i> ; Proto-Tani * <i>bà</i> ; Proto-Boro-Garo <i>u^l, bi^l</i> , Turung Singpho <i>khi</i>

As I said above, the first person pronouns in East Bodish, and the Kurtöp reflex in particular, are unremarkable for Tibeto-Burman, seeming to be a reflex of the form reconstructed at the PTB level. The second person forms are more interesting. Kurtöp shows two separate roots for second person, *wit* and *nin*. The former is widespread within East Bodish (EB) but I am not aware of cognates outside of East Bodish, suggesting it is innovative in EB. The latter, *nin* does have cognates outside of EB and infact could be related to the form reconstructed by Matisoff (2003) for PTB, though the vowel shift from *a* to *i* still needs to be eplxained.¹⁰⁶

There is also evidence to reconstruct two roots for third person pronouns at the PEB level, both of which potentially have cognates outside of EB. Forms with a labial

¹⁰⁵ The source for the Singpho form is Morey (2010).

¹⁰⁶ It is tempting to point to the similarity of Kurtöp *nin* with the Mandarin Chinese second person pronouns *nǐ* and *nín*.

initial stop are found in older stages of Tibetan, Tani, and Bodo-Garo languages while forms with a velar stop initial are found in Singpho.

Recall from Table that all absolutive pronouns end with the coda *-t* (*ngat*, *wit*, *khit*) as do absolutive pronouns in Bumthap (van Driem 1995b: 21-22) and the *-t* is clearly historically innovative. In fact, the obligatory nature of the *-t* in personal pronouns appears to be limited to Kurtöp and Bumthap and not found in the other East Bodish languages, and thus is a very recent development. The origin of the *-t* in *ngat*, and indeed all the ‘absolutive’ forms is perhaps a reanalysis of the form that gave rise to ‘Mangde ergative *-t*’ (Fuminobu Nishida, pc.).^{107,108} The actual use of ergative versus absolutive is complicated; §14 is devoted to this topic.

In addition to the above forms, the form for the word ‘here’ *tshô* can be used also as a polite second person morpheme. This is no doubt related to the same phenomenon in Dzongkha, in which the word *na* ‘here’ is used as a means to address second person in a polite or honorific way.

The personal pronouns are generally used only for human referents. For third person non-human referents the demonstrative *wo* ‘DEM.PROX’ is usually used. However,

¹⁰⁷ Although a thorough analysis of East Bodish pronouns is yet to be completed, there is some additional evidence in favor of absolutive *-t* having its origin as an ergative marker. In my field notes, Chali and Khengkha also have pronominal forms with and without the *-t* though whether or not any functional, semantic or pragmatic difference is encoded by the *-t* is unknown. There is no evidence in either Dakpa or Dzala for the absolutive *-t*, though Dzala marks inclusive plural pronouns with a *-ta(η)* formative (2008-2009 Field Methods class at the University of California Santa Barbara).

¹⁰⁸ It might also be historically relevant that there is evidence to reconstruct an ergative case-marker *-se* to PEB, as I showed in (Hyslop 2010b). First, the ergative case-marker would have had to lose its vowel and attach to pronouns as *-s*, then then sound change *s > t* would have had to occur (indeed, coda *s > t* has happened elsewhere in East Bodish). Then, ergative *-t* could have expanded in function to being simply a pragmatic marker (cf. arguments made in §14.1.1), after Kurtöp and Bumthap separated from East Bodish.

there are (rare) instances of personal pronouns being used for inanimate referents. An example is (216).

- (216) *khitni tshe...*
khit-ni tshe
 3.ABS-CFOC DM
 ‘As for it...(the water)’
 SPh.TsC20081022.SPh

13.1.1. Reflexives

Reflexive pronouns, shown in

Table , are used for reflexive referent (i.e. when an action is directed back at the given argument) but also in broader contexts.

The data in (217) and (218) illustrate the reflexive function of Kurtöp reflexive pronouns:

- (217) *khit khiri khwî tshenan phacina*
khit khiri khwi=gi tshék-nani phat-kina
 3.ABS 3.REFL.GEN dog=ERG bite-COND be.okay-FUT
 ‘If his_i dog bites himself_i, that will be okay’
 KLEmail20080312

(218) *khit khici khwi tshenan phacina*

khit khici khwi=gi tshek-nani phat-kina
3.ABS 3.GEN dog=ERG bite-COND be.okay-FUT

‘If his_i dog bites him_j, that will be okay’

*‘If his_i dog bites himself_i, that will be okay’

KLEmail20080312

When the reflexive pronoun is used, as in (217), the referent is interpreted as being the same -- that is, the dog owner and the recipient of the dog’s bite are the same. When the non-reflexive form is used, however, as in (218), the referent of the genitive pronoun is interpreted as being different. In this instance, the dog owner and the one bitten by the dog cannot be the same person.

There is some evidence that Kurtöp reflexive pronouns are more formal or polite than non-reflexives. For example, in (219), which is taken from a formal narrative introducing the Kurtöp language area, the speaker begins his self-introduction using reflexive pronouns.

(219) *ngaragi ming khepo Karma Zangpo ngaksi zhuiki la*

ngara=gi ming khepo Karma Zangpo zhu-ki ngaksi la
1.REFL=GEN name FOC Karma Zangpo say.HON-HORT QUOT POL

‘ My own name is called “Karma Zangpo” ’

KZ20080515.16.036-19.646

13.1.2. Clusivity

An inclusive/exclusive distinction is made in first person plural pronouns in Kurtöp. The inclusive form is homophonous with the reflexive form and no inclusive/exclusive distinction is made within the reflexive pronouns. I expect, therefore, that the inclusive first person plural has derived from the reflexive pronoun historically.

Consider (220) and (221):

(220) *net zon gewala*

net zon ge-pala

1.PL.EXL two go-PFV

‘The two of us went’

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(221) *yau neri trongna menyangtami tshe*

yau neri trong=na me-nyang-ta-mi tshe

UP 1.PL.INCL.GEN village=LOC NEG-receive-IPFV.MIR-TAG DM

‘We don’t get (dried fish) up there in our village, right.’

SBC20051127.KW

These two examples come from the same speaker within the same minute of a conversation between him and another Kurtöp. The two speakers hadn’t met previously but were introduced in the United States and quickly became friends, sharing stories and getting to know each other. In (220) speaker KW describes a story about himself and another friend of his; thus *net* refers to the speaker and a third person. Shortly thereafter, KW references the area where he and the interlocutor are from, using *neri*, the inclusive

pronoun. In this case it is clear that the speaker is including the interlocutor in the first person plural reference.

Clusivity beyond first person is not unheard of in Tibeto-Burman. For example, Mark Post and Yankee Modi (pc) report a clusive contrast amongst plural pronouns in Milang, including those used for third person. In third person contexts, a contrast in clusivity may indicate whether the referent belongs to the same ‘group’ as the speaker, with ‘group’ being contextual.

There is some contradictory evidence for clusivity at the third person level as well in Kurtöp. The reflexive form of the third person singular pronoun, *khir*, is often used in non-reflexive contexts. It is as of yet unclear what conditions the use of *khit* ‘3.ABS’ versus *khir* ‘3.REFL’ in these contexts though speakers occasionally have the intuition it involves clusive notions.

Consider the minimal pair illustrated by (222) and (223), where the former example has the regular absolutive third person pronoun and the latter has the reflexive form:

- (222) *Thimphu gemong **khit** natpa shorna*
*Thimphu ge-mong **khit** natpa shor-na*
Thimphu go-CTM 3.ABS sick lose-PFV.MIR
‘When traveling to Thimphu, she fell ill.’
Elicitation.KL.20080312.email

(223) *Thimphu gemong khir natpa shorna*

Thimphu ge-mong khir natpa shor-na

Thimphu go-CTM 3.REFL sick lose-PFV.MIR

‘When traveling to Thimphu, she fell ill.’

Elicitation.KL.20080312.email

The context in (223) is not a reflexive or emphatic one and this example could be said in an identical context to that of (222). A consultant tells me that (222) is preferable when the referent is present, while the reflexive form, in (223), is used when the referent is absent. In other words, *khit* includes present company while *khir* excludes present company. It is also his opinion that, today, most speakers use the pronouns interchangeably.

A contrast between inclusive and exclusive first person pronouns is common in Tibetan languages. For example, Huber (2005) reports *'u* and *orã* as inclusive and *nyi* and *nyirã* as exclusive pronouns in Kyirong Tibetan; Haller (2000) describes *ngari* and *ngaca* as being the inclusive and exclusive first person plural pronouns, respectively, in Shigatse Tibetan,¹⁰⁹ and Bielmeier (1985) lists *ngaran* as the inclusive form and *ngaja* as the exclusive form in Balti Tibetan.¹¹⁰

¹⁰⁹ (Haller 2000) also lists *nga-tsho* and *nga-rang-tsho* as other first personal plural forms.

¹¹⁰ I am grateful to Scott DeLancey for bringing these to my attention.

13.2. Demonstrative pronouns and adverbials

Like most Tibeto-Burman languages, Kurtöp has a rich system of demonstrative pronouns and adverbials, many of which denote topographical deixis, or location above, below, or at the same level of the speaker.

Kurtöp has five deictic demonstratives. *wo* and *wozi* are used to reference proximity to the deictic center (usually, but not necessarily, the speaker), *wudi* references relative distance from the deictic center, *wome* references location below the deictic center, and *woye* references direction above the deictic center. Deictic demonstratives are illustrated in Table 129.

Table 129. Kurtöp deictic demonstratives

Kurtöp	Function
<i>wo</i>	proximal demonstrative
<i>wozi</i>	proximal demonstrative
<i>wudi</i>	distal demonstrative
<i>wome</i>	down demonstrative
<i>woye</i>	up demonstrative

Demonstratives have a prominent position in Kurtöp syntax. In addition to exclusively occupying the syntactic determiner position, they can also be cliticized with case enclitics =*na* ‘LOC’ or =*ni* ‘ABL’ (described in §11.6.6), specifying direction of movement from a deictic position. An example of the demonstrative determiner specifying location below the deictic center is (83).

(224) *khwegi womenata gari yam nâmi tshe*

khwe=gi wome=na=ta gari yam nâ=mi tshe

water=GEN DEM:DN=LOC=EMPH car road COP.EIXS.MIR=TAG DM

‘There was a car road down near the river, right.’

SBC20051127KW

Locative and ablative-marked proximate and distal demonstratives are also used abstractly for references to time. In (225) the speaker is in the middle of telling a fable about the divine madman, Drukpa Künle. He uses *wudina* as he moves the story line along.

(225) *tshe wudina*

tshe wudi=na

DM DEM.DIST=LOC

‘And after that...’

KS20061212.0187.737KL

While both *wo* ‘DEM.PROX’ and *wudi* ‘DEM.DIST’ are used with *=na* ‘LOC’ and *=ni* ‘ABL’ and abstractly, the topographically deictic demonstratives do not appear to evidence this function. Further, while *wozi* is used abstractly, including as a hesitancy marker, it is never marked with one of the enclitics.

In the adverb domain Kurtöp uses three forms reflecting deictic relations. *mau* reflects location below the deictic center; *yau* reflects location above the deictic center, and *thu* is the distal deictic adverb. These are illustrated in Table 130.

Table 130. Kurtöp deictic locative adverbs

Kurtöp	Function
<i>mau</i>	down adverb
<i>yau</i>	up adverb
<i>thu</i>	distal adverb

A separate set of forms is used to denote movement toward a location in reference to the deictic center, shown in Table 131.

Table 131. Kurtöp deictic allative adverbs

Kurtöp	Function
<i>khako</i>	towards up
<i>yoto</i>	towards down (<i>yosto</i> in Gangzur)
<i>tshondo</i>	toward deictic center
<i>thundo</i>	toward away from deictic center

The four deictic allative adverbs are clearly composed of a root plus the locative case marker. Of the four roots *khak*, *yo*, *tshon*, and *thun*, only *tshon* is found on its own, but without the coda nasal and a slightly elongated vowel: *tshô*. *thun-* is clearly related to the distal adverb *thu* but *yo-* is derived from an unknown root. I am not aware of any cognates for *khak*.

There is also a set of ablative deictic adverbs, indicating direction from a point in reference to the deictic center. These are shown in Table 132. Again, it is clear by an

examination of the forms that they are diachronically composed of a root plus the ablative case marker.

Table 132. Kurtöp ablative deictic adverbs

Kurtöp	Function
<i>yangi</i>	‘from up’
<i>mangi</i>	‘from down’
<i>thungi</i>	‘from away’
<i>tshongi</i>	‘from here’

For comparative purposes, it is useful to compare the roots used for each function: above the deictic center, below the deictic center, toward the deictic center and away from the deictic center. The forms found in Kurtöp are summarized by function in Table 133.

Table 133. Kurtöp deictic proforms

	Up	Down	Toward	Away
Demonstrative	<i>woye</i>	<i>wome</i>	<i>wo ~ wozi</i>	<i>wudi</i>
Locative adverb	<i>yau</i>	<i>mau</i>		<i>thu</i>
Allative adverb	<i>khako</i>	<i>yoto~yosto</i>	<i>tshondo</i>	<i>thundo</i>
Ablative adverb	<i>yangi</i>	<i>mangi</i>	<i>tshongi</i>	<i>thungi</i>

For each function there are two roots. The forms referencing location above the deictic center are *yau~ye~ya* and *khak*. Referents below the deictic center are indicated by use of the roots *yo(s)* and *mau~me~me*. The latter root is likely cognate with the form reconstructed for Proto-Tani **bà* (Post m.s.) and the Lepcha forms *mere* ‘that down

there’ *melom* ‘like that down there’, *melon* ‘in that direction down there’, *mebi* ‘there below’, etc. (Plaisier 2007: 70).

The roots indicating proximity to the deictic center are *wo* and *tshon*. I am not aware of any cognacy of the former outside of East Bodish¹¹¹ for *wo*, but *tshon* has a clear cognate in Written Tibetan *tshon* ‘here’. For indicating relative distance from the deictic center the roots present in Kurtöp are *thun* and *wudi*.

13.3. Question words

Most question words in Kurtöp also fall into the functional category of proforms, as they have the same syntax as personal pronouns. The only exception to this is ‘why’, which, in Kurtöp, is composed of *zhâ* ‘what’ and *ngaksi* ‘do-NF’, perhaps analogous to English ‘how come’. Kurtöp question formatives are shown in Table 134.

Table 134. Kurtöp question words

Kurtöp	Function
<i>'ê</i>	‘who’
<i>'au</i>	‘where’
<i>'akpa</i>	‘how much; how many’
<i>'arwa</i>	‘when’
<i>zhâ</i>	‘what’
<i>zhâ ngaksi</i>	‘why’

¹¹¹ Until more research is done on the East Bodish languages it will be difficult to compare forms and propose reconstructions. However, I can tentatively assume that Kurtöp *wo* is related to the Dakpa proximal demonstrative *ngo* (personal field notes).

The fact that 'é 'who' is in a paradigmatic relationship with the personal pronouns is underscored by the fact that it takes the same irregular genitive *-ci*:

(226) *Bjase*na 'é*ci* dep zu*male*?

Bjase=na 'é*ci* dep zu-*male*

Bjase=LOC who.GEN place eat-FUT

'At whose place will we in Bjase?'

SaT.SW20090917

The remaining question words are illustrated in (227-231).

(227) *miksita* 'au thung*mal*?

mik-si-ta 'au thung-*male*

eye-NF-EMPH where do-FUT

'Where would we see?'

SPh.TsC20081022.SPh

(228) *wî* dor 'akpa thrawal yo tshachu?

wî dor 'akpa thrak-*pala* yo tshachu

2.ERG ORD how.many arrive-PFV QP.COP hot.springs

'How many times have you been to the hot springs?'

SaT.SW20090917SaT

(229) *da nam bjarni yas 'arwani go tsuktaki yo*

da nam byar=ni 'arwa=ni go tsuk-taki yo
now weather summer=ABL when=ABL begin put-IPFV QP.COP

‘Now when do we start working in the summer?’

Rice.Harvest20081022.KeD

(230) *yot gapo zhâ zhâ yoktaki*

yot gapo zhâ zhâ yok-taki
manure PL.FOC what what pour-IPFV

‘What all manure you use’

Rice.Harvest20081022.KeD

(231) *zhunggi tshe zhari... dazin ngako matshunani zha ngaksi bretak yo ngaksi*

zhung-gi tshe zha-ri dazin nga-ko ma-tshu-nani zha
government-ERG DM what-HSY care do-LOC NEG-be.able-COND what
ngak-si blek-taki yo ngaksi
do-NF keep-IPFV QP.COP QUOT

‘So the government what.. (to self) says if you aren’t able to care for (the dog) then why are you keeping it?’

SBC20051127.KW

CHAPTER XIV
CASE-MARKING

Many Tibeto-Burman languages have been described to have systems of ‘optional’ case-marking, wherein a case-marker usually ascribed for a given grammatical function may be used by speakers to connote a particular semantic or pragmatic value, such as focus. This is the situation described, for example, for Tibetan (Tournadre 1991), Mongsen Ao (Coupe 2007) and Kinnauri (Saxena 2007) and to some extent Newar (Genetti 1988) and Tibeto-Burman in general (LaPolla 1995). Recent typological work in ergativity (McGregor 2009) shows that ergative systems, in general, are frequently not systematic and the particular variation found within a given language may differ considerably from the variation reported for another language. In this typological light, the Kurtöp system, as I will show, is not terribly unusual.

The remainder of this chapter has the following structure. In §14.1 I describe case marking on A and S arguments,¹¹³ that is, I describe the system of pragmatic ergativity in Kurtöp. In §14.3 I describe case-marking on O arguments, which includes an illustration of differential object marking in Kurtöp. I conclude in §14.4 2 with a summary and discussion of the Kurtöp system in a comparative and typological light.

¹¹² Much of the data and analysis here is drawn from Hyslop (2010b).

¹¹³ See §10.3.2 for an explanation of what I mean by A, S and O.

14.1. Case-marking on S and A arguments

The majority of Kurtöp verbs allow an S or A argument to be marked with the ergative case enclitic, described in §11.6.6.5. Before delving deeply into the Kurtöp details, I will offer an overview of ergativity in general in §14.1.1. In §14.1.2 I describe the general pattern of syntactic ergativity in Kurtöp while in §14.1.3 I describe the pragmatic ergative. I will show that inherent semantics of a verb dictate whether the ergative case marker will be required, will be allowed for pragmatic purposes, or be disallowed altogether.

14.1.1. Ergativity and Tibeto-Burman

McGregor (2009: 481) cites Fabricius Fabricius (1801/1791), a sketch of Greenlandic (Eskimo-Aleut, Greenland) as the first mention of an ergative system. A similar phenomenon was noted for Awabakal (Pama-Nyungan, Australia) in Threlkeld (1834) and then again in the Caucasian languages (Schuchardt 1895). The modern interest in ergativity began with Dixon's (1972) description of Dyirbal and took off especially with Comrie (1978) and (Dixon 1979). A definition of ergativity can be taken from (Dixon 1994: 1) as 'a grammatical pattern in which the subject of an intransitive clause is treated the same way as the object of a transitive clause, and differently from a transitive subject.'

McGregor (2009) clearly shows that, typologically, ergativity is rarely as straightforward as Dixon's (1994:1) definition (as many others have previously noted). McGregor describes morphological ergativity, lexical-semantic ergativity, syntactic ergativity and discourse ergativity but focuses on morphological ergativity, identifying

several different systems of ‘split-ergativity’. Four main factors condition split ergative patterns: 1) the nature of the verb; 2) the nature of the agent NP; 3) tense/aspect/mood; and 4) construction (McGregor 2009:486). Split ergativity can be contrasted with ‘optional’ ergativity, wherein the ergative marker may be present or not present without affecting the grammaticality of the clause. McGregor himself notes that ‘optional’ in this instance may be misleading as the use of the ergative markers in these instance is not random but is instead conditioned by other factors (2009: 493). This is just the sort of system at play in Kurtöp; however, given the hedge McGregor makes, and the nature of the factors at play in conditioning the presence or absence of the Kurtöp ergative in many instances, I prefer to use the term ‘pragmatic’ ergative.

McGrefor (2009) finds ‘optional ergativity’ in at least 10% of morphologically ergative languages, including Nilotic, Circassian, Kawapana, Nyulnyulan and Tibeto-Burman language families. He further identifies several ‘optional ergative’ concentrations in the world, including the India-Nepal-Tibet-Western China region. Bhutan is easily part of this region geographically and I see no reason why it would be remarkable typologically. Indeed, Kurtöp provides another example of ‘optional’ or pragmatic ergativity.

In a comparative survey on ergativity in 151 Tibeto-Burman languages, LaPolla (1995) identifies both ‘systemic’ and ‘non-systemic’ morphological ergativity. The function of ‘non-systemic’ ergativity is to disambiguate two potential agents -- one function of the Kurtöp ergativite. Because of the different function of ‘non-systemic’ ergativity versus ‘systemic’ ergativity, LaPolla (1995) prefers to use the term ‘agentive’

to refer to instances of ‘non-systemic’ ergativity. Given the description of ‘agentive’ marking in recent descriptions of Tibeto-Burman languages (e.g. Chelliah (1997) for Meithei; Coupe (2007) for Mongsen Ao; Andvik (2010) for Tshangla), one might expect ‘agentive’ to be an appropriate label for the Kurtöp phenomena. However, I opt to retain using the term ‘ergative’ in order to describe the Kurtöp system. The reasons for this are 1) the grammatical necessity of the ergative for a subset of verbs; and 2) the formal similarity of the Kurtöp ergative with the Tibetan ergative and the ergative in other Bodic languages. For example, Written Tibetan had *-gyis ~ -kyis ~ - (i)s*, van Driem (1998) describes a *-gi* ergative for Dzongkha (also with heavy pragmatic functions), and LaPolla (1995: 193) suggests that the Tamang and Gurung ergative morphemes may be palatalized versions of the Tibetan forms. It is important to recall in many instances the ergative is reported to have heavy semantic and pragmatic functions.

14.1.2. Syntactic ergative

As I show in §13.1 Kurtöp has separate pronouns for ergative or absolutive case and as I show in §11.6.6.5, the Kurtöp ergative has several allomorphs. The ergative and absolutive forms of the personal pronouns are repeated in Table 135 and the ergative allomorphs are repeated in Table 136. Recall from the discussion in §7.3.3.3, it appears that there are actually two sources for the synchronic ergative marker in Kurtöp. The native form is *-i ~ -li* while the recently borrowed form is *-gi*. The form *-i* may occur in place of a word-final vowel while *-li* may occur following a coronal or velar nasal. Speakers may use *-gi* in any phonological environment.

Table 135. Kurtöp personal pronouns

Singular			Plural	
	Absolutive	Ergative	Absolutive	Ergative
1 st	<i>ngat</i>	<i>ngai</i>	<i>net</i> (EXL) <i>ner</i> (INCL)	<i>nei</i> (EXL) <i>neri</i> (INCL)
2 nd	<i>wit</i>	<i>wî</i>	<i>nin</i>	<i>ningi</i>
3 rd	<i>khî</i>	<i>khî</i>	<i>bot</i>	<i>boi</i>

Table 136. Allomorphy of ergative

Environment	Form of ergative	Example
All	= <i>gi</i>	<i>Kinlegi</i>
Vowel final	= <i>i</i>	<i>Pemi</i>
Vowel, - <i>n</i> , - <i>ng</i>	= <i>li</i>	<i>zonli</i>

There is a subset of verbs for which the ergative is grammatically required on the A argument. The first group I will examine consists of speech, utterance and cognition verbs. In (232) I show an ergative-marked A argument with the verb *dri* ‘ask’.

(232) *gata Rinzin khîra shamatheni **ngai** drimotako*

*ga-ta Rinzin khî-ra shama-the=ni **ngai***

laugh-IPFV Rinzin 3.ERG-EMPH sometime-one=ABL 1.ERG

dri-mo-tako

ask-CTM-IPFV

‘Even Rinzin himself was laughing after I asked.’

SBC20051127.KW

Example (233) illustrates an ergative first person A argument with the honorific form of the verb ‘see’ *je*.

- (233) *soithap zon jeshang ngai*
soithap zon je-shang ngai
 stove.HON two see.HON-PFV.EGO 1.ERG
 ‘I saw two stoves (of the angel).’
 SaT.SW20090917.1341.340.SaT

In (234) I illustrate the verb *ko* ‘hear’, also with a first person ergative-marked A argument.

- (234) *'napa soithap nâ ngaksi hakoshangna ngai*
'napa soithap nâ ngaksi ha
 earlier stove.HON COP.EXIS.MIR QUOT meaning
ko-shang nâ ngai
 hear-PFV.EGO COP.EXIS.MIR 1.ERG
 ‘I understood earlier (someone say) there were two stove.’
 SaT.SW20090917.1356.725 SaT

The verb *ngak* ‘do’ may also be used as a speech act verb and is the diachronic source of the quotative. When used as a speech act verb it also conditions ergative marking on the A argument, as (235).

(235) *tshé ngai 'amana shê ngawal jed gecí*

tshé ngai 'ama-na shê nga-pala je=to ge-ki
DM 1.ERG mother=LOC come.IMP do-PFV go.HON=LOC go-HORT

'I told my mom "come, go and visit (it)".'

SaT.SW20090917.1370.964SaT

The verb *dran* 'remember' is also shown to condition ergativity on its A argument in (236).

(236) *khî drantami*

khî dran-ta=mi
3.ERG remember-IPFV=TAG

'He remembers, right.'

SBC20051127.KW

Similarly, the verb *bran* 'know', requires an ergative-marker on the A argument. Consider the data in (237-239). In (237) the A argument appears in natural discourse marked with the ergative case. If we try to alter the case in elicitation to absolutive, in (238), the argument is interpreted as being the O argument, but the sentence becomes somewhat unnatural for native speakers. Instead, speakers prefer data like that in (239), in which both the A and O are overly marked.

(237) *branci ke wî*
bran-ki ke wî
 know-HORT QP 2.ERG
 ‘Do you know?’
 SBC20051127.KW.525

(238) ? *wit branci ke*
wit bran-ki ke
 2.ABS know -HORT QP
 ‘(Does s/he) know you?’
 (elicited data)

(239) *khî wit branci ke*
khî wit bran-ki ke
 3.ERG 2.ABS know-HORT QP
 ‘Does s/he know you?’
 (elicited data)

The verbs described until now fall into the category of perception, cognition, and utterance (PCU) verbs. There are many more such examples in the texts and no exceptions have been found to the generalization that verbs of this semantic category will require the A argument to be ergative.

There is a further subset of verbs for which the ergative is required to disambiguate potential agents. Consider the data in (240) and (241), in which the verb *thrung* ‘bear.HON’, relies on the ergative marker to disambiguate the role of the two potential human verbal arguments. In (240) the verb *thrung* has one core argument,

Drowa Zangmo khepo, which is in absolutive case and therefore interpreted as the S argument. In (241) there are two core arguments: *'Am Sonam* 'Lady Sonam' and *se* 'son.HON'. Ergative case is used in this instance in order to disambiguate the agent (*'am Sonam*) from the theme (*se*).

(240) *Drowa Zangmo khepo wo gatpo ganmo zonnang thrungwala wentami*
Drowa Zangmo khepo wo gatpo ganmo
 Drowa Zangmo FOC DEM:PROX old.man old.woman
thrun-pala wenta=mi
 bear.HON-NMZ:PFV COP.EQ.MIR=TAG
 'Drowa Zangmo was born to this old man and woman.'
 PS20061206.339.468.P

(241) *'Am Sonamgi se thrungwala wenta*
'Am Sonam-gi se thrung-pala wenta
 Lady Sonam son.HON bear.HON-NMZ:PFV COP.EQ.MIR
 'Lady Sonam gave birth to a son.'
 (Elicited data)

A similar situation is illustrated in (242) and (243). The verb *zon* 'send' has human A and O arguments, and thus without case marking it would be ambiguous as to which argument is the A and which is the O. In (242) the three referents *yum* 'mother.HON', *se* 'son.HON' and *semo* 'daughter.HON' are together understood to be the O

argument of the clause while the A is unmentioned. If we mark *yum* with ergative case, as in (243), then *yum* must be understood to be the A argument.¹¹⁴

- (242) *yum seni semo yap zhuksana zonpala wenta la*
yum *se-ni* *semo* *yap* *zhuk-sa=na*
 mother.HON son.HON-CMT daughter.HON father.HON sit.HON-NMZ:LOC=LOC
zon-pala *wenta* *la*
 send-NMZ:PFV COP.EQ.MIR POL
 ‘The mother, prince and princess were sent to where the father was’
 (Elicited data)

- (243) *yumgi seni semo yap zhuksana zonpala wenta la*
yum=gi *se-ni* *semo* *yap*
 mother.HON=ERG son.HON-CMT daughter.HON father.HON
zhuk-sa=na *zon-pala* *wenta* *la*
 sit.HON-NMZ:LOC=LOC send-NMZ:PFV COP.EQ.MIR POL
 ‘The mother sent the prince and princess were sent to where the father was’
 PS20061206.961.94.P

Another instance of the ergative distinguishing the A from a potential O argument is illustrated by the data in (244) and (245) with the bivalent verb *phang* ‘feel.pity.for’. In (244) the only overt argument of the clause is in absolutive case and is thus interpreted as the O argument. If the same argument is marked in the ergative case, as in (245), then the

¹¹⁴ It may be noted that these two examples consist of formally nominalized clauses, rather than verbs exhibiting finite TAME morphology. However, my research shows no difference with regard to ergativity for nominalized or non-nominalized verbs. That is, I would expect the same pattern exemplified here if the verbs consisted only of finite suffixes.

argument is interpreted as the A argument. The data in (245) come from a text in which fishermen were ordered to kill a prince and princess, but in the end they felt pity for the prince and princess and were not able to complete their task. Again, note that both the A and O are human in this case.

(244) *nyarop zon phangzi*
nyarop zon phang-si
fisherman two feel.deeply.for-NF
'The two fishermen were pitied...'
(Elicited data)

(245) *nyarop zongi phangzi*
nyarop=gi zon phang-si
fisherman=ERG two feel.deeply.for- NF
'The two fishermen felt pity (for the prince and princess)...'
PS20061206.1241.501.P

The verbs described in this section consistently use the ergative to mark the A argument. In many instances the verb selectionally restricts for arguments which are high on the animacy scale. The primary exceptions to this were *zon* 'send' and *bran* 'know'. While the other verbs in this section would normally have two human arguments, the verb *zon* 'send', can also readily select for one inanimate argument, as can *bran*. It is not known why these verbs behave differently than other verbs which also typically select for one human and non-human argument.

The data in this section so far illustrate an ergative morpheme with the expected distribution; it has marked the A argument while the S and O are unmarked. However, the situation is more complicated than this. Consider, for example, the data in (246-249), showing bivalent verbs with two overt NPs yet no ergative morphemes.

(246) *Rinzin gari 'lup*

Rinzin gari 'lup

Rinzin car learn

‘Rinzin was learning how to drive’

SBC20051127.KW

(247) *Tshewang khit threzi otpal wen tshe thu Nu Yorkni*

Tshewang khit thre-si 'ot-pala wen tshe

Tshewang 3.ABS lead-NF bring.NMZ:PFV COP.EQ DM

Nu York=ni

New York=ABL

‘Tshewang brought him along from New York’

SBC20051127.KW

(248) *tiru zhip matshuwala net gapo*

tiru zhip ma-tshuk-pala net gapo

money straighten NEG-be.able-PFV 1.PL.ABS PL.FOC

‘We were not able to straighten out the money’

SBC20051127.KW

- (249) *Rinzin tsikpa za*
Rinzin tsikpa za
 Rinzin anger become
 ‘Rinzin would become get angry’
 SBC20051127.KW

14.1.3. Pragmatic ergative

For a large portion of Kurtöp verbs, the ergative enclitic actually displays a pragmatic function associated with emphasis. More specifically, the Kurtöp ergative often exhibits what can be referred to as ‘contrastive focus’ as defined by Dik (1985: 58). That is, the Kurtöp ergative often references an argument (‘piece of information’) which is opposed to another reference (‘some other piece of information’).

Consider the data in (250) and (251).

- (250) *tshe geshang khit*
tshe ge-shang khit
 DM go-PFV.EGO 3.ABS
 ‘So he left’
 SBC20051127.7.KW

- (251) *khî geshang*
khî ge-shang
 3.ERG go-PFV.EGO
 ‘**She** went’ (contrary to interlocutor’s assumption)

(250) appeared in a conversation during which the speaker discusses the activities of friends and family members back home in Bhutan. He explains to the interlocutor that a certain person is no longer working at his father's shop; he found a good job and left. This is an unmarked situation. The use of the ergative in (251) with the same verb signals a pragmatic function. The speaker uses the ergative to highlight the S argument, to contrast the S with another possible (the presupposed) referent. The interlocutor had incorrectly thought the speaker had gone back to their home village and the speaker clarifies the issue by using the third person ergative pronoun to signal it was not the speaker who had gone, but a third person referent (the author in this instance).

For another example, consider the data in (252) and (253). The example in (252) describes an event in a story and the S argument occurs in absolutive form.

(252) *tshé ozi mémé **thé** jongshang*
*tshé ozi mémé **thé** jong-shang*
 DM then grandfather one emerge-PFV.EGO
 'So then an old man came out'
 SBC20051127.7.KW

However, (253) is also possible.

(253) *meme the-gi jongshang*
meme the=gi jong-shang
 grandfather one=ERG emerge-PFV.EGO
 ‘An old man came out’
 (elicited data)

A speaker could utter (253) if they wanted to highlight or focus the NP *meme* ‘grandfather’. One possible scenario is one in which a group of people are discussing various people who were able to come to a given event. Perhaps it was difficult for people to come; even a number of strong men were not able to complete the journey. At the end of the discourse, (253) could be uttered, stressing that the old man had managed to come even though those who are younger and stronger did not.

The verb *jong* ‘emerge’ also appears with an ergative-marked S argument in our corpus, as shown in (254). Here, the speaker is again relaying a journey he experienced to his interlocutor. At the beginning of the journey there were about eight or nine people, including the speaker. Along the way, however, the bus broke down and the speaker and his brother decided to continue the journey on foot. By the time the speaker gets to (254) he has relayed most of the tedious journey and concludes with him and his brother reaching their destination. It is not clear, however, in this example that the use of the ergative signals pragmatic focus again, since the remaining passengers in the journey had not been mentioned for several lines previously at this point. Rather, it seems the speaker is stressing the importance of the feat by using the ergative in (254).

(254) *zai... 'ngazi nam makharwa dreni gewali net zonli chutshö yanga winim-the-na jong geshang*

zai... 'ngazi nam ma-khar-wa dreni ge-wala=i
 EXCL morning sun NEG-rise-NMZ together go-NMZ:PFV=GEN
net zon=li chutshot yanga winim-the=na jong
 3.PL.ABS two=ERG time five COP.DBT-DEF=LOC emerge
ge-shang
 go-PFV.EGO

‘Wow... having left early before the sun had risen the two of us came out by around five o’clock.’

SBC20051127.KW

Another verb which may mark its S argument as ergative is *thrak* ‘arrive’, as demonstrated in (255) and (256).

(255) *yau thrakshang net zon*

yau thrak-shang net zon
 DEM:UP arrive-PFV.EGO 1.ABS.PL two

‘The two of us arrived up there’

SBC2005112.KW

(256) *yang yangsana ngai thrakshang Phuntsholinggo*

yang yang-sa=na ngai thrak-shang Phuntsholing=to
 stand stand-NMZ=LOC 1.ERG arrive-PFV.EGO Phunthsoling=LOC

‘I reached Phuntsholing standing.’

SBC2005112.KW

In (255) the speaker is again relaying a previous traveling event. The speaker and a friend had great difficulties in reaching their destination. He describes how they struggled to obtain transportation, how they had to run, and then, in the end, how they finally reached their destination. However, in (256) the speaker employs the ergative with the same verb *thrak* ‘arrive’ to highlight or contrast himself from amongst the others in the group. During a separate trip he was on a crowded bus where he and other people had to stand. At one point all of the others who had been standing had fallen to the ground and were sitting in the aisle of the bus. The speaker, however, remained standing throughout the duration of the trip, and thus he uses the ergative to separate or contrast himself from the rest of the group.

Note that in both (250) and (255) the absolutive argument follows the verb, while the ergative-marked argument precedes the verb in (251) and (256). While a potential correlation between word order and pragmatics needs to be researched, there does not appear to be a direct correlation between ergativity and word order. (257) shows the ergative-marked argument appearing before the verb, while (258) shows the ergative argument following the verb. In both instances the verb is *jukshang* ‘run.PFV.EGO’ and the S argument is *ngai* ‘1.ERG’.

(257) *zai ngai jukshang Taktshangngi yoto barto khako yoto*

zai ngai juk-shang Taktshang=ngi yoto barto
EXCL 1.ERG run-PFV.EGO Taktshang=ABL DIR:DN DIR:MID
khako yoto
DIR:UP DIR:DN

‘Wow, I ran up and down and everywhere from Taktshang’

SBC2005112.KW

(258) *ong tshe shama jukshang ngai*

ong tshe shama juk-shang ngai
AGR DM often run-PFV.EGO 1.ERG

‘Yeah I ran often’

SBC2005112.KW

Note that (257) and (258) also present instances of the pragmatic ergative. These two can be contrasted with the data in (259).

(259) *yamni thundo gorzi thiphin gapo wotor jukta tshe*

yam=ni thun=to gor-si thiphin gapo wotor
road=ABL DEM:DIST=LOC go-NF tiffin PL.FOC like.that
juk-ta tshe
run-IPFV.MIR DM

‘The tiffns were all going that way from the road, running like that.’

SBC2005112.KW

The data in (259) can be considered an unmarked example in which the speaker is describing a scene. In the particular scene addressed in (259), the speaker is describing an

incident in which a car door opened while the vehicle was enroute and cookware and cutlery came out of the car. In (258) and (257), however, the speaker is describing a difficult job he had to do and uses the ergative to emphasize his relationship to the task. Note that the use of the pragmatic ergative in these instances is again not a type of contrastive focus; the speaker is not identifying himself as opposed to someone else. He is emphasizing the difficulty of the task and his involvement; this use is similar to what was illustrated in (254).

Until now we have only seen the pragmatic ergative used with animate arguments. However, the pragmatic ergative may also be used with inanimate arguments. In (260) the pragmatic ergative is cliticized to *trak* ‘truck’.

(260) *trakgi tshe..trak nami gizi gizi, sutla chutshot chaunini 'akpa winimthema yōshang tshe net mau*

<i>trak=gi</i>	<i>tshe</i>	<i>trak</i>	<i>nami</i>	<i>gi-si</i>	<i>gi-si</i>	<i>sutla</i>
truck=ERG	DM	truck	broken	go-NF	go-NF	night
<i>chutshot</i>	<i>chauni-ni</i>	<i>'akpa</i>	<i>winim-the=na</i>	<i>yoi-shang</i>		
time	eleven-and	how.much	COP.DBT-DEF=LOC	reach-PFV.EGO		
<i>tshe</i>	<i>net</i>	<i>mau</i>				
DM	1.PL.ABS	DEM:DN				

‘As for the truck, there’s a truck, right, it keeps breaking down and gets us there by around 11 at night.’

SBC2005112.KW

Here, the function of the ergative seems to be one of marking definiteness and signaling change of topic. Note that the ergative appears only on the first mention of *trak* ‘truck’ and not on the second mention when immediately preceding the verb.

The unifying factor found in ergative-marked (251), (253), (256), (257), (258), and (260), S arguments compared to the absolutive-marked arguments in (250), (252), (255) and (259) is that the ergative serves to highlight or focus the argument while the absolutive arguments are pragmatically unmarked. The ergative uses in (251), (253), (256) versus the ergative in (257), (258) and (260), however does not appear to represent the same function. In the former three, the ergative is marking contrastive focus (cf. Dik 1981; Chafe 1976) but that is not true of the latter three examples. In fact, it is not clear that focus would be the best analysis for *-gi* in these instances.¹¹⁵

In at least one instance the choice between the ergative and absolutive also signals a tense difference. In (261) the verb *dot* ‘sleep’ is interpreted as past tense. However, in (262) the S argument appears in ergative case and the verb is interpreted as being in future tense. Here, a time adverbial pointing to a past time is disallowed.

¹¹⁵ Interestingly, (256) begins with a sharp rising intonation. However, this type of intonation is not exclusive to examples like (256); a sharp rising intonation was also associated with (253). Future research will consider the role of intonation, coupled with the pragmatic uses of the ergative and other focal elements in marking discourse-pragmatic functions in Kurtöp in general.

(261) *tshé net gapoya oyena zhâ dot*

<i>tshé</i>	<i>net</i>	<i>gapo-ya</i>	<i>o-ye=na</i>	<i>zhâ</i>	<i>dot</i>
DM	1.PL.ABS	PL.FOC-also	DEM:PROX-UP=LOC	night	sleep

‘So we also slept up there’

SBC20051127.KW

(262) *net gapiya dot*

<i>net</i>	<i>gapo=i-ya</i>	<i>dot</i>
1.PL.ABS	PL.FOC=ERG-ALSO	sleep

‘We will also sleep (up there).’

**dangning net gepiya dot*

(Elicited data)

I suspect the possible tense differences evidenced in (261-262) fall out from the combination of the pragmatic ergative with the aspectual/evidential function of the bare verb stem. A bare verb stem may occur in two possible contexts. In one case, a bare verb is a converb missing the non-final suffix *-si* (cf. §21.2.5) but if the bare verb is the final, finite verb in an utterance, then it signal future tense (cf. §17.3.2). The use of the ergative in these examples may actually also be concomitant with different functions of the bare verb stem. More examples from natural discourse are needed to fully understand the relationship between ergativity and tense.

Until now I have illustrated uses of the pragmatic ergative with monovalent verbs. While the majority of verbs which may employ the pragmatic ergative are monovalent, there are instances of bivalent verbs also employing the pragmatic ergative. Compare (264) and (264).

(263) *net tiru yanga yang bishang*
net tiru yanga yanga bi-shang
 1.PL.ABS money five five give-PFV.EGO
 ‘We gave five bucks (’ngultram) each’
 SBC20051127.KW

(264) *nei tiru yanga yang bishang*
nei gapo=i=ya dot
 1.PL.ERG PL.FOC=ERG=also sleep
 ‘We gave five bucks (’ngultram) each’
 (elicited data)

Example (263) illustrates the unmarked instance for this verb; *bi* ‘give’ canonically takes an absolutive marked A. This particular example comes from a conversation in which the speaker is relaying events of a journey, with one of the events being that he and a friend paid five ’ngultram each for a bus ticket. However (264) could be uttered if the speaker wanted to stress that he and a friend had paid (in contrast to some other party). In other words, (264) is another example of the ergative signaling contrastive focus, though this time with a bivalent verb.

The fact that the possibility of using the pragmatic ergative is a feature of a given verb is underscored by the data in (265) and (266), which can be contrasted with (264) and (263).

(265) *nei tiru yanga yang zonshang*

nei *tiru* *yanga* *yanga* *zon-shang*
1.PL.ERG money five five give-PFV.EGO

‘We sent five bucks (‘ngultram) each’
(elicited data)

(266) **net tiru yanga yang zonshang*

net *gapo=i=ya* *dot*
1.PL.ABS PL.FOC=ERG=also sleep

In (263) and (264) that the verb *bi* ‘give’ takes an absolutive-marked A argument in the unmarked scenario but may employ the pragmatic ergative to mark contrastive focus. In sharp contrast to this are (265) and (266), where the A argument must be ergative and the pragmatic ergative is not allowed. In addition to whatever semantic differences there are between *zon* ‘send’ and *bi* ‘give’, there are two syntactic differences. First, the verb *bi* ‘give’ occurs in many light verb constructions and occurs as a main verb only, while *zon* ‘send’ has not been found in any light verb constructions and, in addition to being a main verb, also occurs as an auxiliary.

Another possibility that could explain the possibility of the pragmatic ergative for *bi* ‘give’ versus the requirement of the ergative for *zon* ‘send’ could be grammaticalization. LaPolla (1995) states that ‘non-systemic’ and ‘systemic’ ergativity are two ends of a diachronic cline. While I believe the direction of the trajectory (i.e. systemic → non-systemic vs. non-systemic → systemic) remains to be proven, the idea that ergativity has grammaticalized from a non-systemic source is intriguing. Perhaps

ergativity has grammaticalized on *zon* ‘send’ before going on to grammaticalize for *bi* ‘give’.

14.1.4. Ergative resistant verbs

A subset of Kurtöp monovalent verbs mark their argument in absolutive case and rarely allow for ergative case. These verbs tend to have arguments which are typically patients and lower on the animacy scale. These verbs have been termed ‘unaccusative’ in the literature. Weather verbs and verbs which describe a change of state fall into this category. Consider (267-270).

(267) *meto throngta*

meto throng-ta

flower grow-IPFV.MIR

‘A/the flower is growing’

(elicited data)

**metogi throngta*

(268) *mar zhuta*

mar zhu-ta

butter melt-IPFV.MIR

‘(the) butter is melting.’

(elicited data)

**margi zhuta*

(269) *phrum ruita*

phrum rui-ta

cheese rot-IPFV.MIR

‘(the) cheese is rotting.’

(elicited data)

**phrumgi ruita*

(270) *yui rata*

yui ra-ta

rain come-IPFV.MIR

‘It’s raining.’

(elicited data)

**yuigi rata*

As illustrated by the data in (267-270), ergative counterparts are not available for the sentences. However, at least two of these verbs can occur with an ergative marked S in another context, as exhibited by the data in (271-272).

(271) *phrumgi ruizi menyanta*

phrum=gi rui-si me-nyan-ta

cheese=ERG rot-NF NEG-accept-IPFV.MIR

‘**The cheese** is going on getting **rotten**’

(Elicited data)

(272) *yuigi nencarang rata*
yui=gi nenca-rang ra-ta
 rain=ERG day-EMPH come-IPFV.MIR
 ‘It’s always **raining** during the day
 (Elicited data)

The data in (271) and (272) were offered by different speakers during elicitation. In both instances, the ergative can only occur with the added words and an expanded context. The speakers express that in the data in (271) and (272), the S argument is somehow **rotting** or **coming** on purpose. In one speaker’s own words, with regard to (272) ‘you want to blame the rain by using *-gi*’. In both instances the S argument is attributed with a sense of volition. That is, when a context is made explicit, the S argument can take the ergative morpheme as a way to provide the sense that the given S argument is instigating or controlling the event, or force an agent interpretation onto the S argument. (273) and (274), in contrast to those in (271) and (272), show that when the ergative morpheme is removed, the added sense of agency is removed as well.

(273) *phrum ruizi menyanta*
phrum rui-si me-nyan-ta
 cheese rot-NF NEG-accept-IPFV.MIR
 ‘The cheese just keeps getting rotten.’
 (Elicited data)

(274) *yui nencarang rata*

yui nenca-rang ra-ta
rain day-EMPH come-IPFV.MIR

‘It’s always raining during the day.’

(Elicited data)

Examples (273) and (274) could be uttered when the speaker just wishes to articulate an observation and perhaps complain about the situation. However, the complaint can go a step further with (271) and (272) above by using the ergative to attribute an added sense of agency or volition, and blaming the *phrum* ‘cheese’ and *yui* ‘rain’ for the action. The use of the ergative in these instances differs from the uses we have seen previously. Here, the ergative does not signal the A argument nor mark contrastive focus. The function of the ergative in (271) and (272) also appears different than that of (257) or (258).

Another verb which is resistant to the ergative is *shak* ‘die.HON’, as illustrated by the data in (54). While the verb *shak* ‘die.HON’ typically restricts for an argument high on the animacy scale, the argument generally has the semantic role of patient.

(275) *yum shakshang wu ai*

yum shak-shang wu ai
mother.HON die.HON-PFV.EGO TAG EXCL

‘Oh, the mother expired, no?’

SBC20051127.PC

**yumgi shakshang*

To summarize, (271-272) showed that verbs in this category may take the ergative if a non-agent is conceived of as an agent or instigator.

Within the textual database the verbs described in this section have not occurred with ergative marking on their S argument, and in fact I found that the ergative was allowed only in further conversation and elicitation with native speakers. The verbs presented in this section illustrate a small set of verbs which share the semantics of what have been termed ‘unaccusative’ verbs in the literature. These verbs tend to have arguments which are low on the animacy scale. Verbs in this category are monovalent and are unlikely to use the ergative marker. When the ergative marker is employed, instead of providing a sense of contrastive focus, as we have seen prevalent in other instances of the optional ergative, the ergative here adds a sense of agency.

14.2. Locative/dative subjects

While I have not been able to elicit dative subjects, there are a few instances in the texts where the semantic A is marked with the locative. An example is in (276).

(276) *ngarakoya 'nyen goikina ngak samzi*

ngara=ko=ya 'nyen go-ikina sam-si
1.REFL=LOC=also *marriage* need-FUT think-NF

‘Thinking that “I also need a marriage (wife)”...’

Lama200812311.LC

14.3. Case-marking on O arguments

Kurtöp bivalent verbs can be divided into two sets with regard to case-marking on the O argument. One set of bivalent verbs requires the O argument to be unmarked while a subset of bivalent verbs exhibit differential object marking (DOM). This latter set of verbs marks their O argument with a locative postposition depending on various pragmatic factors. §14.3.1 describes instances in which bivalent verbs leave their O argument unmarked while §14.3.2 illustrates DOM.

14.3.1. Unmarked O

A large set of verbs in Kurtöp require the O arguments to be unmarked. The data in (277-278) below provide an example of a verb which cannot mark its O argument with either the *-na* or *-ro* locative.

- (277) *tiru drangkha thungtaki ngaksi*
tiru drangkha thung-taki ngaksi
money counting do-IPFV QUOT
'(We were) counting money.'
SBC20051127.13.KW
**tiru-na/ro drangkha thungtaki*

- (278) *ja cozi 'ipa cozi bita*
ja co-si 'ipa co-si bi-ta
tea make-NF cooked.rice make-NF give-IPFV.MIR
'He made tea and food and gave it (to us)'
SBC20051127KW
**ja-na/ro cozi*

Although (277) and (278) show verbs with inanimate O arguments, it is not required that verbs in this category have inanimate Os, as shown by the data in (57-58) below.

(279) *net zon 'ruzi*

net zon 'ru-zi

1.PL.ABS two wake.up-NF

'(He) woke the two of us up'

SBC20051127KW

**net zon-na/ro 'ruzi*

(280) *khit domzi tsheni khit tapthi charo*

khit dom-si tsheni tapthi charo

3.ABS meet- NF then together friend

'(I) met him and then befriended him'

SBC20051127KW

**khit-na/ro*

Some other verbs that fit this category are: *bja* 'summon', *ker* 'carry', *tup* 'slice', *lup* 'study', *me thung* 'build.a.house', *zu* 'eat', *nyang* 'receive', *kim* 'step.over', *ki* 'plant' and *kang* 'fill.with'. It remains unknown how the remainder of these verbs differ from those which may take DOM, described §14.3.2.

14.3.2. Differential object marking

Differential object marking (DOM) is the phenomenon in which verbal O arguments are marked differently under different contexts. Classic examples are Spanish and Hindi, which, to varying degrees, mark animate and topical O arguments with the same forms used to mark dative case. Bossong (1991) describes DOM in Semitic and Romance and its functional motivations, arguing that DOM represents a preferred diachronic development in which arguments that are semantically prototypical, that is, patient-like, are intimately tied to the verb and therefore unmarked. However, objects which are more independent, autonomous, or more likely to be subjects, are positively marked. The situation in Kurtöp appears to be more complex than this. In Kurtöp, one set of verbs may leave its O unmarked or marked with *=na* or *=to* depending on pragmatic factors. However, it remains to be seen whether the diachronic motivation described in Bossong (1991) will obtain for Kurtöp.

Before discussing the Kurtöp data in detail, it will be useful to review the locative markers in the language. Recall that Kurtöp employs two enclitics to mark locative case: *=na* and *=ro*. Both mark recipients and subjects of possessive predicates, and both locatives can also be used in DOM. Although I note a slight difference in the pragmatics of each, I have not yet discerned the full functional difference between the two locatives. Consider (281-283) below.

(281) *draiber sitgi chando wozi no khepo bre*

draiber sit=gi chan=to wozi no khepo blek
driver seat=GEN RN:NR=LOC DEM:PROX younger.brother FOC keep

‘(I) kept my younger brother by the driver’s seat’

SBC20051127KW

(282) *draiber sitgi chando wozi no khepo bre*

draiber sit-gi chan=to wozi no khepo=na

driver seat-GEN RN:NR=LOC DEM:PROX younger.brother FOC=LOC

blek

keep

‘(I) kept my younger brother by the driver’s seat’

(Elicited data)

(283) *draiber sitgi chando wozi no khepo bre*

draiber sit=gi chan=to wozi no khepo=to

driver seat=GEN RN:NR=LOC DEM:PROX younger.brother FOC=LOC

blek

keep

‘(I) kept my younger brother by the driver’s seat’

(Elicited data)

The precise pragmatic differences between (282) and (283) compared to (281), and the difference between (282) and (283) require further research, though the consensus between the speakers is that somehow *no* ‘younger.brother’ becomes more important, or more salient, in (282) and (283).

At least one verb (*bja* ‘summon’) mentioned in §14.1.4, evidences DOM when it occurs as an auxiliary with a light verb (cf. §16.1.6 for a description of the light verb construction). Consider the data in (284-286). Again, the example without a locative marked O is the unmarked utterance, but (285) and (286) are also possible if the speaker would like to stress the O. However, it remains unclear in which way the O becomes stressed.

(284) *khî ngat kha shû ngak bjata*

<i>khî</i>	<i>ngat</i>	<i>kha</i>	<i>shû</i>	<i>ngak</i>	<i>bya-ta</i>
3.ERG	1.ABS	mouth	strength	do	summon-IPFV.MIR

‘S/he is yelling at me’

(Elicited data)

(285) *khî ngatna kha shû ngak bjata*

<i>khî</i>	<i>ngat=na</i>	<i>kha</i>	<i>shû</i>	<i>ngak</i>	<i>bya-ta</i>
3.ERG	1.ABS=LOC	mouth	strength	do	summon-IPFV.MIR

‘S/he is yelling at me’

(Elicited data)

(286) *khî ngat kha shû ngak bjata*

<i>khî</i>	<i>ngat=na</i>	<i>kha</i>	<i>shû</i>	<i>ngak</i>	<i>bya-ta</i>
3.ERG	1.ABS=LOC	mouth	strength	do	summon-IPFV.MIR

‘S/he is yelling at me’

(Elicited data)

Another example of DOM is illustrated by the data in (287-289). In these data, I was able to obtain a better sense of the pragmatics associated with the use of DOM.

(287) *khî ngat kha shû 'numshang*
khî ngat kha 'num-shang
 3.ERG 1.ABS mouth attach-PFV.EGO
 'S/he kissed me (asserting a fact)
 (Elicited data)

(288) *khî ngatna kha shû 'numshang*
khî ngat=na kha 'num-shang
 3.ERG 1.ABS=LOC mouth attach-PFV.EGO
 'S/he kissed me (rather than someone else)
 (Elicited data)

(289) *khî ngato kha shû 'numshang*
khî ngat=to kha 'num-shang
 3.ERG 1.ABS=LOC mouth attach-PFV.EGO
 'S/he kissed me (contrary to someone else)
 (Elicited data)

In the unmarked instance (289) the O is unmarked. When the speaker wishes to emphasize the O in terms of contrastive focus, the locative =*na* is employed, as in (288). The use of =*to* in (289) appears to be marking broad, rather than narrow focus. In the terms of Dik et al. (1981), the data in (288) represent predication focus, where the whole predicate is being focused.

DOM in Kurtöp may occur with a number of other verbs, such as *prin* ‘lick’, *tshoda thung* ‘scold’, *danjali thung* ‘slap’, *dokpi thung* ‘kick’, *jagaling top* ‘tickle’, *tsimbi bra* ‘scratch’, *khuntol thung* ‘punch’, and *ga* ‘enjoy’. What these verbs have in common, in contrast to the verbs described in §14.3.1, remains to be understood.

There are some additional verbs in Kurtöp which exhibit a different pattern altogether. Consider the data in (290).

- (290) *hapta the khepo trongi mi gapo pura lapsi hapta the khepo o ko khepo phira maphiyere ngaksi*
- | | | | | | | | |
|------------------|-------------|---------------|-----------------|-----------|--------------|----------------|---------------|
| <i>hapta</i> | <i>thek</i> | <i>khepo</i> | <i>trong=gi</i> | <i>mi</i> | <i>gapo</i> | <i>pura=na</i> | <i>lap-si</i> |
| week | one | FOC | village=GEN | person | PL.FOC | all=LOC | say-NF |
| <i>hapta</i> | <i>thek</i> | <i>khepo</i> | <i>wo</i> | <i>ko</i> | <i>khepo</i> | <i>phi-ra</i> | |
| week | one | FOC | DEM:PROX | door | FOC | open-EMPH | |
| <i>ma-phi-ye</i> | <i>re</i> | <i>ngaksi</i> | | | | | |
| NEG-open-IMP | EXCL | QUOT | | | | | |
- ‘(He) said to the villagers that for one week, “you absolutely must not open the door for one week’
- KS20061212.139.719.KL
- *trong mi gapo pura lapsi*

These data show that the verb *lap* ‘say’ must mark the perceived O argument with locative case. If we remove the locative =*na* from the putative O *trongi mi gapo pura* ‘all the villagers’, the sentence becomes ungrammatical. We have found the verbs *tsho* ‘order’ and *pco khot* ‘tell lies’ to also exhibit this pattern.

14.4. Summary and conclusion

Kurtöp provides yet another example of a Tibeto-Burman language which employs a system of case marking that is difficult to capture in purely grammatical terms. Verbal semantics and agency play an important role in determining whether Kurtöp verbal arguments may or may not utilize the ergative marker, and further, verbal semantics seem to play a role in deciding what the function of the ergative case marker will be. Specifically, we have seen the Kurtöp ergative to obligatorily mark the A argument in a bivalent clause, to disambiguate two potential agents, to mark contrastive focus, to attribute greater volition to inanimate objects, and to supply further pragmatics, the exact function of which remains to be studied.

Kurtöp also displays differential object marking via the use of two possible locative markers, though the Kurtöp phenomenon differs from what has been described for other languages such as Spanish, Hindi and Semitic (cf. Bossong (1991). In §14.3 I illustrated that a subset of Kurtöp verbs allow for both locative markers to appear on the O argument. This phenomenon in Kurtöp remains the least understood, though it is clear that in at least one instance the use of locative =*na* was associated with contrastive focus and =*to* was associated with predication focus. A coherent semantic basis for the group of verbs which allowed for DOM is not obvious.

That semantics contribute to case marking -- and especially ergativity -- in Tibeto-Burman has been noticed by many. Meithei (Chelliah 1997), for example, is argued to encode semantic, rather than syntactic, roles with postpositions. Darma (Willis 2007) appears to have a more or less ergative/absolutive case-marking system, with ergative

appearing on the A argument in all tenses and aspects. The Darma ergative is described as ‘optional’, though it tends to appear more in the past tense. However, based on the data and arguments presented in Willis (2007), it does not appear that the optional ergative in Darma bears any particular pragmatic function, unlike in Kurtöp.

The Kinnauri ergative appears to be closer in function to the Kurtöp form. Saxena (2007) describes the Kinnauri ergative as a form which occurs almost obligatorily with subjects of main clauses introducing direct speech. Saxena (2007) argues that the distribution of the Kinnauri ergative cannot be accounted for unless we take into account such notions as context-shift, and again, contrastive focus. Perhaps the Tibetan ergative as described by Tournarde (1991) is most similar to Kurtöp. Tournarde describes a “rhetorical” ergative in Tibetan, the distribution of which is guided by a combination of verbal semantics and syntax. When optional, the Tibetan ergative takes on a contrastive type of focus. In the Tibetan dialect spoken in Kyirong, the distribution of the ergative is similarly complex. Huber (2005:§ 4.4) shows that in Kyirong Tibetan verb type (control, valency) and aspect condition whether or not the ergative morpheme is possible. When used, the Kyirong Tibetan ergative seems to have an emphatic function. Tshangla (Andvik to appear), another Tibeto-Burman language of Bhutan, provides an additional instance of ergative marking that is impossible to describe without reference to semantics and pragmatics.

In a comparative survey on ergativity in 151 Tibeto-Burman languages, LaPolla (1995) identifies both ‘systemic’ and ‘non-systemic’ morphological marking of ergativity. The function of ‘non-systemic’ ergativity is to disambiguate two potential

agents -- one function of the Kurtöp ergative. Because of the different functions of ‘non-systemic’ ergativity when compared to ‘systemic’ ergativity, LaPolla prefers to use the term ‘agentive’ to refer to this phenomena. Given the description of ‘agentive’ marking in recent descriptions of Tibeto-Burman (e.g. Chelliah 1997 for Meithei; Coupe 2007 for Ao; Andvik 2010 Tshangla), the applicability of ‘agentive’ for the Kurtöp ‘ergative’ may be questionable. Despite this, I opt to maintain the term ‘ergative’ because of its obligatory presence in some instances and its formal similarity to other, ergative markers in closely related languages.

One could argue that the Kurtöp ‘ergative’ system may be more akin to the ‘agentive’ marking described for Tshangla (Andvik 2010) and Meithei (Chelliah 1997) than an ‘optional ergative’ system described, for example, by McGregor (2009). However, the fact remains that the Kurtöp ergative is required in some instances (§14.1.2) and is not possible in others (§14.1.4), as would be expected of a grammaticalized system of case-marking. In terms of McGregor’s typology and in terms of what we know about ergativity in Tibeto-Burman languages, particularly of the Himalayas, the apparent non-systemicity and pragmatic functions of the Kurtöp ergative are less striking. Ergativity, it seems, particularly in the India to western China region, is often intertwined with pragmatic factors. Recently, Poornima (2009) reports similar pragmatic uses of the Hindi ergative, pushing the pragmatic ergative beyond Tibeto-Burman.

Like Bossong (1991) argues, we expect both the system of ergative marking and DOM to represent a point in a diachronic continuum of a preferred development. It

remains unclear at present what, exactly, the history of the case-markers described in this article would be, and it is impossible to speculate on what their future development would be. However, we suspect the current synchronic system of the Kurtöp ergative and DOM are indeed a snapshot of a larger diachronic development, one which we hope future research will elucidate.

CHAPTER XV
NOMINALIZATION

As elsewhere in Tibeto-Burman, nominalization is an important aspect of both the synchronic Kurtöp grammar and diachronic development of that grammar. This chapter focuses on the synchronic nominalizations used in Kurtöp, though touches on the development of clausal nominalizations into finite verbal morphology when relevant.

The important role of nominalization in Tibeto-Burman languages has been noted at least since Matisoff (1972). Since then, several articles, theses and descriptive grammars have continued to note the central role nominalization has in scores of Tibeto-Burman languages. Among the most influential have been Noonan (1997), DeLancey (2002); (1999), Bickel (1999); (1995), Genetti (1992b), and many others.

Genetti et al. (2008) distinguish between *derivational* nominalization and *clausal* nominalization. The former is essentially a derivational syntactic process that creates lexical nouns from other lexical categories. The latter applies to an entire clause, allowing it to function as a NP in a larger syntactic context. Genetti et al. (2008) illustrate this difference with the information in Table 137.

Table 137. Two types of nominalization (Genetti et al. 2008)

Nominalization			
	Applies to:	Results in:	Structure:
Derivational	Lexical root	Lexical noun	[V-NOM] _{noun}
Clausal	Clause	Noun phrase	[(NP... V-NOM)] _{NP}

Kurtöp also has derivational and clausal nominalizations. There are only two derivational morphemes, *-thang* and *-sa*, which are described in §15.1. More interesting in Kurtöp is the use of several different clausal nominalizers. There are three main clausal nominalizers which occur robustly in the data and are used in Kurtöp both as the head of noun phrases as well as modifiers in a genitive-head construction. Forms based on the nominalizer *-pa* are used in nominalizations involving perfective aspect, as I describe in §15.2.1. The nominalizer *-khan* is used for nominalizations involving imperfective aspect, as I describe in §15.2.2 and the nominalizer *-male*, which denotes irrealis nominalizations, is described in §15.2.4. There is another clausal nominalizer *-sang*, that is used much less rarely than *-pala*, *-khan*, or *-male*. I describe *-sang* in §15.2.3.

DeLancey (2002) focuses on the syntax of relativization within the Bodic branch of Tibeto-Burman, which is accomplished by nominalizing a clause which then occurs in a genitive or appositive relation to the head noun. He identifies several forms and constructions common to Bodic languages as well as forms that are innovative within a given language. As we will see below, Kurtöp shares three of these nominalizers with Central Tibetan and also makes use of the *CLAUSE-pa GEN N* construction, which DeLancey (2002) reconstructs to the shared ancestor of Tamang and Tibetan.

15.1. Derivational nominalization

15.1.1. Locative *-sa*

The morpheme *-sa* is a locative nominalizer, yielding ‘place of V-ing’. Two examples are shown in (291) and (292).

(291) *khiksana ya*
khik-sa=na ya
 be.cold-NMZ:LOC=LOC QP
 ‘In a cold place?’
 Rice.Harvest20081022.KeD

(292) *gari yam gosa*
gari yam go-sa
 car road need-NMZ:LOC
 ‘Where car roads are needed’

15.1.2. Manner *-thang*

The derivational nominalizer *-thang* changes verbs into nouns that pertain to manner. The form is rare in the texts, but is given relatively frequently in elicitation, especially when presented with Dzongkha or Chöke glosses.

Table 138. Forms derived from manner nominalizer *-thang*

Verb stem	Derived form	Gloss
<i>zu</i> ‘eat’	<i>zuthang</i>	‘way of eating’
<i>ni</i> ‘sit’	<i>nithang</i>	‘way of sitting’
<i>ngak</i> ‘do’	<i>ngakthang</i>	‘way of doing’
<i>khor</i> ‘take’	<i>khorthang</i>	‘way of taking’
<i>drop</i> ‘churn’	<i>dropthang</i>	‘way of churning’

There are a few examples of the nominalizer *-thang* in the texts. Several examples come from the narration Karma Zangpo gives about Dungkar. The example in (293)

below comes from a narration by an elderly lama. Note that in his example he switches from Kurtöp to Dzongkha back to Kurtöp.

- (293) *ngakthang bethang dangsanga bori 'acigi*
*ngak-thang be**-thang dangsanga bori*
 do-NMZ:MNR do (<Dz.)- NMZ:MNR completely 3.PL.REFL.ERG
 'aci=gi
 elder.brother=ERG
 'The elder brother (learned) all that they do...'
 Lama20081231.LC

The fact that *-thang* 'NMZ:MNR' is limited in the textual database to formal interview situations in which speakers who are highly educated in the monastic tradition are the narrators is suggestive of *-thang* 'NMZ:MNR' being borrowed from Classical Tibetan. Indeed, there is a form <stangs> 'style, posture, manner' listed in Jäschke (2003: 220) which he describes, among other uses, as forming 'verbal substantives'. The form is also present in Dzongkha with the same function (Thinley 2009).

15.2. Clausal nominalization

Four nominalizers in Kurtöp apply at the clause level, rather than the lexical level. The forms described below are robustly used throughout the Kurtöp nominalization system. In §15.2.1 I describe the perfective *-pa* nominalizers. The form *-pa* by itself is used in forming adverbial clauses, while the form *-pala* is used in forming relative clauses. It may occur on its own, may be marked as a genitive in a V-NMZ=GEN N

construction, or may be suffixed with the purposive marker *-ki*. The nominalizer associated with imperfective aspect is *-khan*, described in §15.2.2. As with *-pala*, it may occur on its own, in a genitive modifying construction, or suffixed with *-ki* as a purposive clause. In §15.2.3 I describe the nominalizer *-sang*, which has the least frequent distribution of all the clausal nominalizers. The irrealis nominalizer is *-male*, as I describe in §15.2.4. *-male* is similar to *-pala* and *-khan* in that its nominalized constituent may occur as the head of a NP or may occur as the modifier of a NP. The perfective nominalizer *-pala* and the irrealis nominalizer *-male* share the fact that they are also used as finite suffixes. The imperfective nominalizer *-khan* and the future nominalizer *-sang* are not used this way, though, as I illustrate below, they are used with a copula in a construction which I argue is the last nominalized step in becoming finite verbal morphology.

15.2.1. The *-pa* nominalizers: *-pa* ~ *-wa* ~ *-sa*

Benedict reconstructs a *-pa* ~ *-ba* suffix to Proto-Tibeto-Burman which he describes as a ‘verbal noun suffix’ (1972: 96). As DeLancey (2002) points out, this form is undoubtedly related to the Classical Tibetan *-pa* nominalizer and was also clearly present at the time of Proto-Bodic. The form is also found in Kurtöp.

Nominalizations ultimately derived from a *-pa* nominalizer are the most pervasive in the Kurtöp. The reflex of the PTB **-pa* nominalizer has the following allomorphy: *-wa* following velar and old *-l* codas, *-sa* following historically open stems, and *-pa* elsewhere. Derivations of nominalizer *-pa* are found throughout Kurtöp grammar (cf.

§16.2.2.9, §17.1.1.2, §17.1.1.5 , §17.1.1.6). This section is devoted to its purely nominalizing functions.

15.2.1.1. Adverbial perfective *-pa*

-pa on its own is relatively rare in Kurtöp (this is true both of finite and non-finite constructions when compared to *-pala*, which is described immediately below). As a suffix to verbs, *-pa* has two functions. In finite grammar, *-pa* functions as a yes/no perfective question marker (cf. §19.2.2.1.1) while in non-finite grammar *-pa* still functions as a clausal nominalizer for perfective aspect, creating adverbial clauses.

As a nominalizer *-pa* encodes perfective aspect and by itself nominalizes clauses which are used adverbially. Consider (294):

- (294) *'ngazi nam makharwa dreni gewali*
'ngazi nam ma-khar-wa dreni ge-pala=gi
morning sky NEG-rise-NMZ together ge-NMZ=ERG
'Going early before the run had risesn...'
SBC20051127KW

In this example the function of *-pa* is to nominalize the clause *'ngazi nam khar* 'early sun rise', which can then be used as an adverbial for the matrix verb *ge* 'go', which is itself then nominalized via the strategy described in §15.2.1.2.3 . A more detailed discussion pertaining to adverbial clauses derived via nominalization with *-pa* can be found in §21.2.1.

15.2.1.2. Perfective *-pala*

The most common uses of *-pa* are in the nominalizer *-pala*. The allomorphy described above for *-pa* is also found in *-pala*; that is, *-pala* changes to *-wala* following velar, *-r* and old *-l* codas, *-sala* follows historically open verb stems, and *-pala* is found elsewhere. The source of *-la* is unclear and we still cannot know if it has any cognates in the other East Bodish languages. There are few possible candidates for cognacy in related languages. Tshangla (Andvik 2010) has a mirative copula *la* and in Tamang (Poudel 2006) *-la* marks non-past on verbs.

15.2.1.2.1. *-pala*

In its most basic form, *-pala* serves as clausal nominalizer, resulting in a derived noun which serves as the head of a NP. In other words, nominalizer *-pala* differs from nominalizer *-pa* in marking relative clauses, as opposed to adverbial clauses. *-pala* may be used to relativize an A, S or O argument. The clause in the resulting N is in perfective aspect and can occur in a NP with other constituents. Like other nouns, a noun derived by way of *-pala* can occur as the head in a NP; it can receive nominal morphology, such as the contrastive focus marker, and it can occur in the syntactic position of other nouns, such as preceding focus markers or following determiners.

A simple example is (295), in which the clause *zikorna bjon* ‘to go on tour’ is nominalized with *-pala* and serves as the head noun, preceding the plural focus marker *gapo*. Here, the relativized argument is the single argument of a monovalent verb.

(295) *zikorna bjonpala gapo*
zikor=na byon-pala gapo
 tour=LOC go.HON-NMZ:PFV PL.FOC
 ‘Those who went on tour and all’
 SPh.TsC20081022

In (295) the nominalized clause is monovalent and the entire NP, for which *bjonpala* is the head, appears in the discourse with a copula. The speaker describes those present at a particular event in Lhüntsi. (296) illustrates *-pala* nominalizing *zat* ‘finish’, an auxiliary to the bivalent verb *je* ‘see.HON’. The referent of the NP is the O argument. This example, as in (295), is lacking overt core referents in the clause. In the larger syntactic context, the NP illustrated in (296) occurs as an argument in an existential clause.

(296) *mau je mazatpal gap*
mau je ma-zat-pala gapo
 DEM:DOWN see.HON NEG-finish-NMZ:PFV PL.FOC
 ‘Those which (we) couldn’t visit’
 SaT.SW20091017

In (297) the nominalized verb *tsosala* occurs in a NP with *neri* ‘1.PL.INCL.ERG’ in the nominalized clause. Recall that for the inclusive first person plural pronoun there is no formal distinction between genitive and ergative, thus it is conceivable that *neri* could be analyzed as a genitive, rather than ergative pronoun. However, upon further research,

we find that *neri* ‘1.PL.INCL.ERG’ could be replaced with the exclusive ergative form *nei* ‘1.PL.ERG’, but not the exclusive genitive form *neci* ‘1.PL.GEN’. Thus, the form *neri* ‘1.PL.INCL.ERG’ in (297) is clearly representative of the ergative, rather than the genitive.

(297) *neri tsosalani boi mebran wu ngaksi*
neri tso-pala-ni boi me-bran wu ngaksi
 1.INCL.GEN speak-NMZ:PFV-CFOC 3.ERG NEG-know TAG QUOT
 ‘Saying “they won’t understand what we were talking about”...’
 Lama20081231.LC

A similar example is (298). The nominalized verb *zhe* ‘discover’ occurs with both of its arguments overt; its O argument, *terna* ‘treasure’ is unmarked while the A argument, *khiri* ‘3.REFL.ERG’ is again marked as an ergative.¹¹⁶ The same argumentation holds in this instance as it did for (297). That is, when replacing the pronoun *khiri* ‘3.REFL.ERG’ with a non-reflexive form, we find that genitive forms entail an ungrammatical utterance while the ergative forms do not.

¹¹⁶ The presence of overt nominal referents in a clause nominalized with *-pala* seems to entail the use of the suffix *-ni* attached to the nominalized verb, which I have tentatively analyzed as the contrastive focus marker. Speakers I consult say these examples are preferred with the suffix *-ni* but are unable to articulate why. The true motivation for seemingly obligatory presence of *-ni* following a clause nominalized with *-pala* that also contains overt nominal referents is a matter of continuing further investigation.

(298) *tshé khiri terna zhesalani wo gapoyang*

tshé khiri terna zhe-pala=ni wo gapo-yang
DM 3.GEN treasure discover-NMZ:PFV=CFOC PROX PL.FOC-also

‘And the treasures that he discovered were also...’

TInterview20081231.DT

The data here illustrate that nominalization via *-pala* is a productive means in Kurtöp to derive action nominalizations, allowing a clause to serve as a NP in a broader syntactic context. Another way to look at *-pala* is through the lens of relativization. The nominalizations formed by *-pala* are also examples of relative clauses. The first two examples, (295) and (296), illustrate headless relative clauses, with the former having a referent NP that is the A argument. The third and fourth examples in this section, (297) and (298), illustrate internally headed relative clauses. In both instances the nominal head occurs in genitive case.

15.2.1.2.2. *v-pali* N

A very common construction is to use *-pala* as a pre-head modifier in a genitive construction: V-NMZ=GEN N. The structure N=GEN N is a common way for Kurtöp to form functional adjectives and Kurtöp nominalized clauses readily fall into this construction. This construction is very widespread in Bodic languages and the data presented here offer further support for DeLancey (2002)’s reconstruction of this construction to a parent language of Tamang and Tibetan. Indeed, the Kurtöp data suggest this construction was present at the parent language for all three languages. I illustrate the use of genitive-marked *-pala* to modifier following nouns below.

In (299) the monovalent verb *lhak* ‘exceed’ is nominalized with the suffix *-pala* and cliticized with the genitive. The verb phrase *trong lhawali* then modifies the head noun *juta* ‘shoes’. The whole NP *trong lhawali juta gapoya* is the O argument to the verb *thung* ‘do’.

- (299) *trong lhawali juta gapoya thungta*
trong lhak-pala=gi juta gapo=ya thung-ta
 thousand exceed-NMZ:PFV=GEN shoes PL.FOC=also do-IPFV.MIR
 ‘Shoes costing more than a thousand are seen’
 SPh.TsC20081022

A similar example is (300) but instead of the nominalized verb being monovalent, *drang* ‘offer.HON’ is bivalent. The nominalized verb takes the genitive enclitic and serves as the base for the following relator noun *korni* ‘RN:ABT’.

- (300) *jinlapgi ngaksi 'ai khepo thorina drangwali korni wenta ngak*
jinlap=gi ngaksi 'aya khepo thori=na
 blessing=INSTR QUOT grandmother FOC heaven=LOC
drang-pala=gi korni wenta
 offer.HON-NMZ:PFV=GEN RN:ABT COP.EQ.MIR
 ‘It’s about how the old woman was sent to heaven by the blessing.’
 KS20061212

(301) is a particularly interesting example, structurally. The verb *nawala* is synchronically the unmarked existential copula (§18.1.2.1) but in (301) shows some

evidence that the formative *-wala*, still has nominalizing properties synchronically. Here, it can take the genitive and participate in the N=GEN N construction.

- (301) *khwe nawali 'nemaro*
khwe nawala=gi 'nema=to
 river COP.EXIS=GEN side=LOC
 'By the side of the river'
 PS20061206

15.2.1.2.3. Clause-final *v-pali*

When a verb nominalized with *-pala* serves as a post-head modifier it is generally marked with *-ki*, though not necessarily. When the verb is bivalent the clause tends to translate into a headed relative clause in English. Consider the examples below.

In (302) the head of the relative clause is *mi* 'eye', which is modified by the verbal expression *miksi thung* 'eye-NF do' (the way to express 'see' cf. §10.5.5.4). The verb *thung* 'do' is nominalized with *-pala*, takes the genitive *=gi* and then again the nominalizer=*-ki*.

- (302) *mi khepo miksirang mathungwaliki*
mi khepo mik-si=rang ma-thung-pala=gi=ki
 eye FOC eye-NF=EMPH NEG-do-NMZ:IPFV=GEN=NMZ
 'The eyes which couldn't see at all'
 SPh.TsC20081022

In (303) the matrix verb is *'ot* ‘bring’ with *khî* ‘3.ERG’ as the A argument and *ting* ‘butter.lamp.container’ as the O. *'ngos zapaliki* modifies the O argument.

(303) *ting yangi khî 'ot ra yau 'ngos zatpaliki*

<i>ting</i>	<i>ya-ngi</i>	<i>khî</i>	<i>'ot</i>	<i>ra</i>	<i>yau</i>
butter.lamp.container	UP=ABL	3.ERG	bring	come	DEM:UP
<i>'ngos</i>	<i>zat-pala=gi-ki</i>				
religious.favor	finish-NMZ:PFV=GEN=NMZ				

‘He brought the butterlamp container from up there which was offered up there.’

SBC20051127KW

In (304) the matrix verb is *yitna rata* ‘remember-IPFV.MIR’ and the O argument of the clause is the difficult journey or ‘going’. The verb *ge* ‘go’ is nominalized, marked with the genitive =*gi* and again nominalized with *-ki*,

(304) *yitna rata kau chutsi gewaliki*

<i>yitna</i>	<i>ra-ta</i>	<i>kawa</i>	<i>chut-si</i>	<i>ge-pala=gi-ki</i>	
memory	come-IPFV.MIR	pole	cut-NF	GO-NMZ:PFV=GEN-NMZ	

‘I remember the difficult journey (lit. the memory of the cutting poles’ going comes’)

SBC20051127KW

In (305) the speaker is telling a story involving a long journey and a magical piece of flat bread. The noun that is modified is *keptang* ‘flat bread’, which comes in the next

couple clauses, and the modifier, occurring here, is a nominalized version of the verb *thak* ‘finish’, marked with the genitive and again nominalized with *-ki*.

- (305) *nen zushang zut methâ san zushang methawaligi*
nen zu-shang nen zu-to me-thak san zu-shang
 day eat-PFV.EGO day eat-INF NEG-finish night eat-PFV.EGO
me-thak-wala-ki
 NEG-finish-NMZ:PFV-NMZ
 ‘... which cannot be finished if (you) eat day and night.’
 Lama20081231.877.717LC

Nominalizations with *-pala=gi* or *-pala=gi-ki* may also be used on a clausal level (as opposed to lexical), signaling cause, as in (306).

- (306) *'lama... mi mang gewali tshe*
'lama... mi mang ge-wala=gi tshe
 Lama person group go-NMZ:PFV=ERG DM
 ‘My god! Due to too many people going...’
 KZ20080515.1. 631.017KZ

15.2.1.2.4. Moving into the finite verbal system

In a spectrum of finiteness, from clausal nominalization on one end to finite verbal morphology on the other, the Kurtöp form *-pala* clearly evidences both ends, as evidenced in what I refer to as type 1 and type 2 clausal structure (cf. §16 for a more

elaborate discussion and illustration). The previous sections have illustrated the uses of *-pala* as a clausal nominalizer, but consider example (307).

(307) *ble jurwal wenta*
ble jur-pala wenta
four become-NMZ:PFV COP.EQ.MIR
'(it) became four bags'
SBC20051127.8KW

This example consists of a nominalized verb *jur* 'become' immediately followed by the copula *wenta* 'COP.EQ.MIR'. However, there is no sense whatsoever in the semantics of *juwala* 'become-NMZ:PFV' in (307) that would lead one to believe the form is nominalized. On the contrary, the semantics of (307) are identical to a fully finite clause. The formal nominalization present in (307) is now only a historical relic.

DeLancey (in press) shows how Tibeto-Burman languages tend to develop new finite structures by way of clausal nominalizations. Finite structures developed via this pathway begin as clausal nominalizations. When these nominalized clauses co-occur with a copula, the seeds of grammaticalization have been planted and the structure is now in a position to be reanalyzed as a finite clause. (307) above would be a prime example of this situation. Once the clause is interpreted as finite, the copula is free to be omitted, yielding a brand new finite construction, involving an erstwhile nominalized verb and no copula. This is precisely the development of the perfective *-pala*, described in detail in §17.1.1.2 and §20.1.1.4, and illustrated in (308) immediately below.

- (308) *witya machutpala*
wit-ya ma-chut-pala
 2.ABS-also NEG-cut-PFV
 ‘You also didn’t suffer (lit. ‘cut’ (poles))’
 KZ20080515.1. 631.017KZ

In (308) the verb is suffixed with *-pala*, formally identical to the perfective nominalizer (including allomorphy) and also retaining perfective semantics. However, in this instance there is no copula and indeed no other source for finiteness. The suffix *-pala* provides the finiteness.

15.2.2. Imperfective *-khan*

The nominalizer *-khan* contrasts with *-pala* in that it encodes imperfective aspect of the nominalized clause. An elicited minimal pair clearly shows this aspectual difference. The example in (309) illustrates the use of the nominalizer *-pala* conveying perfective aspect, while (310) shows the nominalizer *-khan*, indicating imperfective aspect. In all other respects these clauses are identical.

- (309) *jongwala mutna*
jong-wala mutna
 emerge-NMZ:PFV COP.EXIS.NEG.MIR
 ‘There is no one who went’
 KLElicitation.Email.20101024

(310) *jongkhan mutna*

jong-khan *mutna*

emerge-NMZ:IPFV COP.EXIS.NEG.MIR

‘There is no one who is going’

KLElicitation.Email.20101024

The ultimate origin of *-khan* seems straightforward. *mkhan* was a nominalizer in Classical Tibetan (DeLancey 2002) and is also found today in Tshangla (Andvik 1999). It is interesting to note, however, that the form is not found in Dzongkha. The possibility that it has been borrowed from Classical Tibetan into Kurtöp and Tshangla cannot be overlooked. The alternative to this, of course, is that *-khan* reconstructs to the parent language shared between Classical Tibetan, the East Bodish languages and Tshangla.¹¹⁷

As with *-pala*, *-khan*’s perfective counterpart, *-khan* can attach to the edge of a verb stem and appear without genitive marking as the nominal head of a NP. Unlike in Lhasa Tibetan (DeLancey 2002), *-khan* may also be used in the genitive construction, either coming immediately before the noun it modifies, or at the end of the clause. Note that in these instances the form of the genitive is always *-li* (cf. §7.3.3.4).

¹¹⁷ There are two reasons why I am not confident of this possibility. First, although Tshangla has been classified as ‘Bodic’, I have yet to see evidence for this beyond what could simply be attributed to areal influence. Phonological innovations are generally taken to be the strongest criteria for subgrouping, but know of no evidence cited inclusion of Tshangla in Bodic. Hill (2010) proposes that the sound change *ng > ny* in the word for ‘fish’ could be diagnostic of Bodic. If so, Tshangla fails this test right away as it retains the word *nga* for ‘fish’. Second, Tshangla speakers and most East Bodish language speakers are Buddhist. History tells us that Bhutanese recently converted to Buddhism and an important aspect of this conversion has been the power of Classical Tibetan over the languages of Bhutan. The fact that Kurtöp and Tshangla speakers are Buddhist, and that *-khan* is associated with Buddhist philosophical texts, automatically raises suspicion that the form could be borrowed.

15.2.2.1. *-khan*

The imperfective nominalizer *-khan* may be used on the referent of an S argument, as example (311) shows. Here, the nominalized verb is *zhuk* ‘stay.HON’, which is also marked with the definite suffix *the*. The nominalized clause *’awanang zhukhanthe* serves as the S argument for the verb *thrak* ‘arrive’.

- (311) *’awanang zhukhanthe thrawal wenta*
’awa=nang zhuk-khan-the thrak-pala wenta
 elder.sister=LOC stay.HON-NMZ-DEF arrive-NMZ:PFV COP.EQ.MIR
 ‘Someone came to stay with the sister.’
 PS20061206

Example (312) shows the existential copula nominalized with *-khan*. The nominalized clause *torshongthe nâkhan* is part of the NP, functioning as the A argument for the verb *zhu* ‘say.HON’. Like other nouns, *nâkhan* is followed by the focus marker *khepo*.

- (312) *torshongthe nâkhan khepo yidamo ngaksi zhumale*
torshongthe nâ-khan khepo yidamo ngaksi zhu-male
 torshong-DEF COP.EXIS-NMZ:IPFV FOC yidamo QUOT say.HON-FUT
 ‘There is a *torshong* called ‘yidamo’ (*torshong* is a type of *torma*, or religious effigy made of dough)
 Lama20081231.LC

In (313) the nominalized verb is again the existential copula but the referent of the NP is this time the O argument of the question predicate.

- (313) *tsentsen ngâkhan khepo zhâ yo?*
tsentsen ngak-khan khepo zhâ yo
cypress.tree do-NMZ:IPFV FOC what QP.COP
'What is this (thing) called *tsentsen*?'
Lama20081231.JT

Example (314) illustrates a nominalized bivalent verb for which the referent of the NP is the A argument.

- (314) *sungchot 'nangkhan khepo...*
sungchot 'nang-khan khepo
ceremony.HON give.HON-NMZ:IPFV FOC
'(those) who offer the religious ceremony...'
Lama20081231.LC

Another interesting example is (315), drawn from an interview with a local elder and respected authority on Dungkar history. In this example the nominalized clause consists of the monovalent verb *ge* 'go' and its argument '*neng sum*' 'three years'. What is interesting, however, is the interpretation of this example appears to be for an NP referent that is the A argument, despite *ge* 'go' being a monovalent verb.

- (315) *'neng sum gekhan*
'neng sum ge-khan
 year three go-NMZ:IPFV
 'The ones which are three years old' ...
 DungkarTS20080101DT

The nominalized constituent can also receive receive ergative marking, as I show in (316) and (317).

- (316) *corkhanli khako ta, 'macorkhanli...*
cor-khan=li khako ta ma-cor-khan=li
 be.able-NMZ=ERG DIR:UP see NEG-be.able-NMZ=ERG
 'The ones who are able study higher, the ones who are not capable...'
 TInterview20090106.DT

- (317) *gari mutkhanli tiru bizi*
gari mut-khan=li tiru bi-si
 car COP.EXIS.NEG-NMZ:IPFV=ERG money give-NF
 'Those who don't have a car give money...'
 TInterview20090106.DT

15.2.2.2. *v-khan=GEN N*

As with *-pala*, when the nominalizer *-khan* serves as a nominal modifier, it is marked with the genitive and generally precedes the head noun, as in (318) and (319).

- (318) *nerayang zukhanli khwi wen ngaksi*
nera-yang zu-khan=li khwi wen ngaksi
 1.PL.REFL-also eat-NMZ:IPFV=GEN dog COP.EQ QUOT
 ‘We are also dogs that eat (they said)’
 PS20061206

In (318) the matrix verb is the equational copula *wen*, with one argument the pronoun *near* ‘1.PL.REFL’ and the other the noun phrase *zukhanli khwi* ‘eat-NMZ:IPFV=GEN dog’. In the second noun phrase the verb *zu* ‘eat’ is nominalized with *-khan*, to which the genitive clitic then attaches. The genitive phrase *zukhanli* precedes the head noun *khwi* ‘dog’; recall that the construction N=GEN N is a common way in Kurtöp to modify nouns.

Example (319) is similar example, with *moja* ‘woman’ serving as the head noun and in the second NP in a copular clause. This time the nominalized clause consists of the bivalent verb *nat* ‘leave’ plus auxiliary *blek* ‘keep’ and an overt O argument *khit* ‘3.ABS’.

- (319) *thrakhan kheponi khit nat brekhanli moja kkep wenta*
thrak-khan khepo-ni khit nat blek-khan=li moja
 arrive-NMZ:IPFV FC-CFOC 3.ABS leave keep-NMZ:IPFV=GEN woman
khepo wenta
 FOC COP.EQ.MIR
 ‘The woman who came is said to be the same woman who left him.’
 Lama20081231.LC

15.2.2.3. Moving into the finite verbal system

While *-khan* has not yet crossed into the finite grammar in the way *-pala* has (that is, *-khan* cannot be used on its own as a finite suffix), there is some evidence it could be on its way. There are some instances in which a clause nominalized with *-khan* is immediately followed by a copula and the entire nominalized clause + copula construction is interpreted as a single event. I illustrate two examples below.

In (320) the verb *ge* ‘go’ is nominalized with *-khan* and immediately followed by the copula *wenta* ‘COP.EQ.MIR’. The interpretation is of one single event, as the translation indicates.

(320) *bosaya gekhan wenta ngaksi*

bosa=ya ge-khan wenta ngaksi

orphan=also go-NMZ:IPFV COP.EQ.MIR QUOT

‘The orphan is also going (they say)’

Lama20081231.1497.613LC

15.2.3. Future *-sang*

The nominalizer *-sang* is used to encode future tense in nominalized clauses. In this way it is very similar to *-male* (§15.2.4), but unlike *-male* cannot be used on its own as a finite marker of future tense. *-sang* is used only rarely in the texts and does not occur in basic elicitation at all. The precise difference between *-sang* and *-male* remains the focus of ongoing research.

In (321) the clause *'langpochegi yung ra* ‘elephant-ERG get come’ is nominalized with *-sang* ‘NMZ:FUT’ and immediately followed by the equational copula *wen*. The nominalized clause plus copula is interpreted as an event in the future.

- (321) *'langpochegi yung rasang wen ngaksi*
'langpoche=gi yung ra-sang wen ngaksi
 elephant=ERG get come-NMZ:PL COP.EQ QUOT
 ‘‘The elephant will come to get (you)’’ (the mother) said’
 PS20061206P

A similar example is (322), where the nominalized clause contains the verb *ra* ‘come’ followed by the existential copula *wen*, which happens to be cliticized with the hearsay marker. Again, the interpretation appears identical to a fully finite clause.

- (322) *tshondo thimphuro rasang wenri*
tshon=to thimpu=ro ra-sang wen=ri
 here=LOC Thimphu=LOC come-NMZ:PL COP.EQ=HSY
 ‘He said he’s coming here to Thimphu.’
 SaT.SW20090917.SW

There are a few examples in the texts in which *-sang* is not used in immediate conjunction with a copula. Rather, the function of *-sang* in (323) and (324) appears to be more derivational than clausal. This example comes from a narration with an elderly speaker from Gangzur. He and a friend are discussing life in the village in the past, during which time many items were not available for sale and most objects had to be

made by hand in the village. Containers for eating and storing alcohol were amongst these, as he lists in these two examples.

- (323) *'ipa zusang*
'ipa zu-sang
food eat-NMZ:PL
'(thing) for eating (i.e. 'plate')'
SPh.TsC20081022

- (324) *zhor theksang*
zhor thek-sang
alcohol insert-NMZ:PL
'(thing) for the alcohol (i.e. 'alcohol container')'
SPh.TsC20081022

15.2.4. Irrealis *-male*

Unlike *-sang*, which occurs only rarely in the texts and almost never in elicitation, *-male* is a very productive clausal nominalization. *-male* contrasts with *-pala* 'NMZ:PFV' and *-khan* 'NMZ:IPFV' in that it encodes irrealis mood. The equivalent form in Bumthang is *-mala* (Driem 1995a), and I therefore suspect the finale vowel in *-male* has recently raised from the low vowel /a/ to the mid vowel /e/. If this is the case, then, in terms of etymological source, *-male* could be composed of *-ma* plus the same formative *-la* found in the perfective nominalizer *-pala* (cf. §15.2.1.2). There is ample

evidence for a separate *-ma* formative in Kurtöp’s East Bodish sister languages as well as in other Tibeto-Burman languages, as I shown in Table 139.^{118,119,120,121,122}

Table 139. Possible cognates to Kurtöp *-ma* in *-male*

Khengkha	Dakpa	Dzala	'Olekha	Chantyal	Dimasa
<i>-m</i> ‘FUT’	<i>-m</i> ‘FUT’	<i>-ma</i> ‘FUT’	<i>-m</i> ‘FUT’	<i>-m</i> ‘IPFV’	<i>-ma</i> ‘FUT’

15.2.4.1. *-male*

A verb nominalized with *-male* may occur as the head of a NP, as in (325), in which the verb *ni* ‘stay’ is nominalized and the referent NP is the S argument of *ni* ‘stay’.

(325) *pcha ngaksi nimale khepo*
phya ngaksi ni-male khepo
 Bon.festival QUOT stay-NMZ:IRR FOC
 ‘the one that will remain being called *pcha*...’
 KZ20080515KZ

¹¹⁸ In our Dakpa data (Hyslop and Tshering 2010, 16), we found *-m* to correlate with third person future, while *-k* appeared to correlate with first person future. Given that the study was preliminary, it is too early to tell whether or not the analysis of *-m* being a marker of third person future, or something else, such as disjunct future, for example.

¹¹⁹ The source for the Dzala data is Genetti (2009).

¹²⁰ The source for the 'Olekha data is van Driem (1995b: 239).

¹²¹ Noonan (2003) identifies *-m* as a present/immediate future/future imperfective in Chantyal.

¹²²The source of the Dimasa data is Longmailai (to appear).

In (326) I show a similar example; here, *-male* as a nominalizer to the verb *se* ‘die’, again referencing the S argument. Again in (327) the nominalized verb *lang* ‘be.sufficient’ is monovalent.

- (326) *semal khepo 'lamagi bran*
se-male khepo 'lama=gi bran
 die-NMZ:IRR FOC lama=ERG know
 ‘The lama knew (she) was going to die...’
 KS20061212KL

- (327) *basgi 'la langmalthebe darna tshe*
bas=gi 'la lang-male-the-be dar-na tshe
 bus=GEN rent suffice-NMZ:IRR-DEF-only remain-PFV.MIR DM
 ‘There was just enough money remaining for the bus fare.’
 SBC20051127.KW

An example with *-male* attaching to a bivalent verb is (328), where the nominalized constituent refers to the O argument. As with the previous examples, the nominalized verb evidence nominal syntax; here *tshuimale* ‘look.for-NMZ:IRR’ precedes the plural focus marker.

- (328) *sha phâ tshuimal gapo tshui ngak...*
sha phâ tshui-male gapo tshui ngak
 meat pig look.for-NMZ:IRR PL.FOC look.for QUOT
 ‘(They) look for the meat pig they are looking for (it is said)...’
 KZ20080515.KZ

15.2.4.2. *V-male=GEN N*

Constructions involving a verb nominalized with *-male* can also occur in the genitive construction as a means to modify a noun. In this way, *-male* is similar to the other clausal nominalizers *-pala* and *-khan* and is also a very productive strategy in Kurtöp for forming relative clauses. The first examples I show illustrate clauses nominalized with *-male* which are cliticized with the genitive and modify the following noun. However, I will also show examples in which the genitive is missing and the nominalized clause stands as an appositive to the head noun.

The example in (329) shows the bivalent verb *zu* ‘eat’ suffixed with the irrealis nominalizer *-male*. The clause created by this nominalization is then cliticized with the genitive and serves as a modifier for the head noun *rozan* ‘last.meal’. The head noun is immediately followed by the focus marker *gapo* and the particle *pura* ‘all’.

- (329) *zumalegi rozan gapo pura*
zu-male=gi rozan gapo pura
eat-NMZ:IRR=GEN last.meal PL.FOC all
‘All the food which is the last meal’
Lama20081231.LC

Another example with the verb *zu* ‘eat’ as the nominalized verb is shown in (330). Here, the clause *'mese tsham zu* ‘NEG-die until eat’ is nominalized and this phrase receives the genitive clitic and modifies the following nominal head *tsampa*. The entire

NP, consisting of the noun *tsampa* and its preceding genitive modifier (the nominalized clause) function as the O argument in the matrix clause with A argument *khi* ‘3.ERG’ and verb ‘*ot* ‘bring’.

- (330) *'mese tsham zumalegi tsampayang khi 'ot ngaksi*
me-se tsham zu-male=gi tsampa-yang khi 'ot
 NEG-die until eat-NMZ:IRR=GEN roasted.barley-also 3.ERG bring
ngaksi
 quot
 ‘(Saying that) he will also bring food (lit. roasted barley) until they die...’
 PS20061206

In (331) the nominalized clause consists of a directional adverb plus the verb *phur* ‘fly’ and auxiliary *jon* ‘go.HON’. The clause is then marked as a genitive and modifies its following noun *namza* ‘clothing.HON’.

- (331) *khakto phur jonmalegi namza khepo zhezi...*
khakto phur jon-male-gi namza khepo zhe-si
 DIR:UP fly go.HON-NMZ:IRR=GEN clothing.HON FOC wear.HON-NF
 ‘Putting on (her) clothing for flying upwards...’
 PS20061206

In (332) the verb *chong* ‘take.out’ is nominalized and modifying the head noun *charzhi* ‘plans’. In this example *-gi* functions as a genitive.

(332) *gari yam chongmalegi charzhi*
gari yam chong-male=gi charzhi
 car road take.out-NMZ=GEN plans
 ‘Road construction plans’
 SaT.SW20090917.SW

In (333) *-male* nominalize the entire clause and *-gi* is attached to it.

(333) *gari yam chongmaligi nâ*
gari yam chong-male=gi nâ
 car road take.out-NMZ:IRR=NMZ COP.EXIS.MIR
 ‘There is road construction.’
 SaT.SW20090917.SaT

While the majority of utterances of this type show overt marking of the genitive, there are a few instances in the texts in which the genitive is absent. The example in (334) is drawn from the story of Kala Wangpo. Here two nominalized verbs *zu* ‘eat’ and *gin* ‘wear’ are joined with the comitative marker *-ni*. Together both modify the noun *'atsa* ‘clothes’ but are in an appositive relationship. At this point in the narration the speaker had been discussing food to eat and clothes to wear and thus neither of these referents (food to eat or clothes to wear) were new. I suspect the fact that the nominal referents are now old information licenses the omission of the genitive in this instance, though further research is needed to confirm this hypothesis.

(334) *yau mayoinani zumaleni ginmale 'atsa mutle*

yau ma-yoi-nani zu-male-ni gin-male 'atsa
UP NEG-reach-COND eat-NMZ:IRR-CMT wear-NMZ:IRR clothes
mutle

COP.EXIS.NEG.IND

'If (we) don't reach (them) up, then there where was nothing to eat and no clothes to wear.'

SPh.TsC20081022.537.282.SPh

15.2.4.3. Clause-final *v-male=GEN*

When a nominalized verb is marked as a genitive but does not function as a modifier, it gives the sense of purpose in the future. A simple example is (335).

(335) *zumaliki pura*

zu-male=gi pura
eat-NMZ:IRR=GEN all

'All would be edible...'

SBC20051127KW

Another example is (336):

(336) *tshé daning semaleki namungcham nimaleki wenta la*

tshé daning se-male-ki namung-cham ni-male-ki
DM this.year di-NMZ:IRR-NMZ next.year-until stay-NMZ:IRR-NMZ
wenta la

COP.EXIS.MIR POL

'If we were going to die, then we would stay until the next year.'

SaT.SW20090917.SW

In the example above, the speaker is discussing a hypothetical situation in the past. He and a friend are discussing the hot springs, which are renowned for their magical curative powers. In (336) SW expresses the belief that if one were going to die, the power of the hot springs would give them another year to live.

15.2.4.4. Moving into the finite verbal system

In §15.2.1.2.4 I described how the perfective nominalizer *-pala* is now also used as part of the finite grammar. In §15.2.2.3 I provided some examples that the imperfective nominalizer *-khan* occurred in what I call type 2 clause types -- a nominalized clause followed immediately by a copula -- the final step in the nominalization → finite clause grammar continuum before becoming a fully finite construction. As with *-pala*, the irrealis nominalizer *-male* is also used as a finite verbal suffix.

The example in (337) illustrates the formally nominalized verb *bi* ‘give’ immediately followed by the equative copula *wen*, interpreted as a single event without any semantic evidence of nominalization. In other words, (337) illustrates the nominalizer *-male* taking part in a clause type 2 construction.

- (337) *ngai wotor **bimale** wen ngaksi*
ngai wotor bi-male wen ngaksi
 1.ERG like.this give-NMZ:IRR COP.EQ QUOT
 ‘‘I will give (you a piece of flat bread) like this’ (he says)...’
 Lama20081231.LC

Example (337), which consists of a formally nominalized verb and a copula can be contrasted with (338), in which the copula is absent and *-male* is left to stand alone as the finite verbal morphology.

- (338) *tam ’namisami tam shik **nimale***
tam ’namisami tam shik ni-male
 speech very speech narrate stay-FUT
 ‘Stories, (he) will keep on narrating stories.’
 Lama20081231.LC

More details about *-male* as a future tense marker can be found in §16.2.2.4, §17.3.1, and § 20.1.3.1.

15.3. Purposive *-ki* ~ *-gi*

Unlike the other nominalizers discussed in this section, which attach directly to verb stems, *-ki* only attaches to verbs that have already been nominalized. In fact, it is not strictly correct to call *-ki* a nominalizer, as it only occurs on constituents which have already been nominalized. The form *-ki* appears to be in free variation with *-gi*

Etymologically, it is unclear whether or not the nominalizer *-ki* is related to the genitive/ergative *=gi*, the horative *-ki ~ci ~iki*, the formative *-ki* which joins the mirative imperfective *-ta* in order to mark imperfective with assimilated knowledge. I will provide an overview of its distribution in the nominalization paradigm below, illustrating its semantic function as we go along.

In (339) the verb *ni* ‘stay’ has been nominalized with *-sang* and is again suffixed with *-ki*, giving a sense of purpose to the entire clause.

- (339) *phogi saka nisangki*
pho=gi sa=ko ni-sang-ki
 cave=GEN earth=LOC STAY-NMZ:PL-NMZ
 ‘A place for staying under the cave...’
 SaT.SW20090917.SaT

A clause which has been nominalized with *-pala* ‘NMZ:PFV’ may also be marked with purposive *ki*, as I show in (340)

- (340) *tshe makhanpaliki...*
tshe ma-khan-pala=gi=ki
 DM NEG-know-NMZ:PFV=GEN=NMZ
 ‘For (the ones) who do not know...’
 Lama20081231LC

The example in (341) was uttered by the author. Toward the beginning of my stay in Kurtö, the woman who was hosting me was not feeling well and reported she had a

headache. I quickly went to my room and returned to main living room, where a group of speakers were also sitting, with a bottle of ibuprofen. I said (341), trying to explain that it would help her headache (i.e. English ‘it’s for your headache’). However, my remark was met with an uproar of laughter, because the only interpretation of (341) was one of purpose or causation.

- (341) *guyung namaleki*
 guyung *na-male=ki*
 head be.sick-NMZ:IRR=NMZ
 ‘to make the head hurt’

In one example in the text, a verb nominalized with the place nominalizer *-sa* takes *=ki*; this is shown in (342).

- (342) *'napa Khentse khir thrungsaki wentami*
 'napa Khentse khir thung-sa=ki *wenta=mi*
 earlier Khentse 3.REFL give.birth.HON-NMZ:PL=NMZ COP.EQ.MIR-TAG
 Before, where Khentse was born, right...’
 SaT.SW20090917.SW

15.4. The role of nominalization in main clause grammar

Much of Kurtöp main clause grammar has come diachronically from nominalizations. The unmarked perfective *-pala* and certain future *-male* have both

recently come from a nominalized verb plus a copula. Over time, the copula ceases to be necessary, leaving the nominalized verb standing alone as the only marker of finiteness. Thus, a new finite construction is born. We can see how this has recently happened with *-pala* and *-male*; for both morphemes there are several instances in which *-pala* or *-male* is followed by a copula and the construction is translated simply into an English finite clause with one event. In instances where minimal pairs do exist (V-NMZ COP vs. V-NMZ/TAME) the difference between the two constructions is subtle and even native speakers have a difficult time articulating what difference is signaled by the presence or absence of a copula.

-male and *-pala* are not the only nominalizers that play a role in the finite grammar. While they are the most productive and the only nominalizers which have moved into the realm of finiteness, there is some evidence that *-khan* and/or *-sang* could also be moving in that direction. The nominalizer *-khan* is most commonly used to make relative clauses but there are a few instances in the text in which the result of nominalizing a verb with *-khan*, when followed by a copula, is the translation of an English finite mono-clausal event. Nominalizations involving *-sang* are more likely to report this function, but *-sang* occurs much less commonly than *-khan*. However, whether the verbal uses of *-khan* are greater than those of *-sang* remains a question of future research.

CHAPTER XVI
THE VERBAL COMPLEX

Verb phrases in Kurtöp are broadly of two types: those involving single, finite verbs and those involving a nominalized verb plus a copula. Finiteness in Kurtöp is a property of a clause; a clause which can stand on its own, which is not adverbial, a complement, or in any way subordinate to another clause is finite. Because much of the Kurtöp finite verbal morphology has developed by way of nominalization -- some of the forms quite recently -- some of the forms described here are identical to forms described in the chapter on nominalization (§15).

There are two main types of verbal clauses in Kurtöp -- those which consist of a formally nominalized verb and copula, and those which consist only of a finite verb and no copula. The nominalized type clearly reflects the tendency in Tibeto-Burman to build main clause grammar by way of nominalizations (DeLancey in press). As DeLancey (in press) shows, a verbal stem may be nominalized and followed by a copula as: V-NOM COP. Beginning as a novel and innovative way to create main clause grammar, over time these nominalizations often become the heart of main clause syntax. In Kurtöp, too, nominalizations are an important -- though not exclusive -- means to construct main clauses. Examples from the nominalized type and the non-nominalized type of clause are shown in (343) and (344), respectively. I will refer to a finite clause that consists only of a finite verb as clause type 1, while clauses that formally consist of a nominalized verb plus a copula will be called clause type 2.

(343) *khit gewala wenta*

khit ge-wala wenta

3.ABS go-NMZ:PFV COP.EQ.MIR

‘He went indeed’

(344) *khit geshang*

khit ge-shang

3.ABS go-PFV.EGO

‘He went’

In (343), the verb *ge* ‘go’ is suffixed with the nominalizer *-pala*¹²³ and is followed the copula *wenta*. A more literal translation for this sentence in English might be something like ‘his going was’. (344) on the other hand shows the same verb *ge* ‘go’ suffixed with the egophoric perfective suffix. A literal translation in English for (344) is ‘he went.’

Over time it becomes difficult to draw the line between a nominalized clause and a main clause. For example, with (343) in mind, consider (345).

¹²³ Note that the allomorph of *-pala* is *-wala* following old *-l* coda verb stems (see §7.3.2.2 for a detailed analysis of this morphological alternation).

- (345) *khit gewala*
 khit *ge-wala*
 3.ABS go-PFV
 ‘He went’

In this example the verb *ge* ‘go’ is suffixed with the same suffix, *-wala*, as in (343) but this time there is no copula and *-wala* is a fully finite perfective suffix. The meaning is again different and the closest English translation is ‘he went’.¹²⁴ In truth, much of Kurtöp main clause grammar is somewhere in the cycle of nominalization > finite clauses and this grammar is a snapshot in of that process in time. Whether to label some suffixes as nominalizers or finite tense/aspect/evidential markers becomes an almost arbitrary decision. In a sense, nominalization and finite clauses in Kurtöp are not always mutually exclusive.

Regardless of whether main clauses in Kurtöp are composed of a nominalizer and copula or exclusively an unambiguously finite verb, a wide range of tense/aspect and evidential/evidential-like values are coded. In order to do this, Kurtöp possesses a rich array of suffixal verbal morphology as well as an impressive set of copulas. To add to this is a smaller set of verbal clitics which attach to the right edge of the verb phrase, encoding a variety of functions. Thus, a simple finite verb phrase may be as short as two syllables in (346) or as long as six syllables as in (347).

¹²⁴ The actual difference between *khit geshang*, in (344) and *khit gewala*, in (345), is evidential-like and discussed in §20.

(346) *khit geshang*

khit ge-shang

3.ABS go-PFV.EGO

‘He went.’

(347) *khit gewala wentari*

khit ge-wala wenta=ri

3.ABS go-NMZ:PFV COP.EQ.MIR=HSY

‘He went indeed (I heard).’

16.1. Verbs

Unlike other Tibeto-Burman languages which may make a contrast between transitive and intransitive verbs (e.g. Kham) or evidence different stems based on aspectual and modal factors (e.g. Tibetan; Dakpa, Hyslop & Tshering 2010), Kurtöp verb stems are by and large invariant. Only one verb in the language *ge* ‘go’, evidences a different stem type based on tense/aspect. However, there is a small set of verbs which exhibit the lexicalized remnant of the *s- causative that has been reconstructed to Proto-Tibeto-Burman. These are discussed in §16.1.2.

16.1.1. The basic monovalent-bivalent distinction

The terms ‘monovalent’ and ‘bivalent’, rather than ‘transitive’ or ‘intransitive’, are useful designators for Kurtöp verbs. Monovalent verbs are those which may take maximally one core argument (S) and bivalent verbs are those which may take maximally two core arguments (A and O). These categories are lexically determined and there is no

formal way to identify whether a given verb will be monovalent or bivalent. Given the tendency for NPs to be omitted from discourse in general, it is also often difficult to ascertain from texts alone whether a verb is monovalent or bivalent. That is, if a verb appears with two overt core arguments in discourse, it is obviously bivalent. However, if a verb appears with one or no overt core arguments, there is not evidence that the verb is not bivalent. Often, elicitation is needed to ascertain the lexical valency of a verb.

Within the categories of monovalent and bivalent, Kurtöp verbs are also categorized based on the semantic role of the core argument. Monovalent verbs subcategorize for agent or patient arguments. In the case of the former, the optional ergative will be allowed while in the case of the latter the ergative enclitic *-gi* is usually disallowed (cf §14 for more details on case-marking).

Table 140. Kurtöp monovalent patient verbs

Form	Gloss
<i>boi</i>	‘recover’
<i>se</i>	‘die’

Table 141. Kurtöp monovalent agent verbs

Form	Gloss
<i>'ngo</i>	‘cry’
<i>zak</i>	‘drip’
<i>zok</i>	‘grow.tall’
<i>bap</i>	‘descend’

Bivalent verbs may also be sub-categorized based on the semantic nature of their arguments. For example, a bivalent verb may selectionally restrict for an agent or theme A argument, and an agent or theme O argument.

16.1.2. Remnants of PTB causative *s-

A handful of Kurtöp verbs are lexicalized examples of the old PTB causative *s-. These are shown in Table 142.

Table 142. Lexicalized examples of the PTB causative *s-

Monovalent	Bivalent
<i>dar</i> ‘fall.to.lower.level’	<i>thar</i> ‘release; make.fall’
<i>bap</i> ‘descend’	<i>phap</i> ‘bring.down’
<i>dek</i> ‘enter’	<i>thek</i> ‘insert’
<i>dor</i> ‘be.broken’	<i>thor</i> ‘break’
<i>jong</i> ‘emerge’	<i>chong</i> ‘take out’

16.1.3. Stem alternations

The verb *ge* ~ *gi* ‘go’ is the only verb to exhibit any alternation in the stem that is not conditioned phonology (for example, the voicing of final non-coronal consonants or loss of coda *-k* described in §7.3.1). The allomorph *gi* is found in the imperative and when suffixed with the indirect evidence perfective suffix. In other times the form is *ge*. In Gangzur, they also have allomorph *ga*, at least in the imperative, if not in other contexts. Presumably the *ga* allomorph is the result of a different diachronic development than what Dungkar Kurtöp underwent. The form for ‘go’ reconstructs to **gai*, from older

**gal*. The form *gai* is still readily found amongst the languages of the wider Bumthang group, including in the Tangmachu dialect of Kurtöp. It is easy to see the different paths of development possible.

16.1.4. Auxiliaries

The primary defining quality of Kurtöp auxiliaries is that they can occur directly following a lexical verb without interceding material in the clause-chaining construction (described in detail in §21.2.5). All of the auxiliaries are also lexical verbs with semantics typically associated with auxiliarization (Anderson 2006). These are shown in Table 143.

Table 143. Kurtöp auxiliaries

Form	Gloss
<i>ra</i>	‘come’
<i>zon</i>	‘send’
<i>zat</i>	‘finish’
<i>ge</i>	‘go’
<i>blek</i>	‘keep’
<i>ni</i>	‘stay’
<i>thung</i>	‘do’
<i>ngak</i>	‘do’

16.1.5. Copulas

Copulas, which may be the only verbal element of the clause or which may accompany a formally nominalized verb, are themselves a sub-category of verbs. Unlike the lexical and auxiliary verbs, copulas do not synchronically take any of the verbal

prefixes or suffixes, though they can be cliticized with the full gamut of clitics described in §16.2.3 and vary to reflect evidential and evidential-like values. As I describe in §18 in detail, there is a rich set of negative and affirmative existential and equational copulas which, at least diachronically, share much of the verbal suffixes described below.

However, in the case of the copulas, the function of the apparent suffixes are not necessarily predictable from the functions described below. The reconstructed forms of the copulas are summarized in Table 144.

Table 144. Proto-Kurtöp copulas

Form	Function
<i>*wen</i>	affirmative equational copula
<i>*min</i>	negative equational copula
<i>*nak</i>	affirmative existential copula
<i>*mut</i>	negative existential copula

DeLancey (2008) speculates that the affirmative equational copula *wen* has its origin at least in part in the TB copular etymon **way* (Matisoff 1985; Matisoff 2003a) with the nasal final probably attributed to a fusion of **way* with PTB **(g-)na(-s)* ‘be/live/stay/rest/perch’. I will also tentatively assume this hypothesis. The negative equational copula is descended from a composition of *mV-wen*. The affirmative existential copula may be descended from PTB **(g-)na(-s)*, which is cognate with many forms throughout Bodic (DeLancey 1992). Interestingly, this form is still a lexical verb in Kurtöp’s closest neighbor Bumthap, suggesting it has grammaticalized as a copula only recently in Kurtöp. The etymology of the negative existential **mut* is not an obvious

collocation of *mV-* plus *nak* and instead probably represents a historical combination of *mV-yut*, cognate with Tibetan *yod*.

In addition to performing the expected copular functions described in §18, the copulas are an integral part of the finite verbal system. The equational copulas (*wen*, *min*) follow verbs nominalized with *-pala*, and *-male* and the existential copulas (*nâ*, *mû*) follow non-final marking.

16.1.6. Light verbs in verbo-nominal predicates

In South Asian languages complex predicates involving what is referred to as a ‘light’ verb plus a nominal are common. Mohanan (1994: §8) describes ‘complex predicates’ in Hindi as a N+V sequence in which the N is referred to as the ‘host’ and the verb V is referred to as a ‘light verb’. Mohanan (1994) points out that complex predicates of this nature have been of interest in Indo-Aryan and Dravidian linguistics for over two centuries, with (Gilchrist 1796; Kellogg 1875; Platts 1898; Sharma 1958; Verma 1971) being just a few well-known examples. Rather than use the term ‘complex predicate’, which may denote any number of predicates involving more than a simple verb, I use the term ‘verbo-nominal predicate’ following (Montaut 2004). Following Mohanana (1994) and (Butt 1995), and the tradition before them, I use the term ‘light verb’ to designate the verbal element in the Kurtöp equivalents of this type of complex predicates but use the more generic term ‘nominal’ to designate the nominal element of the predicate.

Unlike Hindi, which has different formal types of verb-nominal predicates¹²⁵ (e.g. Montaut (2004: §174-179)), verbo-nominal predicates in Kurtöp consist only of one type, formally: a nominal element and light verb, as shown in (348).

(348) *ce thung*
 ‘swim’

In (348) the nominal element is *ce* ‘swimming’ and the light verb is *thung* ‘do’. *ce* is noun-like in that it appears to be an argument of the verb on the surface, but is not noun-like in that it cannot occur on its own in a NP in another context. In this sense, nominals and light verbs comprise a small, closed set of elements not found outside of this construction.

16.1.7. Complement types

Some verbs can also be described based on what type of complement they take. Generally, speech and cognition verbs can take fully finite complements.

16.1.7.1. Infinitival complement-taking verbs

A small set of verbs may take an infinitival verbal complement (cf. §21.1.1 for a discussion of complementation involving the infinitive *-ro*). Table 145 shows some examples of these.

¹²⁵ For one example, Hindi verbo-nominal predicates differ in whether there is obligatory genitive marking, as in the following example: *merii madad kiijie* vs. *mujhe yah pasand nahii haī*.

Table 145. Verbs which take infinitival complements

Form	Gloss
<i>ge</i>	‘go’
<i>tshuk</i>	‘be.able’
<i>ni</i>	‘stay’
<i>’lot</i>	‘be.able (contra-expectation)’
<i>go</i>	‘need’
<i>yok</i>	‘pour’
<i>khor</i>	‘take’

An example is:

- (349) *zhungnang phuido go dratshangna*
zhung=nang phui-to go dratshang=na
 government=LOC offer-INF need monastic.body=LOC
 ‘(We) have to offer to the government, the monastic body.’
 SPh.TsC20081022.2901.970.SPh

16.1.7.2. Fully finite complement-taking verbs

Another set of verbs may take fully finite verbal complements, some of which are shown in Table 146.

Table 146. Verbs which take fully finite complements

Form	Gloss
<i>bran</i>	‘know’
<i>khan</i>	‘know.how’
<i>ngak</i>	‘do; say’

16.2. Verbal morphology

This section discusses the various morphological structures the lexical and auxiliary verbs can take. In §16.2.1 I discuss the only true prefix in Kurtöp, the negative prefix. §16.2.2 provides a structural analysis of all the suffixes a verb may take; §16.2.3 presents the verbal clitics; and §16.2.4 presents the verbal particles. For the purposes of this dissertation, I define affixes in Kurtöp as those bound grammatical forms which attach to a word, while clitics attach to phrases. Both tend to be included in a phonological word with the forms to which they have attached. Particles, on the other hand, tend to comprise their own phonological word.

16.2.1. Prefixes

Kurtöp has only one prefix, negative *-ma/me/mi*, a reflex of the PTB **ma-y* negative (Matisoff 2003a: 601). This form occurs as a prefix to verbs to negate the action, as in:

(350) *ngaita mebran*

ngai-ta me-bran

1.ERG-EMPH NEG-know

‘I didn’t know.’

SBC20051127.KW

The prefix takes on the tone of the verb stem, so that if the verb stem has a high tone the prefix will have a high tone while if the verb stem has a low tone, the prefix will have a low tone (cf. §7.3.2.1 for a more elaborate discussion). The vowel quality of the

negative changes as a means to indicate tense differences. Refer to §19.1 for a more thorough discussion of negation in Kurtöp.

16.2.2. Suffixes

Table 147. Structural analysis of Kurtöp verbal suffixes

Form	Function	Origin	Conditions stem-final <i>-k</i>	May be negated
<i>-khan</i>	Nominalizer	Verb	Y	Y
<i>-sa</i>	Nominalizer	Noun	Y	Y
<i>-sang</i>	Nominalizer	?	Y	N
<i>-male</i>	Nominalizer/TAME	Noun?	N	Y
<i>-pa*</i>	Nominalizer/TAME	Noun?	N	Y
<i>-mo</i>	Subordinator	Noun?	N	Y
<i>-nani</i>	Subordinator	COP=ABL	N	Y
<i>-si</i>	Converb	?	Y	N
<i>-shang</i>	TAME	?	Y	Y
<i>-mu</i>	TAME	Verb?	Y	N
<i>-ta</i>	TAME	Verb	Y	Y
<i>-na</i>	TAME	COP (<VERB)	Y	Y
<i>-ki</i>	TAME	?	Y	Y
<i>-le</i>	Imperative	?	Y	Y
<i>-lu</i>	Imperative	?	Y	Y
<i>-yo</i>	Imperative	?	Y	Y

Verbal suffixes in Kurtöp attach exclusively to the end of verbs. This syntactic category is for the most part straightforward, except in a few cases where suffixes have

clearly had a broader distribution diachronically, making the synchronic picture somewhat muddier. Table 147 shows a structural summary of the verbal suffixes.¹²⁶

16.2.2.1. Nominalizer *-khan*

The nominalizer *-khan* is found in Written Tibetan as མཁན་ <mkhan> as an agentive nominalizer (Jäschke 1881) and is no doubt related to the Kurtöp verb *khan* ‘know’. In Kurtöp, the nominalizer *-khan* falls into the syntactic slot of verbal suffixes immediately following the verb stem and though it still function as as a nominalizer, it has a much broader has a semantic function than WT མཁན་ <mkhan> (cf §15.2.2).

(351) *Drukpa Künle ngakhan khepo mejena jemalta*

<i>Drukpa</i>	<i>Künle</i>	<i>ngak-khan</i>	<i>me-je-na</i>	<i>je-male-ta</i>
Drukpa	Künle	do-NMZ:IPFV	NEG-see.HON-PFV.MIR	see.HON-FUT-EMPH

‘(She) had never even seen (this guy) called Drukpa Künle.’

SBC20051127.KW

16.2.2.2. Nominalizer *-sa*

The nominalizer *-sa* is also an old formative that reconstructs back to Proto-Tibeto-Burman **sa* ‘earth/ground/soil’ (Matisoff 2003a: 612). In Kurtöp, *-sa* is a verbal

¹²⁶ In Dungkar Kurtöp, the focus of this dissertation, stem-final *-k* is lost preceding the *-pa* suffix and conditions a *-wa* allomorph (cf. §7.3.2.2). However, in Tangmachu Kurtöp the *-k* is still present and *-pa* has no allomorphy.

nominalizing suffix that denotes location. The function of *-sa* is discussed in greater detail in §15.1.1 but illustrated as a verbal suffix in (352).

- (352) *tshe darung yau jepo zhuksana thrâmo tshe jepoi shakhwi ngâmo tshe shakhwi mû ngaksi zhusal wenta*
- | | | | | | | |
|---------------|-----------------|--------------|---------------|---------------------|----------------|--------------|
| <i>tshe</i> | <i>darung</i> | <i>yau</i> | <i>jepo</i> | <i>zhuk-sa=na</i> | <i>thrâ-mo</i> | <i>tshe</i> |
| DM | again | DEM:UP | king | stay.HON-NMZ:PL=LOC | arrive-CTM | DM |
| <i>jepo-i</i> | <i>shakhwi</i> | | <i>ngâ-mo</i> | <i>tshe</i> | <i>shakhwi</i> | <i>mû</i> |
| king-ERG | hunting.dog | | do-CTM | DM | hunting.dog | COP.EXIS.NEG |
| <i>ngaksi</i> | <i>zhu-sala</i> | <i>wenta</i> | | | | |
| QUOT | say.HON-NMZ:PFV | COP.EQ.MIR | | | | |

‘And again when they reached where the king was staying, the king said ‘is the hunting dog (there)?’ and (they) said the hunting dog wasn’t.

‘PS20061206.389.465.P

16.2.2.3. Nominalizer *-sang*

The form *-sang* is also a nominalizer but with a different function than *-sa* (see §15.2.3 for more details). The source of *-sang* is unclear though it worth pointing out that Lepcha has an infinitive *-shang* that may or may not be cognate. Whatever the source, its grammaticalization precedes the loss of word-final *-k* historically, as it conditions verbal allomorphs with coda *-k* as opposed to those with a long vowel in its place.

- (353) *'ai khepo tshe thrim khepo tshe khweni gamina thungsang wen ngaksi*
'aiya khepo tshe thrim khepo tshe khwe-ni
 grandmother FOC DM punishment FOC DM water-CMT
gami=na thung-sang wen ngaksi
 fire=LOC do-NMZ:PL COP.EQ QUOT
 'The old lady will be punished in the fire and water (they said).'
- PS20061206.658.723.P

16.2.2.4. Nominalizer/future *-male*

The suffix *-male* functions both as a nominalizer and as finite morphology; its position as a suffix to a verb is shown in (354). See §15.2.4 for more details about *-male* as a nominalizer and §17.3.1 for more details about *-male* as a marker of future tense.

- (354) *zhor khepoyang drang, khauti drangzi tshe, 'ai 'namisami sem gazi, 'enji ngâma*
wen mabranpal depagi
zhor khepo-yang drang khauti drang-zi tshe 'ai
 alcohol FOC-also offer egg offer-NF DM grandmother
'namisami sem ga-si 'enji ngak-male wen ma-bran-pala
 very mind enjoy-NF how do-NMZ:IRR COP.EQ NEG-know-PFV
depa=gi
 devotion=INSTR
 'After offering the alcohol and eggs, the old woman was so happy and didn't know
 what to say out of devotion'
- KS20061212.104.909KL

16.2.2.5. Co-temporal *-mo(ng)*

The verb suffix *-mong* alternates with *-mo* in a stylistic pattern. The form *-mo* is used most commonly while *-mong* is reserved for more stylistic or formal occasions, such as narration of stories or more formal interviews. As I describe in §7.3.3.5, there are several forms which exhibit the alternation $-\emptyset \sim -ng$ and thus in the case of *-mong* \sim *-mo*, it is not clear if the nasal coda is representative of a form that would reconstruct to a proto stage of the language, or if it simply added synchronically as a means to encode a more formal register.

Busch (2007) hypothesizes that *-mo* is derived from the PTB nominalizer *-ma*, though more external evidence is needed to support this. In support of Busch (2007) is the fact that verbs suffixed with *-mo* receive small subset of nominal morphology, including the focus particles *gapo* and *khepo* and the contrastive focus marker *-ni*. If *-mo* is derived from the PTB nominalizer *-ma*, then either a separate source would be needed to account for the presence of the synchronic form *-ma* or a secondary grammaticalization and sound change would have to be posited. Of course, the sound change *-ma* $>$ *-mo* is plausible indeed. In any case, both *-mo* and *-ma* are relatively recent; they grammaticalized after monosyllabic words lost coda *-k*.

The function of *-mo* is to mark co-temporal subordinate clauses, which I describe in greater detail in §21.2.4. (355) is an example of *-mo* as a verbal suffix.

(355) *da ro ngâmo tshe da norgi ... aaa ... mahegi ro the wenta ngak 'noksam thung*
da ro ngak-mo tshe da nor-gi aaa mahe=gi
 now corpse do-CTM DM now cow-GEN HES water.buffalo=GEN
the wenta ngak 'noksam thung
 INDEF COP.EQ.MIR QUOT thought do
 'Now when (we) say "corpse", now (we) should think of it as a cow's ... umm
 ... a water buffalo's corpse.'
 KZ20080515.117.649KZ

16.2.2.6. Conditional *-nani*

Like the suffixes *-mo* and *-ma*, *-nani* conditions the open syllable version of verbs with coda *-k* and therefore is a relatively recent grammaticalization. The form itself is probably composed of the suffix *-na* 'LOC' + *-ni* 'ABL' so the diachronic trajectory can be imagined as 'from being at Ving' > 'if Ving'. The fact that *-nani* is no longer simply composed of a locative plus ablative suffix is shown by the common tendency for the final vowel *-i* to drop off in connected speech, so that *-nani* is often realized as *-nan*. The ablative morpheme itself does not evidence this alternation.

An example of the conditional suffix *-nani* is (356). Note the suffix conditions the form of the verb stem with a long vowel in place of coda *-k* and the final vowel of *-nani* is lost, which is a common phenomenon in phonological words longer than one syllable.

(356) *nguis khorci ngânan rui bre dirdir ngakta tshe*
ngui-si khor-ci ngak-nani rui dirdir ngak-ta tshe
 buy-NF take-FUT do-COND rot yucky.smell do-IPFV.MIR DM
 ‘We though of buying and taking but there was a rotten smell.’
 SaTSW20090917. 618.619.SaT

(357) *tshe cala matshutnan tsama the da thu ’lu ’nangu, tshama zhugu ngak*
tshe cala ma-tshut-nani tsama-the da thu ’lu
 DM stuff NEG-be.ready-COND some-DEF now DIST convince
 ’nang-lu
 do.HON-IMP
 ‘So if it’s not ready, (we will) tell them to wait.’
 SaTSW20090917. 618.619.SaT

16.2.2.7. Infinitive *-to*

Diachronically, the suffix *-to* is clearly derived from the locative *-to* as it shares the same allomorphy (cf. §7.3.3.1). The allomorph *-ro* is found following old open stems; *-do* is found following *-n* and *-m* final stems, *-ko* is found following *-k* final stems; *-go* or *-o* follows *-ng* stems, and *-to* occurs elsewhere. Unlike the locative, which also has a *-ko* allomorph possible in contexts where a different allomorph would be expected, the infinitive strictly follows this allomorphy.

The trajectory of a locative being reanalyzed as infinitival is not unlike English *to*, which is also used both for indicating direction toward a location and the verbal infinitive form. The vowel of the infinitive is often lost, leaving only the consonant. I discuss the

function of the infinitive in greater detail in §21.1.1 though (358) provides an example, showing the distribution of *-to* as a suffix.

- (358) *tshé yau 'né korto gewala 'napa yau*
tshé yau 'né kor-to ge-wala 'napa yau
 DM DEM:UP sacred.site wander-INF go-PFV earlier DEM:UP
 ‘So we went up there to visit the sacred site up there first.’
 SaTSW20090917.842.707SW

When the infinitive-affixed verb is negated, the negation has scope only over the subordinate verb. Consider the following elicited examples.

- (359) *mizuro gemale*
mi-zu-to ge-male
 NEG-eat-INF go-FUT
 ‘(I) will go without eating.’
 Elicitation.KL20100607

- (360) *metaro gemale*
me-ta-to ge-male
 NEG-look-INF go-FUT
 ‘(I) will go without looking.’
 Elicitation.KL20100607

In (359) and (360) the infinitive verbs *zuro* ‘to eat’ and *taro* ‘to see’, respectively, are negated with the negative prefix and followed by the future form of the verb *ge* ‘go’.

In both instances, the speaker still intends to go, but will not conduct the activity

described in the infinitive clause. This function is similar to what is found with the Kurtöp Clause-chaining Construction (which cannot be negated), described in detail in §21.2.5. In other words, negating the infinitive might be a strategy speakers resort to when they would like to negate the first in a series of actions.

(361) *metaro gemale*
 me-ta-to *ge-male*
 NEG-look-INF go-FUT
 ‘(I) will go without looking.’
 Elicitation.KL20100607

(362) *metaro gemale*
 me-ta-to *ge-male*
 NEG-look-INF go-FUT
 ‘(I) will go without looking.’
 Elicitation.KL20100607

Further details on negation, including scope, can be found in §19.1.

16.2.2.8. Perfective *-sa* ~ *-s*

Some speakers occasionally use a simple *-s* suffix in what speakers report is an alternate form of *-shang* (cf. §16.2.2.10). It is not yet clear whether *-s* is actually a very reduced form of *-shang* or another form entirely. In support of *-s* being a separate morpheme is 1) the fact that *-shang* does not exhibit any reduction in conversation or

dialects of Kurtöp. In Tangmachu Kurtöp, the same *-pa*, does not evidence any allomorphy; it is *-pa* all phonological environments, as is the cognate in Khengkha. In other words, it appears the allomorphy associated with perfective *-pa* described here is a recent innovation and therefore not shared with Tibetan.

The suffix *-pa* is involved in several non-finite and finite constructions in Kurtöp. Nominalizing functions involving *-pa* are described in §15.2.1; *-pa* as a formative in finite verbal morphology is discussed in §17.1.1.2 and §17.1.1.5; the function of *-pa* in marking perfective questions is illustrated in §19.2.1.4 and §21.2.1 discusses adverbial clauses involving *-pa*.

(364) illustrates the syntactic status of *-pa* as verbal suffix.

(364) *nyarop zongi yâko **totpal** wenta*

nyarop zon=gi yâ=ko tot-pala wenta
 fisherman two=GEN hand=LOC hand.over-NMZ:PFV COP.EQ.MIR

‘(The children) were handed over to the two fishermen.’

PS20061206.1075.673P

In an interesting, recent innovation, the use of the nominalizer *-pa* on its own has grammaticalized into a perfective yes/no question marker. For example, yes/no questions are typically posed as in (365).

- (365) *thingpuro thrawa*
Thingphu=to *thrak-pa*
 Thimphu-LOC arrive-QP.PFV
 ‘Have you been to Thimphu?’

However, such questions are obligatorily followed by the question particle *ya* (cf. §16.2.4.3) in Khengkha and still occur as such, though rarely, in natural conversations. (366) provides an example of *ya* used following a verb suffixed with *-pa*, drawn from a casual conversation between two friends.

- (366) *trak khirira nguisa ya*
trak khiri-ra ngui-pa ya
 truck 3.REFL.ERG-EMPH BUY-QP.PFV QP
 ‘Did he buy the truck by himself?’
 SaTSW20090917.1081.019.SW

It is easy to see the development of the nominalizer *-pa* into a perfective question marker. After the point in which *-pa* began to be used in perfective statements it was used with the question marker *ya* as a default means for asking yes/no questions. Once the perfective *-pa* had grammaticalized with other morphology into the subordinate and finite verbal system, the bare form alone was followed by the question particle; elsewhere the perfective *-pa* was already grammaticalized with other suffixal material. Now the question marker *ya* was free to drop off, leaving simply the suffix *-pa* to mark perfective yes/no questions. The diachronic trajectory can be illustrated as follows: V-PFV QP > V-PFV.QP.

A verb suffixed with the *-pa* nominalizer/perfective can be negated, as in the question shown in (367).

(367) *Jamyang Khentse jonzi drupchen 'manangwa?*

Jamyang Khentse jon-si drupchen ma-'nang-pa

Jamyang Khentse come-NF ritual NEG-give.HON-QP.PFV

'Didn't Jamyang Khentse come to offer the ritual?'

SaTSW20090917.174.025.SW

A statement from elicitation shows when *-pa* is followed by *-la* as part of perfective statement morphology, it can also be negated.

(368) *matasala*

ma-ta-pala

NEG-look-PFV

'(I) didn't look.'

KLElicitation20100607

16.2.2.10. Egophoric perfective *-shang*

The form *-shang* is of unknown etymology. Unlike other forms found in the texts, it never immediately precedes a copula, suggesting that either it came from a verb or its source as a nominalizer is quite old.¹²⁷ A potential cognate may be found in Lepcha

¹²⁷ See, however, (374) for a potential counter to this observation.

infinitive *-shang* (Plaisier 2007:115-117) but more reconstructive work is needed within East Bodish and Lecpha to support this. Whatever the source of *-shang*, it is obviously a relatively old morpheme as it suffixes to verb stems with coda *-k* still present.

Kurtöp *-shang* is used to encode perfective aspect with direct evidential value when the speaker has direct evidence of the experience and there is no expectation that a speech-act participant would have direct evidence. Speakers tell me that “you are reporting because you know; you are reporting on behalf of yourself” with the use of *-shang*, which can be contrasted with the use of *-pala* (§17.1.1.2) when “you are reporting on behalf of someone else.” The use of *-shang* translates directly into *-ci ~ -i* in Dzongkha.

An example of *-shang* is:

- (369) *darung rospa zon domshang*
 darung rospa zon dom-shang
 again bone two meet-PFV.EGO
 ‘And again (she) found two bones’
 PS20061206. 1711.858P

16.2.2.11. Inferential perfective *-mu*

The verbal suffix *-mu* encodes perfective aspect with inferential evidential value. It does not co-occur with a copula, suggesting its origin is an auxiliary verb rather than a nominalizer. Again, *-mu* is likely a relatively old morpheme as it suffixes to verb stems still evidencing coda *-k*. An interesting possible cognate is found in Marphatan Thakali.

Georg (1996: 118-122) describes a ‘copula’ *mu* with an interesting extension. Georg states:

Die Erweiterung des präteritalen -ci durch das Hilfsverb *mu*¹ kodiert ein in der Vergangenheit lokalisiertes Ereignis mit gegenwärtiger Relevanz, d.h. ein Ereignis, dessen Ergebnis in der Gegenwart spürbare Wirkungen hat. Diese Form findet auch dann Anwendung, wenn der Sprecher nur aufgrund des Vorliegens eines gegenwärtigen Sachverhaltes auf ein früheres Ereignis schließt, das er nicht beobachten konnte.

The extension of the preterite –ci with the auxiliary *mu*¹ encodes an event located in the past with present relevance, i.e. an event, the result of which has perceptible effects in the present. This form is also used when the speaker infers a previous event which he could not have witnessed on the basis of a present situation (Georg 1996:118-119).¹²⁸

Other possible cognates are the Nar-Phu copula *mu* (Noonan 2003), Chantyal stative copula *mu* (Noonan 2003b), Thulung-Rai equative copula *bumu* (Lahaussis 2002) and perhaps Caodeng rGyalrong sentence final particle *mu* (Sun 2003).

¹²⁸ I am grateful to Scott DeLancey for this translation.

In (370) I show *-mu* as a verbal suffix. A detailed discussion of *-mu* as encoding perfective aspect and inferential evidential value is found in §17.1.1.3 and §20.1.1.3, respectively.

(370) *tshe khit pretmu da*
tshe *khit* *pret-mu* *da*
 DM 3.ABS fear-PFV.IND now
 ‘Now he was afraid.’
 PS20061206. 1711.858P

Perhaps not surprisingly, this form of the verb cannot be negated.

16.2.2.12. Mirative imperfective *-ta*

Like *-mu*, the suffix *-ta* is part of the Kurtöp finite verbal paradigm and also likely has its historic origins as an auxiliary, as it does not precede a copula in the same clause. A synchronic verb *tak* ‘become’ still exists in Kurtöp and is a possible, plausible source for *-ta*. The form *tak* ‘become’ and *-ta* ‘PFV.MIR’ are probably related to the copula *ta* in Kham (Watters 2002: 219) and Tamang (Poudel 2006: 136). Kurtöp *-ta* probably grammaticalized prior to the loss of coda *-k* word-finally, as the coda *-k* is in tact stem-finally when *-ta* is present. (371) below illustrates *-ta* as a verbal suffix while a more thorough discussion of *-ta* as a mirative imperfective suffix is in §17.2.1.1 and §20.1.2.1.

- (371) *tâgi po cokta*
tâ=gi po cok-ta
 tiger=GEN fur defecate-IPFV.MIR
 ‘(He) was defecating the tiger’s fur.’
 SPh.TsC20081022.

A verb suffixed with *-ta* may also be negated, as in (372).

- (372) *mebranta ngai drupchen*
me-bran-ta ngai drupchen
 NEG-know-IPFV.MIR 1.ERG ritual
 ‘I don’t know about the ritual.’
 SaT.SW20090917.181.223.SaT

The suffix *-ta* can also be cliticized with the nominalizer *-ki*, creating the non-mirative reading of the perfective.

16.2.2.13. Mirative perfective/copula *-na*

Another verbal suffix to interlace with the aspectual and evidential paradigm is *-na*, which encodes perfective aspect and mirativity. These functions are discussed in greater detail in §17.1.1.4 and §20.1.1.2.

The mirative perfective suffix *-na* is a recent grammaticalization from the copula *nâ*, itself also a recent grammaticalization from a main verb **nak* ‘to be at’, which is reconstructed to the proto-Bumthang group (cf. §3.5.2.3). Syntactic evidence for this diachronic analysis is again the fact that V-*na* does not precede a copula and

uncertain origin, and it is not even clear if the hortative *-ki* is related historically to the nominalizer *-ki* the ergative/genitive *-gi* (§7.3.3.3, §7.3.3.4)

However, there is strong evidence that the hortative *-ki* is historically a nominalizer, as it also occurs in Kurtöp preceding a copula.¹²⁹ (375) shows *-ki* as a verbal suffix.

- (375) *zumal zuiki ngak-shang*
zu-male zu-ki ngak-shang
eat-NMZ.IRR eat-HORT do-PFV.EGO
“(She) was the food to eat”, (they) said.’
PS20061206.519.663.P

This form can also be negated, as the elicited example below shows.

- 376) *megeci*
me-ge-ki
NEG-go-HORT
‘let’s not go.’
KLElicitation 20100607

¹²⁹ The presence of a copula with the hortative suffix actually distinguishes the hortative function from a future tense. §17.3.4 describes the future tense using *-kina* in greater detail and §17.3.3 describes the hortative in greater detail.

16.2.2.15. Non-final *-si*

The suffix *-si* is of unknown etymology but an interesting candidate is the Dakpa ergative *-si* (Hyslop and Tshering 2010). If these forms are related, a possible scenario is one in which an agentive suffix **-si* was used in the proto-language common to Dakpa and Kurtöp (such as Proto-East Bodish). In Dakpa, the morpheme was recruited exclusively for noun phrases and eventually was reanalyzed as an ergative morpheme. In Kurtöp, the same form could have developed exclusively into a form used on verbs.¹³⁰

Perhaps more likely is the suggestion that Kurtöp *-si* is related to the similar forms found as verbal morphology throughout the Himalayas. For example Jero has a middle suffix *-si* (Opgenort 2004: 164), Darma has a middle suffix *-çi* (Willis 2007) and Karbi has a non-final suffix *-si* with a similar function (Linda Konnerth, pc).

Any speculation regarding the etymology of the Kurtöp converb suffix will have to remain as such at this point, though future research on the development of this morpheme, and its potential cognates in Tibeto-Burman would be interesting, particularly give the potential relationship with the PTB suffix **-s*, (Benedict 1972:97-99, (Matisoff 2003a: 465-468).

The Kurtöp Clause-chaining construction, characterized by the possible presence of the non-final suffix *-si*, is discussed in detail in Hyslop (to appear) and §21.2.5 of this dissertation. A simple example of *-si* as a verbal suffix is illustrated in (377).

¹³⁰ Nominal morphology used on verbs to combine clauses common through the Bodic languages. Many of Kurtöp's synchronic subordinators are homophonous with synchronic case-markers.

- (377) *lungtennang bapsi tshe*
 lungten=nang *bap-si* *tshe*
 lungten=LOC descend-NF DM
 ‘According to the prophesy...’
 PS20061206.603.103.P

The non-final suffix is one of the few verbal morphemes that cannot be negated. Instead, speakers may negate the perfective *-pala* or the infinitive *-to* for a similar function. I describe these possibilities in greater detail in the sections on clause-changing (§21.2.5) and negation (§19.1).

16.2.2.16. Polite imperative *-le*

There are three imperative suffixes in Kurtöp, the first of which, *-le*, is used as a polite imperative. All three imperatives share the same initial consonant, including the associated allomorphy (*-le* → *-e* following non-coronal consonants with stop codas voicing and *-le* → *-ye* following historically open stems; see §7.3.2.3 for discussion and evidence). The only formal difference between the forms is the shape of the vowel. The function of all three imperatives is discussed in greater detail in §19.2.

The polite imperative suffix is demonstrated in (378).

- (378) *duimo Hacangmi tshe ninta zongi 'neng yung gile ngak zonpal wen ngak*
duimo Hacangmo=gi tshe nin-ta zon=gi 'neng yung gi-le
 demoness Hacangmo=ERG DM 2.PL-EMPH two=GEN heart get go-IMP
zon-pala wen ngak
 send-NMZ:PFV COP.EQ QUOT
 ‘(the hunters said) “the demoness was sent to go get your two’s hearts.”’
 PS20061206.1113.117P

16.2.2.17. Informal imperative *-lu*

The imperative *-lu* contrasts with *-le* in that *-lu* is used more informally, or less politely. The etymological source of *-lu* is also uncertain. Van Driem (1995:239-240) identifies a *-lu* imperative in Black Mountain Mönpa which could easily be cognate. However, the future imperative *-lo* (§16.2.2.18) could also be cognate; more comparative work is needed within East Bodish in order to make out the regular sound changes and thus determine whether Kurtöp *-lu* or *-lo* would correspond to Black Mountain Mönpa *-lu*.

- (379) *wera suka nilu ngak wenta*
wera suka ni-lu ngak wenta
 2.REFL quiet stay-IMP QUOT COP.EQ.MIR
 ‘“You keep quiet”, (he) said.’
 SBC20051127.KW

16.2.2.18. Irrealis imperative *-lo*

The third imperfective in Kurtöp is used in irrealis condition. Like with *-lu*, there are several possible etymologies for *-lo* and until more work is done on Kurtöp’s East Bodish neighbors it will be impossible to ascertain the etymology of these imperatives with any assurance. A more detailed illustration of *-lo* as an irrealis imperative is given in §19.2.1.3 but the form is illustrated as a verbal suffix in (380).

- (380) *tsheni yamnang ipa zuyo ngaksi*
tsheni yam=nang 'ipa zu-lo ngaksi
 then path=LOC cooked.rice eat-IMP.IRR QUOT
 “‘Then (you) must eat along the road’ (he) said.’
 SBC20051127.KW

16.2.3. Clitics

Verbal clitics in Kurtöp are defined as such because of 1) their ability to affix (cliticize) to phrases, or least categories broader than simply a given lexical type; and 2) their tendency to form phonological words with their host words. Generally, clitics are not given the status of phonological words, unlike particles.

Table 148. Distribution of Kurtöp verbal clitics

Form	Following tensed verb	Following other clitics or particles?	Following NPs	Following word
= <i>ri</i>	Y	Y	Y	Y
= <i>mi</i>	Y	N	N	N
= <i>sa</i>	Y	N	N	N

16.2.3.1.Hearsay =*ri*

The Kurtöp hearsay marker presumably comes from an old verb ‘to say’ but there is little comparative evidence in support of this. Generally, the hearsay enclitic attaches to the edge of a finite clause, but in practice its distribution is wider. The hearsay marker has the widest distribution of all the clitics. It may occur following a tensed verb, as in (381).

- (381) *semchanggi pura nyangtari udinang*
semchang=gi pura nyang-ta=ri udi=nang
animal=GEN all receive-IPFV.MIR=HSY DEM:DIST=LOC
‘(They) get everything for animals up there.’
SBC20051127.KW

In clauses involving copulas, the hearsay clitic will cliticize to the right edge of the copula, as in (382).

- (382) *ne tshasal pita yoebarzi nâri*
ne tsha-pala pita yö bar-si nâ=ri
sun burn-NMZ:PFV as shine burn-NF COP.EXIS.MIR=HSY
‘It was like the sun was shining (it is said).’
KS20061212.186.035.KL

In sentences involving particles, the hearsay marker will cliticize to the right edge of the particle, as in (383).

(383) *Rimpoche*gi *sungta* 'ator *ngawal draki shuri*

Rimpoche=gi *sung-ta* 'ator *ngak-pala* *drak-ki*
Rimpoche=ERG say.HON-IPFV.MIR how do-PFV be.good-HORT
shu=ri

DBT=HSY

'Rimpoche asked what would be a good thing to do.'

SBC20051127.KW

The hearsay particle is not restricted to only verbs or particles. A very common use of the hearsay particle is with the word *zhâ* 'what', which is most often used when speakers are in the middle of a discourse and are trying to recollect the correct word or what they were going to say.

(384) *zhâri*

zhâ=ri

what=HSY

'What (said to self)?'

Another simple English translation for (384) might be something like 'what was it..?'. Kurtöp *zhari* appears to translate directly into *g'acilo* in Dzongkha.

The hearsay clitic may also cliticize to a noun, itself followed by a verb, as in (385). In this example the speaker seems to be searching for the word *thrim* 'fine'. A more literal translation of *thrimri* here might be something like 'it's called 'fine''.

(385) *wo minani yangna thrimri kutta sho*

wo min-nani yang-nani thrim=ri kut-ta
PROX COP.EQ.NEG-COND stand.up-COND fine=HSY assign-IPFV.MIR

sho

EMPH

‘If not this, then they will fine you!’

SBC20051127.KW

In a particularly interesting case, the hearsay marker appears on almost every element inside a NP, in (386).

(386) *tru drolarsri 'akpari theri ngakna*

tru drolars=ri 'akpa=ri the=ri ngak-na
two (<Eng) dollars (<Eng)=HSY how.much=HSY one=HSY do-PFV.MIR

‘(They) said it was around two dollars.’

16.2.3.2. Inclusive tag =*mi*

The clitic =*mi* is of unknown origin and it is not yet clear if it has any cognates in neighboring languages. The form is similar in distribution and function to Dzongkha *-ba*.

The Kurtöp inclusive tag clitic *-mi* only attaches to finite verbs or copulas, as I demonstrate below. Example (387) shows =*mi* following a tensed verb.

(387) *da nam bjar yas ngaktami tshe wu*

da nam bjar yas ngak-ta=mi tshe wu
now season summer work do-IPFV.MIR=TAG DM TAG

‘Now we do work in the summer, right.’

Rice.Harvest.3.804.KeD

When the finite clause consists of a nominalized or non-final verb plus a copula, the clitic =*mi* attaches to the edge of copula, as in (388) and (389).

(388) *Khandro thrungwal wentami*

Khandro thung-pala wenta=mi

Khandro be.born.HON-NMZ:PFV COP.EQ.MIR=TAG

‘Khandro was born, right..’

PS20061206.721.713.P

(389) *tshe ting-ting banka dungzi nâmi*

tshe ting-ting banka dung-si nâ=mi

DM beating.sound drum.type beat-NF COP.EXIS.MIR=TAG

‘The Bangka drums were being beaten, *ting-ting*’

PS20061206.795.889.P

16.2.3.3. Counter expectation =*sa*

The clitic =*sa* has the same distribution as =*mi*; it attaches to tensed verbs or copulas. Like =*mi*, =*sa* is also of unknown etymology, though it is similar in function to Dzongkha -*sa*. In Kurtöp, =*sa* encodes that the action or the result of the action was counter to expectation.

Example of =*sa* attaching to a tensed verb are (390) and (391).

(390) *osor nimota ... 'Autshorota tshongpa zha winim **laptasa***

<i>osor</i>	<i>ni-mo-ta</i>	<i>'Autsho=to=ta</i>	<i>tshongpa</i>	<i>zha</i>
like.this	stay-CTM-EMPH	'Autsho=LOC=EMPH	shop.keeper	what
<i>winim</i>	<i>lap-ta=sa</i>			
COP.EQ.DBT	say-IPFV.MIR=CEXP			

'While (we) were there like that, the shopkeeper in 'Autsho, what was (he) called...?

SBC20051127.KW

(391) *'au nawori ... ngai **koshangsa***

<i>'au</i>	<i>na-wo=ri</i>	<i>ngai</i>	<i>ko-shang=sa</i>
where	COP.EQ-QP=HSY	1.ERG	hear-PFV.EGO=CEXP

'Where (did I hear) (he) was? I thought I heard (to self)..'

SBC20051127.KW

In (392) I show an example of =*sa* attaching to a copula. The function of =*sa* is difficult to understand fully. In this particular example a speaker tells me that there is something incomplete about this, or perhaps the speaker is sad that the dog is not his.

(392) *khwi mira gatokalthe **nawalsa***

<i>khwi</i>	<i>mira</i>	<i>gatoka-la-the</i>	<i>nawala=sa</i>
dog	others	friendly-IDZ-DEF	COP.EXIS=CEXP

'It's a good dog.'

SBC20051127.PC

(393) *gatasa khwi gap*

ga-ta=sa *khwi gapo*
 enjoy-IPFV.MIR=CEXP dog FOC.PL
 ‘I like dogs.’
 SBC20051127.PC

16.2.4. Particles

There are seven verbal particles in Kurtöp, the distribution of which is summarized in Table 149.

Table 149. Distribution of Kurtöp verbal particles

Form	Following tensed verb	Following other clitic/ptc?	Following NPs	Following word
<i>wu</i>	Y	Y	Y	Y
<i>sho</i>	Y	N	Y	N
<i>ya</i>	Y	Y	Y	Y
<i>yo</i>	Y		N	Y (wh-words)
<i>shu</i>	Y			Y
<i>la</i>	Y	Y	Y	Y
<i>ngaksi</i>	Y	Y	Y	Y

The next sections provide an overview of each particle.

16.2.4.1. Tag *wu*

The particle *wu* is free-standing; it does not join to another word or element in a phonological word. The function of *wu* is similar to that of =*mi* in that it is used as a tag,

when the speaker would like to bring the interlocutor into the context, knowing that the the interlocutor shared the experience with the speaker.

There is no obvious etymology for *wu*, but it is important to note its realization varies among the Kurtöp dialects. In Gangzur, for example, it is *wa*, while in Tangmachu it is *au*. The form in Dzongkha equated with the same function as Kurtöp *wu* is *mo*. In terms of syntactic distribution, *wu* may occur in a much broader context than *=mi*, which is limited to verbs. *wu* may occur following an constituent, nominal or verbal.

A very common use is following a copula, as in (394) and (395).

- (394) *Ugen Tenzin wen wu*
Ugen *Tenzin* *wen* *wu*
 Ugen Tenzin COP.EQ TAG
 ‘He was Ugen Tenzin, right?’
 SBC20051127.PC

- (395) *Monggar Samdrup Jongkhargi yam ’ator naki wu*
Monggar Samdrup Jongkhar=gi yam ’ator naki wu
 Monggar Samdrup-Jongkhar=GEN road how COP.EXIS.DBT TAG
 ‘How the Monggar-Samdrup Jongkha road used to be, right?!’
 SBC20051127.PC

In (396) the particle *wu* follows the tensed verb *nyang-shang* ‘receive-PFV.EGO’.

(396) *darung gar theni nyangshang wu*

darung gari the-ni nyang-shang wu
again car DEF-CFOC receive-PFV.EGO TAG

‘Again we got a car, right?’

SBC20051127.KW

The distribution of the particle is not limited to following a finite clause. In (397) the particle *wu* follows the adverbial *da* ‘now’.

(397) *khwi gap le dakmi da wu*

khwi gapo le dak-mi da wu
dog PL.FOC sins cleanse now TAG

‘These dogs are cleansed of their sins, right?’

SBC20051127.PC

An elicited example shows that *wu* may also follow a noun in (398).

(398) *gor wu*

gor wu
rock TAG

‘(the) rock, right.’

KLElicitation20100607

16.2.4.2. Emphatic *sho*

The emphatic particle *sho* has a cognate in Dakpa *sho*, a form which Hyslop and Tshering (2010) analyze as potentially being an old copula, based on the tendency to occur sentence-finally without any obviously discernable change in the meaning.¹³¹ As I will show below, the syntactic distribution of *sho* in Kurtöp today is suggestive of its status as an old copula.

There are other possible cognates for Kurtöp *sho* in several Tibeto-Burman languages. For example, the Pattani copula root seems to be *fu-*; Sharma (1989b) glosses *fubi* as ‘to be’ and *fucl* as ‘to be’ and ‘to become’. In Tinani *fupi* is a copula with a general ‘capulative’ sense (Sharma 1989b: 154). In Lepcha *sho* marks present tense (Plaisier 2003).¹³²

Another small group of forms that could be related to Kurtöp *sho* is represented by the Tshangla copula, *chho*, which appears in *chhole*, the past time copula for attributive, locative, existential and possessive predications. Tutsa, a language nearby in Arunachal Pradesh reports that *take-choh* is the form used for ‘to be’ and ‘to have’,

¹³¹ In Hyslop and Tshering (2010) we analyzed *ço* as a sentence-final particle in Dakpa, which optionally occurred at the end of most of the elicited examples. For example, of the following examples, with and without the sentence-final particle, were acceptable to native speakers:

jop namnum-na hur-dir ço	jop namnum-na hur-dir
bird sky-in fly SFP	bird sky-in fly
‘Birds are flying in the sky’	‘Birds are flying in the sky’

If the suffix *-dir* in Dakpa is shown to have its origin as a nominalization, as much of Tibeto-Burman main clause grammar (cf. Delancey to appear), then *ço* could very well have its origin as a copula.

¹³² Mainwaring (1876) calls this form ‘future’, rather than ‘present’.

though I could find no data to support this in Rekhung (1992). Perhaps related may also be the Tangut form *tʃu¹*, which meant ‘have’.

The most common position for Kurtöp *sho* is following a finite clause, either a copula, as in (399), or a verb as in (400).

(399) *gari mutle 'namsam wenta sho zai*

<i>gari</i>	<i>mutle</i>		<i>'namisami</i>	<i>wenta</i>		<i>sho</i>	<i>zai</i>
car	COP.EXIS.NEG.IND	very	COP.EQ.MIR	EMPH	EXCL		

‘Without a car it’s very (difficult), wow.’

SBC20051127.KW

(400) *Phuntsholinggo thrâmo ngâna zai ... yampa pitalana yangko matshuwala jurna sho wai*

<i>Phuntsholing-go</i>	<i>thrak-mo</i>	<i>ngak-nani</i>	<i>zai</i>	<i>yangpa</i>
Phuntsholing-LOC	arrive-CTM	do-COND	EXCL	tomorrow
<i>pitalana</i>	<i>yang-ko</i>	<i>ma-tshuk-wala</i>	<i>jur-na</i>	<i>sho</i>
like	stand-INF	NEG-be.able-NMZ:PFV	become-PFV.MIR	EMPH

wai

EXCL

‘I got to Phuntsholing and the next day I couldn’t even get up.’

SBC20051127.KW

The particle *sho* also has a distribution suggestive of its former status as a copula. For example, in (401), the most commonly said expression upon departure, *sho* follows a nominalized verb.

(401) *gewa sho*

ge-wa sho

go-NMZ EMPH

‘I’m gone! (i.e. goodbye, see you later)’

In (402) and (403) *sho* appears to be functioning as a copula.

(402) *Zongsar Khentse sho oning sharchokpi tronga jonmi tshe ona cha zhuzi gewala ngat sho*

Zongsar Khentse sho wo=ning sharchokpa=i trong=na

Dzongsar Khentse EMPH DEM:PROX=ABL easterner=GEN village=LOC

jon=mi tshe o-na cha zhu-si ge-wala ngat

go.HON=TAG DM PROX=LOC hand.HON do.HON-FN go-NMZ:PFV 1.ABS

sho

EMPH

‘From this (time) onward it was Dzongsar Khentse who went to the easterners’ villages and going serving him was me.’

SBC20051127.KW

(403) *khira sho Hâpa, ’nesang sho Naleng wentami*

khira sho Hâ-pa ’nesang sho Naleng wenta=mi

3.REFL EMPH Hâ-DZ wife EMPH Naleng COP.EQ.MIR=TAG

‘It was him who was a Hâpa, and his wife is (from) Naleng.’

SBC20051127KW

16.2.4.3. Yes/no particle *ya*

Like the tag particle *wu*, the Kurtöp yes/no particle can follow any constituent, depending on what the speaker is questioning. In terms of diachronic development of *ya*, there is so far no definitive source, but it worth noting the question particles *la* in both Newar and Lahu. Given that *l > y* has happened in other contexts in Kurtöp, it is possible that *ya* reconstructs to *la*, making a diachronic relationship to the PTB form **la* even more likely.

Examples of *ya* following tensed verbs are shown in (404) and (405).

(404) *tshe yumya tapsirang jonpal ya*

tshe yum-ya tap-si-rang jon-pala ya

DM mother.HON-also return-NF-REFL go.HON-PFV QP

‘Did (Rimpoche’s) mother also come back?’

SBC20051127.KW

(405) *yampa jepo jonmo bot khepo tshe gatpo ganmo zon thrim khwening gaminang thungmo tshe wit thu ’enjiya mera ya ngaksi*

yangpa jepo jon-mo bot khepo tshe gatpo

tomorrow king go.HON-CTM 3.PL.ABS FOC DM old.man

ganmo zon thrim khwe-ning gami=nang thung-mo

old.woman two punishment water-CMT fire=LOC do-CTM

tshe wit thu ’enji-ya me-ra ya ngaksi

DM 2.ABS DIST how-also NEG-come QP QUOT

“When the king comes tomorrow will you not feel anything when they punish us two old man and woman in the fire and water? ”

PS20061206.668.126.P

The question particle is shown following a copula in (406) and (407).

(406) *lota dui-rang wen ya*

lota dui=rang wen ya

zodiac.year snake=REFL COP.EQ QP

‘Is (your) zodiac year also the snake?’

SPhTsC20081022. 3298.291SPh

(407) *'mâmi mutle ya*

'mâmi mutle ya

soldier COP.EQ.NEG.IND QP

‘Are there no soldiers?’

SaT.SW20090917

It is not necessary, however, that the question particle *ya* follows a verbal element. There are several instances of *ya* following nominal elements, such as the ablative-marked argument in (408), the verb *zam* ‘bridge’ in (409), or the adjective suffixed with *be* ‘only’, in (410).

(408) *tshachuni ya*

tsachu=ni ya

hotsprings=ABL QP

‘From the hotsprings?’

SaT.SW20090917. 487.098SW

- (412) *'akpa yo*
'akpa yo
 how.many QP.COP
 'How many?'
 SBC20051127.KW

In clauses where the speaker is questioning an action, the content question particle will follow the tensed verb, as in (413) where *yo* 'QP.WH' follows *getak* 'go-IPFV'.

- (413) *wo mi nguntili 'wai 'au getak yo ngâmo*
wo mi nguntila=gi 'wai 'au ge-taki yo ngak-mo
 PROC person black=ERG hey where go-IPFV QP.COP do-CTM
 'When this black person says "hey, where are you going?"...'
 SaT.SW20090917.2283.623SaT

- (414) *zhunggi tshe zhari... dazin ngako matshunani zha ngaksi bretak yo ngaksi*
zhung-gi tshe zha=ri dazin ngak=ko ma-tshuk-nani zhâ
 government-ERG DM what=HSY care do=LOC NEG-be.able-COND what
ngak-si blek-taki yo ngaksi
 do-NF keep-IPFV QP QUOT
 'So the government what.. (to self) says if you aren't able to care for (the dog) then why are you keeping it?'
 SBC20051127.KW

16.2.4.5. Imperfective question particle *ke*

The question particle *ke* is used to indicate yes/no questions in imperfective aspect.

- (415) *tshachuna geta ke*
tshachu=na ge-ta ke
 hot.springs=LOC go-IPFV.MIR QP.IPFV
 ‘Do (you all) go to the hotsprings?’
 SaT.SW20090917.2283.623SaT

16.2.4.6. Imperfective *wh*- question marker *ko*

The question particle *ko* is used to mark content questions in imperfective aspect. *ko* is diachronically a recent development from *ke* ‘QP.IPFV’ + *wo*. This form is heard most commonly in the question shown in (416), which I overheard throughout my stay in Kurtö.

- (416) *zha ngakta ko*
zhâ ngak-ta ko
 what do-IPFV.MIR QP.WH.IPFV
 ‘What are (you) doing?’

16.2.4.7. Dubitative *shu*

The Kurtöp dubitative particle *shu* can replace *yo* but also has a wider distribution. There is no immediate obvious source for *shu*, other than the possible forms mentioned above for *sho* in §16.2.4.2. The function of *shu*, roughly, is to add doubt to the sentence, either because the speaker doubts the interlocutor would have the answer to the question or because the speaker is not sure about the facts s/he is reporting.

In (417) *shu* immediately follows a verb in a content question phrase, filling the slot where *yo* would otherwise appear and in (418) *shu* immediately follow the content question word 'ê 'who'.

- (417) *ngaita zhâ lapmal shu da*
ngai-ta *zhâ lap-male shu da*
 1.ERG-EMPH what say-FUT DBT now
 'Now what should I say?'
 SPh.TsC20081022.311.002TsC

- (418) 'ê *shu*
 'ê *shu*
 who DBT
 'Who might it be?'
 SaT.SW20090917.94.282SW

The particle *shu* can also follow whatever lexical element the speaker would like to emphasize as doubtful. In (419) the speaker is doubtful about an amount of time. He guesses two weeks, but follows the numeral *zon* 'two' with *shu*.

- (419) *hapte zon shu winimthe wen tshe*
hapta zon shu winim-the wen tshe
 week two DBT COP.DBT-DEF COP DM
 'It's for around two weeks (I guess).'

16.2.4.8. Polite *la*

The polite particle *la* is etymologically derived from <lags>, though it was probably borrowed into Kurtöp from Dzongkha, as it is used in other languages of Bhutan, and commonly throughout Tibetan. In Kurtöp the particle *la* is used to make a statement more polite. It is used commonly in story-telling and when speaking to people of a higher rank than the speaker. During the introduction and first conversation between two educated people, both speakers often use *la* throughout the conversation. But as time passes and a personal relationship grows between the two, the use of *la* diminishes.

Example (420) illustrates a very common use of *la*, at the introduction of a story. Throughout this story the speaker continues to use *la* with great frequency, usually after a copula.

(420) *lungpathena jepothe nawal wenta la*

lungpa-the=na jecho-the nawal wenta la

lungpa-DEF=LOC king-DEF COP.EXIS COP.EQ.MIR POL

‘In a valley there was a village.’

PS20061206.22.625P

In the same story, the speaker also uses *la* following NPs, as in (421).

- (421) *wo shakhwi tshuikhan gapi la*
wo shakhwi tshui-khan gapo=gi la
 PROX hunting.dog look.for-NMZ:IPFV PL.FOC=ERG POL
 ‘The ones looking for the hunting dog.’
 PS20061206.

Example (422) was drawn from an interview between a native Kurtöp speaker and a native Dzongkha-speaking recorder. This example is from the beginning of the interview, where the speaker uses *la* in conjunction with *zhu*, the honorific form of the verb ‘say’.

- (422) *cingkui gangna ’namlo ngaksi zhumal zhâya mutna da nei yitnaya mû la*
cingku=gi gang=na ’namlo ngaksi zhu-male zhâ=yang da
 small=GEN time=LOC year QUOT say.HON-FUT what=also now
yitna=yang mû la
 memory=also COP.EXIS.NEG POL
 ‘“(about) the time, year, when we were small”, there is nothing to say; (I) don’t remember anything.’
 SPhTsC20081022.2.234SPh

16.2.4.9. Quotative *ngaksi*

The Kurtöp quotative is composed of the verb *ngak* ‘do’ plus the non-final suffix *-si* (cf. §16.2.4.9). The main verb *ngak* ‘do’ still retains its original meaning in some contexts but is also used as a verb ‘say’, perhaps in a way similar to the verb ‘like’ in English being also used as speech verb in ‘and she was like “I don’t want him to go”,

for example. In its full form, both syllables of *ngaksi* are audible, however in connect speech, the form may be reduced to *ngaks*, *ngak*, or simply *nga*.

ngaksi is used obligatorily following direct speech. The direct speech itself may be any constituent, as small as a single word or as large as a finite clause. An example of *ngaksi* with a single word is (423), extracted from carrier phrase for the acoustic study examining stress, described in §7.2.1.

- (423) *ngai kwa ngaksi lapmale*
ngai *kwa ngaksi lap-male*
 1.ERG tooth QUOT say-FUT
 ‘I will say “tooth”’.

Example (424) provides an example of the quotative *ngaksi* with scope over two clauses *net thramal mû* ‘we were not arriving’ and *tar gile* ‘go and look (for them)’. The main clause in this example is *shamatheni Rimpoche gi gari the zonna* ‘Rimpoche send one car.’

- (424) *shamatheni Rimpoche gi gari the tap zonna .. net thramal mû tar gile ngaksi*
shamathe-ni Rimpoche-gi gari thê tap zon-na net
 awhile-ABL Rimpoche-ERG car one return send-PFV.MIR 1.PL.ABS
thrak-male mû ta-ro gi-le ngaksi
 arrive-NMZ:IRR COP.EXIS.NEG see-INF go-IMP.POL QUOT
 ‘After awhile Rimpoche had sent one car back, saying “we were not coming back, go and look (for us)”’.
 SBC20051127.KW

As well as quoting direct speech, the quotative *ngaksi* can be used to quote a direct sound. In (425), the speaker KW is relaying a traveling event in which the car had died and upon trying to start the car, it made a *bor bor* sound.

(425) *net woni khako wotor ngak gemotako neci gari stop geshang .. bor bor bor bor bor ngaksi*

<i>net</i>	<i>wo=ni</i>	<i>khako</i>	<i>ngak</i>	<i>ge-mo-tako</i>	<i>neci</i>
1.PL.ABS	DEM:PROX=ABL	DIR:UP	do	go-CTM-IPFV	1.PL.GEN
<i>gari</i>	<i>stop**</i>	<i>ge-shang</i>	<i>bor bor bor bor bor</i>	<i>ngaksi</i>	
1.PL.ABS	stop (<ENG.)	go-PFV.EGO	bor bor bor bor bor	QUOT	

‘When we went up like this our car stopped; it went “*bor bor bor bor bor*”.’

SBC20051127.KW

At times *ngaksi* acts more like a hearsay marker than a quotative. It often occurs during story-telling, as in (426), which was drawn from a story in which the speaker is not quoting the words of someone else *per se*. Here, the function seems to be to indicate that the speaker gained the knowledge by hearing of it from someone else.

(426) *khwe yungkhan moja the thrakshang ngaksi wenta*

<i>khwe</i>	<i>yung-khan</i>	<i>the</i>	<i>thrak-shang</i>	<i>ngaksi</i>	<i>wenta</i>
water	get-NMZ:IPFV	DEF	arrive-PFV.EGO	QUOT	COP.EQ.MIR

‘A woman is said to have come to get water.’

Lama200812311.

CHAPTER XVII

TENSE/ASPECT

The Kurtöp tense/aspect system is marked primarily in main clause and finite clause grammar, but there are a few instances in which these differences are marked in subordinate grammar as well. In main clause finite grammar, a broad three-way distinction is made between perfective aspect, imperfective aspect, and future tense. Within perfective aspect there are five contrasts made, depending on evidential or evidential-like contrasts. Within imperfective aspect a two-way contrast is made with regard to mirativity, and an additional construction is available that denotes durative aspect. In nominalized subordinate clauses, a distinction is made between perfective aspect, imperfective aspect, and irrealis mood. The distinction between perfective and imperfective is also encoded in co-temporal subordinate clauses and a subset of adverbial clauses. There are four constructions used to indicate future tense, which indicate different degrees of certainty or mode.

This chapter is organized according to the tense/aspectual categories found in Kurtöp. Thus, there are four major sections. §17.1 addresses perfective aspect; §17.2 addresses imperfective aspects; §17.3 presents the forms used in encoding future tense; and §17.4 presents irrealis mode. Within §17.1 and §17.2 there are additional sub-sections for main-clause versus subordinate grammar.

17.1. Perfective aspect

17.1.1. Perfective aspect in main clause grammar

There are five separate morphemes which suffix directly to a verb stem in order to mark perfective aspect. In addition to perfective aspect, the forms encode a variety of evidential or evidential-like functions, briefly outlined in §17.1.1.1 - §17.1.1.6 and illustrated in greater detail in §20. In the examples immediately below I illustrate all five forms with a future time adverb. If the forms were marking past tense, the future time adverb would not be allowed. In each example, the interpretation is one in which completion of the event is the relevant aspect.

(427) *yampa geshang*

yampa *ge-shang*
tomorrow go-PFV.EGO
'Tomorrow (I) will have gone'

(428) *yampa gewala*

yampa *ge-pala*
tomorrow go-PFV
'Tomorrow (s/he) will have gone'

(429) *yampa gena*

yampa *ge-na*
tomorrow go-PFV.MIR
'Tomorrow (s/he) will have gone'

(430) *yampa gewara*

yampa ge-para

tomorrow go-PFV.PRES

‘Tomorrow (s/he) will have gone’

(431) *yampa gimu*

yampa ge-mu

tomorrow go-PFV.IND

‘Tomorrow (s/he) will have gone’

The particular semantic and pragmatic differences between these forms is outlined immediately below.

17.1.1.1. Egophoric *-shang*

The egophoric perfective is used in perfective contexts when the speaker has direct, first-hand knowledge of an event. This perfective is often (though not exclusively) when reporting on first person experience to an interlocutor who did not share the experience, as in (432).

(432) *tsheni trak the razi traknang thek zonshang net*

tsheni trak the ra-si trak-nang thek zon-shang

then truck one come-NF truck-LOC insert send-PFV:EGO

net

3.PL.ABS

‘Then the truck came and we were also put in the truck’

SBC20051127.KW

17.1.1.2. Unmarked *-pala*

The perfective *-pala* is derived from the nominalizer *-pa* (§15.2.1) plus *la*, which is likely either an old nominalizer or copula. The observation that the *-pa* described here as being diachronically identical to the old nominalizer *-pa* described elsewhere in this dissertation is supported by the fact that *-pa* in *-pala* shares the same allomorphy described for *-pa* in §7.3.2.2; that is, it has allomorph *-wala* following velar-final stems, *-r* final stems and stems that were closed by *-l* historically, *-sala* following historically open stems and *-pala* elsewhere. As I describe in §21.2.1.2, the form *-pala* also occurs in adverbial clauses as *-palthe* (< *-pa* + *la* + *the* ‘one’). In main clause grammar, *-pala* often, though not necessarily, co-occurs with a copula, which I assume to be evidence that the form is a recent recruit into main clause grammar from subordinate morphology. While the origin of *-pa* as a nominalizer is straightforward, the source of *la* is less clear. Tshangla has a mirative copula *la* (Andvik to appear) and Tamang has the suffix *-la* with marks non-past aspect on verbs (Poudel 2006). Without *-la*, the Kurtöp verbal *-pa* forms perfective questions.

Kurtöp *-pala* can be contrasted with *-shang* in that it encodes *non-personal* experience. When the speaker uses *-pala* they are speaking on behalf of someone else; the speaker expects someone else to have first-hand knowledge of the event but does not have doubt if the event occurred and the source and expectation of knowledge are irrelevant.

The most common use of perfective *-pala* is with second person statements, as in (433) or third person referents, as in (434).

(433) *witya machutpala*
wit-ya ma-chut-pala
 2.ABS-ALSO NEG-cut-PFV
 ‘You didn’t suffer, either’
 SPh.TsC20081022.918.843.SPh

(434) *Nyakoya me theta druppala*
Nya=ko=ya me the-ta drup-pala
 Nya=LOC=ALSO house one-EMPH be.complete-PFV
 ‘At Nya also one house is completed.’
 SaT.SW20090917.1467.067.SaT

The form *-pala* also marks perfective aspect in subordinate clauses (see §15.2.1 for more information on *-pala* as a nominalizer), as in (435):

(435) *barphela se tayo ngak lappala ngawal wenta*
barphela se talo ngak lap-pala ngak-pala wenta
 frog lice see-IMP.FUT QUOT say-PFV do-PFV COP.EQ.MIR
 ‘(Tiger) said “I told frog to look for lice.”’
 SPh.TsC20081022.737.864.SPh

17.1.1.3. Indirect *-mu*

The perfective suffix *-mu* encodes indirect evidence value; the speaker is reporting on indirect evidence that the event took place. The evidence could be a variety

- (437) *tshe darung duimoi mik thung ... tshe darung 'misutna ngaksi*
tshe darung duimo=gi mik thung tshe darung
 DM again demoness=ERG eye do DM again
mi-sut-na ngaksi
 NEG-kill-PFV.MIR QUOT
 ‘And again the Demoness saw ... and again (she) said (they) did not kill (them)!’
 PS20061206.1201.854.P

17.1.1.5. Presumptive *-para*

The fifth perfective suffix in Kurtöp, *-para*, is derived from the nominalizer *-pa* + *-ra*. The origin of *-pa* is obviously the old TB nominalizer found elsewhere in Kurtöp (cf. §15.2.1) as it shares the same allomorphy: *-wa* following velar and old *-l* codas, *-sa* following diachronically open syllables, and *-pa* elsewhere (see §7.3.2.2 for more details). The source of *-ra* is less clear, though one possibility could be a grammaticalization of the verb *ra* ‘come’. This hypothesis receives support from Anderson’s (2006: 351) observation that the verb ‘come’ tends to grammaticalize into a ‘potential’ construction. On the other hand, the formative *-ra* may be related to the form *-la* which occurs on the presumptive form of both the existential and equational copula (§18.1.2.2 and 18.1.3.2.)

-para is used when the speaker is uncertain of the knowledge, as in (438):

- (438) *daning sorwara*
daning *sor-wara*
 this.year change-PFV.PRES
 ‘This year it might have changed.’
 SaT.SW20090917.1254.692.SaT

The form *-para* may be negated, as in:

- (439) *miksira mathungwara phetseita*
mik-si=ra ma-thung-wara phetse=gi-ta
 eye-NF=EMPH NEG-do-PFV.PRES half=ERG-EMPH
 ‘Half might not have even seen (His Majesty)’
 SPh.TsC200801022.1487

17.1.1.6. *-pana*

There are very limited examples of the suffix *-pana*, which appears to be perfective aspect but with doubt. How this differs from *-para* remains to be seen. An example is *gewana*, which has been translated as ‘maybe gone now’.

17.2. Imperfective aspect

In finite clauses Kurtöp makes use of three contrastive constructions: *-ta*, *-taki* and *-si nâ*. In addition, a contrast is made in co-temporal subordinate clauses: *-tako* suffixed to the co-temporal subordinator *-mo* also encodes imperfective aspect. I discuss these forms below in terms of aspect, beginning with the finite contrasts.

17.2.1. Main clauses

Of the constructions used for marking imperfective aspect in main clause grammar, two forms, *-ta* and *-taki*, are also intertwined in the evidential system and the last construction *-si nâ* is intertwined with the Clause-chaining construction. The current section describes the form and outlines the function of these constructions. More details on the function of *-ta* and *-taki* are in §20 and *-si nâ* is also described in §21.2.5.5.4.

17.2.1.1. Mirative *-ta*

In a discussion of subordinate morphology in Kurtöp, Busch (2007: 47-48) mentions Proto-Tamangic **ta* ‘become’ as evidence for a possible source for *-ta*, but misses the fact that *tak* still exists as the synchronic verb ‘become’ in Kurtöp, further support in favor of his analysis. Anderson (2006: 359) identifies the auxiliary verb ‘become’ as one of the most common and important auxiliaries throughout languages of the world. The fact that it does not occur preceding a copula in semi-nominalization is further evidence that the source of *-ta* is an erstwhile verb.

The imperfective *-ta* can be negated, as in:

(440) *da ngai tshangto mebranta*

da ngai tshangto me-bran-ta

now 1.ERG complete NEG-know-IPFV.MIR

‘Now I don’t know (it) completely’

PS20061206.1552.61.P

The mirative imperfective *-ta* is used for imperfective events which the speaker was not expecting, such as most observations about third person. Only aspect, and not time, is relevant to *-ta* so *-ta* can be used in past, present, or future time. (441) and (442) are examples of the imperfective *-ta* used with past time.

(441) *chorten-the kora thung ngamo mithe ratari*

chorten-the kora thung ngak-mo mi-the
 chorten-DEF circumambulation do do-CTM man-DEF
ra-ta=ri

come-IPFV.MIR=HSY

‘While (she was) circumambulating the chorten, a man came (it is said).’

KS20061206.55.638- 57.321.KL

(442) *shakhwi Ujen Guru Rinpochegi terna bewal wentamila, jepoi shakhwigi sha*

'ngam sutta ngaksi

shakhwi Ujen Guru Rinpoche terna be-wala
 hunting.dog Ujen Guru Rinpoche treasure hide-PFV
wenta=mi la jepo=gi shakhwi sha 'ngam
 COP.EQ.MIR=TAG POL king=GEN hunting.dog meat much

sut-ta ngaksi

kill-IPFV.MIR QUOT

‘The hunting dog was hidden as a treasure by Ujen Guru Rinpoche, (thinking) it was killing a lot of meat (animals) (they) said.’

PS20061206.53.821.P

In (443) the imperfective is used with a present time interpretation:

- (443) *'ac sharpo wit mik thungmo khepo tshe net pretta*
aci sharop wit mik thung-mo khepo tshe net
 elder.brother hunter 2.ABS eye do-CTM FOC DM 1.PL.ABS
pret-ta
 fear-IPFV.MIR
 'When (we) see you, brother hunters, we are frightened.'
 KS20061206.55.638- 57.321.KL

- (444) *jepi 'napara phatta mephatta*
jepi 'napa-ra phat-ta me-phat-ta
 8TH.GEN earlier-EMPH be.okay-IPFV.MIR NEG-be.okay-IPFV.MIR
 'Even before (the) eighth (month) it will be okay.'
 Rice.Harvest20081022.93.890.PS

17.2.1.2. Non-mirative *-taki*

The imperfective, non-mirative *-taki*, often shortened to *-tak*, has almost the same distribution as the form *-ta*, except that *-taki* may also occur preceding a copula. *-taki* is derived from a combination of *-ta* plus the nominalizer *-ki*, and this diachronic relationship with the nominalizer allows it to co-occur with copulas in a semi-nominalized structure.

(445) shows *-taki* occurring as a nominalized clause with a copula:

(445) *tshe nin ramo net sem gatak wen*

tshe nin ra-mo net sem ga-taki wen
DM 2.PL come-CTM 1.PL.ABS mind enjoy-IPFV COP.EQ

‘When you guys come we are happy.’

PS20061206.1312.925.P

However, *-taki* may also occur on its own as a fully finite clause, as in (446-448):

(446) *da neri tshô wennanimi mi phetseni nornang getakiri*

da neri tshô wen-nani=mi mi pheste-ni nor=nang
now 1.PL.INC.GEN here COP.EQ-COND=TAG person half-CFOC cow=ABL
ge-taki-ri

go-IPFV-HSY

‘Now, if it’s our place half the people have to go to the cows (it is said).’

SPh.TsC20081022.953.SPh

(447) *yosto gatak*

yos-to ge-taki
work-LOC go-IPFV

‘(They) go to work.’

SPh.TsC20081022.953.SPh

(448) *nin ’angi rastak yo*

nin ’a-ngi ras-taki yo
2.PL where-ABL come-IPFV QP.COP

‘Where are you guys coming from?’

PS20061206.168.115

Like its counterpart *-ta*, *-taki* can also be negated, as in:

- (449) *wici mini yot gor tancang kâ mezaktak wen ngaksi*
wici mi-ni yo-to gor tancang kâ me-zak-taki
2.PL where-ABL down-LOC turn always blood NEG-drip-IPFV
'Blood doesn't always flow down from your eyes (she said)'.
PS20061206.1447.408.P

The form *-taki* has the same aspectual value as *-ta* but a different evidential interpretation. As I describe in greater detail in §20.1.2.2, *-taki* is used when the speaker has old or intrinsic knowledge about an event.

17.2.1.3. Durative *-si nâ*

The Durative *-si nâ* construction is a recent grammaticalization of durative aspect from the Clause-chaining Construction (described in §21), consisting of VERB-NF COP. Evidence that *-si nâ* has grammaticalized into an aspectual category from a chain is in semantic interpretation; while the clause-chains in Kurtöp involving final verbs other than *nâ* may be interpreted as two events (see §21.2.5 and immediately below for more details), *VERB-si nâ* is only interpreted as one event with durative aspect.

In contrast to *-ta* or *-taki*, the use of *-si nâ* entails that the action went on for a considerable period of time, similar to the sense of *keep on V-ing* in English. An example is (450).

- (450) *omenang net gapo thapsi nâ ngaksi yau 'napani lapna*
*wo-me=nang net gapo thap**-si nâ*
 DEM:PROX-DN=LOC 1.PL.ABS PL.FOC quarrel (>Dz)-NF COP.EXIS.MIR
ngaksi yau 'napa=ni lap-na
 QUOT DEM:UP earlier=ABL tell-PFV.MIR
 ‘(Somebody) up there had already said we were fighting down there.’
 SBC20051127.KW

Like the imperfective suffixes described previously, the *-si nâ* durative is also interlaced with the evidential system. As I describe in §18.1.2 and especially in §20.2.1, there is a set of existential copulas which code a wide range of evidential and evidential-like categories. For example, the copula *nâ* also inherently encodes mirativity in (450) while *nawala* in (451) encodes old or intrinsic knowledge.

- (451) *ngat calai barto wotor deksi nawal*
ngat cala=gi bar=to wotor dek-si nawala
 1.ABS luggage=GEN middle=LOC like.this insert-NF COP.EXIS
 ‘I was kept in the middle of the luggage like this.’
 SBC20051127.KW

Also like the previously described imperfective suffixes, *-si nâ* can be used in past, present, or future time. (451) provides an example of *-si nâ* encoding durative aspect in past time while (452) is an example of *-si nâ* in present time.

(452) *khit chorten kora thungzi nâ*

khit chorten kora thung-si nâ

3.ABS chorten circumambulation do-NF COP.EXIS.MIR

‘He is (continuing to) circumambulate the chorten.’

Elicited data.KL

As I mentioned previously, to negate the *-si nâ* construction, a negative existential copula must be used in place of the affirmative copula. (453) provides an example of durative aspect with negative polarity.

(453) *'ipa zuzi mû*

'ipa zu-si mû

cooked.rice eat-NF COP.EXIS.NEG

‘(S/he) is not eating food (continuously).’

Elicited data.KL

Recall that *-si nâ* has grammaticalized into durative aspect from a derivation of the Clause-chaining construction. The Kurtöp Clause-chaining construction has not completely grammaticalized with the negative copula, however. Thus, (453) can also mean ‘Having been eating, the food is no more.’

17.2.2. Subordinate clauses

In cotemporal subordinate clauses, characterized by the suffix *-mo*, a contrast between perfective and imperfective clauses is possible. As I describe in greater detail in §21.2.4, the subordinator *-mo* encodes cotemporal subordinate clauses while

suffixing *-tako* to *-mo* changes the aspect to imperfective. The difference between *-mo* and *-motako* can be roughly translated into the difference between the adverbs ‘when’ and ‘while’ in English. (454) provides an example of perfective aspect in cotemporal subordination, which contrasts with (455), evidencing imperfective aspect.

(454) *udina Bidung thrâmo tshe nei ’lupshang*

wudi=na Bidung thrak-mo tshe nei ’lup-shang
 DIST=LOC Bidung arrive-CTM DM 1.PL.ERG catch-PFV.EGO

‘When (they) arrived over there (in) Bidung we caught (up with them).’

SPB20051127.KW

(455) *tshe thu Trongsa thrâmotak Rimpochena zhushang yum wotor geshang ngaksi zhushang*

tshe thu Trongsa thrâ-mo-tako Rimpochena zhu-shang
 DM DIST Trongsa arrive-CTM-IPFV Rimpochena=LOC tell.HON-PFV.EGO
yum wotor ge-shang ngaksi zhu-shang
 mother.HON like.this go-PFV.EGO QUOT tell.HON-PFV.EGO

‘While we arriving over there (in) Trongsa, we told Rimpochena, we told (him) that the mother had gone like this.’

SPB20051127.KW

17.3. Future tense

As the previous sections demonstrate, most of the finite verbal morphology is associated with aspectual, rather than tense differences. Nonetheless, Kurtöp also marks future tense. As with aspectual values, there are different evidential-like values in future

tense as well. Below I describe the suffix *-male*, used to encode future tense with speaker certainty, and unmarked verbs which encode future tense with speaker uncertainty.

17.3.1. *-male*

The suffix *-male*, often shortened to *-mal*, still regularly occurs as a nominalizer in subordinate clauses (cf. §15.2.4) and in main clauses *-male* still often co-occurs with a following copula.

An example of *-male* preceding a copula is:

(456) *da semal wenta ngak ai khepo*

da se-male wenta ngak 'ai khepo
now die-NMZ:IRR COP.EQ.MIR QUOT grandmother FOC

‘Now (he) knew the old woman was going to die.’

KS20061206.130.335.KL

To negate *-male* a negative copula must be used, as in:

(457) *tshe 'ai jongmal mutle*

tshe 'ai jong-male mutle
DM grandmother emerge-FUT COP.EXIS.NEG.IND

‘Then the old woman didn’t come out.’

KS20061206.146.829.KL

It is not required for *-male* to occur preceding a copula; it can occur as the end of a finite clause, as in (458), however the only way to negate *-male* is to follow it with a negative copula.

- (458) *yung ramal ngaksi*
yung ra-male ngaksi
get come-FUT QUOT
'(They) will come get (her), (they) said.'
PS20061206.555.255.P

17.3.2. Bare verb stem

A bare verb can be contrasted with *-male* in terms of epistemic modality, or speaker certainty. As with other finite forms, such as *-pala* and *-male*, bare verbs may be finite or subordinate. When finite, the bare verb yields future tense with uncertain epistemic modality.

- (459) *khî gê*
khî gê-ø
3.ERG go-FUT.DBT
'He will go'(I think)'
Elicited data.KL

17.3.3. Hortative *-ki*

The hortative *-ki* affix is used to suggest immediate future, which can also be interpreted as suggestion or slight command. In (460) I show the hortative used with first person.

- (460) *mapa ringku ni barma... barma the shiki la*
mapa ringku ni barma barma the shi-ki la
originally tall CMT medium medium one narrate-HORT POL
'(From) a long and medium one, I will narrate (a) medium (one).'
- SPh.TsC20081022.

Examples with third person are in (461) and (462).

- (461) *wangda-karmo lemci ke*
wangda-karmo lem-ci ke
wangda-karmo be.tasty-HORT QP
'Is wangda-karmo (a variety of rice) is tastier?'
- Rice.Harvest20081022.438.321.KD

- (462) *khiri po gap pizi theki mebranta*
khiri po gapo pi-si the-ki me-bran-ta
3.REFL.GEN fur PL.FOC pull-NF insert-HORT NEG-know-IPFV.MIR
'He didn't know his fur was going to be inserted by pulling.'
- SPh.TsC20081022.992.960.TsC

17.3.4. Uncertain *-kina*

The morpheme *-kina* encodes future but compared to *-ki*, there seems to be more hesitancy. There are several examples below.

(463) *'napanira wakso goikina ngak lap-taki ngai*

'napa=ni=ra wakso go-kina ngak lap-taki ngai
earlier=ABL=EMPH this.much need-FUT QUOT tell-IPFV 1.ERG

'I tell them how much I want from the beginning.'

SBC20051127.KW

(464) *ngaita mekhancina*

ngai-ta

1.ERG

me-khan-kina

NEG-know-FUT

'I think I don't know.'

SPh.TsC20081022.1159.539.TsC

(465) *tsam chapsang ge goikina da ngat*

tsama chapsang ge go-kina da ngat

little bathroom go need-FUT now 1.ABS

'Now a have to go to the bathroom for a while.'

SaT.SW20090917.3164.105.SW

The above examples were with first person, but there are several examples in third person in the data as well. These are shown immediately below.

(466) *bot khwe ning gaminang thungkina ngaksi*
bot khwe ning gami-nang thung-kina ngaksi
 3.PL.ABS water and fire-LOC do-FUT QUOT
 ‘(She said) that they will be thrown into the water and fire.’
 PS20061206.676.578.P

(467) *mangi duimo mik thungkina ngaksi*
ma-ngi duimo mik thung-kina ngaksi
 down=ABL demoness eye do-FUT QUOT
 ‘(She said) that the demoness will see from down there.’
 PS20061206.888.969.P

(468) *cikja the lhakina tshe*
cikja the lha-kina tshe
 hundred one exceed-FUT DM
 ‘It would be more than one hundred.’
 SaT.SW20090917.1076.547.SaT

17.4. Irrealis

While irrealis is generally not considered a tense or aspectual category, in subordinate grammar it is coded in a way similar to aspect. Several examples follow.

- (469) *tshe wo Hâpaya 'namisami the lapmal zhaya mutna*
tshe wo Ha-pa-ya 'namisami the lap-male
 DM DEM:PROX Hâ-DZ-also very one tell-NMZ:IRR
mutna
 COP.EXIS.NEG.MIR
 'So this Hapa also didn't have anything at all to say.'
 SBC20051127.KW

- (470) *'ipa net zonli kermal otshang, bek cingkul thenang*
'ipa net zon=li ker-male ot-shang bek
 food 1.PL two=ERG carry-NMZ:IRR bring-PFV.EGO bag
cingku-la the-nang
 small-IDZ one=LOC
 'We brought food carried in a small bag.'
 SBC20051127.KW

- (471) *basgi 'la langmal thebe darna tshe*
bas=gi 'la lang-male the-be dar-na tshe
 bus=GEN rent be.enough-NMZ:IRR one-only remain-PFV.MIR DM
 'There was just enough money for the bus fare.'
 SBC20051127.KW

- (472) *thrâmal mutle*
thrak-male mutle
 arrive-NMZ:IRR COP.EXIS.NEG.IND
 'We would never arrive'
 SBC20051127.KW

- (473) *tshe ngat cala 'ngam 'otmal nâmotako ngai mau sang **thungmal** sho*
tshe ngat cala 'ngam 'ot-male nâ-mo-tako
 DM 1.ABS stuff many bring-NMZ:IRR COP.EXIS.MIR-CTM-IPFV
*ngai mau sang **thung-male** sho*
 1.ERG DEM:DN incense do-FUT EMPH
 'If I have many things to bring, then I would light up some incense down there.'
 SBC20051127.KW

CHAPTER XVIII

COPULAS AND NON-VERBAL PREDICATION

Copulas make up an integral part of the Kurtöp verbal system, as much of main clause grammar is composed of formally nominalized clauses completed with a final copula. There is sufficient evidence in the language to show that much of the synchronic main clause grammar has recently, and is still currently, developing via nominalization strategies. Indeed, in this way, Kurtöp is a prime example of a language which has developed, and continues to develop, main clause grammar via nominalizations, exemplifying DeLancey's (in press) conclusions about nominalizations in Tibeto-Burman.

The role of copulas in nominalization and main clause grammar is discussed in §15 while this chapter presents the structural and functional properties of the copulas. There are three basic forms which I consider to be copulas. Structurally, copulas occur at the end of clause, in place of a verb. Functionally, copulas predicate the functions of proper inclusion, equation, attribution, location, existence, and possession (cf. Payne (1997)). This chapter begins with a structural organization; §18.1 presents a category of forms which are formally a sub-category of verbs and therefore referred to here as ‘verbal copulas’; §18.2 describes ‘copular particles’, or forms that fulfill the same predicative function as the copular verbs but cannot be considered a subclass of verbs in similar to the verbal copulas. The third section, §18.3, summarizes the functional properties of the

copulas, showing how the various forms divide the functional copular space. Included in this last section is a brief discussion about the role of copulas in main clause grammar.

18.1. Verbal copulas

Kurtöp has four basic forms which function as copulas and yet can also be considered a subclass of verb, structurally. These forms are *nak~nâ* ‘COP.EXIS’, *mut~ mû* ‘COP.EXIS.NEG’, *wen* ‘COP.EQ’, and *min* ‘COP.EQ.NEG’. In §18.1 I offer the structural definition of a verbal copula, in §18.1.2 I present the existential copulas *nak~nâ* ‘COP.EXIS’ and *mut~ mû* ‘COP.EXIS.NEG’, and in §18.1.3 I present the equational copulas *wen* ‘COP.EQ’, and *min* ‘COP.EQ.NEG’.

18.1.1. Structural definition

I use the term ‘verbal copula’ to designate a subclass of verb-like elements, which are neither fully verbal nor nominal. Unlike verbs, which may take the negative prefix and a host of verbal suffixes (cf. §16 for a full structural analysis of Kurtöp verbs and the VP), copulas take only a limited set of verbal affixes. They cannot be negated but instead there are separate forms for affirmative and negative values. Copulas, however, can receive a subset of nominalizing suffixes and the full set of verbal particles. More specifically, copulas may be nominalized with *-khan* or *-sa* and suffixed with *-male*. Other forms that appear ‘attached’ to a copula do not share the same synchronic function as when they are affixed to lexical and auxiliary verbs. The nature of these forms will become clearer as I proceed below.

Before getting in to the functional details of the copulas, I will briefly illustrate the ability of the copulas to receive a subset of verbal morphology. In (474) the existential copula *nâ* is shown to be suffixed with the nominalizer *-khan*. The nominalized existential copula then is translated roughly into English ‘those who have’. In another context, *na-khan* ‘COP.EXIS-NMZ’ can be translated as ‘one who is’, with the predicate referring to a temporary property (cf. §18.1.2 below).

- (474) *phusana 'aring nakhanla gapo*
phu-sa=na 'aring nak-khan-la gapo
 UP-NMZ:LOC=LOC terrace COP.EXIS-NMZ:IPFV-IDZ PL.FOC
 ‘those who have terraces up there’
 Rice.Harvest20081022.678.597PS

The place nominalizer *-sa* can also be suffixed to a copula, as in (475). The resulting translation is roughly equivalent to ‘place where X is’. Note in this case the copula clearly retains its coda *-k*, which is otherwise lost word-finally.

- (475) *wo dui naksana razi*
wo dui nak-sa=na ra-si
 PROX demon COP.EXIS-NMZ:PL=LOC come-NF
 ‘(he) came to where the demon was...’
 SaT.SW20081022.1938.709SaT

The use of *-male* with a copula yields a slightly idiosyncratic result. While *-male* encodes future tense in main clauses (cf. §17.3.1) with lexical and auxiliary verbs, with

copulas it adds a sort of emphasis, or assertion. In (476) *wenmale*, clearly composed of the equational copula *wen* plus the future tense marker *-male*, is understood as ‘indeed’, or perhaps ‘it is true that’ in English.

- (476) *wenmal pretchakka razi ngatni*
 wenmale pretchakka ra-si ngat-ni
 indeed very.scared come-NF 1.ABS-CFOC
 ‘I was quite scared.’
 SaTSW20090917.1003.460SW

18.1.2. Existential

Kurtöp has a set of existential copulas whose primary function is to mark attribution, location, existence, and possession. Though much of the form of several of the existential copulas appears to be similar to verbal forms (e.g. *-wala* in *nawala*, which is a perfective marker, as I describe in §16.2.2.9 and §17.1.1.2), it is not always possible to understand the meaning of the copula as a composite of the copula plus verbal morphology. For example, take the form *nawala*, which is the basic, non-mirative, certain, unmarked, affirmative existential copula. *-wala* by itself on a lexical or auxiliary verb encodes perfective aspect, a meaning which is clearly not present in the case of the copula.

There are separate forms for affirmative and negative existential copulas. As I describe in §16.1.5, the affirmative form *nak~nâ* may be related the PTB form **(g)na(s)* (Matisoff 2003a: 603) and the negative form *mû ~ mut* is a likely combination of *ma-* +

yod, with *yod* being cognate with Tibetan *yod*¹³³. In the discussion below, it will become obvious that each copular base has several variations, depending on a wide variety of evidential or evidential-like factors, leading to the question of a basic form. In a structural sense, the ‘basic’ affirmative existential copulas is *nâ* and the basic negative existential copula is *mû*; that is, structurally the other existential copulas can be seen as composed of the basic root (*nâ* or *mû*) plus a suffix. However, for reasons speculated below, the ‘basic’ existential affirmative copula is actually semantically or pragmatically marked. Therefore, I begin my discussion of the affirmative existential copula with the morphologically marked but semantically unmarked *nawala* ‘COP.EXIS’.

18.1.2.1. Affirmative

The affirmative existential copula is used to ascribe a description, as in (477). The construction is one of existence; as evidenced by the literal translation below. However, the function is one of attribution, where the speaker attributes a great amount of holiness to a particular place.

- (477) *bjinlap chetoka nawala*
bjinlap chetoka ngak nawala
 holiness very.big QUOT COP.EXIS
 ‘The (place) is very holy (lit. the holiness is very big)’
 SaT.SW20090917.1211.409SaT

¹³³ Jaschke (1954: 51-52) describes Written Tibetan <yod-pa> as a verb meaning ‘to be’, or more specifically ‘to exist’, ‘to be present’ or ‘to be found at a place’.

The existential copula also fulfills the function of predicating location. In (478) the copula *nawala* locates *yum* ‘mother.HON’ in her car.

- (478) *yum khira nawala*
yum *khira* *nawala*
 mother.HON 3.REFL COP.EXIS
 ‘The mother was in hers’
 SBC20051127.KW

The existential copula is also used to predicate existence of tangible and intangible entities. For example, in (479) the existential copula is used to assert the existence of a palace while in (480) the copula *nawala* predicates the existence of a problem.

- (479) *zhabgi zimcung ngak nawala*
zhap=gi zimcung ngak nawala
 king=GEN palace QUOT COP.EXIS
 ‘There is a (so-called) king’s palace’
 SPh.TsC20081022.3182.357SPh

- (480) *tshe osi kanyel nawala la*
tshe wosi kanyel nawala la
 DM DEM:PROX problem COP.EXIS pol
 ‘So there was this problem’
 SPh.TsC20081022.2024.776SPh

The existential copula is also used to assert possession, of an object (a car) in (481) and of a human in (482).

(481) *netna gari sum nawala*
net=na *gari sum nawala*
 1.PL.ABS=LOC car three COP.EXIS
 ‘We have three crs’
 SBC20051127.KW

(482) *neci 'amthe nawal la yau*
neci *'ama-the nawala la yau*
 1.PL.GEN mother-DEF COP.EXIS POL UP
 ‘We have a woman up there.’
 SaT.SW20090917.3126.817SaT

18.1.2.1.1. Semantically/pragmatically marked derivations of the affirmative existential copula

Each verbal copular root has several forms -- clearly derived from a combination of the root plus synchronic verbal suffixes or particles -- which encodes an evidential, mirative, or related value.

The mirative form of the affirmative existential copula is *nâ*. In (483) the speaker is conversing with a friend about people in Bhutan and shared experiences there. He mentions the husband of a person from Naleng, a Kurtöp-speaking village, using the mirative form of the copula to assert the person belongs to a category of people from the

When the speaker is doubtful about the existence of an entity, there are two forms s/he may chose from. The form *nawara* is used when the speaker is speculating, or presuming that something would be the case. An example is (484), drawn from the story of Kala Wangpo. In this part of the story the king had lost its hunting dog and had sent his servants to look for the dog throughout the kingdom. The servants come across a home and expect that they will find the dog there. The are not *certain* but *assume* that they will find the dog there.

- (484) *tshe womenang shakhwi nawara ngaksi tshui gewal wentami*
tshe wome=nang shakhwi nawara ngaksi tshui
 DM DEM:DOWN=LOC hunting.dog COP.EXIS.PRES QUOT look.for
ge-pala wenta=mi
 go- NMZ:PFV COP.EQ.MIR=TAG
 ‘Saying “the hunting dog must be down there”, (they) went to look for (it).’
 PS20061212.P

The copula *nawara* ‘COP.EXIS.PRES’ can be contrasted with the copula *naki* in that the speaker has less certainty when using *naki* ‘COP.EXIS.DBT’. Consider (485).

- (485) *chortenthe naki la*
chorten-the naki la
 chorten -DEF COP.EXIS.DBT POL
 ‘There may be a chorten’
 KZ200805151

The example above comes from a narration about the Kurtöp-speaking area. The speaker in this instance thinks there could be a chorten in a certain area in the region, but is not sure. Perhaps he had seen one once, but later heard it was demolished and has not been able to verify himself. When using *naki* ‘COP.EXIS.DBT’, the speaker has some sense that the entity in question may not be existence at the time of the utterance.

18.1.2.2. Negative

The negative existential *mut ~ mû* is the negative version of *nawala*, predicating the semantically/pragmatically unmarked negative occurrences of description, location, existence, and possession. Like the affirmative, there are several versions of the negative existential copula, depending on evidential or evidential-like values. First, I will illustrate the copular functions of the negative existential, and then in 18.1.2.2.1 I will present the marked forms of the negative, existential copulas. Note that in some of the examples immediately below a marked form of the copula is used; this was so I could use examples from the textual database, rather than elicited data.

In (486) the negative existential copula is used to predicate description.

- (486) *yam lektokara mutna*
 yam *lektoka=ra* *mutna*
 path good= EMPH COP.EXIS.NEG.MIR
 ‘The path wasn’t good at all’
 SaTSW20090919.SaT

Negative location is also indicated with the negative existential copula, as in (487) and (488).

- (487) *bö Khenpajongo trong mû*
bö Khenpajon=go trong mû
holy.place Khenpajon=LOC village COP.EXIS.NEG
'There is no village in the holy place Khenpajon'
SaTSW20090919.SW

- (488) *yum Drowa Zangmo mucı kapni khepo*
yum Drowa Zangmo mut=gi kapni khepo
mother.HON Drowa Zangmo COP.EXIS.NEG=GEN time FOC
'the time when Mother Drowa Zangmo was not there'
PS20061206P

Examples of the negative existential *mû* predicating the lack of existence of an human entity is in while in (489).

- (489) *'apayang tapti nikhan mû*
'apa=yang tapti ni-khan mû
father=also together stay-NMZ.IPFV COP.EXIS.NEG
'There was no one staying (up there) with the father'
SBC20051127KW

In (492) and (491) possession is illustrated. In the first example, the possessor is not mentioned in the clause, but is understood to be a third person plural referent, who the

speakers had been discussing. In the second example, however, the possessor (*wo Hapaya*) is overt, together with the object of possession (the nominalized clause *'namisamithe lapmal*). Here, the mirative form of the negative existential copula is used; this form and the other semantic/pragmatic derivations are discussed in §18.1.2.2.1.

(490) *chuti mû*
chuti *mû*
 vacation COP.EXIS.NEG
 ‘(They) had no vacation.’
 SBC20051127KW

(491) *tshé wo Hapaya 'namisamithe lapmal zhaya mutna*
tshé *wo* *Ha-pa=ya* *'namisami-the* *lap-male*
 DM DEM:ROX *Ha-DZ =also* *very-DEF* *tell-NMZ.IRR*
zha=ya *mutna*
 what=also COP.EXIS.NEG.MIR
 ‘So even this *Hapa* (person from Ha) had nothing at all to say’
 SBC20051127KW

18.1.2.2.1. Semantically/pragmatically marked derivations of the negative existential copula

In addition to unmarked *mut ~ mû*, Kurtöp has three derivations of the negative existential copula. The form *mutna* is used for mirative value; *mutle* is used for indirect evidence, or inference, and the form *mutla* is used when the speaker is not sure. These are each illustrated below.

The example in (492) exemplifies the mirative negative existential copula:

- (492) *Monggar=ni tsheni tshe gari mutnami tshe khako da*
Monggar=ni tsheni tshe gari mutna=mi tshe
 Monggar=ABL then DM car COP.EXIS.NEG.MIR=TAG DM
khako da
 DIR:UP now
 ‘Then from Monggar there was no vehicle (going) up’
 SBC20051127KW

Use of the negative inferential existential is illustrated in (493) and (494). In the first example the speaker is reporting something said to a third person (*khit*). The woman who said the clause which is indicated by the quotative (*khit phoja mutle*) had indirect evidence of the woman’s (*khit*) lack of a husband. It was not her own husband who was non-existent, and because it was someone else’s (non-existent) husband she was referring to, she had to use the inferential form of the negative copula.

- (493) *khit phoja mutle ngak*
khit phoja mutle ngak
 3.ABS male COP.EXIS.NEG.INF QUOT
 ‘(She_i) says “she_j doesn’t have a husband”
 SaT.SW20090917

The second example illustrates the inferential negative existential copula, again when the speaker has indirect evidence for the statement. The speaker here is not

intrinsically tied to the area he and the others are discussing. He cannot speak with old, ingrained knowledge about the lack of villages there; thus he uses the inferential form of the copula.

- (494) *trong mutle la*
trong mutle la
 village COP.EXIS.NEG.INF POL
 ‘There is no village (there)’
 SaT.SW20090917

If the speaker is not certain about the lack of existence, possession, description, or location of something, the form *mutla* will be used. In (495) the speaker is not certain about his assertion regarding the lack of tragopans, and thus uses the form of the copula *mutla*.

- (495) *bapja gapoya mutla*
bapja gapo=ya mutla
tragopan PL.FOC=also COP.EXIS.NEG.DBT
 ‘There aren’t tragopans and all (I don’t think...)
 SaT.SW20090917SaT

18.1.3. Equational

Payne (1997:114) defines proper inclusion as being when ‘a specific entity is asserted to be among the class of items specified’ and equative clauses as asserting ‘that a

particular entity ... is identical to the entity specified in the predicate nominal'. Kurtöp has a set of equational copulas which are used to express these functions. *wen* is the root for the positive equational copulas and *min* is the root for the negative set. I discuss the affirmative equational copula and its related forms in §18.1.3.1 and the negative *min* and its related forms in §18.1.3.2

18.1.3.1. Affirmative

The copula *wen* is shown illustrating the equative function in (496) and (497). The first example has two NPs which are linked with the copula *wen* (occurring in a marked position, between the NPs, rather than at the end of the clause) and the second has only one overt NP, with the other being recoverable from discourse.

(496) *Ugen Tenzin wen khici ming*
Ugen Tenzin wen khici ming
Ugen Tenzin COP.EQ 3.GEN name
 'Ugen Tenzin is his name.'
 SBC20051127.KW

(497) *'awa wen ngaksi*
'awa wen ngaksi
elder.sister COP.EQ QUOT
 'She is (his) elder sister'
 SBC20051127.KW

Examples of *wen* carrying out the functions of proper inclusion are in (498) and (499). In (498) the speaker is placing herself in the category of those from the village of

Naleng. Similarly, in (499), the speaker is placing himself in the category of guests. Note that this last example shows the mirative form of the copula; this and others will be discussed in greater detail in §18.1.3.1.1.

(498) *Chusani wen*

Chusa=ni wen

Chusa=ABL COP.EQ.MIR

‘(I) am from Naleng’

SBC20051127.KW

(499) *dronpo wenta wu tsheni ngat*

dronpo wenta wu tsheni ngat

guest COP.EQ.MIR TAG then 1.ABS

‘Then I was a guest, right!’

SBC20051127.KW

18.1.3.1.1. Semantically/pragmatically marked derivations of the affirmative equational copula

In order to encode the functions of proper inclusion and equation together with mirativity or epistemic modality, Kurtöp has a set of equational copulas to draw from. I discuss the mirative form *wenta*, the dubitative *winim*, and the presumptive *wenpara* immediately below.

The mirative form of the affirmative equational copula *wenta* is used when the speaker does not expect something to be the case. In (500), for example, the speaker is

discussing people he knows in Bhutan with another Bhutanese friend living in the U.S. In the discourse immediately preceding this example he mentions a person from Ha, a village in the far western corner of Bhutan. Next, he discusses the person's wife, who happens to be from Naleng, a village in the Kurtöp-speaking region. The fact that a person from Ha would have a wife who is from Kurtö is surprising; thus, the mirative form of the copula is used here.

- (500) *Nalengni wenta*
Naleng=ni wenta
Naleng=ABL COP.EQ.MIR
 '(She) is from Naleng.'
 SBC20051127.KW

A separate form of the copula is reserved for contexts in which the speaker is unsure. For example, in (501), the speaker is stating that he does not know if a particular place is Pسالung or Yonten Kunjung. Since he is not sure, he uses the dubitative form of the copula *wenim*.

- (501) *Pسالung wenim Yonten Kunjung wenim mabran*
Pسالung wenim Yonten Kunjung wenim ma-bran
Pسالung COP.EQ.DBT Yonten Kunjung COP.EQ.DBT NEG-know
 '(I) don't know whether it is Pسالung or Yonten Kunjung.'
 SaT.SW20090919SW

There is also an affirmative equational copula form for instances in which the speaker is presuming something to be the case. In the portion of the text from which (502) is drawn, two speakers are discussing the whereabouts of a Rinpoche and his family. Speaker KW asks whether a particular person is looking after the Rinpoche's family. Speaker PC responds with (502); he assumes that this is the case, but cannot speak with authority.

(502) *wenpara*
 wenpara
 COP.EQ.PRES
 ‘It must be’
 SBC20051127.PC

The difference between *wenim* and *wenpara* is similar to the difference between *naki* and *nawara*, described in §18.1.2.1.1. That is, in the case of *wenim* and *naki*, the speaker is simply uncertain about the truth value of the assertion. However, in the case of *wenpara* and *nawara*, the speaker, though still uncertain, has some external reason to assume or presume that the assertion is true.

18.1.3.2. Negative

Kurtöp also has a unique root to denote negative equational copular contexts. Like the affirmative *wen*, the negative equational copula *min* is used to denote (negative) proper inclusion and equative functions. I illustrate the use of the negative equational copula to fulfill these two functions immediately below, followed by a discussion of the

derived forms which encode these functions together with a variety of evidential or evidential-like values (§18.1.3.2.1).

The negative equational copula *min* is illustrated in (503), expressing the function of proper inclusion. This example is drawn from a conversation about rice types grown in Gangzur village. The speaker goes through the eight different varieties grown in the village, and at the end of the list, another speaker asks if the *Dakpa* variety of rice is grown in the village. PS answers as in (503), communicating that the rice in their village does not belong in the same category as the *Dakpa* rice.

(503) *neri min*
 neri *min*
 1.PL.INCL.GEN COP.EQ.NEG
 ‘Ours isn’t (Dakpa)’
 Rice20081022.PS

An example of *min* conveying the equative function is (504). This example comes from a conversation between two speakers about an event in the past. At one point speaker TsC mentions a vehicle that had gone off the road, mistakenly asserting it was a bus. Speaker SPh corrects her, stating that it wasn’t a bus, using the negative equational copula.

(504) *bas min*
bas min
bus COP.EQ.NEG
 ‘(It) wasn’t a bus’
 SPh.TsC20081022.SPh

18.1.3.2.1. Semantically/pragmatically marked derivations of the negative equational copula

The negative equational copula *min* has three additional forms, depending on evidential or evidential-like values. As I illustrate immediately below, the form *minta* is used for mirative contexts, the form *minle* is used when the speaker does not have direct evidence, and the form *minla* is dubitative, when the speaker is uncertain.

The example in (505) comes from a portion of a conversation between two friends. The speaker is narrating an experience he had with some other villagers and starts by introducing two people (himself and another) but immediately realizes that it wasn’t two people, but three. The mirative realization that he was wrong is coded by the mirative negative affirmative equational copula *minta*.

(505) *net zon ... net zon minta*
net zon net zon minta
 1.PL.ABS two 1.PL.ABS two COP.EQ.NEG.MIR
 ‘The two of us ... no, not the two of us’
 SaTSW20090919SaT

An example of the inferential negative equational copula is (506). Here, the speaker has inferred from the previous context that a particular tax called *wangtho* is not the tax another speaker is discussing. The inference and the negative proper inclusion function is encoded here by the form of the copula *minle*.

(506) *wangtho ngaksisa minle ya?*
wangtho ngaksi=sa minle ya
 wangtho QUOT=CEXP COP.EQ.NEG.IND QP
 ‘It’s not the one called *wangtho*, right?’
 DungkarTS20081231.JT

When the speaker is not sure, s/he will use the dubitative form of the negative equational copula, *minla*. The example in (507) comes from a conversation between two older speakers, remembering a time when the former king visited their area. At this point in the conversation they are discussing the location of a particular person. Speaker TsC thinks the other speaker might be wrong, but is not sure, and so uses the form *minla*.

(507) *khit minla nanggo*
khit minla nang=go
 3.ABS COP.EQ.NEG.DBT inside=LOC
 ‘It wasn’t him inside (?)’
 SPh.TsC20081022.TsC

18.2. Copular particles

In addition to a set of copulas which are structurally a subset of verbs, Kurtöp has particles which can also be considered copulas. In *wh*- questions, a question particle is required at the end of the clause. The particle *yo* is used when the speaker expects the hearer to have the answer (as is the case in most information questions), while the particle *shu* is used when the speaker does not expect the hearer to have the answer (as in rhetorical questions). The syntax of *yo* and *shu* is actually different; *yo* occurs exclusively as the predicating element in *wh*- questions while *shu* occurs in this position as well as others (cf. §16.2.4.4 and §16.2.4.7 for a discussion of the syntactic distribution of *yo* and *shu*).

The question particle *yo* is shown in the elicited examples (508) and (509), fulfilling the functions of verbal copulas *nawala* and *wen*, but in syntactic *wh*- question contexts. The first examples shows a speaker question the location of a given entity, a function encoded by the existential copula *nawala* in non-question contexts. The second example has a speaker question the proper inclusive or equative function of an entity; here again the question particle *yo* is used.

- (508) *banggala 'au yo*
 banggala 'au yo
 chiles where QP.COP
 ‘Where are the chiles?’
 **banggala 'au*

- (509) *khit 'ê yo*
khit 'ê yo
 3.ABS who QP.COP
 ‘Who is he?’
 **khit 'ê*

The question particle *yo* is replaced with *shu* when the speaker is not sure that the interlocutor will have the answer, as in (510) and (511), showing the same questions as (508) and (509) above, but in a rhetorical context.

- (510) *banggala 'au shu*
banggala 'au shu
 chiles where DBT
 ‘Where are the chiles?’
 **banggala 'au*

- (511) *khit 'ê shu*
khit 'ê shu
 3.ABS who DBT
 ‘Who is he?’
 **khit 'ê*

The copula particles described in this section differ somewhat from the copular verbs described in §18.1. It is clear from numerous examples and contexts that the verbal

copulas play a primary role in denoting the traditional copular functions of proper inclusion, equation, attribution, location, existence and possession (however, see §15.4 and §18.4 for a discussion of copulas in the finite verbal system). The copula particles fulfill this function in the contexts I described immediately above, but it is not their *only* function. Here, I have shown how they share a function with the verbal copulas and how they participate in the same paradigm. However, both particles also have functions and syntactic distributions beyond those associated with the copulas (cf. §16.2.4.4 and §16.2.4.7). Nonetheless, I argue that *yo* and *shu* are a subset of copulas because they are the only way to predicate traditional copular functions in *wh*- question contexts.

18.3. Functional properties of the copulas

In the previous sections I have illustrated the wide range of verbal copulas and copular particles used in Kurtöp. §18.1 focused on the verbal copulas, illustrating the affirmative and negative existential and equational forms, along with their corresponding mirative, inferential, dubitative or presumptive forms. §18.2 presented the particles used in copular contexts unique to *wh*- questions.

The following three tables summarize the constructions involved in non-verbal predication. The use of the affirmative existential and equational copulas is summarized in Table 150. Non-verbal predication involving negative existential and equational copulas is summarized in Table 151. Table 152 summarizes the constructions involved in non-verbal predication in the context of *wh*- questions. For a full treatment of question formation (including polar questions and *wh*- questions in verbal contexts), see §19.2.2.

Table 150. Non-verbal predication in affirmative

Function	Declarative	Mirative	Presumptive	Dubitive
Equative	NP NP <i>wen</i>	<i>wenta</i>	<i>wenpara</i>	<i>wenim</i>
Proper Inclusion	NP NP <i>wen</i>	<i>wenta</i>	<i>wenpara</i>	<i>wenim</i>
Attributive	NP Adj. <i>nawala</i>	<i>nâ</i>	<i>nawara</i>	<i>naki</i>
Locative	NP NP=LOC <i>nawala</i>	<i>nâ</i>	<i>nawara</i>	<i>naki</i>
Existential	NP NP(=LOC) <i>nawala</i>	<i>nâ</i>	<i>nawara</i>	<i>naki</i>
Possessive	NP NP(=LOC) <i>nawala</i> / NP=GEN <i>nawala</i>	<i>nâ</i>	<i>nawara</i>	<i>naki</i>

Table 151. Non-verbal predication in negative

Function	Declarative	Mirative	Dubitive	Inferential
Equative	NP NP <i>min</i>	<i>minta</i>	<i>minla</i>	<i>minle</i>
Proper Inclusion	NP NP <i>min</i>	<i>minta</i>	<i>minla</i>	<i>minle</i>
Attributive	NP Adj. <i>mû</i>	<i>mutna</i>	<i>mutla</i>	<i>mutle</i>
Locative	NP NP=LOC <i>mû</i>	<i>mutna</i>	<i>mutla</i>	<i>mutle</i>
Existential	NP NP(=LOC) <i>mû</i>	<i>mutna</i>	<i>mutla</i>	<i>mutle</i>
Possessive	NP NP(=LOC) <i>mû</i> / NP=GEN NP <i>mû</i>	<i>mutna</i>	<i>mutla</i>	<i>mutle</i>

Table 152. Non-verbal predication in *wh*- questions

Function	<i>wh</i> - Question	Rhetorical <i>wh</i> - question
Equative	NP NP <i>Q yo</i>	NP NP <i>Q shu</i>
Proper Inclusion	NP NP <i>Q yo</i>	NP NP <i>Q shu</i>
Attributive	NP Adj. <i>Q yo</i>	NP Adj. <i>Q shu</i>
Locative	NP NP=LOC <i>Q yo</i>	NP NP=LOC <i>Q shu</i>
Existential	NP NP(=LOC) <i>Q yo</i>	NP NP(=LOC) <i>Q shu</i>
Possessive	NP NP(=LOC) <i>Q yo</i> NP=GEN <i>Q yo</i>	NP NP(=LOC) <i>Q shu</i> NP=GEN <i>Q shu</i>

18.4. The role of copulas in main clause grammar

In addition to the basic existential and equational functions outlined above, the copulas play a large role in Kurtöp grammar. Copulas often combine with nominalized clauses and, over time, are omitted from the construction, yielding new main clause grammar. This diachronic reanalysis can be summarized as: [(NP) (NP) V-NMZ] COP → (NP) (NP) V-TAME and is discussed in greater detail in §15.4. In this section I will briefly provide some examples of copulas involved in main clause grammar, beginning with equational copula, followed by the existential copula. The copular particles are not integrated into main clause grammar in the same way the verbal copulas are.

The equational copula may combine with *-male*, *-pala*, *-taki*, and *-si*:

- (512) *ngai wotor bimale wen ngaksi*
ngai wotor bi-male wen ngaksi
 1.ERG like.this give-NMZ:IRR COP.EQ QUOT
 ‘‘I will give (you a piece of flat bread) like this’ (he says)...’
 Lama20081231.LC
- (513) *khitya Kurtötpa jur zatpala wenta*
khit-ya jur zat-pala wenta
 3.ABS-also become finish-NMZ:PFV COP.EQ.MIR
 ‘He had also turned into a Kurtöp’
 SBC20051127.7.229KW
- (514) *’nau-gangsha rastaki wentami*
’nau-gangsha ras-taki wenta=mi
 random.thought come-IPFV COP.EQ.MIR=TAG
 ‘(they) must have been shocked (lit. random thoughts were coming)!’
 SPh.TsC20081022. 2942.823.SPh
- (515) *tshe Pasalung ngakhan Guru khirawa lhaksi wen ngaksi jinlap chitpu*
tshe Pasalung ngak-khan Guru khira-wa wen
 DM Pasalung do-NMZ:IPFV Guru 3.REFL-COMP COP.EQ
ngaksi jinlap chitpu
 QUOT blessing large
 ‘The one called Pasalung is said to have more blessings than Guru
 himself’
 SaT.SW20090919.SaT

The existential copula combines only with *-si*, as in (516).

(516) *ngat calai barto wotor deksi nawal*

<i>ngat</i>	<i>cala=i</i>	<i>bar-to</i>	<i>wotor</i>	<i>dek-si</i>	<i>nawala</i>
1.ABS	luggage=GEN	middle=LOC	LIKE.THIS	insert-NF	COP.EXIS

‘I was kept in the middle of the luggage like this.’

SBC20051127.KW

CHAPTER XIX

NEGATION AND NON-DECLARATIVE SPEECH ACTS

Until now, this dissertation has focused on declarative speech acts, including aspect, clause-combining, and other topics. The aim of this chapter is to present grammatical topics typically contributed to other modes or moods. More specifically, this chapter presents negation (§19.1), imperative constructions (§19.2) and question formation (§19.2.2)

19.1. Negation

The only means for negation in Kurtöp is by way of a verbal prefix *ma*, as in (517).

(517) *wai co makhotle ngawal wenta*
wai co ma-khot-le nga-wala wenta
hey lies NEG-tell-IMP.POL do-NMZ:PFV COP.EQ.MIR
“‘Hey, don’t lie” (he) said.’
SPh.TsC20081022. 1073.514SPh

The vowel in the prefix changes depending on tense of the verb combined with the height of the verb root. In non-future contexts the vowel /a/ is used regardless of the vowel in the verb stem. In future contexts, the vowel changes to /e/, and if the vowel in the root is a high vowel the vowel of the negative prefix will change to /i/.

19.1.1. Tense

The vowel of the negative remains a low vowel in imperatives, as in (518).

- (518) ***machage***
 ma-chak-e
 NEG-step-IMP.POL
 ‘Don’t step.’
 SPh.TsC20081022.1097.535TsC

The same form of the negative prefix is used for perfective aspect. An example is

(519).

- (519) ***ged maphatpal nera***
 ge-to ***ma-phat-pala*** *nera*
 go-INF NEG-be.okay-PFV 1.PL.INCL
 ‘It’s not okay for us to go.’
 SaT.SW20090917.2231.234SaT

In imperfective and future contexts that negative prefix changes to *me-*, as illustrated below.

- (520) ***mebranta ngai drupchen***
 me-bran-ta *ngai* *drupchen*
 NEG-know-IPFV.MIR 1.ERG ritual
 ‘I don’t know about the ritual.’
 SaT.SW20090917.181.223.SaT

(521) *ngaita mekhancina*

ngai=ta *me-khan-kina*
1.ERG=EMPH NEG-know-FUT

‘I don’t know.’

SPh.TsC20081022.1159.539TsC

(522) *khiri po gapo pizi theki mebranta*

khiri *po* *gapo* *pi-si* *the-k-i* *me-bran-ta*
3.REFL.GEN fur PL.FOC pull-NF insert-HORT NEG-know-IPFV.MIR

‘He didn’t know his fur was going to be inserted by pulling.’

SPh.TsC20081022.992.960.TsC

19.1.2. Vowel assimilation

In non-perfective contexts when the vowel of the verb root is high, the negative prefix changes from *me-* to *-mi-*, as exemplified below.

(523) *tshemo net sutya misut ngaksi*

tshemo *net* *sut=ya* *mi-sut* *ngaksi*
then 1PL.ABS kill=also NEG-kill QUOT

‘Then (the hunter says) “we are definitely not going to kill (you)”.’

PS20061206

19.1.3. Scope

Scope of negation is tied to the level of clause integration between two verbs. In (524) the negative has scope only the subordinate clause, as would be expected in contexts involving two clauses.

- (524) *metaro gemale*
 me-ta-to *ge-male*
 NEG-look-INF go-FUT
 ‘(I) will go without looking.’
 Elicitation.KL20100607

In (525), however, negation has scope over the entire series of events. Note also that here the negation occurs on the second verb while in (360) negation occurs on the first verb.

- (525) *'neng chongzi mibina ngaksi*
 'neng chong-si mi-bi-na ngaksi
 heart take.out-NF NEG-give-PFV.MIR QUOT
 ‘(said that they) had not taken out the heart and given it (to her)...’
 PS20061206.1286.016P

19.2. Non-declarative speech acts

19.2.1. Imperatives

Imperative mood in Kurtöp is achieved by way of suffixation and there are three formally similar but functionally distinct suffixes Kurtöp speakers may choose from: polite *-le*, informal *-lu*, and irrealis *-lo*. I describe these in turn below.

19.2.1.1. Polite *-le*

As I stated in §16.2.2.16, the polite imperative suffix *-le* is of unknown etymology but is probably an old morpheme as it conditions allomorphological alternations rich for Kurtöp. I describe the allomorphy in §7.3.2.3 but also summarize the alternations here, including a repetition of the table summarizing the forms, shown as Table 153.

Table 153. Allomorph of polite imperative *-le* suffix

Stem Type	Example Bare Stem	Gloss	Imperative
<i>-k</i>	<i>kuk</i>	‘gather’	<i>kug-e</i>
<i>-ng</i>	<i>thong</i>	‘drink’	<i>thong-e</i>
<i>-p</i>	<i>phap</i>	‘bring down’	<i>phab-e</i>
<i>-m</i>	<i>ngom</i>	‘cry’	<i>ngom-e</i>
<i>-r</i>	<i>chir</i>	‘chop’	<i>chir-le</i>
historical <i>-l</i>	<i>phre</i>	‘separate’	<i>phre-le</i>
<i>-t</i>	<i>dot</i>	‘sleep’	<i>dot-le</i>
<i>-n</i>	<i>gin</i>	‘put on’	<i>gin-le</i>
open syllable	<i>se</i>	‘die’	<i>se-ye</i>

In addition to the alternation of *-le* with *-ye* or *-e*, the polite imperative suffix also conditions different forms of stem-final consonants. When imperative *-le* is suffixed to non-coronal stop final stems, the final consonants become voiced. Thus, in the examples in Table , the final consonant in *kuk* ‘gather’ voices to /g/ and the final consonant in *phap* ‘bring down’ voices to /b/. It is important to point out that this voicing alternation is not simply intervocalic voicing, as it does not happen in other intervocalic environments and is restricted to the context of the polite imperative.

The polite imperative *-le* is used to make imperatives but when one is making a command to someone of a higher status, or when one simply wants to convey an added sense of respect. In this way, the Kurtöp polite imperative is very similar to the Hindi imperative *-ie*.

An example of the polite imperative is shown in (526), extracted from part of a conversation in which one speaker is reporting something the mother of a Rimpoche had said to him. Note the use of *tsama* ‘some’ as a way to further soften the request.

- (526) *wici tsama ngaksi thu thegeri*
wici tsama ngaksi thu thek-le=ri
 2.GEN some QUOT DIST insert-IMP.POL=HSY
 ‘(she) told (me) to put (her) there.’
 SBC20051127KW

A similar example is (527). In this example someone is making a request of a Rimpoche that the Rimpoche come and visit their place. The honorific form of the verb ‘go’, *jon*, is used, and the speaker also uses the polite form the imperative.

- (527) *Khentse Rimpoche zhuro rana Zongsar Khentse zhuro thu nen the jonle ngaksi*
Khentse Rimpoche zhu-to ra-na Zongsar
 Khentse Rimpoche request.HON-INF come-PFV.MIR Zongsar
Khentse zhu-to thu nen the jon-le
 Khentse request.HON-INF DIST day one go.HON-IMP.POL
 ‘(They) had come to request Khentse Rimpoche, Request Dzongsar Khentse, to come over there for one day.’
 SBC20051127KW

19.2.1.2. Informal *-lu*

As I describe in §16.2.2.17 and 16.2.2.18, both the informal imperative *-lu* and irrealis imperative *-lo* are potentially related to the Black Mountain imperative *-lu*. Other than this, there is no obvious etymology for *-lu*. There is one irregularity involving *-lu*; the verb *khor* ‘take’ loses its final *-r* when suffixed with *-lu* for a form of *kholu* ‘take-IMP’. This is surprising given the fact that *khor* does not lose the final *-r* when suffixed with the polite imperative *-le*, yielding *khorle* ‘take-IMP.POL’.

The difference between *-le* and *-lu* is one of politeness or formality. *-lu* is used most commonly amongst friends or people of the same status. In this way it translates well into the Hindi imperative *-o*.

The example in (528) is drawn from the tale of Kala Wangpo. At this point in the story the mother is ordering her two children to go to their father for blessings. Commands to children, by default, take the *-lu* imperative, as in this instance.

- (528) *tshé ninta zon tshé yapgi chawangnang gilu ngaksi*
tshé nin-ta zon tshé yap=gi chawang=nang
 DM 2.PL-EMPH two DM father.HON=GEN blessing.HON=LOC
gi-lu ngaksi
 go-IMP QUOT
 ‘‘Then the two of you go for (your) father’s blessing’’ (she said).’
 PS20061206.956.001P

In (529) the speaker is narrating a story in which one character is wishing for a girl to become a monkey. Here, we also see the informal imperative used.

- (529) *khit pra jurlu ngaksi ’molam tapsi*
khit pra jur-lu ngaksi ’molam tap-si
 3.ABS monkey become-IMP QUOT pray-NF
 ‘praying “that she become a monkey” ...’
 Lama200812311.2884.160LC

19.2.1.3. Irrealis *-lo*

Kurtöp has a third imperative, but rather than make a third contrast along the lines of politeness or formality, the third imperative is used in irrealis contexts, usually when the speaker is telling the second person to follow a particular action in the future, should

another action take place. A speaker explained this to me in the context when, for example, you are leaving your younger sister alone in the house for a few hours to run errands in town. Right before leaving, you might tell your sister, *ko maphiyo* ‘do not open the door’, using the form *-lo* because a context in which the sister might open the door is may or may not come about.

An example of the irrealis imperfective *-lo* is shown in (530). This example was taken from a conversation between two speakers. Speaker KW is relaying part of a previous journey when he encountered an old family friend who put him and his traveling companions up for the night. At their departure the following morning, the family friend handed them some food and said (530).

- (530) *tsheni yamnang 'ipa zuyo ngaksi*
tsheni yam=nang 'ipa zu-lo
 then path=LOC cooked.rice eat-IMP.IRR
 ‘Then eat (some) food along the way.’
 SBC20051127

Another example is (531):

- (531) *ta razi wai 'ap barphela se tsam tayo ngawal wenta*
ta ra-zi wai 'ap barphela se tsama ta-lo
 horse came-NF hey Mr. frog lice some look-IMP.IRR
ngak-wala wenta
 do-NMZ:PFV COP.EQ.MIR
 ‘Tiger came and (said) “hey Mr. Frog, look for some lice”.’
 SPh.TsC20081022.965.402.SPh

19.2.2. Question formation

Question formation in Kurtöp can be divided into two syntactic sub-types: yes/no or polar questions and information questions. The latter requires a particular sentence-final particle, while for the former a sentence-final particle is only required in some contexts. I discuss yes/no questions in §19.2.2.1 and information questions in §19.2.2.2.

19.2.2.1. Yes/no questions

There are different strategies for formulating yes/no questions in Kurtöp depending on the aspect or tense of the clause. Perfective questions are encoded by a unique, recent grammaticalization of the nominalizer *-pa* (§19.2.2.1.1). Yes/no questions in imperfective aspect involve the addition of the final particle *ke* at the end of the clause (§) and future questions are marked by the addition of sentence final particle *ya*.

19.2.2.1.1. Perfective yes/no questions

Yes/no questions in perfective aspect are marked simply by the presence of the historical nominalizer *-pa* the finite verbal morphology. Etymologically, the perfective question marker *-pa* is the same as the *-pa* that occurs in nominalization (§15.2.1) and in various forms of perfective aspect (cf. §17.1.1.2, §17.1.1.5, §17.1.1.6, §20.1.1.4, §20.1.1.5).

Examples of the perfective question marker *-pa* drawn from the texts are illustrated in (534) and (535). Note that both of these examples show the question

occurring in a negative context. The perfective question marker is also used in positive contexts, as I show in (536).

- (534) *brânita magewa daru?*
brâ=ni-ta me-ge-wa daru
 cliff=ABL-EMPH NEG-go-QP.PFV again
 ‘Didn’t he fall again?’
 SaT.SW20090917.SaT

- (535) *tshê Gangte Truilku yau mabjonpa?*
tshê Gangte Truilku yau ma-byon-pa
 DM Gangte Trüku DEM:UP NEG-come.HON-QP.PFV
 ‘And didn’t Gangte Trüku come up there?’
 SaT.SW20090917.SW

- (536) *wî nya ’ngam nguïsa?*
wî nya ’ngam nguï-sa
 2.ERG fish a lot buy-QP.PFV
 ‘Did you buy a lot of fish?’
 PCElicitation.Book1.123.022

The etymology of the *-pa* perfective question marker is clear. In Khengkha and Bumthap yes/no perfective questions are formed by use of the perfective nominalizer *-pa* plus the question marker *ya* (cf. §19.2.2.1.3). In Kurtöp, the *ya* has simply disappeared, allowing finite *-pa* to grammaticalize into a perfective yes/no question marker. There is occasional evidence for the presence of *ya* in Kurtöp as well. Though speakers prefer

perfective questions without a sentence final *ya*, questions with it are occasionally found in the discourse, such as in the example in (537).

- (537) *trak khirira nguisa ya*
trak khiri=ra ngui-sa ya
 truck 3.REFL.ERG=EMPH buy-QP:PFV QP
 ‘Did he buy the truck himself?’
 SaTSW20090917.SW

19.2.2.1.2. Yes/no question marker *ke*

In imperfective and hortative contexts, the question particle *ke* is added to the end of the clause to denote a yes/no question. An example I heard quite frequently is in (538).

- (538) *kurtotpai kha khanci ke?*
kurtot-pa=gi kha khan-ki ke
 Kurtot-DZ=GEN language know-HORT QP
 ‘Do you know the Kurtöp language?’

A similar example, also showing the *ke* question marker concomitant with a hortative-marked verb, is drawn from the texts in (539).

- (539) *phaci ke?*
 phat-ki *ke*
 be.okay-HORT QP
 ‘Is it okay?’
 TInterview20090106.JT

Example (540) shows the question marker *ke* used with an imperfective-marked verb, drawn from an interview conducted in the village of Gangzur. The speaker is the interviewer, asking the interviewee about the number of varieties of rice grown in the village. Note here also the interesting use of *ra* ‘come’ to convey an existential meaning.

- (540) *'ngam rata ke?*
 'ngam ra-ta *ke*
 'ngam come-IPFV.MIR QP
 ‘Are there are a lot?’
 Rice.Harvest20081022.KeD

19.2.2.1.3. Yes/no question marker *ya*

The question marker *ya* is used in all contexts except imperfective and hortitative. That is, the question marker *ya* is used in future tense, to clarify a particular nominal entity, or, more rarely, as a residual relic in yes/no perfective questions (cf. §19.2.2.1.1 and example (537)). I will illustrate the use and distribution of *ya* below.

The question particle *ya* may follow any finite clause (except as those described above, where *-pa* or *ke* would be required). (541) illustrates question particle *ya* following a copular clause using the inferential negative existential copula.

- (541) *'mâmi mutle ya?*
'mâmi mutle ya
 soldier COP.EXIS.NEG.IND QP
 'Are there no soldiers?'
 SaT.SW20090917.SaT

However, it is not required that the clause be finite. In (542) the question particle *ya* is used with a verb marked by the co-temporal suffix *-mo*, which only occurs in subordinate clauses.

- (542) *tap ramo ya?*
tap ra-mo ya
 return come-CTM QP
 'While coming back?'
 SaT.SW20090917.SW

The question particle *ya* can also be used to question phrases, not only clauses. In (543) *ya* follows a nominalized clause, while in (544) and (545) *ya* is used to question a location, and NP, respectively.

(543) *tshongi khak khorwalik ya?*
tshongi khak khor-wala=gi-ki ya
 here.ABL DIR:UP take-NMZ-INSTR-NMZ QP
 ‘So it was taken up from here?’
 SaT.SW20090917.W

(544) *khanpalung tshachu jeni ya?*
khanpalung tshachu jeni ya
 Khanpalung hot.springs RN:ABV QP
 ‘Above the Khanpalung hot springs?’
 SaT.SW20090917.SaT

(545) *thoksungpa ya*
thoksungpa ya
 field.guard QP
 ‘The field guard?’
 SaT.SW20090917.SW

It is interesting to note that *ya* also occurs with perfective aspect questions, even when the verb is marked fully as perfective, as in (546) (as opposed to *-pa* marking both perfective aspect as well as a polar question). Examples like this are uncommon in natural discourse, but present nonetheless. The difference between the use of *ya* ‘QP’ with a *-pala* perfective versus the use of solely the *-pa* perfective question marker remains the focus on ongoing research.

- (546) *zarwa makhorwal ya?*
zarwa *ma-khor-wala ya*
 lunch NEG-take-PFV QP
 ‘Didn’t you take a lunch?’
 SaT.SW20090917.SW

19.2.2.2. Information questions

As with the yes/no questions, a sentence final particle is used to encode information questions. Generally, information questions follow the same pattern as yes/no questions, with the exception of information questions in the future, which require no sentence final particle.

Historically, there was one information question marker for Proto-Kurtöp which I reconstruct as *yo*. However, *yo* has combined with the various yes/no question markers forming today a synchronic three-way contrast between *-po* ~ *-wo* ~ *-so*, for perfective information questions, *ko* for information questions in imperfective aspect and hortative mood, and *yo* for copular contexts. These are illustrated in §19.2.2.2.1, §19.2.2.2.2 and §19.2.2.2.3, respectively. Information questions for which no sentence final particle is required are discussed in §19.2.2.2.4.

19.2.2.2.1. Perfective information questions *-po* ~ *-wo* ~ *-so*

The presence of a question word in a perfective question triggers the change of *-pa* ~ *-wa* ~ *-sa* to *-po* ~ *-wo* ~ *-so*. For example, in (547) the verb *thrak* ‘arrive’ is suffixed with *-yo*, the morpho-phonologically conditioned variant of the perfective

information question marker. The fact that *-po* ‘QP.IF.PFV’ is historically composed of *-pa* ‘QP:PFV’ plus *yo* ‘QP:IF’ can be evident in hyper-speech. For example, when speaking to foreigners or when speakers are asked to speak very slowly and precisely, they will sometimes utter *thrâwo* as *thrâwa-yo*, drawing out the last two syllables.

- (547) *wî 'akpa thrâwo?*
wî 'akpa thrak-po
 lunch NEG-take-PFV arrive-QP.IF.PFV
 ‘How many times have you been (to the hot springs)?’
 SaT.SW20090917.SaT

The question marker *-po* ‘QP.IF.PFV’ is also used with verbs which are historically derived via the perfective *-pala*, even if the synchronic use has since deviated. For example, consider (548).

- (548) *Sambata jikpa 'akpa nâwo?*
Samba-ta jikpa 'akpa nâ-po
 Samba-EMPH big how COP.EXIS-QP.IF.PFV
 ‘How big is Samba?’
 SaT.SW20090917.SaT

The existential copula *nawa* or *nawala*, though diachronically comprised of a copular stem plus the perfective suffix *-pa* or *-pala*, no longer retains any sense of perfective aspect. However, the form associated with the perfective morphology, with a *-w* onset, is still used.

19.2.2.2.2. Information question marker *ko*

As with yes/no questions, information questions involving imperfect aspect or hortative mood, information questions require a *k-* initial sentence-final particle, historically composed of *ke* plus *yo*. (549) illustrates the use of *ko* when a wh- word is present.

- (549) *da zhâ nyangta ko*
da zhâ nyang-ta ko
now what receive-IPFV.MIR QP.IF
'Now what do (you) receive?'
SPh.TsC20081022.SPh

As we saw above with the existential copula, a copula that is historically derived from the same morpheme used to mark imperfective aspect or hortative mood in lexical verbs will take the question marker *ko*, as in (550).

- (550) *'akpa wenta ko bjasa trip the nâ?*
'akpa wenta ko bjasa trip the nâ
how.much COP.EQ.MIR QP:.F sand trip one COP.EXIS.MIR
'Much is it for one trip of sand?'
SaT.SW20090917.SW

19.2.2.2.3. Information question copula *yo*

In copular grammatical contexts, the question marker *yo* replaces the copula in information questions. There appear to be several cognates for Kurtöp *yo* throughout the East Bodish languages. Table 154 illustrates information question copulas in seven East Bodish languages. Based on this distribution, and the fact that *l > y* is a sound change that occurred in Kurtöp, Bumthap and Khengkha, I think it is safe to reconstruct a copula question marker *lo* to proto East Bodish.

Table 154. East Bodish information question copulas

Gloss	Krt	Bum	Kh	Ch	Ph	Da	Dz
QP.COP	<i>jo</i>	<i>jo</i>	<i>jo</i>	<i>do</i>	<i>lo</i>	<i>lo</i>	<i>lo</i>

The most common uses in Kurtöp occur in equative clauses with a question word. For example, a question I commonly asked in the village is shown in (551).

- (551) *wo zhâ yo*
 wo *zhâ yo*
 DEM:PROX what QP:COP
 ‘What is this?’

Another common example is (552), which is uttered when someone enters a house and the person inside the house is not close enough to the entrance to see who it is.

- (552) 'é **yo**
 'é **yo**
 who QP. COP
 ‘Who is it?’

However, the distribution of the copula question marker is not limited to equational clauses, making the analysis of it as a copula somewhat problematic. For example, consider (553).

- (553) *wî dor 'akpa thrawal yo tshachu?*
 wî dor 'akpa thrak-pala yo tshachu
 2.ERG times how.many arrive-PFV QP.COP hot.springs
 ‘How many times have you been to the hot springs?’
 SaT.SW20090917.SW

In this example the function of *yo* is clearly less-copula like and more like a question particle. Further, the difference *thrawal yo* and *thrawo* is still uncertain. Like the difference between *thrawa* and *thawal ya*, this question continues to be an area of further investigation.

19.2.2.2.4. Bare information questions

The information question copula *yo* also differs from the yes/no question marker *ya* in that it is not used in future tense. Consider (554).

(555) *wī dor 'akpa thrawal yo tshachu*
wī dor 'akpa thrak-wala yo tshachu
 2.ERG ORD how.many arrive-PFV QP hot.springs
 ‘How many times have you been to the hot springs?’
 SaT.SW20090917.150.129.SW

The use of *yo* above can be contrasted with *shu* below. In (555) the speaker is telling the story of a demon whose palace had been destroyed by Guru Rimpoche. Upon returning to his palace he noticed the destruction and think aloud to himself, ‘*angi nawa shu*’ ‘from where *shu*’. Since the demon is not speaking to anyone in particular, there is not an interlocutor *per se* and thus does not expect a potential interlocutor to know the answer; thus *shu* is used.

(556) *tshe duigi da khici phodrang ozi me 'angi nawa shu ngak wotor tamotakona*
tshe dui=gi da khici phodrang ozi me 'a=ngi
 DM demon=ERG now 3.GEN palace PROX house where=ABL
nawa shu ngak wotor ta-mo-tako-na
 COP.PFV QP.DBT QUOT LIKE.THAT see-CTM-IPFV-COP
 ‘And when the demon was looking at his palace, he was like “where did this house come from”?’
 SaT.SW20090917.2023.134-2025.591.SaT

Shu has a broader syntactic distribution than *yo* (cf. §16.2.4.4) and can also be used in yes/no questions. In (557) the speaker is asking his interlocutor a question about a third person (Dungse), and does not know if the interlocutor and Dungse are close. Since he is not sure that his interlocutor would know the answer. In a similar instance, the speaker in

(558) is wondering if the recording if the recorder has finished; he asks with *shu* because he does not expect the interlocutor -- not one of the linguists conducting the recording -- to know the answer.

(557) *Dungsegi ziktak shu*
Dungse-gi zik-taki shu
Dungse-ERG care.for.HON-IPFV DBT
'Is Dungse caring for (them)?'
SBC20051127.KW

(558) *zatpa shu da*
zat-pa shu da
finish-NOM DBT now
'Is it finished now?'
SBC20051127.PC

CHAPTER XX

EVIDENTIALITY AND RELATED CATEGORIES

Evidential and related categories are obligatorily encoded in most finite clauses in Kurtöp, including all affirmative statements -- copular clauses and in verbal predication -- and questions. These categories are not encoded in negative statements or imperatives. Evidentiality has been widely researched and a common definition can be taken from Aikhenvald (2004: 14) as ‘grammaticalized information source’. Some related categories have also been described, such as the *mirative*, which DeLancey (2001) defines as ‘linguistic marking of an utterance as conveying information which is new or unexpected to the speaker’. For Tibetan, Tournadre (2008a: 295) defines the term *egophoric* as expressing ‘personal knowledge or intention on the part of the actual speaker, or in the case of direct questions, expresses the next speaker’s (the addressee’s) personal knowledge or intention, as anticipated by the actual speaker.’ The Kurtöp verbal system encodes a combination of all these categories. I argue for three categories pertaining to knowledge in Kurtöp: *source* of knowledge (evidentiality), *expectation* of knowledge (including but not limited to mirativity) and *certainty* of knowledge.

20.1. Evidential categories encoded as part of the tense/aspect paradigm

20.1.1. Perfective aspect

As described in §17.1, Kurtöp makes a five-way distinction in perfective aspect with regard to evidential and evidential-like categories. Of the five forms, only *-mu*,

which encodes indirect evidence, would be considered a ‘true’ evidential in the sense of Aikhenveld. Another form *-shang* expresses a category similar, but not identical to the category ‘egophoric’ described by Tournadre (2008a) or ‘ego’ described by Garrett (2001). Kurtöp *-shang* also encodes expectation on part of the speaker that the interlocutor does not have personal knowledge of the event. The form *-na* marks mirativity combined with perfective aspect. For instances in which the speaker is not certain that a given event has taken place -- in other words that they are *presuming* an event has taken place -- the form *-para* is used. Finally, the form *-pala* is unmarked for mirative, ‘egophoric’ or indirect evidence. As such, it encodes certainty, a sense that the knowledge is not new or gained by inference, and does not encode a sense that the interlocutor does not have direct knowledge of the event.

20.1.1.1. Egophoric *-shang*

The use of the perfective suffix *-shang* encodes certainty on behalf of the speaker and the expectation that the interlocutor does not share the knowledge. As such, this form is used most often with first person, but it is not necessarily used so. The verbal suffix *-shang* may be used with third person forms as well, if the speaker has direct, personal evidence of a given event involving third person and does not expect the interlocutor to share the information. *-shang* can also be used with second person, but given the pragmatic rarity of second person statements in the first place, these are less common.

Due to the semantics inherent to *-shang*, when used by itself the default understanding is that first person is the S/A argument, as in (560):

A typical example with first person is shown in (559) and (560).

- (559) *dor zon thrakshang ngai*
dor zon thrak-shang ngai
ORD two arrive-PFV.EGO 1.ERG
'I have been there twice'
SPh.TsC20081022.2927.186.TsC

- (560) *khici mengya zhit geshang da*
khici meng-ya zhit ge-shang
3.GEN name-also forget go-PFV.EGO
'(I) also forgot his name'
SBC20051127.KW

First person could also be understood to be the O, as in (561):

- (561) *daru bot gapi theksi woyenatsham thek zonshang*
daru bot gapo=gi thek-si wo-ye=na=tsham
again 3.PL.ABS PL.FOC=ERG insert-NF DEM:PROX-UP=LOC=until
thek zon-shang
insert send-PFV.EGO
'Again having put us in (the truck) they sent (us) up there.'
SBC20051127.KW

In (562), the speaker uses a first personal plural exclusive pronoun, speaking to outsiders about what life was like in his village. He is discussing knowledge that is shared

between him and the people from his village but is not shared by the interlocutors. Thus, the form *-shang* is employed.

- (562) *sijüta 'lupshang neiyang la*
sijü-ta 'lup-shang nei-yang la
 politics-EMPH catch-PFV.EGO 1.PL.ERG-also POL
 ‘We have also caught the politics’
 SPh.TsC20081022.2078.400.SPh

An example with third person is (563), which was drawn from a narrated story about Kala Wangpo. This comes from the beginning of the story in which the storyteller is setting the stage; the king lost his hunting dog and has sent his assistants out to look for it. In this sort of story, especially as told to outsiders, the interlocutors do not share the knowledge and thus the speaker uses the perfective *-shang*.

- (563) *tshé oning 'aurang shakhwi tshui geshang*
tshé o-ning 'au-rang shakhwi tshui ge-shang
 DM 3.PROX-ABL where-EMPH hunting.dog look.for go-PFV.EGO
 ‘And then (they) went everywhere looking for the hunting dog’
 PS20061206.48.553P

Another example of *-shang* comes from a conversation between two people whomet only recently. In (564) the speaker is relaying information about a third person both speakers knew of. The speaker has first-hand knowledge of the event and does not expect his interlocutor to share this knowledge.

- (564) *zhing phepshang*
zhing phep-shang
heaven arrive.HON-PFV.EGO
'(The lama) passed away'
SBC20051127.268.649KW

20.1.1.2.Mirative *-na*

To encode that knowledge is new and not unexpected in perfective aspect the form *-na*, a recent grammaticalization of the existential copula *nâ*, is used. A simple example is (565), which was uttered by children who had been watching paragliders take off from the top of a hill. They would watch the paraglider circle around in the sky and slowly rise and fall. He disappeared out of the children's view for a few minutes and then they saw that he had landed.

- (565) *chakna*
chak-na
land- PFV.MIR
'It landed!'

A more colorful example comes from a short story about an old woman and Drukpa Künle. At the end of the story the woman was locked inside a room and the villagers were instructed not to open the door for seven days. However, upon the sixth day her son opened the door and discovered there was nothing but her toe remaining. As

an event clearly not expected in the discourse it is encoded with the mirative form of the perfective, as shown in (566).

- (566) *palanggi jedo thila the darnari*
palang=gi je=to thila the dar-na=ri
bed=GEN top=LOC thumb/big.toe one remain-PFV.MIR=SHSY
'On the bed remained a toe! (it is said)'
KS20061212.188.829-191.112KL

Similar examples are shown in (567) and (568). The first example, (567), comes from a part of a conversation in which one speaker is relaying a traveling event. During this portion in the journey he had reached Trashigang and from the top of a hill was looking down on a temple. There was an important event that day and many people had come; there were so many people, in fact, that a line had formed from the door snaking outside the temple. The speaker was not expecting a line of people coming from the door and thus uses the form *-na*.

- (567) *koni yoto jong gina*
ko=ni yoto jong gi-na
door=ABL DIR:DN emerge go-PFV.MIR
'(they) had come out of the door down there!'
SBC20051127.8.052.KW

Example (568) comes from the same conversation but this time the speaker had reached a house of someone who turned out to be an old relative. The portion in (568),

drawn from a longer clause, quotes the relative speaking to the speaker. The relative hadn't seen the speaker since the speaker was a child and now, suddenly, the speaker arrives completely unexpected, as an adult.

(568) *yala.. o onga tshô thrakna wai*

<i>yala...</i>	<i>wo</i>	<i>onga</i>	<i>tshô</i>	<i>thrak-na</i>	<i>wai</i>
god..	DEM:PROX	child	here	arrive-PFV.MIR	wow

'God.. this child has arrived! Wow

SBC20051127.KW

20.1.1.3. Inferential *-mu*

Perfective aspect with inferential evidence is encoded by suffixation of *-mu* to the verb stem. This form can be used if the speaker wishes to encode that the knowledge was gained by *inference*, such as when one goes looking for another in the house, and sees that the person is not in the house. The one who was looking then *infers* that the person in the house is gone and would relay this knowledge using the form *-mu*.

Examples (569) and (570) are both from personal experiences; (569) comes from a narrative in which two elderly speakers are discussing life in a village to the researchers and (570) comes from a conversation between two younger speakers. Example (570), which is used in a question, provides a clear illustration of the use of *-mu* to code indirect evidence. The interlocutor had gone to the hot springs but would not have been there while the hot springs were being washed away; he would have only seen evidence that the hot springs had been washed away, thus the speaker uses *-mu*.

(569) *dangponira comu la ozi pheng sho*

dangpo=ni=ra *co-mu* *la* *wozi* *pheng*
long.ago=ABL=EMPH make-PFV.IND POL DEM:PROX clay.pot
sho

EMPH

‘(they) have been made since a long back, these clay pots.’

SPh.TsC20081022.2683.631.SPh

(570) *tshachu tang gap roi khormu ke roizi*

tshachu *tang* *gapo* *roi* *khormu* *ke* *roi-zi*
hot.springs pond PL.FOC ROI take-PFV.INF QP ROI-NF

‘Were the hot spring ponds washed away?’

SaT.SW20090917.513.006.SW

A similar example is (571), also drawn from a story. In this example, no one in the story actually witnessed the tiger dragging the bear, but the evidence of the bear being drug was present.

(571) *tâ pretsi juk gemo wam rui khormu*

tâ *pret-si* *juk* *ge-mo* *wam* *rui* *khormu*
tiger fear-NF run go-CTM bear drag take- PFV.INF

‘When Tiger ran out of fear, he took the bear dragging’

SPh.TsC20081022.1112.999.SPh

The inferential perfective suffix can also be used with first person, as in (572). This example is drawn from the beginning of a recording session with two elderly speakers who were meeting the researchers for the first time. They were discussing between the two of them who was going to speak. The female speaker was insisting that she was not a capable story-teller and that the man should begin; in her utterance immediately prior to (572) she says *ngai ta 'rung mekhan ni* 'In my opinion I am not a story-teller'. Her use of indirect evidentiality here may be means by which she would not give the man any room to challenge her assertion.

(572) *da ngari zut thungmu*
da ngara=gi zu-ro thung-mu
 now 1.REFL=ERG eat-INF do-PFV.INF
 'Now I've eaten (the story)'
 SPh.TsC20081022.1170.670.TsC

20.1.1.4. Unmarked *-pala*

Like the forms *-shang*, *-na* and *-mu* the Kurtöp form *-pala* encodes certainty on behalf of the speaker. In another sense, however, it is unmarked for each value encoded by the previous three morphemes. It does not code inferential knowledge, it does not code that the knowledge was unexpected, and it does not encode that the speakers expects the interlocutor to share the knowledge. As such, as a default, the form *-pala* encodes third person referents that are unremarkable with regard to mirativity or evidentiality.

An example of *-pala* with an overt first person pronoun is in (575). Here again, the speaker expects speech-act participants to have knowledge of the event.

(575) *tshachu bang niye yaura drâ ngak lappala ngai*
tshachu bang ni-ye yau-ra drak ngak
 hot.springs bathe stay-IMP DEM:UP-emph be.good QUOT
lap-pala ngai
 tell-PFV 1.ERG
 ‘‘stay in the hot springs up there; it is good’’, I said.’
 SaTSW20090917.141.517.SW

Example (575) was uttered during a conversation between two old friends. They were raised in the same village together and were intricately involved in the details of each other’s lives. The speaker in this example expects that his interlocutor already knows this part of the story he is relaying and thus cannot use the perfective suffix *-shang*. Because he does not need to encode anything with regard to mirativity or evidentiality here, he uses the form *-pala*.

When used with third-person referents, *-pala* often precedes the equative copula, usually in its mirative form, as in (576):

(576) *tap tap rasal wentami*
tap tap ra-sala wentami
 return return come-NMZ:PFV COP.EQ.MIR=TAG
 ‘They came back, right?’
 PS20061206.52.198P

The use of *-pala* plus *wenta* ‘COP.EQ.MIR’ adds a dimension of mirativity to third person statements.

However, *-pala* may also be used on its own for third person referents, as in (577):

- (577) *Nyakoya me theta druppala*
Nya-ko=ya me the-ta drup-pala
Nya=LOC=also house one-EMPH be.complete-PFV
‘At Nya also one house is completed.’
SaT.SW20090917.1467.067.SaT

20.1.1.5. Presumptive *-para*

The previous four perfective suffixes encode speaker certainty as default. The fifth perfective suffix contrasts with these four in that it encodes uncertainty on behalf of the speaker, or that the speaker is presuming something to be true.

An example is (578):

- (578) *yangna oyenang gewara ngaksi*
yangna wo-ye=nang ge-wara ngaksi
perhaps DEM:PROX-UP=LOC go-PRES QUOT
‘Perhaps (the hunting dog) has gone up there (they) said’
PS200612106.95.0.P

In this example, drawn from the story of Kala Wangpo, the assistants of a king are looking for the king's hunting dog, which has disappeared. They make conjectures about where the dog could have gone, and while postulating that the dog could have gone to a certain location, they use the form *-para*, as they are not certain they dog had gone there.

Another example comes from a narration about life in the village. In (579) the speaker is discussing the experience of the villagers and how isolated they had been. One of the points he makes is:

(579) *miksira mathungwara phetseita*
mik-si=ra ma-thung-wara phetse=i=ta
 eye-NF-EMPH NEG-do-PFV.PRES half=ERG=EMPH
 'Half might not have even seen (His Majesty)'
 SPh.TsC200801022.1487

Because the speaker does not know exactly how many people from his village have actually seen or not seen the King, he uses the form *-para*.

20.1.1.6. Summary

The forms *-shang*, *-na*, *-mu* and *-pala* express certainty of knowledge, which contrast with *-para*, the only form to express uncertainty. The form *-shang* contrasts with the others in that it encodes intrinsically first-hand knowledge that the speaker does not expect the interlocutor to share. The form *-na* marks mirativity in perfective aspect, or that the knowledge was not expected. This contrasts with the other four forms which do not encode that the knowledge was not expected (note that this is different than saying

the other four forms encode expectation of knowledge, which is not the case). The only form which is truly evidential by a typical definition such as that of Aikhenveld (2004) is *-mu*, which encodes indirect evidence, or that the speaker has inferred the knowledge from other events. Finally, the form *-pala* expresses certainty but not based on intrinsic knowledge unshared with the interlocutor.

20.1.2. Imperfective aspect

The grammatical distinction made in imperfective aspect in Kurtöp is one of mirativity versus non-mirativity. When speakers report on knowledge in imperfective aspect they chose between whether to encode the information as unexpected (and therefore new information) or not unexpected (and therefore old information). If the knowledge not expected (mirative) the form *-ta* will be used. If the knowledge was not unexpected the form *-taki* will be used. As one consultant explains to me succinctly, ‘the form *-ta* is used when you just found out about something; then if you are telling that to someone else you use the form *-taki*.’ These are discussed in more detail below.

20.1.2.1. Mirative *-ta*

In Kurtöp the form *-ta* encodes imperfective aspect with mirative value. This form is thus usually used when the speaker acquires knowledge for the first time. Mirativity encodes knowledge that was not expected. In elicitation, the form *-ta* most often occurs with third person.

An example of *-ta* from discourse is (580), where one speaker is describing an event to another speaker. There are two verbs marked as mirative imperfectives (*tun-ta*

‘show-IPFV.MIR’ and *bran-ta* ‘know-IPFV.MIR’) and in both instances the event was new, or not expected, in the discourse.’ The speaker did not know the other people were going to show photographs to the Rimpoche and likewise had no expectation of the Rimpoche’s knowledge.

- (580) *Rimpoche-nang tun-ta tshe khi-ra-ya me-bran-ta*
 Rimpoche-LOC show-IPFV.MIR DM 3-REFL-also NEG-know-IPFV.MIR
 ‘They showed (the pictures) to Rimpoche and even he (Rimpoche) didn’t know (the pictures)’
 SBC20051127.142.517KL

A similar example in (581) comes from an interview between two Kurtöp speakers. One speaker is asking the other to give an account of rice and rice processes in the village. At this point in the narrative she is discussing the varieties of rice given by the government to the village for planting. The fact that outsiders are so involved in the process that they would be giving several varieties of rice for cultivation is not expected, and thus the speaker uses the form *-ta*.

- (581) *lhampa sum bleyang bista miri*
lhampa sum ble-yang bis-ta miri
 type three four-also give-IPFV.MIR others.ERG
 ‘Three or four types were also being given by the others.’
 Rice.Harvest20081022.159.064.PS

20.1.2.2. Non-mirative *-taki*

The non-mirative imperfective is *-taki*, a form which is probably historically a variation on the form *-ta*. While one might expect mirativity to be the marked form, the fact that the form that seems semantically unmarked is morphologically marked has perhaps a straightforward historical explanation. I suspect the form *-ta* to be a recent grammaticalization from the verb *tak* ‘become’, which brought with it a grammaticalization of mirative semantics. Thus, the unmarked imperfective aspect carries with it a mirative function. The counter to this is the marked form, *-taki*, which has likely been derived by the addition of the nominalizer *-ki* (cf. §15).

In elicitation, the form *-taki* normally occurs with first person referents or third person referents if the relationship between the speaker and the referent is very close. For example, a speaker reporting on a spouse or child would likely use the form *-taki* in response to a question asking what the spouse or child was doing.

If the event is not new knowledge, for example if the speaker is self-reporting or reporting knowledge they previously acquired, the form *-taki* is used. In (582) the speaker is reporting on previous knowledge. She and her husband live in a very remote region and their previous experience living there has shown them that they do not normally get visitors. The knowledge is not new or unexpected and thus the form *-taki* is used.

(582) *neci tshô khep miyang methraktaki*

neci khepo tshô mi-yang me-thrak-taki
3.PL.GEN FOC here people-also NEG-arrive-IPFV
'No one comes to our place'
PS20061212.192.68P

As I mentioned, the form *-taki* is often used when self-reporting, including when a third person referent is self-reporting. (583) shows the use of *-taki* inside a quoted clause, where a third person referent is reporting that she herself is sick and dying. Because the self-knowledge is (usually) intrinsically not unexpected, the form *-taki* is used.

(583) *tshé darung khít nataki ngaksi, khít setaki ngaksi*

tshé darung khít na-taki ngaksi khít se-taki ngaksi
DM again 3.ABS be.sick-IPFV QUOT 3.ABS die-IPFV QUOT
'And again she said that she was sick, that she was dying...'
PS20061212.1208.263 P

20.1.2.3. Summary

While in perfective aspect there are five distinctions made, imperfective only grammatically distinguishes between mirative and non-mirative values. However, this is not to say that further evidential or evidential-like categories are not available to speakers in imperfective aspect. If the speaker wishes to add further evidential or modal information, the speaker may choose from a set of particles to attach to the end of the verb phrase, as I describe in §19.2.2. In durative aspect, which is encoded using a clause chain

ending with a copula (§21.2.5.5.4) , the choice of copula (§18.1.2) dictates the evidential or evidential-like value.

20.1.3. Future tense

In future tense Kurtöp obligatorily marks a difference between certainty and uncertainty. The certain form *-male* encodes certainty and thus is used most often with first statements and second person questions, though it is also used with third person statements if the speaker has previous or intimate knowledge that enables him/her to speak on the other's behalf. An unmarked, finite verb encodes future tense but without certainty, such as when the speaker is speaking on behalf of third person but does not have the previous or intimate knowledge to be certain the event will take place.

20.1.3.1. Certain *-male*

As I described in §15.2.4, and §17.3.1, the form *-male* is a recent recruit into finite verbal morphology, still most often occurring as a nominalized/non-finite form. Nonetheless, when functioning alone as finite verbal morphology, the form *-male* encodes future tense with certainty on behalf of the speaker. The most common use of *-male* is heard in the question shown in (584):

- (584) *'au gemale*
 'au ge-male
 where go-FUT
 ‘Where are you going?’

The question shown in (584) is used as a greeting when villagers see others approach. In fact, the use of the question ‘where are you going?’ as a greeting¹³⁴ is so common throughout Bhutan that languages are often locally named by the way a speech community asks this question. As I described earlier, *'au gemale* can also be understood as another name for Kurtöp.

The form *-male* can be used with third person if the speaker is reporting on behalf of third person (e.g. ‘he said he’s going to the store’) or if the speaker has previous experience that the event will take place, as in (585).

(585) *net zumo tshe bot .. 'miser .. mi gap dangsa nga tatmung tazi **nimale***

<i>net</i>	<i>zu-mo</i>	<i>tshe</i>	<i>bot</i>	<i>'miser</i>	<i>mi</i>	<i>gapo</i>
1.PL	eat-CTM	DM	3.PL	citizen	person	PL.FOC
<i>dangsa</i>	<i>nga</i>	<i>tatmung</i>	<i>ta-si</i>		<i>ni-male</i>	
all	do	show	watch-NF		stay-FUT	

‘When we eat, the citizens.. all the people will be watching the show.’

KZ200805152.653.617-656.149.KZ

The example in (585) comes from a narrative where a speaker is talking about the history and local culture in Dungkar. He describes an event that happens every year, and based on this previous knowledge he can predict how the event will happen in the future; thus, he uses the form *-male*.

¹³⁴ A common interaction in the Kurtöp region would be something as follows. Upon seeing someone approaching, speaker A says *'au gemale* and speaker B responds with their destination, for example: *Lhüntshiro gemale* ‘(I) am going to Lhüntshi’. Speaker A and B might continue their conversation for a few minutes and as speaker B departs, s/he would utter *gewa sho* ‘(I’m) gone now!’.

20.1.3.2. Presumptive - \emptyset

The form *-male* can be contrasted with *- \emptyset* , which encodes future tense but with doubt, or simply presumption, rather than certainty, that the event will take place. An example from elicitation is:

- (586) *khî ge*
khî *gê*
3.ERG go
'(I presume) he will go'
Elicited data.KL.

20.2. Copulas

As I described in §16 and §18, copulas are an important part of Kurtöp grammar. In addition to encoding a range of copular functions, such as proper inclusion, equation, attribution, location, existence and possession, copulas in Kurtöp are also intertwined with main clause tense/aspectual/evidential grammar as subordinate grammar becomes finite. Here, I will focus on the evidential and evidential-like functions of the copulas. These are discussed in terms of form; §20.2.1 describes existential forms and §20.2.2 describes the equational forms. The categories previously seen -- source of evidence, expectation of evidence, and certainty of evidence will be discussed again.

20.2.1. Existential copulas

In addition to making a formal distinction between equational and existential copulas, Kurtöp makes a distinction between affirmative negative copulas. The

affirmative existential copula in Kurtöp can be internally reconstructed as a verb **nak* and the negative existential copula can be reconstructed as **mut*; there is less evidence that **mut* was verb in recent stages of Kurtöp.

20.2.1.1. Affirmative forms

There are four contrasts made amongst the affirmative, existential copulas; *nâ* encodes mirative value, *nawala* is the non-mirative form, and *nawara* is the presumptive form and *naki* encodes speaker doubt.

20.2.1.1.1. Non-mirative *nawala*

The copula *nawala* is used when the speaker is certain of the knowledge but the knowledge is not new and unexpected. (587) is drawn from a recording in which a speaker is narrating the history and culture of Dungkar. He is relaying knowledge he has based on his previous experience growing up in Dungkar as a Kurtöp. Thus, the form *nawala* is used.

(587) *mau zangu ngak nawala*

mau zangu ngak nawala

DEM:DN zangu QUOT COP.EXIS

‘There is this (thing) down there called “zangu”.’

KZ20080515.751.325.KZ

20.2.1.1.3. Presumptive *nawara*

The form *nawara* contrasts with both *nawala* and *nâ* in the speaker is unsure of the given knowledge. In (589) the speaker, having listened to another speaker relay difficult events of a journey, proposes an alternative to walking on foot. Because he is not sure if there would have been a horse or not, he uses *nawara*.

(589) *chipta drau nawara tshe*

<i>chipta</i>	<i>drau</i>	<i>nawara</i>	<i>tshe</i>
riding.horse.HON	LIKE	COP.EX.PRES	DM

‘There might have been a riding horse (of the king) or something.’

SBC20051127.PC

A similar example is shown in (590), which is extracted from a story about the king Kala Wangpo. (590) is said at the beginning of the story when the assistants are postulating where the king’s missing hunting dog could have gone and begin their search. Because they speculate about the location of the dog, they use the form *nawara*.

(590) *tshe omenang shakhwi nawara ngaksi tshui gewal wentami*

<i>tshe</i>	<i>o-me-nang</i>	<i>shakhwi</i>	<i>nawara</i>	<i>ngaksi</i>	<i>tshui</i>
DM	DEM-DOWN=LOC	hunting.dog	COP.EXIS.PRES	QUOT	look.for

ge-wala wenta=mi

go-PFV COP.EQ.MIR=TAG

‘Having said ‘the hunting dog might be down there’, (they) went to look for it.’

PS20061206. 0127.397.P

20.2.1.1.4. Dubitative *naki*

The form *naki* is used when the speaker is not sure about the truth value of statement. For example, in (591) the speaker uses *naki* because he is not certain that the place *Pali Gonpa* exists. This differs from *nawara*, which is used when the speaker presumes something to the case; *naki* simply indicates the speaker is uncertain.

(591) *Pali Gonpa ngaksi pangthe naki*

<i>Pali</i>	<i>Gonpa</i>	<i>ngaksi</i>	<i>pang-the</i>	<i>naki</i>
Pali	Gonpa	QUOT	field-DEF	COP.EXIS.DBT

‘There might be a field called Pali Gonpa’
KZ200805151KZ

20.2.1.2. Negative forms

20.2.1.2.1. Non-mirative *mû*

The negative counterpart to *nawala* is *mû*, encoding certainty, based on previous experience or intrinsic knowledge. For example, in (592), extracted from the tale of Kala Wangpo, the speaker in the story is telling the king’s assistant that the hunting dog is not her house. She knows this intimately, as she is familiar with all the objects in her home.

(592) *ko phis thungmo tshe shakhwi mû ngaksi*
ko phis thung-mo tshe shakhwi mû ngaksi
 door open do-CTM DM hunting.dog COP.EXIS.NEG QUOT
 ‘When (she) opened the door, she said “the hunting dog’s not (here)”’
 PS20061212. 218.427.P

20.2.1.2.2. Mirative *mutna*

The form *mutna* can be contrasted with *mû* in that the speaker recently acquired the information and it was unexpected. This form is used, for example, when the speaker suddenly notices something is not present, for example when looking in his/her wallet and realizing there is no money.

Example (593) is extracted from a narration of an older villager about what life was like during his childhood. He describes a time when there was poor yield and the living conditions were particularly bad. By using the mirative form of the copula in (593), the speaker paints a picture wherein participants suddenly notice they don’t even have a piece of meat to eat. This was an unexpected turn of events.

(593) *shathe zu oto zumal mutna*
sha-the zu wotor zu-male mutna
 meat-INDEF eat like.this eat-NMZ:IRR COP.EXIS.NEG.MIR
 ‘(We) didn’t have a piece of meat to eat’
 SPh.TsC20081022.1608.669SPh

20.2.1.2.3. Inferential *mutle*

Whereas the previous forms *mû* and *mutna* encode direct knowledge, the form *mutle* encodes indirect knowledge, or that the speaker gained the knowledge through inference. Example (594) is extracted from the same narrative as (593), where an elderly speaker is describing the difficulties of village life during his childhood. In (594) he is commenting on the lack of western hospitals and medicine. This situation contrasts with that of the meat in (593) in that the speaker would not notice the absence of western medicine. It wasn't part of his experience growing up; it wasn't something that had existed and was taken away. His knowledge of the lack of western medicine during childhood is gained through indirect evidence based on his knowledge of present-day village life, where there is (limited) access to western medicine.

(594) *'mankang mutle, zumale 'manyang mutle*

<i>'mankhang</i>	<i>mutle</i>	<i>zu-male</i>	<i>'man-yang</i>	<i>mutle</i>
hospital	COP.EXIS.NEG.IND	eat-NMZ:IRR	medicine-also	COP.EXIS.NEG.IND

'There were no hospitals, no medicine to take (lit. eat)
SPh.TsC20081022.1371.001.SPh

20.2.1.2.4. Dubitative *mutla*

The fourth negative existential form contrasts with the preceding three in that the speaker is not certain or presumes the knowledge to be true. In (595), king's assistants from the tale of Kala Wangpo have arrived in the house of an elderly couple looking for the king's hunting dog. The assistants do not have evidence of any kind that the dog

would be with the couple and are not certain; thus the form *mutla* is used to represent their doubt.

(595) *tshē neci khwi mutla ngak drir rasal*

tshē neci khwi mutla ngak dri-ro ra-sala
DM 1.PL.GEN dog COP.EXIS.NEG.DBT QUOT ask-INF come-PFV
'(They said) they have to ask if our dog is not (here).'

PS20061206 .187.613.P

20.2.2. Equational copulas

As with the existential copulas, there are separate forms for affirmative and negative copulas, and within these categories there are separate forms to mark a variety of evidential and evidential-like functions. I discuss the affirmative forms first and the negative forms. As I show, the categories of unexpectedness (mirativity), indirect evidence (evidentiality) and certainty (epistemic modality) are coded throughout these paradigms as well.

20.2.2.1. Affirmative forms

There are four separate affirmative equational copulas. The form *wenta* marks mirative value; *wen* is the non-mirative, *winim* is the uncertain form and *wenpara* is used for presumption. I discuss these in turn below.

20.2.2.1.1. Non-mirative *wen*

In marking certainty of knowledge, based on previous knowledge or non-mirative contexts, the form *wen* is used. This form is frequently used during interviews when speakers respond to questions about personal information, and also occurs frequently during elicitation when speakers are asked to name various objects.

A typical example is shown in (596), which is used by a speaker to tell the audience how life was like in the village based on his previous knowledge.

- (596) *tshe 'napata zhe oso wen*
tshe 'napa-ta zhe woso wen
DM before-EMPH what like.this COP.EQ
'Earlier this is how it was'
SPh.TsC20081022.335.398.TsC

20.2.2.1.2. Mirative *wenta*

As a contrast to *wen*, the mirative copula marks that the information is newly acquired and unexpected. As such, this form is commonly used as a story-telling device to 'make the story more interesting', as speakers report to me.

- (597) *lungpa-the-na jepothe nawal wenta la*
lungpa-the=na jepo-the nawala wenta la
valley-DEF=LOC king-DEF COP.EXIS COP.EQ.MIR POL
'In a village there was a King'
PS20061212.22.625P

Another example comes from part of a narrative where an elderly speaker is describing life in the past. At this point in the narration he is describing a period of time in the distant when past when Bhutanese were required to pay taxes to the King in the form of goods, such as rice, pottery, and stones for use as catapults. He deviates from the description some, describing how people used to play with the catapults, and utters *wentami* to invoke the sudden surprise that would have entailed when one was hit.

(598) *'nau-gangsha rastaki wentami*

<i>'nau-gangsha</i>	<i>ras-taki</i>	<i>wenta=mi</i>
random.thought	come-IPFV	COP.EQ.MIR=TAG

‘(they) must have been shocked (lit. random thoughts were coming)!’

SPh.TsC20081022. 2942.823.SPh

20.2.2.1.3. Dubitative *winim*

When the speaker has doubt about the certainty of the event, s/he will use form *winim*. (599) exemplifies typical use of the form; here, the speaker is not sure about the amount of time that had passed, but thinks it may have been around a month and a half. The copula *winim* expresses this doubt:

(599) *'la phedang zon winim*
'la phedang zon winim
 month half two COP.EQ.DBT
 'It was maybe a month and a half.'
 SBC20051127.KW

A separate form, *wenpara* is used to mark presumption, described in §18.1.3.1.1.

20.2.2.2. Negative forms

The negative equational copulas mark a four-way contrast among evidential and evidential-like categories. This is exactly the same pattern as shown for the existential copulas, with *min* being the non-mirative, *minta* as the mirative, *minle* as the inferential and *minla* as the form that marks uncertainty. I discuss these in turn below.

20.2.2.2.1. Non-mirative *min*

The form *min* is the negative counterpart of *wen*. As expected, *min* is used when the speaker is certain of the knowledge and acquired the knowledge through personal experience and the information is not unexpected. A typical example is in (600):

(600) *bas min, D.C.M.the*
bas min D.C.M -the
 bus COP.EQ.NEG D.C.M-DEF
 '(It) wasn't bus, (it was) a D.C.M (small truck type)'
 SPh.TsC20081022.2635.176.SPh

This form is also used similarly to English 'no', as in (601):

(601) *min*, *ngari cenggamthe nâ kwana thekna*

<i>min</i>	<i>ngari</i>	<i>cenggam-the</i>
COP.EXIS.NEG	1.SG.EMPH.GEN	chewing.gum-DEF
<i>nâ</i>	<i>kwa=na</i>	<i>thek-na</i>
COP.EXIS.MIR	tooth=LOC	insert-PFV.MIR

‘No, that chewing gum I had, it’s put in my teeth (mouth)’

SPh.TsC20081022.1174.862.TsC

20.2.2.2.2. Mirative *minta*

The form *minta* contrasts with *min* in marking mirativity and is the negative counterpart to *wenta*. A typical example is when someone self-corrects, as in (602).

(602) *net zon minta ... net sum, Pema Drakpa, net sum*

<i>net</i>	<i>zon</i>	<i>minta</i>	<i>net</i>	<i>sum</i>	<i>Pema Drakpa</i>	<i>net</i>	<i>sum</i>
1.PL	two	COP.EQ.NEG.MIR	1.PL.ABS	three	Pema Drakpa	1.PL.ABS	three

‘Not the two of us... three of us, (with) Pema Drakpa (there were) three of us’

SaT.SW20090917.1120.559.SaT

20.2.2.2.3. Inferential *minle*

minle is the negative equative copula with inferential evidential value. Two examples follow below. In (603) the speaker is reporting on knowledge he has inferred from previous experience, and not based on direct evidence. The same is true of (604).

(603) *Bartshamna minle*
Bartsham-na minle
 Bartsham=LOC COP.EQ.NEG.IND
 ‘(Apparently) not at Bartsham.’
 SBC20051127.KW

(604) *yarje drangsuya minle*
yarje drangsu=ya minle
 development category-also COP.EQ.NEG.INF
 ‘It’s also not (in) the category (of) development (apparently).’
 SPh.TsC20081022.536SPh

20.2.2.2.4. Presumptive *minla*

The negative counter part to the presumptive equational copula is *minla*, used when the speaker is not certain about the knowledge. (605) was extracted from the story about Kala Wangpo. In this example the elderly couple tells the king’s assistants they suspect they have arrived to loot and kill them.

(605) *dasum tshe net gatpo ganmo gap comzi sutkhandi minla ngak*

<i>dasum</i>	<i>tshe</i>	<i>net</i>	<i>gatpo</i>	<i>ganmo</i>
today	DM	1.PL.ABS	old.man	old.woman
<i>com-zi</i>	<i>sut-khan-di**</i>		<i>minla</i>	<i>ngak</i>
loot-NF	kill-NMZ:IPFV-DEF (<Dz)		COP.NEG.DBT	QUOT

 ‘Today you must be here to loot and kill us old folks (they said)’
 PS20061212.174.344.P

20.3. Evidential and evidential-like clitics

In addition to the categories obligatorily coded as part of tense/aspect or copulas, Kurtöp has other evidential or evidential-like categories available to speakers. In this section I discuss the hearsay enclitic =*ri* and counter-expectation enclitic =*sa*.

20.3.1. Hearsay =*ri*

If the source of knowledge for a given event is auditory; that is, if the speaker acquired the knowledge s/he is relaying by hearing it from someone else; the speaker may cliticize =*ri* to the right edge of a verb phrase. Kurtöp =*ri* appears to translate directly into Dzongkha =*lo* or Nepali *-re*. In addition to the contexts below, the Kurtöp hearsay particle =*ri* may also be suffixed to the word *zha* ‘what’ to make *zhari*, which a speaker might utter when trying to recollect the name for something. In this instance Kurtöp *zhari* translated directly into Dzongkha *g’acilo*.

Evidentials may be used during storytelling, as in (606):

- (606) *palanggi jedo thilathe darnari*
palang=gi jedo thila-the dar-na=ri
bed=GEN TOP thumb-DEF remain-PFV.MIR=HSY
‘On the bed remained a big toe’
KS20061212.188.829.KL

Another example comes from a conversation in which one speaker is sharing a previous experience, relaying what people said to him. The function of the hearsay marker in (607) is similar to the quotative (cf. §21.2.5.4.3).

(607) *nin 'angi ratak yori*

nin 'a=ngi ra-tak yo=ri

2.PL where=ABL come-IPFV QP=HSY

‘Where are you guys coming from (they said)?’

SBC20051127.KW

An interesting example is (608). The speaker in this example is describing life in his village, talking about others’ actions. He uses the verb form *-taki*, which, when used with third person, indicates that the speaker has intrinsic or integrated knowledge. However, in the case of (608) the speaker has the hearsay marker *-ri* cliticized to the end, showing that it’s not really his personal knowledge he is reporting on, but knowledge he has heard from other people.

(608) *da neri tshô wennani mi phetseni nornang getakiri*

da neri tshô wen-nani mi phetse-ni

now 1.PL.EXL.GEN here COP.EQ-COND person some-CFOC

nor=nang ge-taki=ri

cow=LOC go-IPFV=HSY

‘Now if it’s our place some people go to (take care of) the cows’

SPh.TsC20081022.1625.310.SPh

20.3.2. Counter-expectation =sa

The clitic =sa indicates an event or outcome counter to the speaker's expectation. In (609) the speaker adds =sa to the tensed verb *koshang* 'hear-PFV.EGO', indicating the result of the action was counter to expectation. More specifically, the speaker heard about the location of a given person, but at the time of speaking cannot remember what that location is. Thus, though he heard, he does not know; the result of the event is counter to expectation.

(609) 'au nawori ... ngai *koshangsa*

'au na-wo-ri ngai ko-shang=**sa**

where COP.EQ.QP=HSY 1.ERG hear-PFV.EGO=CEXP

'Where (did I hear) (he) was? I thought I heard (to self)..'

SBC20051127.KW

Another example is (610), drawn from a conversation between two friends living in the U.S. During their conversation, which took place on a patio outside a home in Santa Barbara, CA, a dog comes up to the speakers. One speaker, PC, utters (610) below upon seeing the dog and begins to pet the dog. Dogs in Bhutan maintain a low status; dogs are usually stray, a nuisance, and sometimes carry rabies. They are not considered loveable creatures and, previously in the conversation, the two friends were commenting on the difference between a dog's life in Bhutan and a dog's life in the U.S. The fact that

PC would actually like dogs is counter to expectation, and thus he uses the morpheme =*sa*.

(610) *gatasa khwi gap*

ga-ta-sa *khwi gapo*
enjoy-IPFV.MIR=CEXP dog FOC.PL
'I like dogs.'
SBC20051127.PC

20.4. Question formation

Kurtöp speakers must take into account their interlocutor's knowledge when asking questions. Recall that content questions in Kurtöp require a sentence final particle. There are two of these question particles; *yo* is used if the speaker expects the hearer to know the answer and *shu* is used if you do not expect the hearer to have the answer. Below I illustrate uses of *yo* followed by uses of *shu*.

In (611) the speaker is enacting a scenario in which the U.S. government is intervening on behalf of an abused dog, saying to the dog owner *dazin ngako matshunani zha ngaksi bretak yo* 'if you can't take care (of it) why keep (it)? The use of *yo* in this instance reflects the fact that the speaker (the government in this case) expects the hearer (the dog owner) to have the answer.

- (611) *zhunggi tshe zhari... dazin ngako matshunani zha ngaksi bretak yo ngaksi*
zhung=gi tshe zha=ri dazin nga=ko ma-tshuk-nani zha
 government=ERG DM what=HSY care do=LOC NEG-be.able-COND what
ngak-si blek-taki yo ngaksi
 do-NF keep-IPFV QP QUOT
 ‘So the government what.. (to self) says if you aren’t able to care for (the dog) then
 why are you keeping it?’
 SBC20051127.KW

This example can be contrasted with the following examples where *yo* is replaced with *shu*. In (612) the speaker is unsure of what to talk about. She asks out loud what she should say, but because the question is about her, she does not expect any interlocutor to have the answer, and thus uses *shu* instead of *yo*.

- (612) *ngaita zha lapmal shu da*
ngai-ta zha lap-male shu da
 1.ERG-EMPH what say-FUT QP.DBT now
 ‘Now what should I say?’
 SPh.TsC20081022.311.002.TsC

Shu has a broader syntactic distribution than *yo* and can also be used in yes/no questions. In (612) the speaker is asking his interlocutor a question about a third person (Dungse), and does not know if the interlocutor and Dungse are close. Since he is not sure that his interlocutor would know the answer.

20.5. Summary

The ‘evidential’ system described for Kurtöp in this chapter actually consists of forms that encode source of knowledge alongside expectations of knowledge and certainty of knowledge. Consider Table 155.

Table 155. Summary of evidential and evidential-like markers in Kurtöp

	Source of Knowledge	Expectation of Knowledge	Certainty of Knowledge
Tense/Aspect	<i>-mu</i> (inferred)	<i>-shang</i> (hearer unexpected to share knowledge)	<i>-para</i> (presumed)
		<i>-pala</i>	<i>-male</i> (certain)
		<i>-na</i> (unexpected)	<i>-∅</i> (uncertain)
		<i>-ta</i> (unexpected)	
Particles	<i>=ri</i> (heard)	<i>shu</i> (hearer unexpected to have knowledge)	
		<i>=sa</i> (contra-expectation)	
Copulas	<i>mutle</i> (inferred)	<i>nâ</i> (unexpected)	<i>nawara</i> (presumed)
	<i>minle</i> (inferred)	<i>nawala</i>	<i>naki</i> (uncertain)
		<i>mû</i>	<i>mutla</i> (uncertain)
		<i>mutna</i> (unexpected)	<i>wenim</i> (uncertain)
		<i>wen</i>	<i>wenpara</i> (presumed)
		<i>wenta</i> (unexpected)	<i>minla</i> (uncertain)

The verbal morphology and copulas which play a role in the evidential/evidential-like system are illustrated in Table 155, according to three columns. The first column shows the forms which encode source of knowledge. One verbal clitic, =*ri*, encodes hearsay, or oral source of information; and one suffix and two copulas encode that knowledge was gained through inference. These forms would be considered true evidentials, according to Aikhenvald's (2004) definition. The largest number of forms, shown in the second column, convey information regarding expectations of knowledge. Several of these forms -- but not all -- encode that information is unexpected, and thus can be considered to encode mirativity, according to the definition given in DeLancey (1997). Other forms convey functions that are less well-described in the literature, such as expectation of interlocutor's knowledge and whether information is *counter* expectation. Note that Kurtöp treats unexpected information differently from information that goes against expectation. The third column consists of verbal suffixes and copulas which are used to encode various degrees of certainty. Within future tense a two-way contrast is made with regard to certainty, while among the affirmative existential copulas a three-way contrast is actually maintained (certain, presumed, or uncertain).

CHAPTER XXI
CLAUSE COMBINING

There are two ways in which Kurtöp may combine clauses into one larger structure. In the case of complement clauses one clause serves as an argument of a verb in a matrix clause; these are discussed in §21.1. Adverbial clauses differ from complement clauses in that the subordinate clause is not an argument of a matrix verb clause but is subordinate in the way an adverb is subordinate to a verb. §21.2 provides a discussion of adverbial clauses in Kurtöp, including the clause-chaining construction (§21.2.5).

21.1. Complement clauses

21.1.1. Infinitive *-to*

Diachronically, the infinitival suffix *-to* is derived from the locative *=to*; this is evidenced by the fact that infinitival *-to* and locative *=to* share the same allomorphy (cf. §7.3.3.1). Below I illustrate several examples of infinitival *-to* drawn from the textual database.

In (613) several clauses are strung together in a clause-chain. Toward the end of the chain the verb *ra* ‘come’ appears twice, both times with an infinitival complement. The first occurrence has *com* ‘loot’ suffixed with *-to* and the second occurrence has *sut* ‘kill’ suffixed with *-to*, both as infinitival complements to the verb *ra* ‘come’. In both instances the verbal participant *khit khepo* (referring to Khando Drowa Zangmo,

mentioned previously in the discourse) is an argument of both the infinitival verb and the matrix verb. In the case of the first occurrence of *ra* ‘come’, *khit khepo* ‘3.ABS FOC’ is the O of *com* and the S of *ra* ‘come.’ Likewise in the second occurrence, *khit khepo* is the O argument of *sut* ‘kill’ and the S of *ra* ‘come.’

(613) *se wera khepo tshe yapning zhuyu ngaksi tshe khit khepo Duimo Hacangmai tshe comdo rata ngaksi ya suto rata ngaksi*

<i>se</i>	<i>wera</i>	<i>khepo</i>	<i>tshe</i>	<i>yap=ning</i>	<i>zhu-lu</i>	
son.HON	2.ABS.REFL	FOC	DM	father.HON=ABL	request.HON-IMP	
<i>ngaksi</i>	<i>tshe</i>	<i>khit</i>	<i>khepo</i>	<i>Duimo</i>	<i>Hacangma=gi</i>	<i>tshe</i>
QUOT	DM	3.ABS	FOC	demoness	Hacang=ERG	DM
<i>com-to</i>	<i>ra-ta</i>	<i>ngaksi</i>	<i>ya</i>	<i>sut-to</i>	<i>ra-ta</i>	
loot-INF	come-IPFV	QUOT	HES	kill-INF	come-IPFV.MIR	
<i>ngaksi</i>						
QUOT						

‘(Khando Drowa Zangmo) said to her son, “request from your father” and that “Demoness Hacangma was coming to loot her”, oops, “coming to kill (her).”
PS20061206.942.792.P

The data in (614) provide a relatively simple example of the infinitival *-to* construction. Here, the verb *tshuk* ‘be.able’ is the matrix verb and *ta-r* ‘see-INF is the infinitival complement. The O argument of *ta* ‘see’ is the A argument of *tshuk* ‘be.able.’

- (614) *thê sutmo the tar mitshu ngaksi*
the sut-mo the ta-to mi-tshuk ngaksi
 one kill-CTM one see-INF NEG-be.able QUOT
 ‘When one is killed one cannot look (the said)’
 PS20061206.1135.162.P

In (615) I show another example in which the S argument of the matrix verb (*ni* ‘sit’) is shared with the A argument of the infinitival verb (*pret* ‘fear’).

- (615) *tshemo khepo tshe weri tsamarang ’mepreto nilu ngaksi*
tshemo khepo tshe weri tsama-rang
 but FOC.SG DM 2.EMPH.ERG little-EMPH
me-pret-to ni-lu ngaksi
 NEG-fear-INF sit-IMP QUOT
 ‘But don’t be afraid at all (they said).’
 PS20061206.1596.404P

An example of a shared A argument is shown in (616); the A argument of both *sut* ‘kill’ and *’lot* ‘be.able’ is understood to be *nyarop zon* ‘the two fishermen’ based on the preceding discourse.

- (616) *tshe suto ’melot*
tshe sut-to me-’lot
 DM kill-INF NEG-be.able
 ‘And then (they) couldn’t kill (the children).’
 PS20061206.1251.475P

The data in (617) provide another example of an A argument shared between the infinitival verb *lap* ‘say’ and *go* ‘need’.

- (617) *neri mras sho zha yo meng lapto go tshe*
neri mras sho zha yo lap-to go tshe
 1.PL.INCL.GEN paddy EMPH what QP say-INF need DM
 ‘(You) need to say what our rice paddies are.’
 riceharvest20081022.

In at least one instance we see that the equational copula *wen* serves as the matrix verb. In (618) the matrix verb *wen* is directly preceded by the infinitival form of the verb *sut* ‘kill.’ The O argument of the verb *sut* ‘kill’ is understood to be *ninta zon* ‘you two’ and it appears that the A argument of *sut* (*nyarpo zon* ‘the two fishermen’) is also the A argument of *wen* ‘COP.EQ’

- (618) *ngâmo tshemong darung tshe ninta zon sutto wen ngaksi zhusal wenta wozi nyarop zongi*
ngak-mo tshemong darung tshe nin-ta zon sut-to
 do-CTM when again DM 2.PL-EMPH two kill-INF
wen ngaksi zhu-pala wenta wozi nyarop
 COP.EQ QUOT say.hon-NMZ:PFV COP.EQ.MIR DEM:PROX fisherman
zon=gi
 two=ERG
 ‘When (the children) said (this), again (the two fishermen) said “(they) were going to kill the two of them” said the two fishermen.’
 PS20061206.1237.295P

In (619) I provide an example of a complement clause inside a complement clause. The matrix verb in this example is *tshuk* ‘be.able’ and its infinitival complement is *yok* ‘to pour’, which itself has an infinitival complement *ngui* ‘buy’.

- (619) ***nguir yoko metshukta***
ngui-ro yok-to me-tshuk-ta
 buy-INF pour-INF NEG-be.able-IPFV.MIR
 ‘(We are) unable to buy in order to pour.’
 riceharvest20081022.PS

- (620) *tshe ker khorzi .. brâ ... ’Yangridrak ngakhanli gen .. tshe udi kwekpani yot gwar*
cangko khormal ngak
tshe ker khor-si brâ ’Yangridrak ngak-khan=li
 DM carry take-NF cliff ’Yangridrak do-NMZ:IPFV=GEN
*gen tshe udi kwekpa=ni yot gwar **cang-to***
 steep DM DEM:DIST crown=ABL DIR:DN turn throw-INF
chor-male ngak
 take-FUT QUOT
 ‘Then (they) were carried and taken to a cliff, a cliff called “Yangidrak” to be thrown from the top (they said).’
 PS20061206.1377.548-1380.692.P

21.2. Adverbial clauses

21.2.1. Perfective *-pa*

The old PTB nominalizer **pa*, in addition to showing up in finite clauses as part of the perfective suffix in finite verbal morphology, occurs readily in subordinate clause grammar as well. The fact that the *-pa* nominalizer described in this section is etymologically the same as the perfective suffix in §17.1.1.2 is evidenced by the shared allomorphy. Like in the perfective suffix, the *-pa* used in making subordinate clauses has allomorph *-wa* following velar and etymologically *-l* final stems, allomorph *-sa* following open stems, and *-pa* elsewhere. For more details on this morpheme, please refer to a discussion of its allomorphy in §7.3.2.2 and its function as a nominalizer in §15.2.1.

21.2.1.1. *-pani*

The nominalizer *-pa* plus ablative *=ni* yields an adverbial clause which may translate roughly in English ‘before V’ or ‘since V’.

In (621) the clause *cingukni dompani* is an adverbial clause that can be translated into something like English ‘having met since (being) small’.

- (621) *lama cheno! Da domra madom cingkuni **dompani** nango she nango she ngaksi zai dronpo wenta wa tsheni ngat*
- | | | | | | | |
|--------------------|----------------|---------------|---------------|------------------|-------------------------|--------------|
| <i>lama cheno!</i> | <i>da</i> | <i>dom-ra</i> | <i>ma-dom</i> | <i>cingku=ni</i> | <i>dom-pa=ni</i> | |
| My god! | now | meet-EMPH | NEG-meet | small=ABL | meet-NMZ=ABL | |
| <i>she</i> | <i>nang=to</i> | <i>she</i> | <i>ngaksi</i> | <i>zai</i> | <i>dronpo</i> | <i>wenta</i> |
| come.IMP | inside=LOC | come.IMP | QUOT | wow | guest | COP.EQ.MIR |
| <i>wai</i> | <i>tsheni</i> | <i>ngat</i> | | | | |
| EXCL | then | 1.ABS | | | | |
- ‘My god! (I) haven’t met (you) since (you) were small, “come inside, come inside” she said and then I was a guest.’
- SBC20051127.KW

This construction can be negated by prefixation of *ma-*, as (622). Note the perfective sense of *zat* ‘finished’ is still maintained. Note the arguments are shared across the adverbial clause and the main clause; *gomchen* ‘monks’ is the A argument of the adverbial clause and the S argument of the main clause *thraktati* ‘arrive.IPFV’

- (622) *o pholap tsozi **mazatpani** gomchen thraktaki omena*
- | | | | | |
|-------------------|---------------|---------------|----------------------------|----------------|
| <i>wo</i> | <i>pholap</i> | <i>tso-si</i> | <i>ma-zat-pa=ni</i> | <i>gomchen</i> |
| PROX | chat | tell-NF | NEG-finish-NMZ=ABL | monk |
| <i>thrak-taki</i> | <i>ome=na</i> | | | |
| arrive-IPFV | PROX:DN=LOC | | | |
- ‘Before finishing the chat, the monks arrive down there.’
- SBC20051127.KW

A similar example is shown in (623).

(623) *wo Chendebji chorten mathrawani o tsama oni thundo ngaksi shama geta tshe gari sikstini*

<i>wo</i>	<i>Chendebji</i>	<i>chorten</i>	<i>ma-thrak-wa=ni</i>	<i>wo</i>	<i>tsama</i>
DEM:PROX	Chendebji	chorten	NEG-arrive-NMZ=ABL	DEM:PROX	little
<i>woni</i>	<i>thun-to</i>	<i>ngak-si</i>	<i>shama</i>	<i>ge-ta</i>	<i>tshe gari</i>
then	DIST=LOC	do-NF	some	go-IPFV.MIR	DM car

*siksti**=ni*
sixty=ABL

‘Before reaching the Chendebji chorten, a little while from there, the car was doing in the sixties.’

SBC20051127.KW

As would be expected from adverbial clauses, it is not required for an argument of the adverbial clause to be the same as an argument of the main clause. This is illustrated by (624), in which *’ngazi makhwarwaning* ‘the sun not rising’ is adverbial to *net gap yang bapshang* ‘we had to get up’.

(624) *’lama ’ngazi nam makhwarwaning net gap yang bapshang*

<i>lama</i>	<i>’ngazi</i>	<i>nam</i>	<i>ma-khar-wa=ning</i>	<i>net</i>	<i>gapo</i>
god	morning	sun	NEG-rise-NMZ=ABL	1.PL.ABS	PL.FOC

yang bap-shang
stand.up must-PFV.EGO

‘God! Before the sun rose we had to get up.’

SBC20051127.KW

21.2.1.2. *-palthe*

The Kurtöp *-palthe* construction is etymologically composed of the perfective suffix *-pala* plus the numeral *thê*, yielding the sense of immediacy following the completion of a given action. In short, the construction *V-palthe* can be translated into English as ‘Once Ved’. Some examples are shown below.

In (625) the finite clause *darung yau thrawala* ‘again (I) reached up there’ is suffixed with *-the* ‘one’ to yield an adverbial clause ‘Once I reached up there again...’

(625) *barbarto 'ngazi yoto ge darung yau thrawalthe yangi yoto darung tapsi mau sutle mau yoto ge go*

barbar-to 'ngazi yoto ge darung yau

sometimes=LOC morning DIR:DN go again DEM:UP

thrak-palthe *ya=ngi yo-to darung*

arrive-PFV.IMM UP=ABL DIR:DN again

tap-si mau sutle mau yoto ge go

return-NF DEM:DN night DEM:DN DIR:DN go need

‘Sometimes in the morning I go down and again as once I arrive up then again I have to go back down.’

SBC20051127.KW

Example (626) shows the verb *dek* ‘enter’ as part of an adverbial clause before the main clause with the main verb *ge* ‘go’.

(626) *cakharpi sana **dewalthe** gari yam thang wotor ngaksi daro wotor ngaksi tsama getami wotor ngak*

<i>cakharpa=gi</i>	<i>sa=na</i>	<i>dek-palthe</i>	<i>gari</i>	<i>yam</i>	<i>thang</i>	
India=GEN	place=LOC	enter-PFV.IMM	car	path	flat	
<i>wotor</i>	<i>ngak-si</i>	<i>daro</i>	<i>wotor</i>	<i>ngak-si</i>	<i>tsama</i>	<i>ge-ta=mi</i>
like.this	do-NF	now	like.this	do- NF	little	go-IPFV.MIR=TAG
<i>wotor</i>	<i>ngak</i>					
like.this						

‘Once (we) entered the Indian land, the car went like this and likt this for some time.’

SBC20051127.KW

A similar example is in (627), where the finite clause *'wang juduwala* is suffixed with *-the* to yield ‘Once the blessing was over...’

(627) *'wang **juduwalthe** juduzi tapsi khako majonpal*

<i>'wang</i>	<i>judu-palthe</i>	<i>judu-si</i>	<i>tap-si</i>	<i>khako</i>	
blessing	exhaust-PFV.IMM	exhaust-NF	return-NF	DIR:UP	
<i>ma-jon-pala</i>					
NEG-come.HON-PFV					

‘Once the blessing was over, after finishing he didn’t return up.’

SBC20051127.KW

A similar example is shown in (628).

- (628) *ko phisalthe wak .. ka .. ka ngawalthe mira yum jong ge tshe*
ko phi-palthe wak ka ka ngak-palthe
 door open-PFV.IMM wak ka ka do-PFV.IMM
mira yum jong ge tshe
 others mother.HON emerge go DM
 ‘Once the door was opened, there was a *wak ka ka* and then the mother came out.’
 SBC20051127.KW

21.2.2. Imperfective *-kini*

Another way of forming adverbial clauses is by way of suffixing the nominalizer *-ki* plus the ablative *=ni*. Like in its nominalizing (cf. §15.3) and finite sense, the form *-ki* has allomorph *-ci* following coda *-r*, *-p*, *-n*, *-m* and old *-l* codas, the form *-iki* following open syllables, and *-ki* following *-ng* and *-k* codas. This construction is very similar to *-pani* in that the adverbial clause is understood to be chronologically prior to the main clause.

In (629) the adverbial clause *oci ngakini* is followed by the main clause *tshe geshang khit* ‘then he left’. In the adverbial clause *khit* is understood to be the A argument, which is shared as the S argument in the main clause. Note the shared argument is mentioned only once at the end of the main clause.

(629) *tshe woci ngakini tshe geshang khit*
tshe woci nga-kini tshe ge-shang khit
 DM then do-IPFV.IMM DM go-PFV.EGO 3.ABS
 ‘After doing that then he left.
 SBC20051127.KW

Example (630) provides another example of an adverbial clause with the verb *ngak* ‘do’ and the A argument of the adverbial clause being the same as the S of the main clause.

(630) *lama... tshe tongpa ngakini cota cota gizi net zon wudukshang zai*
lama tshe tongpa nga-kini cota cota gi-zi
 god! DM empty do-IPFV.IMM fast fast go-NF
net zon wuduk-shang zai
 1.PL.ABS two exhaust-PFV.EGO EXCL
 ‘God! We were empty so we walked quickly and the of us were exhausted
 SBC20051127.KW

A similar example is shown in (631).

- (631) *mi phetse oyena **dekini** tshe ner gur pupsi thangna gur pupsi nir go*
*mi phetse o-ye-na **dek-kini** tshe*
 people some DEM:PROX-UP=LOC enter-IPFV.IMM DM
neri gur pup-si thang=na gur
 1.PL.INCL.GEN tent be.covered-NF plane=LOC tent
pup-si ni-to go
 be.covered- NF sit-INF need
 ‘After some get in then at the tent pitching ground we have stay pitching the tent’
 SaT.SW.20090917.2565.023-2570.506.SaT

Sometimes the construction V-*kini* yields a sense of causation, as in (632). The action *tsokpa tong* ‘drink dirty (water)’ is understood to be the cause of *sestami* ‘die-IPFV-TAG’.

- (632) *tshe ome tsokpa **thongkini** oci wentami tshe miyang shama lo gepcu yang methupnami sestami tshe la*
*tshe wo-me tsokpa **thong-kini** woci*
 DM DEM:PROX-DN dirty drink-IPFV.IMM DEM:PROX.GEN
wenta-mi tshe mi-yang shama lo gepcu= yang
 COP.EQ.MIR-DBT DM person-also some age eighty=also
me-thup-na=mi ses-ta-mi tshe la
 NEG-reach.age-PFV.MIR=TAG die-IPFV-DBT DM POL
 ‘And it’s because of drinking that dirty water down there that many people do not even reach the age of eighty and die’
 SPh.TsC20081022.1965.057.SPh

In (633) the adverbial clause consists of the verb *ge* ‘go’, its verbal complement *natpa taro* ‘to see a sick person’ and the auxiliary *ngak* ‘do’, which receives the subordinate morphology *-kini*. The finite clause is characterized by the nominalized verb plus copula *khormale mû*.

(633) *da net daru natpa taro getak ngakini, da chomani o gapo 'namisami khormal mû tshesharang*

<i>da</i>	<i>net</i>	<i>daru</i>	<i>natpa</i>	<i>ta-ro</i>	<i>ge-taki</i>	<i>nga-kini</i>
now	1.PL	now	sick.person	see-INF	go-IPFV	do-IPFV.IMM
<i>da</i>	<i>choma</i>	<i>o</i>	<i>gapo</i>	<i>'namisami</i>	<i>khormale</i>	
now	gift	PROX	PL.FOC	very	take-NMZ:IRR	
	<i>mû</i>					
						COP.EXIS.NEG

‘Now because we were going to see a sick person, we didn’t take many gifts.’

SBC20051127.KW

It is not a requirement of the *V-kini* construction for any arguments to be shared between the adverbial clause and the main clause. Example (634) illustrates a subordinate clause *bijili thrakini* ‘since electricity arrived’ which does not share an argument with the monovalent main clause verb *ge* ‘go’.

(634) *bijil thrakini 'neng jat geshang*

<i>bijil</i>	<i>thrak-kini</i>	<i>'neng</i>	<i>jat</i>	<i>ge-shang</i>
electricity	arrive-IPFV.IMM	year	eight	go-PFV.EGO

‘Since the electricity arrived eight years have gone’

SPh.TsC20081022.2194.279.Ch

The difference between *-pani* and *-kini* appears to be one of aspect. In (635) the subordinate verb is translated in perfective aspect while in (636) the subordinate verb receives an imperfective translation.

- (635) ***thrawani***
 thrak-pa=ni
 arrive-NMZ=ABL
 ‘after having arrived...’
 SPh.TsC20081022.2192.945.SPh

- (636) *gun* ***bjongkini***
 gun ***byong-kini***
 winter emerge- IPFV.IMM
 ‘When winter comes...’
 SPh.TsC20081022.2192.945.SPh

21.2.3. Conditional *-nani*

The Kurtöp morpheme *-nani* attaches to bare or negated verbs to make an adverbial conditional clause. Kurtöp *-nani* translates into འབད་བ་ཅིན་ *-bewacin* in Dzongkha though it would premature at this point to simply equate their functions. I describe some uses of the Kurtöp *-nani* below.

The following example comes from a conversation between two Bhutanese living in the United States. They are discussing the role of dogs in the U.S. compared to in

Bhutan. In (637) one speaker is taking on the voice of the government, which could come and fine a person for not taking care of their dog. Here, the verb *tshu* is negated and suffixed with *-nani*, so that the whole clause *dazin ngako matshu* ‘unable to care for’ is a condition to the main clause *zhangaksi bletak yo* ‘why are (you) keeping (it)?’.

- (637) *dazin ngako matshunanani zhangaksi bletak yo ngaksi*
dazin ngak-to ma-tshu-nani zhangaksi blek-taki yo
 care do-INF NEG-be.able-COND why keep-IPFV QP
ngaksi
 QUOT
 ‘(The government) says “if you can’t take care of (the dog) why keep (it)”?’
 SBC20051127.KW

- (638) *tsheni khwi woni tshe darung tsama nyamya mutle tsheni cotra gizi ’atorti ngak tsokpa*
brenani khwi zhunggi -- ozi zhari darung boci khwi ples nâmi -- onang khor geta
tsheni khwi woni tshe darung tsama nyam-ya mutle
 then dog then DM again little fat-also COP.EXIS.NEG.INF
tsheni cotra gi-si ’atorti ngak tsokpa blek-nani
 then weak go-NF how do dirty keep-COND
khwi zhung=gi wozi zha=ri darung boci
 dog government=ERG PDEM:ROX what=HSY again 3.PL.GEN
*khwi ples** nâ=mi wo=nang khor ge-ta*
 dog place COP.EXIS.MIR=TAG DEM:PROX=LOC take go-IPFV.MIR
 ‘Then if the dog is again a little underweight and then gets weak and is kept dirty the government takes the dog to -- what’s it called the dog place -- there.’
 SBC20051127.KW

Similar examples are in (638) and (639).

- (639) *'macornani thrim drau kutta sho*
ma-cor-nani thrim drau kut-ta sho
 NEG-be.able-COND fine like levy-IPFV.MIR EMPH
 'If you are not able, they will fine you'
 SBC20051127.KW

The example in (640) suggests that the translation of *-nani* to the English condition 'if ... then' is not entirely accurate. The conditional clause in (640) *zhâ the ni* 'stay one night' does not entail *tiru mû* 'not having money'.

- (640) *da zhâ the ninani tiru mû tshe*
da zhâ the ni-nani tiru mû tshe
 now night one stay-COND money COP.EXIS.NEG DM
 'If we stayed for another night we had no money.'
 SBC20051127.KW

Until now all the examples I have presented of *-nani* involve a verb which may be an auxiliary or verb of ability. However *-nani* may be suffixed to lexical verbs as well, as in (641).

(641) *da trongna ngaci medo 'onga kenani tshe wai 'ong nana wai ngâna tshe
 thamce yangi ramale tshe*

<i>da</i>	<i>trong-na</i>	<i>ngaci</i>	<i>me=to</i>	<i>'ong</i>	<i>ke-nani</i>	<i>tshe</i>
now	village-LOC	1.GEN	house=LOC	child	bear-COND	DM
<i>tshe</i>	<i>wai</i>	<i>'ong</i>	<i>nâ-nani</i>	<i>wai</i>	<i>ngak-na</i>	<i>tshe</i>
DM	EXCL	child	COP-COND	EXCL	do-PFV.MIR	DM
<i>thamce</i>	<i>ya=ngi</i>	<i>ra-male</i>	<i>tshe</i>			
all	up=ABL	come-FUT	DM			

‘Now in the village if a child is born in our house then it is said “hey, there is a child, hey” and everyone comes from up there.’

SPh.TsC20081022.1402.946.SPh

21.2.4. Cotemporal *-mo*

Kurtöp may conjoin two co-temporal events by suffixing *-mo* to the end a bare verb stem. Aspect (perfective/imperfective) is also encoded in the subordinate clause; *-mo* by itself entails perfective aspect while *-motako* encodes imperfective aspect.

§21.2.4.1 describes the uses of perfective subordination with *-mo* while §21.2.4.2 describes imperfective co-temporal subordination using *-motako*.

21.2.4.1. Perfective *-mo*

The Kurtöp *-mo* construction, on its own, is a perfective co-temporal adverbial structure. The *-mo* construction is structurally similar to the clause-chaining *-si* construction (see §21.2.5) in that the suffix may attach to a main verb or auxiliary and the verb must be affirmative. Also like clause-chaining, the *-mo* construction, though subordinate to the main verb, does not function as an argument of the main clause verb.

Unlike *-si*, however, *-mo* attaches to main verbs or auxiliaries only; it does not attach to the copula *nâ*. Neither do we see evidence of the *-mo* construction creating converbs or clause-chains; the *-mo* construction is noticeably more adverbial in structure and function when compared to the *-si* construction.

Busch (2007: 47) suggests *-mo* originates as a nominalizer diachronically, an intriguing idea which merits further research. There has not been sufficient research on the other East Bodish languages to indicate whether there is comparative evidence in Kurtöp's closest neighbors to support this, but following Busch's suggestion, one obvious source for a *-mo* nominalizer could be the PTB form **ma* 'woman/female' which shows up as a nominalizer in several branches throughout the family.

The Kurtöp form *-mo* alternates with *-mong* but the difference is not based on phonological or morphological rules but rather is stylistic, with the form *-mong* appearing more formal or eloquent; see §7.3.3.5 for more details on the stylistic alternation between suffixes and clitics that alternate an open syllable with one closed by a velar nasal.

In (642) I show a typical use of the co-temporal subordinating construction. *-mo* is suffixed to the end of the verb *thung*, itself the main verb in the subordinate clause *khit nya thung* to give the translation to give the rough translation 'while he played archery...'. The main clause in (642) is *nya zhiknami oni thundo* '(he) was hit by an arrow'. Note that in this example although the referent 'he' is not overtly mentioned in the main clause, it is present and *nya thungmo* is clearly not filling the role of either verbal argument of *zhik*

‘be.hit.’ In this example the subordinate clause appears temporally before the main clause.

- (642) *tshé khít nya thungmo nya zhiknami oni thundo*
tshé khít mya thung-mo nya zhik-na=mi
 DM 3.ABS arrow do-CTM arrow be.hit-PFV.MIR=TAG
wo=ni thun=to
 DEM:PROX=ABL DIST=LOC
 ‘While he played archery, he was hit by an arrow here’
 SBC20051127.KW

Below is another example of *-mo* of creating an adverbial clause which precedes the main clause.

- (643) *dam breksi dasum ngâmo nen drô geshang da*
dam blek-si dasum ngak-mo nen drô ge-shang da
 lock keep-NF today do-CTM day six go-PFV.EGO now
 ‘Since locking, now today six days have gone’
 KS20061212.168.75KL

In another example of the *-mo* construction (644), the adverbial clause *wona thrâmo* ‘when arrive here’ the adverbial clause interrupts the main clause, appearing between the O *thê khepo* ‘one FOC’ and the main verb *zuyu* ‘eat.IMP’.

- (644) *thê khepo ona thrâmo zuyu ngak*
thek khepo wo=na thrak-mo ngak
 one FOC DEM:PROX=LOC arrive-CTM QUOT
 ‘Eat one when you arrive there (he) says’
 SBC20051127.KW

In (645) the co-temporal subordinator *-mo* is attached to an auxiliary; *bo* is the S argument of the main verb *lok* ‘return’ and *ra* ‘come’ is the auxiliary. The main verb here is *brek* ‘keep’ and two clause chains also occur between the adverbial clause *bo lok ramo* and the main clause *mê nango dam brekshang*.

- (645) *bo lok ramo tshe trongi mi gapi wici ’aiya wotor mi the razi co khotsi ’lam*
Drukpa Künle wen ngak lapsi tshe wotor mê nango dam brekshang
bo lok ra-mo tshe trongi mi gapo=gi
 son return come-CTM DM village-GEN person PL.FOC=ERG
Drukpa Künle wen ngak lap-si tshe wotor
 Drukpa Künle COP.EQ QUOT tell-NF DM like.that
mê nang=to dam blek-shang
 house inside=LOC lock keep-PFV.EGO

‘When the son came back then the people from the village said “your grandmother, a man like that came, telling lies, saying “I am Drukpa Künle” and like that she was locked inside the house.’

KS20061212.162.882-167.168KL

The suffix *-mo* may can occur on the verb *ngak* ‘do’ when used as a speech-act verb, as in (646).

- (646) *thrê ngâmo koktongra oksoso*
thrê ngak-mo koktong=ra oksoso
 finger.millet do-CTM ball=EMPH like.this
 ‘When we say millet, it would be a ball of about this size’
 riceharvest20081022.859.681.PS

A very common usage of this construction is in the expression *ngai tamo* ‘1.ERG see-CTM’, which can roughly be translated into English ‘in my opinion’ or, more colloquially, ‘I guess’. An example of *ngai tamo* is in (647).

- (647) *'aci 'yô lim nawal wentami ngai tamo*
'aci 'yô limu nawala wenta=mi
 elder.brother job good COP.EXIS COP.EQ.MIR=TAG
ngai ta-mo
 1.ERG see-CTM
 ‘I guess the brother got a good job.’
 SBC20051127.KW

21.2.4.2. Imperfective –*motako*

With the exception of (647), illustrating a grammaticalized use of the co-temporal subordinator, all the examples of *-mo* co-occur with perfective aspect in the adverbial clause. An imperfective version of the co-temporal subordinating *-mo* construction is also available with the form *-tako* suffixed following *-mo*.

Busch (2007:§3.3.1) analyzes *-tako* to be diachronically composed of the imperfective *-ta* and locative *-ko*, with *-ta* being grammaticalized from the verb ‘become.’ Busch (2007:47-48) mentions Proto-Tamangic **ta* ‘become’ as evidence for a possible source but misses the fact that *tak* still exists as the synchronic verb ‘become’ in Kurtöp, further support in favor of his analysis. Indeed, the source for *-motako* is likely to be *-nominalizer-imperfective-locative*, as the semantics ‘to be at V-ing’ link intuitively to the semantics of *-motako* in use.

The use of *-motako* is formally equivalent to *-mo* on its own; it suffixes to bare lexical verbs or auxiliaries and forms a co-temporal subordinate adverbial clause. The only difference is one of aspect of the adverbial clause; *-motako* entails the co-temporal adverbial clause is in imperfective aspect.

In (648) the main verb *domshang* ‘meet.PFV.EGO’ has one argument *mi* ‘nguntil’ ‘black man’ and the adverbial clause *yau gemotako nâ* is subordinate. Note the presence of the copula *nâ* here, perhaps further evidence of *-tako* being derived from aspectual morphology plus locative case.

- (648) *yau gemotako nâ tshemo yam barto mi 'nguntil the domshangri*
yau ge-mo-tako nâ tshemo yam bar=to mi
 DEM:UP go-CTM-IPFV COP.EXIS.MIR while path RN:MID=LOC person
'ngunti-la the dom-shang=ri
 black-IDZ One meet-PFV.EGO=HSY
 ‘While (they) were going up there, while on the path, (they) met a black person.’
 SaT.SW20090917.2133.597-2137.116.SaT

A typical example of the co-temporal imperfective subordinating construction is shown in (649). The main verb in this example is *nan* ‘be full’ and its S argument is *mi* ‘person’. The adverbial clause *nam kharmotako* ‘while the sun is rising’ appears preceding the main clause.

- (649) *nam kharmotako wo thangna mi nanna tshe darung*
nam khar-mo-tako wo thang=na mi nan-na
 sun rise-CTM-IPFV DEM:PROX plane=LOC person be.full-PFV.MIR
tshe darung
 DM again
 ‘While the sun was rising the ground was filled with people.’
 SBC20051127.KW

There are several examples of the co-temporal imperfective subordinating construction occurring with auxiliaries. In (650) I show the auxiliary verb *ge* ‘go’ suffixed with *-motako* while in (651) the subordinate clause has *ni* ‘sit’ was the auxiliary verb.

- (650) *net woni khako wotor ngak gemotako neci gari stop geshang*
net wo=ni khako wotor ngak ge-mo-tako
 1.PL.ABS DEM:PROX=ABL DIR:UP like.this do go-CTM-IPFV
*neci gari stop** ge-shang do*
 1.PL.GEN car stop go-PFV.EGO
 ‘When we went up like this our car stopped.’
 SBC20051127.KW

(651) *tshé thundo jongzi bot 'ip zuzi **nimotako** tshemo ngaktari khî 'ama te te 'oyeni khak mi cepal ngam geta ngaktari 'amana*

<i>tshé</i>	<i>thun=to</i>	<i>jong-si</i>	<i>bot</i>	<i>ni-mo-tako</i>	<i>zu-si</i>	
DM	DIST=LOC	emerge-NF	3.PL	sit-CTM-IPFV	eat-NF	
<i>ni-mo-tako</i>	<i>tshemo</i>	<i>ngak-ta=ri</i>	<i>khî</i>	<i>'ama</i>	<i>ta-le</i>	
sit-CTM-IPFV	while	do-IPFV.MIR=HSY	3.ERG	mother	see-IMP	
<i>ta-ye</i>	<i>ta-ye</i>	<i>'o-ye-ni</i>	<i>khak</i>	<i>mi</i>	<i>cepa-la</i>	<i>'ngam</i>
see-IMP	see-IMP	PROX-UP=ABL	up	person	naked-IDZ	many
<i>ge-ta</i>	<i>ngak-ta=ri</i>	<i>'ama=na</i>				
go-IMP	do-IPFV=HSY	mother=LOC				

‘While eating food after coming out (he) said “mother, look, look, there are so many naked people up there going from up there”, (he) said to his mother.’

21.2.5. The clause-chaining construction *-si*

A very common construction in Kurtöp, referred to here as the Kurtöp Clause-chaining Construction, is characterized by the presence of at least one converb (and indeed usually many more), suffixed with *-si*, followed by a final and finite verb. The converb does not receive any of the finite morphology which would otherwise obligatorily encode tense, aspect, and evidentiality. Its occurrence in discourse requires a finite verb, at the end of the chain, which determines the tense, aspect and evidentiality for the event(s) encoded by the converb(s). In other words, converbs are not finite and are subordinate to the finite clause. The converb, however, like in other adverbial clauses, does not fulfill a semantic or grammatical role of the finite verb (see §21.2.5.1 for more details). Thus, the Kurtöp Clause-chaining construction is treated in this section.

The Kurtöp Clause-chaining Construction is used for a very wide variety of functions, including adverbial, temporal sequence, sequential events, and causation of

multiple clauses, as well as aspectual and modal information in monoclausal constructions. When encoding adverbial, temporal sequence, and causation of multiple clauses, the converb suffix *-si* is required and verbal arguments are not necessarily shared between the converb(s) and the final, finite verb. That is, a clause-chain in Kurtöp may consist of one or more converbal clauses, in which verbal arguments may or may not be shared between converbal clauses and the finite verb.

The adverbial, temporal sequence and causation functions are typical of the Kurtöp Clause-chaining construction when the finite verb is a main verb (not auxiliary or copula). A converb may also be used with an auxiliary (see §10.5.5.2 and §16.1.4 for detailed definitions of auxiliaries) or copula (see §10.5.5.5 for detailed definitions of copulas), in which case the converbal suffix *-si* is optionally omitted. In these instances the function encoded by the Kurtöp Clause-chaining construction is one of aspect or modality (described in §13.7.4), as opposed to sequencing of events, or a function more typically associated with clause-chaining.

21.2.5.1. Definition of ‘converb’

Before turning to the analysis of the Kurtöp data and description of clause-chaining in Kurtöp, some background on the terms *converb* and *clause-chaining* are in order. The interest in converbs and related phenomena appear to go back at least 100 years, to work done by Gustaf John Ramsted on Mongolian (Bickel 1998: 389). The term ‘converb’ has since been used widely in Altaic linguistics to describe the sort of

subordinate verb described in this section for Kurtöp. The term ‘Clause-chaining’¹³⁵ has been in use for at least the past four decades, describing phenomena in languages of Papua New Guinea (e.g. Elson (1964); McCarthy (1965) for Kanite; Lawrence (1972) for Oksapmin), Australia (e.g. Dixon (1972) for Dyirbal), the Americas (e.g. Payne (1991) for Panare) and the Tibeto-Burman languages (e.g. Andvik (1999) for Tshangla; Post (2007) for Galo).

Perhaps the most influential and controversial work to date on converbs has been the edited volume *Converbs in cross-linguistic perspective* (Haspelmath and König 1995), which examines the validity of a typological, cross-linguistic category of *converb*. A review of the work finds two senses of the term *converb*. One sense, rigorously defined by (Haspelmath 1995: 3) is that of a subordinate verb which has the primary function of marking adverbial subordination. A broader, looser definition of the term *converb* is proposed by V. Nedjalkov (Nedjalkov 1995: 97) to be ‘a verb form which depends syntactically on another verb form, but is not its syntactant actant; i.e. does not realize its semantic valencies’. Problems with Haspelmath’s definition have been noted by many, including Bickel (1998), Genetti (2005), and Coupe (2007). One of these issues, acknowledged by Haspelmath himself, is that of finiteness. Finiteness is often a continuum, and designating a particular form as finite or non-finite is not always straightforward.

¹³⁵ Or other derivations thereof, such as ‘topic chain’, or ‘chain of medial clauses’, ‘clause-linking’ device, amongst others.

One may contrast Haspelmath's (1995) notion of *converb* with the notion of *medial verb*, a term defined by (Longacre 1985: 263) to refer to a verb of a clause with reduced finite possibilities, usually specifying a subject, and usually expressing a temporal relationship between clauses. Haspelmath (1995:23) makes a distinction between converbs and medial verbs; he states 'the key difference lies in the fact that prototypical converbal clauses are *subordinate* (in the sense of 'embedded') while prototypical medial clauses ... are not subordinate but are *cosubordinate*.'

According to Haspelmath (2005: 12), a converb can be considered to be subordinate based on the following criteria: 1) clause-internal word order; 2) variable position; 3) possibility of cataphoric reference; 4) semantic restrictiveness; 5) possibility of extraction. Natural discourse provides no evidence of (1), (2) or (5) in Kurtöp and though (4) is possible, it is not the only function of the Kurtöp Clause-chain. However, the Kurtöp Clause-chaining Construction does adhere to the definition of V. Nedjalkov (1995) in that it is dependent on a final, finite verb and does not satisfy any syntactic or semantic requirement of the final verb. As it turns out, Kurtöp converbs are not unique in this regard. Converbs described in Newar (Genetti 2005), Ao (Coupe 2007), and Darma (Willis 2007) are similarly subordinate. As I show below, Kurtöp converbs exhibit a wide range of functions, including expressing both adverbial and temporal sequencing of events. While these functions are not subsumed under Haspelmath's (1995) sense of *converb*, they are endemic of Asian converbs in general (e.g. Bickel 1998). I follow Genetti (2005), Coupe (2007) and Willis (2007) in using the term *converb* to describe the form the verb takes in a clause-chaining construction. In doing so, I hope to link the

Kurtöp data to the similar findings reported in these other Tibeto-Burman languages, and at the same time retain the word ‘clause-chain’ in order to tie the Kurtöp data into the areal phenomenon noted by (Masica 2005), namely that clause-chaining is an areal feature of South Asia.

21.2.5.2. Introduction to the Kurtöp clause-chaining construction

The Kurtöp Clause-chaining construction is amongst the most productive syntactic constructions in the language, with of clauses employing the construction. Kurtöp finite sentences are often very long and complex, consisting of several chained clauses within one finite sentence. Prototypically, the Kurtöp Clause-chaining construction consists of at least two verbs. The first verb is a converb suffixed with the converb marker *-si* and the second verb will be finite. Both verbs may have separate arguments or the arguments may be shared between the verbs. An example of the Kurtöp Clause-chaining construction is shown in (652) below, with the converb in bold font.

- (652) *depa **kut-si** tsawai 'lama ngak tanpal wenta*
*depa **kut-si** tsawa=gi 'lama ngak tan-pala wenta*
 devotion send-NF root=GEN DM do adhere-PFV COP.EQ.MIR
 ‘Being very devoted, (she) made (him her) root lama’
 KS20061212.31.734KL

However, in some instances (see mainly §21.2.5.5) the *-si* suffix may be omitted. It is the *possible* presence of the converbal morphology that characterizes the construction.

21.2.5.3. Form

The Kurtöp Clause-chaining construction consists of at least two verbs, in which the first verb is a converb suffixed with *-si*, and a clause-final verb which is finite. The converbs in the construction are usually bare, other than for the suffix. It cannot be marked for tense, aspect or evidentiality, cannot be nominalized, and cannot be negated. It does share some noun-like properties in that the converb may also be cliticized with the emphatic morpheme *=ra*.

The final verb in the chain is usually fully finite, marked for tense/aspect/evidentiality, but may also be a nominalized verb (followed by a copula), which itself is part of a nominalization construction (see §15). The final verb may be a lexical verb, an auxiliary, or a copula. In the case that the final verb of the Clause-chaining Construction is a lexical verb, the suffix *-si* is required on the converb (unless the verb is *ngak* ‘do’; see below) and the construction canonically encodes two separate events (see §21.2.5.4). When the final verb is an auxiliary, the converb suffix may be omitted and one event is canonically encoded (see §21.2.5.5.1). In addition, the final verb may be a copula, in which case the Clause-chaining Construction is encoding imperfective aspect (see §21.2.5.5.4 and §17.2).

As I describe in §16.2.2.15, the non-final suffix *-si* is of unknown direct etymology but is likely related to similar forms found throughout TB, including Jero and Karbi, and may be related the form * *-s* reconstructed for PTB.

The Kurtöp converb suffix *-si* has allomorph *-zi* following vowels (i.e. open stems), and voiced consonants (i.e. *-m*, *-n*, *-r*, *-ng*). Table 156¹³⁶ illustrates the allomorphy of *-si* based on the verb stem type.

Table 156. Allomorphy of Kurtöp converb *-si*

Stem Type	Example Bare Stem	Gloss	Stem with <i>-si</i>
-p	phap	‘bring down’	<i>phap-si</i>
-t	dot	‘sleep’	<i>dot-si</i>
-k	kuk	‘gather’	<i>kuk-si</i>
-n	gin	‘put on’	<i>gin-zi</i>
-m	ngom	‘become drunk’	<i>ngom-zi</i>
-ng	thong	‘drink’	<i>thong-zi</i>
-r	chir	‘chop’	<i>chir-zi</i>
historical -l	phre	‘separate’	<i>phre-zi</i>
open syllable	se	‘die’	<i>se-zi</i>

In addition to the alternation between *-si* and *-zi*, both forms may be shortened to *-s* or *-z*. Not surprisingly, the reduction of the converb suffix often correlates with the reduction of multiple clauses to one.

¹³⁶ With reference to open syllables, because synchronic open syllables in verbs may come from at least two different sources (i.e. open syllable remains open or coda *-l* is lost and sometimes fronts the vowel) a verbal stem in it of itself does not show whether or not a coda *-l* was present historically. Thus, comparative data is used to discern whether or not the stem had a *-l* coda historically. For example, with regard to the present data, comparison with Classical Tibetan ལྷ་ལ་བ་ <spralba> supports the hypothesis that this form had a historically present *-l* final stem. Kurtöp synchronic allomorphy also exhibits this distinction elsewhere. See §7.3.2.2, §7.3.2.3 and §7.3.3.1 for more explanation.

21.2.5.4. Different events

The most common usage of the Kurtöp Clause-chaining construction is to denote separate events. In this section I describe first the form, and then some functions of the Kurtöp Clause-chaining Construction when marking separate events. Note that there will be some instances in which the boundary between two and one events is fuzzy.

21.2.5.4.1. Form of different event clause-chaining construction

The canonical use of the Kurtöp Clause-chaining construction is as follows. In natural discourse, the Clause-chaining Construction is often used to join multiple events, using multiple verbs. For example, consider the data in (653), a typically complex sentence in Kurtöp.

- (653) *bo lok ramo tshe, trongi mi gapoi wici 'aiya wotor mi the razi, co khotsi 'lam
Drukpa Künle wen ngak lapsi, tshe wotor me nango dam brekshang*
- | | | | | | |
|----------------|-------------|----------------|--------------|-----------------|-----------------|
| <i>bo</i> | <i>lok</i> | <i>ra-mo</i> | <i>tshe</i> | <i>trong=gi</i> | <i>mi</i> |
| son | return | come-CTM | DM | village=GEN | person |
| <i>gapo=gi</i> | <i>wici</i> | <i>'aiya</i> | <i>wotor</i> | <i>mi</i> | <i>the</i> |
| PL.FOC=ERG | 2.GEN | grandmother | like.that | person | one |
| <i>ra-si</i> | <i>co</i> | <i>khot-si</i> | <i>'lam</i> | <i>Drukpa</i> | <i>wen ngak</i> |
| come-NF | lie | tell- NF | Lama | Künle | COP.EQ QUOT |
| <i>lap-si</i> | <i>tshe</i> | <i>wotor</i> | <i>me</i> | <i>nango</i> | <i>dam</i> |
| say-NF | DM | like.that | house | inside | lock |
- brek-shang*
keep-PFV.EGO

‘When the son came back, the villagers said ‘your grandmother.. how.. a man came, lying, saying “I am Drukpa Künle” and then like that she was locked inside

the room’

KS20061212.162.882-167.168KL

In (653), the first clause to be marked with the clause-chaining suffix consists of the verb *ra* ‘come’ plus its S argument *mi the* ‘a man’. The second and third clauses consist of a bivalent verb in which *mi the* ‘a man’ is the A argument; in the second clause the verb *khot* ‘lie’ has the O argument *co* ‘lie’ and the verb *lap* ‘say’ takes the whole phrase *’lam Drukpa Künle wen* ‘I am Drukpa Künle’ as the second argument. The final verb in the chain is *brekshang* ‘keep.PFV.EGO’, which is fully finite and thus marked for aspect and evidentiality.

In example (653) it could be argued that the same subject is maintained throughout the entire utterance. However, this need not be the case. The subject in the chained clause may be different than that in the final verb, as exemplified by the data in (654).

(654) *tshe darung boi phiyeni phiye ngak ’urzi tshe nanggi koyang phihi ngamo tshe..
tshe shakhwi mû ngak lapsi tshe oning tshe darung ’aini mem zongi tshe nangi
norbu mego ngak boi jiku thungzi tshe ko phir tuzi tshe oning ko phis thungmo
Khando khepo yau thriye jedo jemo tshe jepo khepo drenmi gizi tshe ome thriyi
ranarang dorti shawalari la*

<i>tshe</i>	<i>darung</i>	<i>boi</i>	<i>phi-ye-ni</i>	<i>ngak</i>	<i>’ur-si</i>		
DM	again	3.PL.ERG	open-IMP-CMT	QUOT	pressure-NF		
<i>tshe</i>	<i>nang=gi</i>	<i>ko-yang</i>	<i>phi-si</i>	<i>nga-mo</i>	<i>tshe</i>	<i>tshe</i>	
DM	inside=GEN	door-also	open-NF	do-CTM	DM	DM	
<i>shakhwi</i>	<i>mû</i>		<i>ngak</i>	<i>lap-si</i>	<i>tshe</i>	<i>wo=ning</i>	

hunting.dog COP.EXIS.NEG QUOT say-NF DM DEM:PROX=ABL
nang-i norbu me-go ngak boi jiku
 inside-GEN jewel NEG-want QUOT 3.PL.ERG deception
thung-si *tshe ko phi-to tu-si tshe wo=ning*
 do- NF DM door open-INF force-NF DM DEM:PROX=ABL
ko phis thung-mo Khando khepo yau thri-yi
 door open do-CTM Khando FOC UP throne-GEN
je-to je-mo tshe jepo khepo drenmi
 see.HON-INF see.HON-CTM DM king FOC faint
gi-si *tshe ome thri=gi ra-na=rang*
 go-NF DM DEM:DN throne=GEN base-LOC=EMPH
dor-ti sha-pala=ri
 ORD-one die.HON-PFV=HSY

‘And again they insisted “open the door” and when they said “open the door” (the couple) said “there is no hunting dog” and then they (the king’s assistants) deceived (the couple), saying “(we) don’t want your jewel inside” and then they forced (the couple) to open the door and then when the door opened and they saw Khando up there on the throne, then the king fainted; it is said he died once at the base of that throne’

PS20061206.471.303-486.435P

Example (654) is a section from the tale of Kala Wangpo, a legend found throughout Bhutan and Tawang, Arunachal Pradesh, if not in a wider distribution. This section of the text is from the beginning of the story. The king had lost his hunting dogs and has set out a few assistants to look for it. They travel widely throughout the region, finally turning up at the remote home of an elderly man and women, where they insist on looking inside for the King’s hunting dog. The point in the story where this chain is

drawn from is one in which the assistants are at the home of the elderly couple and are insisting on opening a door in their home.

Ignoring the other subordinate clauses in this selection of discourse, we have seven converbs and one finite verb at the end of the section. The first converb is *'ur* 'pressure'. The A argument of this clause is clearly marked in the text: *boi* is the third person plural morpheme, inflected for ergative case. The O argument in this clause is the direct quote *phiyeni* 'open'. The next converb in this example is *phi* 'open', itself subordinate to the following verb *ngak* 'do'. The verb *ngak* itself is also a converb, though it is unmarked, which is common (see §21.2.5.4.3). In the next clauses, the A argument is switched to the elderly couple, who reply to the assistants, with the verb *lap* marked with the clause-chaining suffix. Note that even though the participant has switched, the new A argument is still not overtly mentioned. In the next clause, however, the A switches back to the King's assistants and is overtly mentioned as *boi* '3.PL.ERG' for the verb *thung* 'do' and is assumed for the next verb *tun* 'force'. The following clause consists of the verb *phis* 'open', followed by a subordinately-marked auxiliary *thung* 'do'. By the next clause-chaining-marked verb *drenmi ge* 'faint', a new S argument is introduced: *jepo* 'king'. Note that this argument is marked with the focus particle *khepo*. Finally, the final verb in this chain appears, *shak* 'die.HON', which is marked with the finite verbal morphology *-pala* 'PFV'.

Only the final verb in the construction may be negated, in which case negation will usually have scope only over the clause to which it is attached. Consider (655-656) below:

(655) *tsheni igu-the cozi boi bishang*

tsheni igu-the co-si boi bi-shang

then letter-DEF make-NF 3.ERG give- PFV.EGO

‘So after making the letter, they gave (it)’

SBC200511275.83.02-86.595KW

(656) *tsheni igu the cozi boi mabishang*

tsheni igu-the co-si boi ma-bi-shang

then letter-DEF make-NF 3.ERG neg-give-PFV:EGO

‘So after making the letter, they didn’t give (it)’

Elicited data

Example (655) shows the Clause-chaining Construction used to communicate two separate events. The first clause consists of the O argument *igu* ‘letter’ and the converb *co* ‘make’; the A is understood as being people working at an embassy, mentioned previously in the conversation from which these data were extracted. The second clause consists of the verb *bi* ‘give’ and the A argument, now overtly mentioned s *boi* ‘3.PL.ERG’ (the O is omitted). When the finite verb *bi* ‘give’ is negated, the scope of negation is restricted to that clause alone, as shown in (656).

There are some problems, however, with the generalization that negation always has scope over only the verb to which it is attached. Other times negation has been shown to have scope over the entire construction, as in (657) below:

(657) *ngai nya tshotma cozi mazu*

ngai nya tshotma co-si ma-zu
1.ERG fish curry make-NF NEG-eat

‘I didn’t cook (and therefore) eat fish curry’

Elicited data

This utterance can only be understood with the translation provided, in which the speaker neither cooked nor ate the fish curry.

The Kurtöp Clause-chaining Construction is frequently used as in the above instances, in which the construction chains one or more clauses, which may or may not share verbal arguments, which themselves may or may not be overtly marked. Main verbs (as opposed to auxiliaries or copulas) are used most frequently when two or more clauses are denoted. When the second verb in the construction is an auxiliary (as in §21.2.5.5.1) or a copula (as in §21.2.5.5.4) then one clause is most often denoted.

21.2.5.4.2. Functions

The typical function of the Kurtöp Clause-chaining Construction is to link two events that are related temporarily. In this case, the first clause in the clause-chain occurs temporally before clauses that come in following chains. An example is as follows:

(658) *tshe tshongna ge ngaksi, tshe lok ratak wenta*

tshe tshong=na ge ngak-si tshe lok ra-taki wenta
DM business=LOC go do-NF DM return come-IPFV COP.MIR

‘So (he) had gone for business and then was coming back’

KS20061212. 160.789KL

In (658), the first clause involves a third person referent which has previously been the topic of discourse in a story narrated by one speaker. This clause shows the verb *ngak* ‘do’ marked as a converb morphology. The following clause shows a finite-marked verb *rataki* ‘come’, and expresses an event sequential to the first event in the chain. After the referent had left for business, then he was coming back.

Not surprisingly, the Kurtöp Clause-chaining expression also often denotes a sense of causation, in which the first clause (also first in a sequence), is the cause of the second event. Consider (659):

(659) *mau chötshok boragi ngaksi dethroni nyangna*
mau chötshok ngak-si dethrone nyang-na
 down religious.office do-NF immediately receive-PFV.MIR
 ‘Their religious office down there so we got (it) immediately’
 SBC200511275.96.039KW

The first event shows the verb *ngak* ‘do’ suffixed as a converb. The second event in the clause, *nyang* ‘receive’ is finite and ends the sentence. The first clause, indicating an event that took place before the second clause, is interpreted as being the cause of the second event.

Another common use of the Kurtöp Clause-chaining Construction is in expressing adverbial ideas. An example of a converb used adverbially is shown below in (660-661).

(660) *wona cha zhu^{zi} gewala ngat sho*

wo=na châ zhu-si ge-pala ngat sho
DEM:PROX=LOC arm.HON submit-NF go-PFV 1.ABS EMPH

‘I went down there helping (Dzongsar Rimpoche)’

SBC20051127.

(661) *'enji pret-si getaki yo ngawal*

'enji pret-si ge-taki yo ngak-pala
how fear-NF go-IPFV QP do-PFV

‘How scared (I) was going there’

SPh.TsC20081022SP

In (660), the first clause, *châ zhu^{zi}* ‘assist.HON’ is the first clause, followed immediately by the second, finite clause *gewala* ‘go.PFV’. The interpretation in this instance is one in which the first clause is a sort of purpose adverbial, perhaps comparable to adverbial clauses in English beginning with ‘in order to’. The second clause consists of the clause-chain-marked verb *pret* ‘fear’, again immediately followed by a finite form of the verb *ge* ‘go’. Here, the clause-chain is expressing an adverbial function of manner; the speaker of this sentence is describing a time when he went somewhere in a lot of fear. It is interesting in both these instances that there is no interceding material between the converb and the finite verb, other than the clause-chain morphology.

Another, less common, function of the clause-chain construction is one in which the converb is interpreted with an adjective-like function. An example is illustrated in

(662):

(662) *'ami darung oso khauti borzi sha tshoksi mebi biyang*
'ami darung woso khauti bor-si sha tshok-si
 mother.ERG again as egg fry-NF meat cook-NF
mebi bi-yang
 NEG-give give-also
 'Again the mothers won't give frying eggs and cooking meats'
 SPh.TsC20081022SP

In (662), the two converbs *bor* 'fry' and *tshok* 'cook', are understood to be modifying the nouns *khauti* 'egg' and *sha* 'meat', respectively. These clauses are translated, then, as though they are dependent to the finite verb *bi* 'give', similar to a relative clause. However, there is no syntactic evidence that either *bor* 'fry' or *tshok* 'cook' are dependent to the verb *bi*. Syntactically, this looks identical to the other instances described above of the Kurtöp Clause-chaining Construction.

21.2.5.4.3. Direct quotative

As will probably have been noticed by now, a very common usage of the clause-chaining expression is in making the Kurtöp quotative morpheme, a combination of the verb *ngak* plus the converb suffix *-si*. Like in Dzongkha, the quotative *ngaksi* is required following a direct quote, often to be followed by the main speech-act verb. A simple example is shown below in (663), which was offered to me as a translation of English "I will say 'tooth'" and based on the frame used in the acoustic studies described in §7.2.1.1.

- (663) *ngai kwa ngaksi lapmale*
ngai kwa ngaksi lap-male
 1.ERG tooth QUOT say-FUT
 Elicited data

The Kurtöp quotative *ngaksi* has a wide range of realizations. In slower, controlled speech, the full form *ngaksi* is clearly audible. However, in faster, more casual speech, *ngaksi* is often reduced to *ngak* or even *nga*. An example of the reduced form of the quotative is shown in (664), which is extracted from part of a conversation taking place between two friends.

- (664) *wenpa ngak gata Rinzin khîra shamatheni ngai drimotak 'ator branpo 'ator branpo ngakta ngatna*
wen-pa ngak ga-ta Rinzin khî=ra
 COP.EQ-QP QUOT laugh-IPFV.MIR Rinzin 3.ERG=EMPH
shama-the=ni ngai dri-mo-tako 'ator bran-pa-yo
 sometime-DEF=ABL 1.ERG ask-CTM-IPFV how know-NMZ-COP.QP
'ator bran-pa-yo ngak-ta ngat=na
 how know-NMZ-COP.QP do-IPFV.MIR 1.ABS=LOC
 “‘Really?’” Rinzin laughs, after awhile he’s asking me “‘how do (I) know?, how do (I) know?’”.
 SBC20051127.7KW

Note also that (664) also illustrates *ngak*, still functioning as a quotative, also still clearly a main verb, as it takes finite verbal morphology (*-ta*) at the end of the clause.

- (665) *gundra rana ngaksi*
gundra ra-na ngaksi
 crook come-PFV.MIR QUOT
 ‘‘A crook has some’’ (he says)’
 SBC20051127.8KW

21.2.5.5. Same event

In addition to being used to denote separate events, the Kurtöp Clause-chaining Construction may also be used to denote one event, in which case no material is allowed to intercede between the clause-chaining-marked verb and the finite verb. In the case when the finite verb is an auxiliary, the clause-chaining suffix may be omitted. One may be tempted to argue for a separate construction in these instances, and in particular in the case of when no interceding material appears between the two verbs, it is tempting to analyze the construction as a serial verb construction. However, the fact remains in these instances that, upon elicitation, the *-si* is always recoverable. The possibility of having interceding material is not part of the canonical definition of a serial verb construction.

21.2.5.5.1. Auxiliaries as the final verb in a clause chain

This section describes the Kurtöp Clause-chaining construction when the second verb is an auxiliary. As I describe below, although this version of the construction differs formally somewhat from instances in which the finite verb is a lexical verb, I consider it to be a variation on the same construction based on the possible presence of *-si*.

21.2.5.5.2. Form of single event clause-chaining construction

Another very productive use of the Kurtöp Clause-chaining Construction is one in which the second verb belongs to a class of auxiliaries, rather than main verbs, as in §21.2.5.4. When the second verb is an auxiliary, the converb suffix is canonically omitted, no interceding material is allowed, and one clause is interpreted. An example is in (666) below.

- (666) *chutshot yanga winimthena **jong** geshang*
*chutshot yanga winim-the=na **jong** ge-shang*
time five COP.EQ.DBT-DEF=LOC emerge go-PFV.EGO
'(the two of us) got there about five'
SBC20051127.7.292.KW

The same utterance could be pronounced with the clause-chaining suffix present, as in (667), in which no difference in meaning is reported to be present.

- (667) *chutshot yanga winimthena **jongzi** geshang*
*chutshot yanga winim-the=na **jong-si** ge-shang*
time five COP-DEF=LOC emerge-NF go-PFV.EGO
'(the two of us) got there about five'
Elicited data

Despite the fact that the presence of *-si* is possible for a single event interpretation in elicited data, in natural discourse it is usually not found as such. For example, in my entire corpus I found only a few examples, shown in (668-669) below.

(668) *Monggarni yam gozi ge*

Monggar=ni *yam* **go-si** *ge*

Monggar=ABL road go-NF go

‘From Monggar (we) walked’

SBC20051127.7KW

(669) *Tshewang khit threzi ’otpal wen tshe thu Nu-Yorkni*

Tshewang *khit* **thre-si** *’ot-pala* *wen* *tshe* *thu*

Tshewang 3.ABS lead-NF bring-NMZ:PFV COP.EQ DM DIST

Nu-York=ni

New York=ABL

‘Tshewang brought him along from New York’

SBC20051127.KW

Like Clause-chaining constructions involving separate events with multiple clause-chain-marked verbs, the Kurtöp Clause-chaining Construction may use multiple verbs marking only one event. (670) illustrates such an example:

(670) *yum.. yum.. jong yar gewala tshe koni*

yum *yum* **jong** **yar** *ge-pala* *tshe* *ko=ni*

mother.HON mother.HON emerge go go-PFV DM door=ABL

‘So the mother, the mother fell out of the car’

SBC20051127.KW

In (670), the verb *jong* ‘emerge’ and *yar* ‘go’ are both participating in the clause-chaining construction with the finite verb *gewala* ‘go.PFV’ ending the clause chain. Neither *jong* nor *yar* receive the converb suffix *-si* and the event is interpreted as one event. Note, importantly, that the data in (671) would be a possible Kurtöp utterance, with the same meaning as (670).

(671) *yum.. yum.. jongzi yarzi gewala tshe koni*

<i>yum</i>	<i>yum</i>	<i>jong-si</i>	<i>yar-si</i>	<i>ge-pala</i>	<i>tshe</i>
mother.HON	mother.HON	emerge-NF	go-NF	go-PFV	DM

ko=ni

door=ABL

‘So the mother, the mother fell out of the car’

Elicited data

21.2.5.5.3. Function of clause-chaining with final auxiliary

When used to denote one event, the Kurtöp Clause-chaining construction provides an added aspectual dimension to the clause. These added senses are often vague and difficult to articulate. For example, the auxiliary *ge* ‘go’ denotes an added sense of completion to the event. Speakers often tell me there is no difference in meaning between the use of *ge-shang* ‘go-PFV’ as the second verb in monoclausal clause chain, and the finite suffix *-shang* ‘PFV’. In this sense, monoclausal constructions involving converbs in Kurtöp are similar to compound verbs in Hindi and other Indo-Aryan languages (Hook

1974, 1977, 1991, *inter alia*).¹³⁷ An example of the construction with the auxiliary verb *ge* is shown below in (672).

(672) *khici mingya zhit geshang da*
khici ming-ya zhit ge-shang
3.GEN name-also forget go-PFV.EGO
'(I) also forgot his name now.'
SBC20051127.KW

A similar instance is found with the use of the auxiliary verb *zat* 'finish'. When *zat* is used as an auxiliary in a monoclausal clause-chain, the event is interpreted as being completed, or that a change that was taking place has finished. Consider the example in (673).

(673) *khitya Kurtötpa jur zatpala wenta*
khit-ya jur zat-pala wenta
3.ABS-also become finish-NMZ:PFV COP.EQ.MIR
'He had also turned into a Kurtöp'
SBC20051127.7.229KW

¹³⁷ The major difference between Kurtöp monoclausal clausechains and Compound verbs in Indo-Aryan languages is the obligatory lack of interceding material in the Indo-Aryan languages. For example, whereas in Kurtöp *-si* may be present in the monoclausal instances of the clause-chain, *-kar* is not permitted between Hindi compound verbs.

The use of *zatpala* ‘finish.PFV’ as the finite verb in the clause-chain provides an added sense of completion to the event. The verb *jur* ‘become’ implies a process was taking place while *zatpala* indicates the process has completed.

Another very common auxiliary is *ni* ‘sit’, which, when used in the Kurtöp Clause-chaining construction provides an added sense of time stability. In (674) below, *nisala* ‘stay.PFV’, indicating that the action, though completed, went on for an extended period of time.

(674) *basgi suko ge ngaksi dot nisala*

bas=gi suko ge ngak-si dot ni-pala

bus=GEN underneath go do-NF sleep sit-PFV

‘(I) went under the bus and was sleeping (there)’

SBC20051127.7.326KW

A similar example is in (675). However, note this time the converbial suffix *-si* does appear on the converb *pup* ‘be.covered’.

(675) *mi phetse oyena dekini tshe ner gur pupsi thangna gur **pupsi** nir go*
mi phetse wo-ye=na dek-kini tshe
 people some DEM:PROX-UP=LOC enter-IPFV.IMM DM
neri gur pup-si thang=na gur
 1.PL.INCL.GEN tent be.covered-NF plane=LOC tent
pup-si ni-to go
 be.covered- NF sit-INF need
 ‘After some get in then at the tent pitching ground we have stay pitching the tent’
 SaT.SW.20090917.2565.023-2570.506.SaT

While the auxiliary *ni* ‘sit’ is used with intransitive verbs in single event constructions, the auxiliary *blek* ‘keep’, is used for a similar semantic function with transitive verbs. Consider the example in (676).

(676) *F.C.B garithena theksi woci Trashigang yö brê*
F.C.B. gari-the=na thek-si woci Trashigang yö
 F.C.B. car-DEF=LOC insert-NF DEM:PROX.GEN Trashigang reach
blek
 keep
 ‘(We were) put in an F.C.B. (Food Corporation of Bhutan) car and that brought us to Trashigang’
 SBC20051127.7.310KW

The use of the auxiliary *blek* ‘keep’ appears to perform the same function as the intransitive auxiliary *ni* ‘sit’. It implies that event happened over an extended period of time. Specifically, in (676), *blek* provides the sense that the participants of the event

stayed some time in Trashigang. Here, Trashigang is conceived of as a destination, and the participants in this example reach Trashigang and stay for a period of time.

21.2.5.5.4. Copulas as the final verb in a clause chain

A sub-type of the single event variant of the Kurtöp Clause-chaining Construction is one in which the finite verb is a copula. This subtype of the construction differs from that described with the auxiliaries in two important ways. First, the converb morpheme *-si* is usually, though not obligatorily, present. Second, whereas a clause-chain involving a final auxiliary has two potential interpretations (one event when the final verb is interpreted as an auxiliary and two events when it is interpreted as a main verb), there is only one interpretation when the final verb in the chain is a copula and that is as a single event.

The only copula to regularly participate in this construction is *nâ*, which, as described in §10.5.5.5, has recently moved into the category of copulas from lexical verbs. As part of its defining characteristics as a copula, it does not take the full range of tense/aspect/evidentiality morphology (unlike auxiliaries) but nonetheless occurs in the Kurtöp Clause-chaining construction in a variety of different forms.

When a copula is used in the Kurtöp Clause-chaining Construction, the result is one of aspect. Much like the suffix *-ta*, a copula ending the clause chain denotes imperfective aspect. The semantic/pragmatic differences between *-ta* and *V-si* COP are slight and the exact nature of the difference is unclear. Generally, *-ta* offers imperfective aspect to the verb, with a possible interpretation of progressive aspect, or the sense that the speaker is engaged in the event at the particular moment. On the other hand, *V-si* COP

is not as likely to be interpreted as progressive aspect, and could even be uttered if the person were not engaged in the activity at the time of utterance (see §17.2 for more details regarding the tense/aspect/evidential value of this construction).

Examples of the clause-chaining construction used with a copula are shown in (677-678) below. In (677) the verb *'rung* 'stand' receives the converbal suffix and is immediately followed by the copula *nâ*, which is itself marked as conditional adverbial to the main clause characterized by the verb *ngak* 'do'.

- (677) *dara... perna... wici tsawai 'lama khepo wici donggo 'rungzi nanani, wî zha ngâ ko ngawal wenta tshe*
- | | | | | | | | |
|-----------------|----------------|-------------|-----------------|--------------|--------------|------------------|---------------|
| <i>dara</i> | <i>perna</i> | <i>wici</i> | <i>tsawa=gi</i> | <i>'lama</i> | <i>khepo</i> | <i>wici</i> | <i>donggo</i> |
| now | for.example | 2.GEN | root=GEN | lama | FOC | 2.GEN | front |
| 'rung-zi | <i>nâ-nani</i> | <i>wî</i> | <i>zha</i> | <i>ngak</i> | <i>ko</i> | <i>ngak-pala</i> | |
| stand-NF | COP.EXIS-COND | 2.ERG | what | do | QP | do-NMZ:PFV | |
| <i>wenta</i> | | | | | | | |
| COP.EQ.MIR | | | | | | | |
- 'Now, suppose if your root lama were standing in front of you, what would you do?'
- KS20061212.71.691KL

In (678), the verb *bar* 'burn' is suffixed with *-si* immediately preceding the copula *nâ*. As I articulated earlier, the added sense is durative in nature.

(678) *ko phis thung gemo nanggo 'namisami ozi drizanggi bri, sang thungwal pita bri*

*lemtoka 'namzi otor ne tshasa; pita yō **barzi** nâri*

ko phis thung ge-mo nanggo 'namisami ozi
door open do go-CTM inside very DEM:PROX

drizang=gi bri sang thung-pala pita bri
saffron.milk=GEN aroma incense do-NMZ:PFV like aroma

lemtoka 'nam-si wotor ne tsha-sa pita yō
delicious emit-NF as sun burn-NMZ:LOC like shine

***bar-si** nâ=ri*

burn-NF COP.EXIS=HSY

‘It is said that when he opened the door inside a smell like saffron milk, a burning-incense like smell, delicious, came out and it was like the sun was shining’

KS20061212.180.787KL

CHAPTER XXII
RHETORICAL DEVICES

The aim in this chapter is to present a description of rhetorical devices in Kurtöp, or the structures and the way they are used in order to create structures that encode expression beyond the basic grammar. I group these into three categories: hesitations, exclamations, and syntactic constructions. The first, hesitations, is discussed in §22.1; the second, exclamations, is discussed in §22.2, and in §22.3 I discuss the various syntactic devices used for rhetorical purposes in Kurtöp.

22.1. Hesitations

In narration and story-telling, *tshe* is used to move the story along and often serves as a break between clauses. Consider (679).

(679) *tshe da wo khep ner 'ngar-zhindu soimalegi tshe 'ong gapi trowathe kutni ngaksi tshe ngaiyang...*

<i>tshe</i>	<i>da</i>	<i>wo</i>	<i>khep</i>	<i>nera</i>	<i>'ngar-zhindu</i>		
DM	now	DEM	FOC	1.PL.INCL	times.of.yore		
<i>soi-male=gi</i>			<i>tshe</i>	<i>'ong</i>	<i>gapo=gi</i>	<i>kut</i>	<i>ni</i>
eat.HON-NMZ.IRR=INSTR			DM	child	PL.FOC=GEN	keep.on	stay
<i>trowa-the</i>	<i>ngak-si</i>		<i>tshe</i>	<i>ngai=yang</i>			
fun-DEF	do-NF		DM	1.ERG=also			

‘And now our consumption in times of yore, well, so that the children have some fun, well, I also...’

KS200805152.KZ

The data in (679) are drawn from a formal narration by a highly educated speaker. He consistently inserts *tshe* throughout the 75-minute long narration, nearly between every verb phrase. The story, however, is fluent; the function of *tshe* is not a marker of hesitancy.

When *tshe* occurs with *wu* it signals hesitation, as in (680), where the speaker momentarily pauses, utters *tshewu* and continues with his sentence.

(680) *yam .. 'mangira ge go tshewu mau .. khwei womeni khako*

<i>yam</i>	<i>ma-ngi-ra</i>		<i>ge</i>	<i>go</i>	<i>tshewu</i>		<i>mau</i>		<i>khwe=gi</i>
road	DN=ABL-EMPH		go	need	HES		DOWN		water=GEN

<i>wo-me=ni</i>		<i>khako</i>
-----------------	--	--------------

DEM:PROX-DOWN=ABL		DIR:UP
-------------------	--	--------

‘the path... (we) have to go from all the way down there -- umm, down there by the river -- and up’

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22.2. Exclamations

Exclamations in Kurtöp are defined as those items which have little lexical function except to get the hearer’s attention, similar to ‘wow!’, or ‘hey!’ in English. Interestingly, the forms found in Kurtöp are also found in Dzongkha. Three common forms are *zai*, *'lama cheno*, and *wai*, illustrated below.

The form *zai*, shown in (681), is used as a way to draw the interlocutor into the event and express surprise or emotion.

(681) *zai junang..*
zai ju=nang
 wow! end=LOC
 ‘Wow! In the end...’
 Lama20081231.LC

Another form common throughout Bhutan and Tibetan is *'lama cheno*, literally Tibetan for ‘The lama knows...’. It is of particular historical interest that the Kurtöp form is identical to the Tibetan expression, as opposed to Dzongkha, which is *'lama kheno*, with out the palatalization of the initial. In both Dzongkha and Kurtöp it is common to reduce the expression to simply *'lama* ‘my god!’, as in (682).

(682) *'lama! yarje gina wai data*
'lama! yarje gi-na wai data
 my.god! development go-PFV.MIR gosh now
 ‘My god! Gosh, how it’s developed.’
 DungkarTS20081231.DT

(682) also serves to illustrate the use of *wai* ‘gosh’, which occurs together with *'lama*. However, *wai* often comes by itself, usually at the introduction of surprising information.

22.3. Syntactic constructions

This section describes two syntactic constructions which are used to provide extra poetic flare to the utterance. Both involve repetition of a verb. The first construction

consists of a verb suffixed with the emphatic suffix, followed by a verb that is marked as a negative. The second, in §22.3.2, consists of a verb nominalized with *-male*, suffixed with the emphatic suffix *-ta*, and followed with another verb.

22.3.1. *V=ra ma-V*

The structure V=EMPH NEG-V stresses the existence, or rarity of existence, of a particular event. The function is similar to English ‘even’ as an adverb, ‘at all’ or ‘anymore’. I illustrate this construction with two examples below. The first example, (683) comes from a story about Drukpa Künle, the mad monk. In the story he commands the villages not to open the door, under any circumstances. In order to further importance of following the request, he uses the V-EMPH NEG-V construction, with the first verb unmarked, other than for the emphatic suffix, and the second verb marked finite -- this case as an imperative.

(683) *hapta the khepo ko **phira maphiyo** ngaksi*
hapta the khepo ko phi=ra ma-phi-lo ngaksi
 week one FOC door open=EMPH NEG-open-IMP.FUT QUOT
 ‘Don’t open the door *at all* for one week (he said).’
 KS20061212.KL

The second example, (684), comes from a conversation between two people. The speaker in this example is younger than the interlocutor by approximately ten years. They are discussing a time in the past, a time, the speaker realizes, that was probably before he was born. He uses the V-EMPH NEG-V construction to emphasize the non-existence of his

birth. Again, the first verb is unmarked except for the emphatic suffix, and the second verb is negative and here also marked perfective.

(684) *ngatta kera ’makesa nami minla*

<i>ngat-ta</i>	<i>ke=ra</i>	<i>ma-ke-sa</i>	<i>nâ=mi</i>
ngat-EMPH	be.born=EMPH	NEG-be.born-QP.PFV	COP.EXIS=TAG
<i>minla</i>			

COP.EQ.NEG.DBT

‘I wasn’t even born, isn’t it?’

SaT.SW20090917.SaT

22.3.2. *V-male-ta V*

A verb suffixed with the nominalizer *-male* and then the emphatic suffix *-ta*, followed by another verb conveys a sense of clarification. For example, in (685) and (686), the speaker uses this construction to ask the speaker if something would *really* be finished or if the interlocutor had *really* been a given location.

(685) *zatmaleta zatpa?*

<i>zat-male-ta</i>	<i>zat-pa</i>
finish-NMZ:IRR-EMPH	finish-QP.PFV

‘ Will it really be finished?’

(686) *thramaleta thrawa?*

thra-male-ta

arrive-NMZ-EMPH

thra-pa

arrive-QP:PFV

‘ Have you really been there?’

CHAPTER XXIII

CONCLUSIONS

This dissertation is the first grammatical description of Kurtöp, a Tibeto-Burman language spoken by approximately 15,000 people in eastern Bhutan. The first five chapters introduced the methodology used for the study and the speech community while also placing Kurtöp speakers and the Kurtöp language in the ethnolinguistic history of Bhutan and the Tibeto-Burman language family, respectively. The methodology argued for in chapter two, and in some ways exemplified through a discussion of orthography development in chapter eight, conceives of linguistic documentation as a collaborative process.

Chapters five and six focused on Kurtöp contrastive and non-contrastive phonology, respectively. Phonologically, Kurtöp is very similar to other languages of the region. As I reported in §6.4.2, Kurtöp is undergoing tonogenesis, proving an ideal situation to examine the tonogenetic details. The findings, that tonogenesis began in a sonorant context, spread to the palatal fricative, and is now spreading to the remainder of the obstruents is potentially typologically important and could impact our theories of tonogenesis.

The aim of chapters nine and ten, on lexicon and grammatical overview, was to provide the necessary background to understand the remaining chapters of the dissertation. Typologically, Kurtöp can be classified as having agglutinative morphology with monosyllabic verb stems but mono-, di- and trisyllabic noun stems. As is typical of

languages of South Asia, Kurtöp has verb-final syntax and many of the associated typological features, including auxiliaries, genitive-noun word order, and postpositions.

Chapters 11 and 12 examined constituents of the noun phrase, showing the expected syntactic properties of a Tibeto-Burman language. Chapter 13 discussed proforms, a group of forms that comprises pronouns, demonstratives and pro-adverbs. The discussion of topographical deixis in §13.2 could be of interest to comparative Tibeto-Burmanists interested in the reconstruction of topographical deixis to Proto Tibeto-Burman, a question which would impinge on the placement of a homeland for the speakers of the proto language.

The next chapter, chapter 14, was devoted to a discussion of case-marking in Kurtöp, a typologically interesting and unusual system. Kurtöp uses an ergative marker obligatorily in some bivalent verbs but in others its presence signals various pragmatic effects. In addition, the ergative marker can be used with some monovalent verbs, signaling various semantic and pragmatic factors. This sort of system, though typologically unusual and interesting, is found elsewhere in Tibeto-Burman languages of the Himalayas.

Chapter 15 also reported on phenomena well-known among Tibeto-Burman languages. Nominalization is used widely in Tibeto-Burman as a device to combine clauses and, historically, to innovate main clause grammar. The nominalization system described for Kurtöp is remarkably similar to that of Tibetan and has clearly been used historically to generate much the main finite grammar and adverbial clauses.

Chapters 16 through 18 reported on various aspect of the Kurtöp verb, including a syntactic analysis of the verb phrase, discussion of tense/aspect and discussion of the copular system. The next chapter, 19, described negation, imperative forms, and question formation. The categories of evidentiality, mirativity, and epistemic modality are drawn out from these four chapters and discussed in chapter 20. Typologically, Kurtöp reports an unusually high number of evidential and related categories encoded throughout the verbal system.

The next two chapters present a discussion of clause-combining and rhetorical devices, respectively. An important aspect of §21 is the discussion of the clause-chaining construction in §21.2.5 which, together with nominalization, is at the heart of Kurtöp syntax. I show in §22 that rhetorical devices in Kurtöp are largely syntactic constructions.

Throughout the dissertation, an effort was also made to advance our knowledge on the placement of Kurtöp and the East Bodish languages (Kurtöp's sister languages) in general. There is a great deal of evidence supporting the notion that Kurtöp and the East Bodish languages are closely related to Classical Tibetan, perhaps as a sister language, making the modern Tibetan dialects cousins to Kurtöp. However, I also presented evidence throughout the dissertation that some of the similarities with Tibetan also appear to have been borrowed, suggesting that the placement of Kurtöp and the East Bodish languages within Tibeto-Burman cannot be handled by solely assuming the model of direct descent from a parent to a daughter language.

APPENDIX A
ABBREVIATIONS

1	1 st person
2	2 nd person
3	3 rd person
ABL	Ablative
ABS	Absolutive
ABT	About
ABV	Above
AGR	Agreement
APRX	Approximative
BOT	Bottom
CFOC	Contrastive focus
COND	Conditional
COMP	Comparative
COP	Copula
CMT	Comitative
CT	Counter (numeral used in counting measurements)
CTM	Co-temporal
DBT	Dubitative
DEF	Definite
DEM	Demonstrative
DIR	Direction
DIST	Distal
DN	Down
DZ	Denizen
EGO	Egophoric
EMPH	Emphasis
ERG	Ergative
EQ	Equative
EXCL	Exclamation
EXL	Exclusive
EXIS	Existential
FOC	Focus
FRT	Front
FUT	Future
GEN	Genitive
HES	Hesitation

HON	Honorific
HORT	Hortative
IMM	Immediate
IMP	Imperative
IDZ	Individuator
INCL	Inclusive
IND	Indirect evidence (inferential evidential)
INF	Infinite
INSTR	Instrumental
IPFV	Imperfective
IRR	Irrealis
LOC	Locative
MID	Middle
MNR	Manner
MS	Measurement
NEG	Negative
NF	Non-final
NMZ	Nominalizer
NR	Near
ORD	Ordinalizer
PFV	Perfective
PL	Plural
POL	Polite
PROX	Proximate
QP	Question particle
QUOT	Quotative
RN	Relator noun
TAG	Tag particle

APPENDIX B

TEXTS

KS20061212.KL

'ator mapa wo sung khepo aaa neri..
 how originally DEM:PROX story FOC HES 3.PL.INCL.GEN

nangpa=gi
 insider(Buddhist)= GEN

'lama 'lam Drukpa Künle nga-pala=gi gang=ki wenta
 lama lama Drukpa Künle do-NMZ:PFV=GEN time=GEN COP.EQ.MIR

‘This story is about how, originally, our ... it’s during the time of our Buddhist lama
 Lama Drukpa Künle’

'napa 'ama the-gi 'namisami khit=na depa
 earlier woman one-ERG very 3.ABS=LOC devotion

nawala=gi korni
 COP.EXIS=GEN RN:ABT

‘It’s about a woman in the past who was very devoted to him’

woci korni wen sung khepo mapa
 DEM:PROX.GEN RN:ABT COP.EQ story FOC originally

‘This is what the story is about originally’

'napa 'napa tshé trong the=na 'ai
 earlier earlier DM village one=LOC grandmother

the nawal wenta
 one COP.EXIS COP.MIR

‘A long time ago in a village there was an old woman’

'ai *khepo* *tshe* *mapa* 'lam *Drukpa*
 grandmother FOC DM originally lama Drukpa

Künle *nga-khan* *khepo*
 Künle do-NMZ:IPFV FOC

me-je-na *je-mal-ta* *tshe*
 NEG-see.HON-PFV.MIR see.HON-NMZ:IRR-EMPH DM

shara *khir* *thun* *tshon=do* *pholap*
 continuously 3.SG DIST here=LOC talks

hago-zi 'lam=*gi* *korni* *tshe*
 understand-NF lama=GEN RN:ABT DM

‘Even though the old woman had never seen this man called Drukpa Künle she’d heard about him continuous through the talks’

ne *thu-sa=ning* 'namisami *depa* *kut-si* 'lama=*nang*
 ear hear-NMZ:LOC=ABL very devotion bow-NF lama=LOC
 ‘After hearing about him she was very devoted to the lama.’

da *ngaci* *tsawa=i* 'lama *wen* *ngak* *nang=i* *khira*
 now 1.GEN root=GEN lama COP.EQ QUOT inside=GEN 3.REFL

sem=gi
 mind=GEN

nang=i *tshe* 'namisami *depa* *kut-si* *tsawa=i* 'lama *ngak*
 inside=GEN DM very devotion bow-NF root=GEN lama do

tan-pal *wenta* *tshe*
 dedicate-NMZ:PFV COP.MIR DM

“‘Now he’s my root lama” she said. Inside, inside her mind she became very devoted to him as her root lama and dedicated herself to him.’

wo 'lam *Drukpa* *Künle* *khepo*
 DEM:PROX lama Drukpa Künle FOC

da *mapa* 'napa *mapa* 'ai *khepo=gi*
 now originally earlier originally grandmother FOC=ERG

'lam Drukpa Künle *khepo* *'napa* *je=rang*
 Lama Drukpa Künle FOC earlier see.HON=EMPH

me-je-na *tshe* *shara* *khir* *'namisami* *depa*
 see.HON-PFV.MIR DM continuously 3.REFL very devotion

kut-si da *ngaci* *tsawa=gi* *'lama* *wen* *share*
 bow-NF now 1.GEN root=GEN lama COP.EQ EXCL

‘The lama Drukpa Künle, now the women had never ever seen the lama Drukpa Khepo earlier but she being continuously devoted to him said “now he is my root lama.”’

nenmal-gongto *'namisami* *châ* *tshe-sha=ra...*
 every-day very hand.HON prostrate-PFV.EGO=EMPH
 ‘Every day she would prostrate’

'lam Drukpa Künle *sem=na* *dren-zi* *châ* *tshe*
 lama Drukpa Künle mind-LOC remember-NF hand.HON prostrate
 ‘With Lama Drukpa Künle in her mind should prostrate’

wotor *ngak-si* *'namisami* *depa* *kut-tak* *wenta*
 like.that do-NF very devotion bow-IPFV COP.EQ.MIR
 ‘That’s how devoted she was’

tshe nam the *khit* *chorten* *the* *chorten* *kora*
 DM day one 3.ABS chorten one chorten circumambulation

thung ngak *ni-sal* *wenta* *chorten* *the* *kora*
 do do stay-NMZ:PFV COP.MIR chorten one circumambulation

thung mani *jang-zi* *om* *mani* *pemi hung mani*
 do prayer chant-NF om mani pemi hung mani

pemi hung ngaksi *tshe*
 pemi hung QUOT DM

chorten the kora *thung ngak* *ni-mo*
 choretn one circumambulation do do stay-CTM

mi the ra-ta=ri
 person one come-IPFV.MIR=HSY

'napa *'arwa=yang* *mik* *ma-thung-wala=i* *mi* *the*
 earlier when=also eye NEG-do-NMZ:PFV=GEN man one

‘So one day, a chorten, she was circumambulating the chorten, she was circumambulating the chorten saying “om mani pemi hung, mani pemi hung”, so while circumambulating the chorten a man came, a man she had never seen.’

wai *'aiya* *zha* *ngak-tak* *yo* *ngâ-mo*
 hey grandmother what do-IPFV QP.COP do-CTM

tshe *ngat* *chorten* *kora* *thung-ta* *nga-wal*
 dm 1.ABS chorten circumambulation do-IPFV.MIR do-NMZ:PFV

wenta *tshe*
 COP.EQ.MIR DM

‘When the lama asked "hey old woman, what are you doing" she said: "well I am circumambulating a chorten"’

tshe *wici* *'lama* *'ê* *yo*
 DM 2.GEN lama who QP.COP

ngâ-mo *tshe* *ngaci* *tsawa=i* *'lama*
 do-CTM DM 1GEN root=GEN lama

khepo *'lam* *Drukpa Künle* *wen* *nga-wala* *wenta* *tshe*
 FOC lama DrukpaKünle COP.EQ do-NMZ:PFV COP.EQ.MIR DM

‘When he asked “who is your lama”, she said “well it’s Lama Drukpa Künle”.’

eee *tshe* *wai* *wici* *tsawa=i* *'lama* *khepo* *'lam* *Drukpa*
 HES dm hey 2GEN root=GEN lama FOC lama Drukpa

Künle *ra-mal* *wenta*
 Künle come-NMZ:IRR COP.EQ.MIR

‘Um, ‘Hey, your root lama, Lama Drukpa Künle is coming now.’

dara ... *perna* ... *wici* *tsawa=i* *'lama*
 present suppose 2.GEN root=GEN lama

khepo *wici* *dong=go* *'rung-zi* *nâ-nani*
 FOC 2.GEN front=LOC stand-NF COP.EXIS-COND

wî zha ngak ko nga-wal wenta tshe
 2.ERG what do QP do-NMZ:IPFV COP.EQ.MIR DM
 ‘Now, suppose, if your root lama were standing in front of you, what would you do?’

da ngâ-mal-ta zha ngak ko ... ngari 'namisami nang=i
 now do-FUT-EMP what do QP 1.REFL.GEN very inside=GEN

depa da na-wala, tshe share ngat tshe
 devotion now do-PFV DM EXCL 1.ABS DM

'namisami chukpo-ni min, tshe me=do...
 very rich-CFOC COP.EQ.NEG DM house=LOC

zhor palang the ning tshe khauti dakti nawala
 alcohol bed one and DM egg few COP.EXIS

‘Now what would I do... I am very devoted indeed, but I am not rich, so at my house there is alcohol, a bed, and a few eggs.’

wo khep phui-male nga-wal wenta 'lama=nang
 DEM:PROX FOC offer-FUT do-NMZ:PFV COP.EQ.MIR lama=LOC
 ‘I will offer that to the lama.’

tshe 'lami ... 'lami zumthrul=gi ngak-si tshe
 dm lama.ERG lama.GEN supernatural.powers=ERG do-NF DM
 ‘So the lama, the lama’s supernatural powers...’

tshe 'lam tshe khir 'lam ngoma khep ... 'napa
 DM lama DM 3.REFL lama original FOC ... earlier

khep khir mi soso co-zi ra
 FOC 3.REFL person different do- NF come
 ‘So the lama, the original lama, earlier he had come as a different person’

ju=na 'lama tun-zi.. tshe 'lam Drukpa Künle ngat wen
 end=LOC lama show-NF DM lama Drukpa Künle 1.ABS COP.EQ

ngâ-mo 'namisami 'ai tshe
 do-CTM very grandmother DM

depa mögü kut-si 'namisami yi che-zi tshe
 devotion esteem bow-NF very truth.feeling moan-NF DM

'lama châ tshe-zi wo thang=na=ra
lama arm.HON prostrate-NF DEM:PROX plane=LOC=EMPH

châ tshe bito=rang
arm.HON prostrate outside=EMPH

'In the end, the lama showed himself and when he said "Drukpa Künle am I", the old woman became very overcome with devotion and she prostrated right there on the ground outside.'

tsheni tshe me-do thre-z khor-wal wenta tshe,
then DM house=LOC lead-NF take-NMZ:PFV COP.EQ.MIR DM

me=do khor-zi da ngaci zhor palang the ni
house=LOC take-NF now 1.GEN alcohol bed one and

'lama khepo 'namisami zhor=na thu 'nye-tak wenta
lama FOC very alcohol=LOC heart.HON enjoy.HON-IPFV COP.EQ.MIR

'And then she lead him to her house, lead him to house, and now my alcohol, alcohol, bed and... the lama was very interested in the alcohol.'

tshe med thre-z khor ngak tshe ...
DM house-LOC lead-NF take do DM

'She led him to her house'

zhor khepo=ya drang .. khauti
alcohol FOC=also give.HON egg

khepo=ya drang-zi tshe
FOC=also give. HON -NF DM

'ai 'namisami sem ga-zi
grandmother very mind enjoy-NF

'enji ngâ-male wen ma-bran-pal depa=gi
how.much do-FUT COP.EQ NEG-know-PFV devotion=INSTR

'After also offering the alcohol and eggs the woman was so happy and she didn't know what to say out of devotion.'

tshe trong=na mi gapo pura ja-zi mi gatpo
DM village=LOC person PL.FOC all call-NF person old.man

ganmo khiri charo gap pura ja-zi tshe
 old.woman 3.REFL.GEN friend PL.FOC all call-NF DM

'lam Drukpa Künle jon-zi nawal share ngaksi
 Lama Drukpa Künle come.go.HON-NF COP.EXIS EXCL QUOT

‘So she called all the villagers, the old folks - her friends - she called, "Lama Drukpa Künle has come, hey."’

tshe mi zhanma gapoi=yang 'napa-ni=ra 'lama=i korni
 then person another PL.FOC.ERG=also earlier=ABL=EMPH lama= RN:ABT

ne thu-zi nawal=i tshe depa=i ngak-si
 ear.HON hear.HON-NF COP.EXIS=GEN DM devotion=INSTR do-NF

pura=gi zhor 'ot-si pura=gi zhor gapo=ya
 all=ERG alcohol bring-NF all=ERG alcohol PL.FOC=also

'lama=ro drang ngak ni-sal wenta tshe ..
 lama-LOC give.HON do stay-NMZ:PFV COP.MIR DM

‘And then the other people also, having heard earlier about the lama, respected him and all brought alcohol, all brought the alcohol and all were offering it to the lama.’

shama-the=ni tshe ... 'lama=gi mir khiri=gi
 sometime-one=ABL DM lama=ERG others 3.REFL=GEN

'ngöshü=gi ngaksi 'ai khepo da se=gi
 Omniscience=INSTR do-NF grandmother FOC now die=GEN

ran-pal wen-ci bran-pal wenta
 time.to-NMZ:PFV COP=GEN know-NMZ:PFV COP.EQ.MIR

‘After a while, then the lama, due to his omniscience, knew that the old woman’s time to die had come’

da se-mal wenta ngak 'ai khepo
 now die-NMZ:IRR COP.EQ.MIR do grandmother FOC

‘Now the old woman is going to die.’

da se-mal wenta ngak bran-zi
 now die-NMZ:IRR COP.EQ.MIR do know-NF

tshe *'ai* *khepo* *tsheni* *'lami=gi*
DM grandmother FOC then lama=ERG

mi *zhanma* *gapo* *pura* *zon* *ngak*
person another PL.FOC all send do

'ai *khepo* *rum*** *the=nang* *dam* ...
grandmother FOC room one=LOC lock

thu *chösham=na* *the* *ngak* *dam* *bre-wal* *wenta*
DIST alter.room=LOC one do tie keep-NMZ:PFV COP.EQ.MIR

‘Now, knowing she is going to die, the old woman, then the lama send out all the other people and locked the woman in the alter room over there, he locked her up.’

ko *thung-zi* *dimi* *thung-zi* *hapta* *the* *khepo*
door do-NF lock do-NF week one FOC

ko *phi=ra* *ma-phi-yo* *ngaksi* *'ê-ya=nang* ...
door open=EMPH NEG-open-IMP.IRR QUOT who-also=OC

hapta *the* *khepo* *trong=i* *mi* *gapo*
week one FOC village=GEN person PL.FOC

pura=na *lap-si* *hapta* *the* *khepo*
all=LOC tell-NF week one FOC

wo *ko* *khepo* *phi=ra* *ma-phi-ye-re* *ngaksi*
DEM:PROX door FOC open=EMPH NEG-open-IMP-EXCL QUOT

ban *thung-zi=ra* *brek=go* *ngaksi*
closed thung-NF=EMPH keep=LOC QUOT

wotor *lap* *tshe* *khit* *gi-mu*
like.that tell DM 3.ABS go-PFV.IND

‘He locked the door and said “For one week you absolutely cannot open the door”, he told the villagers, don’t let anyone open the door for one week, “For one week you absolutely cannot open the door, okay”, he said “shut it and keep it that way” he said left’.

tsheni *tsheni* *hapta* *the* *ge-sha-ra* *tshe* *'ai*
then then week one go-PFV.EGO-EMPH DM grandmother

jong-mal *mutle*
 emerge-NMZ:IRR COP.EQ.NEG.IND

‘Then, then even after one weel the old woman didn’t emerge.’

tsheni *tshe* *mira* *nang=o* *to* *mû*
 then DM others inside=LOC food COP.EXIS.NEG

zha-ya *mû* *'ai* *jong-mal* *mutle* *mi*
 what-also COP.NEG grandmother emerge-NMZ:IRR COP.EXIS.NEG.IND person

gapo *'namto* *langzi* *wai* *dangan* *la* ...
 PL.FOC shock be.full-NF EXCL EXCL POL

wo *mi* *'ê* *wen* *mutle* *wotor* *co* *khot-pal*
 DEM:PROX person who COP.EQ COP.NEG like.that lies tell-NMZ:PFV

the=gi *'lama* *wen* *ngak* *co-zi* *ra-zi* *da*
 one=GEN lama COP QUOT lie-NF come-NF now

'ai *sut-pal* *wenta* *ngak-si*
 grandmother kill-PFV COP.EQ.MIR QUOT

‘Then, so, others, inside there was no food, there was nothing, the old woman didn’t come out and the people were so shocked, “hey, now, that man who is nothing, the lie-telling man came lying saying “I am a lama” and now he killed the old woman”, they said.’

tsheni *wo* *'ai* *khepi* *bo* *the*
 then DEM:PROX grandmother FOC.GEN son one

nawal *wenta* *wo* *bo* *khepo*
 COP.EXIS COP.EQ.MIR DEM:PROX son FOC

tshong-na *gi* *nawal* *wenta*
 trade=LOC go COP.EXIS COP.MIR

‘Then, that grandmother had a son, that son had gone for trade.’

tshemo tshe tshong-na ge ngak-si ... tshe lok ra-tak
 but DM trade=LOC go do-NF DM return come-IPFV

wenta
 COP.EQ.MIR

‘But he had gone for trade and so he was coming back.’

bo lok ra-mo tshe trong=ni mi gapoi wici
 son return come-CTM DM village=ABL person PL.FOC.ERG 2.GEN

'aiya wotor mi the ra-zi co khot-si
 grandmother like.that person one come-NF lie tell-NF

'lam Drukpa Künle wen ngak lap-si
 lamaDrukpa Künle COP.EQ QUOT say-NF

tshé wotor me nang=o dam brek-shang
 DM like.that house inside=LOC lock keep-PFV.EGO

‘When the son came back then the people from the village said “your grandmother, a man like that came, telling lies, saying “I am Drukpa Künle” and like that she was locked inside the house.’

dam brek-si dasum ngâ-mo nen drô ge-shang da
 lock keep-NF today do-CTM day six go-PFV.EGO now

‘Since being locked to today six days have gone.’

da nei hapta the phi=ra ma-phi-ye
 now 3.PL.EXL.ERG week one open=EMPH NEG-open-IMP

ngak-ta da nen drô ge-shang ...
 do-IPFV.MIR now day six go-PFV.EGO

‘Now, we, for one week, say “do not open the door at all”. Now six days are gone.’

tshé bo 'namisami tsikpa za-zi
 then son very anger become-NF

shui ... mi canglong ...
 grrrr person crazy

'ê wen mutle ra-zi
 who COP.EQ NEG.EXIS.COP come-NF

wotor ngaci 'ai sut-pal
 like.that 1.GEN grandmother kill-NMZ:PFV

wenta ngaksi tshe
 COP.EQ.MIR QUOT DM

‘The the boy, becoming very angry says “grr.. a crazy man, who is no one, comes like that and killed my grandmother.’

tshe chösham khepo hapta the ko
 DM alter.room FOC week one door

ma-phi-ye ngâ-khan khepo khî
 NEG-open-IMP do-NMZ:IPFV FOC 3.ERG

ko phis thung-wal wenta
 door open do-NMZ:PFV COP.MIR

‘So this alter room door that was said not be opened, he opened this door.’

ko phis thung ge-mo nang=o
 door open do go-CTM inside=LOC

'namisami ozi drizang=gi bri sang
 very then saffron.milk=GEN aroma incense.type

thung-wal pita bri lemtoka
 do-NMZ:PFV like aroma sweet

'nam-zi wotor
 emit-NF like.that

ne tsha-sal pita yö bar-zi nâ=ri
 sun shine-NMZ:PFV like shine burn-NF COP.EXIS.MIR=HSY

‘When he opened the door inside then there was a very sweet smell like saffron-milk incense coming out.’

tshe wudi=na
 DM DEM:DIST=LOC

palang=gi .. *palang* *nawal* *wenta* *palang=gi* *jedo*
 bed=GEN bed COP.EXIS COP.MIR bed=GEN RN:TOP

thila *the* *dar-na=ri,* *tawa=i* *thila* *the*
 thumb one remain-PFV.MIR=HSY leg=GEN thumb one

‘And then, the bed’s ... there was a bed. On the top of the bed there was a thumb, a thumb of a foot (big toe).’

tshe *mapa* *'ai* *khepo* *mira*
 DM originally grandmother FOC others

se-mal *khepo* *'lama=gi* *bran* *'lama=gi*
 die-NMZ:IRR FOC lama=ERG know lama=ERG

bran-cining *tshe* *zhingkham=na*
 know-IPFV:IMM DM heaven=LOC

drang-wal *wenta* *khakto,*
 give.HON-NMZ:PFV COP.MIR DIR:UP

‘So the lama knew that the old woman was actually going to die, and knowing she was going to die, the lama offered her up to heaven.’

zhingkham=na *drang-mo* *tshe* *traim*** ... *dutshot*
 heaven=LOC give.HON-CTM DM time (<English) time

ma-tshang-wala
 NEG-complete-PFV

‘At the time of being offered to heaven, the time hadn’t completed.’

tshe *dutshot* *khepo* *hapta* *the* *ko* *ma-phi-ye*
 then time FOC week one door NEG-open-IMP

ngak *bre-mo* *tshe* *dutshot*
 QUOT keep-CTM DM time

mat-shang-wa=na *ko* *phis* *thung-wal=i*
 NEG-complete-NMZ=LOC door open do-NMZ:PFV=GEN

o *thila* *khepo* *tshe*
 DEM.PROX thumb FOC DM

aaa ... jayö dre=na ye-zi ma-gi-wala tshe
 EXCL ... rays demon=LOC disappear-NF NEG-go-PFV DM

dar-wal wenta
 remain-NMZ:PFV COP.EQ.MIR

‘Then the time “do not open the door for one week”, while the time hadn’t completed, in opening the door the big toe, aaaa, the bog toe didn’t disappear into demon rays; it remained.’

tshe wotor=rang
 DM like.this=EMPH

tshe wo khepo mira ’lam Drukpa Künle
 DM DEM:PROX FOC others lama Drukpa Künle

jinlap=gi ngaksi ’ai
 blessing=GEN QUOT grandmother

khepo thori=na drang-wal=i korni
 FOC godly.realm=LOC give.hon-NMZ=GEN RN:ABT

wenta ngak wo sung khepo mapa
 COP.EQ.MIR do DEM.PROX story FOC originally

wakti wenta
 this.much COP.EQ.MIR

‘And so just like this, all this, this story is about the blessing of Drukpa Künle offering the old woman up to the Godly realm; it’s just this much.’

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ngat *khepo=yang* *ngak-si* *net* *sum-bakti* *yang-zi*
1.ABS FOC=also do- NF 1.PL.ABS three-APRX stand-NF

nâ
COP.EXIS.MIR

‘I was standing, there were about three of us who were standing’

bar=to *yam=na* *jong-khan* *'ê=yang* *mutna*
RN:MID=LOC path=LOC emerge-NMZ:IPFV who=also COP.EXIS.NEG.MIR

‘There was no one who got off along the way’

net *sum* *ngâ-walthe* *yang-zi*
1.PL.ABS three do- PFV.IMM stand-NF

‘The three of us were there standing’

yang *yang-sa=na* *Phuntsholing thrak-shang* *ngai*
stand stand-NMZ:PL=LOC Phuntsholing arrive-PFV.EGO 1.ERG

‘While standing I arrived at Phuntsholing’

charo *sum-ta* *ri* *gina* *wo* *basgi* *wo*
friend three-EMPH fall go-PFV.MIR PROX:DEM bus=GEN PROX:DEM

bar-ni *thun=do* *gwar-zi* *se-sal* *sisâ*
RN:MID-CFOC DIST=LOC go-NF die-PFV like

yang *yang-sa=na* *ngai* *thrak-shang* *Phuntsholing=go*
stand stand-NMZ:LOC=LOC 1.ERG arrive-PFV.EGO Phuntsholing=LOC

‘(My) three friends fell down in the middle of that bus, going like they had died; (but) standing, I arrived at Phuntsholing’

APPENDIX C

META-DATA

Table 158. Kurtöp consultants

Initials	Gender	Y.O.B.	Home	Residence	Occupation	Education	Marital Status	Languages Spoken
CD	F	unknown	Dungkar	Thimphu	Student	7th grade	Single	English, Dzongkha
Ch	F	1952	Dungkar	Thimphu	Housewife	unknown	Married	Dzongkha, Tshangla, Chocangaca, Bumthap
CL	F	unknown	Shawa	Zilukha	Housewife	unknown	Married	Dzongkha
DT	M	1957	Cakzom	Cakzom	Housewife/ Shopkeeper	unknown	Married	Dzongkha, Tshangla, Chocangaca, Dzala, Tibetan
JT	M	1984	Cakzom	Thimphu	Student	B.A. Kanglung	Single	Dzongkha, English, Nepali, Hindi, Tshangla
JW	M	1971	Cakzom	Cakzom	Khempo	Monk	Single	English, Tibetan, Chocangaca, Dzongkha, Hindi, Nepali
KaTsh	M	1983	Tabi	Tabi	unknown	unknown	unknown	unknown
KD	F	1951	Jasabi	Jasabi	unknown	unknown	unknown	unknown
KeD	F	1981	Gangzur	Gangzur	UN Volunteer	B.A.	Single	Dzongkha, English, Hindi, Japanese (some)
KeT	M	1939	Siwi	Siwi	Farmer	unknown	Married	Dzongkha, Chocangaca
KL	M	1984	Tabi	Thimphu	Administrative Officer	B.A. Hons. (English) Kanglung	Married	Dzongkha, English, Nepali, Hindi, Tshangla
KN	M		Tabi	Zilukha (deceased)	Tour Guide	unknown	Married	Dzongkha, English
KT	M	1968	Tabi	Monggar/ Thimphu	BBC Reporter	Semtokha	Married	Dzongkha, Tibetan, Hindi
KW	M	unknown	Wawe	U.S.A.	Taxi Driver	unknown	Married	Bumthap, Dzongkha, English, Hindi, Nepali

KZ	M	1967	Tabi	Tabi	Ex-Monk		Married	Dzongkha
LC	M	1951	Singnar	Singnar	Lama	unknown	Married	Dzongkha
MG	M	before 1950	Tabi	Tabi	Lay monk	Monastic education	Married	Dzongkha, Tshangla
P	F	1966	Tabi	Tabi	Housewife	uneducated (but 4 years of NFA)	Married	Dzongkha
PC	M	1977	Tabi	Japan	Sales	B.A. (Business) University of Oregon	Married	Dzongkha, English, Bumthap, Hindi, Nepali
Ph	M	1967	Tabi	Tabi	unknown	unknown	unknown	unknown
PL	M	1983	Gangzur	Lhüntsi	Teacher	B.A. Kanglung	Single	Dzongkha, English, Nepali, Hindi, Tshangla
PS	F	1978	Gangzur	Gangzur	Farmer	unknown	Married	unknown
PY	F	1985	Jasabi	Jasabi		unknown	Widowed	unknown
S	F	1943	Tabi	Thimphu	Housewife	Uneducated	Widowed	Dzongkha, Chocangaca, Tshangla
SaP	M	1987	Tabi	Kanglung	Student	Pursuing B.A. (Physical Science)	Single	Dzongkha, English, Nepali, Hindi, Tshangla
SaT	M	1991	Tabi	Tabi	Unemployed	3rd grade	Single	Dzongkha, English (some)
Se	M	unknown	unknown	Thimphu	Weaver	unknown	unkown	unknown
SJ	M	1987	Gangzur	Kanglung	Student	Pursing B.A.	Single	Dzongkha, English, Nepali, Hindi, Tshangla
SL	F	1992	Dungkar	Thimphu	unknown	unknown	Single	Dzongkha, Bumthap
SoP	M	1974	Tabi	Tabi	unknown	unknown	unknown	Dzongkha, Bumthap
SP			Tabi	Thimphu				
SPh	M	1941	Gangzur	Gangzur	unkown	some	unknown	Dzongkha, Hindi
ST	M	1989	Ne	Kanglung	Student	Pursuing B.A.	Single	Dzongkha, English, Nepali, Hindi, Tshangla
SW	M	1976	Tabi	Tabi	Farmer	none	Divorced	Dzongkha
T	F	~1964	Tabi	Tabi	unknown	unknown	unknown	unknown
TC	F		Gangzur	Gangzur	Potter	unknown	unknown	unknown
Th	M	1955	Tabi	Tabi	'Mangap	Monastic	Married	Chocanga, Dzongkha, Tshangla
To	M	~1960	Dungkar	Dungkar	Farmer	none	Married	Chocangaca, Dzongkha

TrD	M	1953						
TrT	M	~1985	Jang	Thimphu	Tour Guide	Class 12	Single	English, Dzongkha
Ts	F	1957	Cakzom				Married	Dzongkha, Dzala, Chocangaca, Tibetan, Nepali
TT	F	1947	Jasabi	Jasabi	Farmer	unknown	Widowed	Dzongkha
TW	M		Tangmachu	Kanglung	Lecturer	M.A. Australia	Married	Dzongkha, English, Chocangaca
TY	F	1968	Ne	Monggar	Housewife/ Shopkeeper		Married	Dzongkha, Hindi, Nepali, Chocangaca, Tshangla
UG	M	1982	Nyare	Nyare	Farmer/ Lay Monk		Married	Dzongkha
UT	F	1969	Dungkar	Thimphu				Dzongkha, Tshangla, Chocangaca, Bumthap
W	F		Shawa	Zilukha	High court financer admin.	Class 12		Dzongkha, English
YD	M	1954	Tergang	Thimphu	Indigenous Medicine Specialist	unknown	Married	Dzongkha, Tshangla, Tibetan, Khengkha, Chocangaca, Dzala
Z	F		Gangzur	Gangzur	Potter			

Table 159. Kurtöp recordings

File Name	Text Details	Recorders	Format	Date		
				Recorded	Speakers	Others present
baskets200810223	KeD naming baskets in Gangzur	GH	.mpg	20081022	GH	
beans20081022	preparing beans for cooking	GH	.mpg	20081022	KTsh	
birds200810211	Discussing bird names		.wav	20081021	GH	
birds2008102125	Discussing bird names		.wav	20081021	GH	
birds20090917.1	SaT and SW name birds with KTsh and GH	GH	.wav	20090917	SaT, SW, KTsh, GH	
birds20090917.2	SaT and SW name birds with KTsh and GH	GH	.wav	20090917	SaT, SW, KTsh, GH	
CakzomCon20081231	JT tries to convince family members to speak		200 812 31	JT	TS	
carpentry200810221	KeD & SPh discuss carpentry tools	KeD, SPh	200 810 22	GH		
carpentry200810222	KeD & SPh discuss carpentry tools	KeD, SPh	200 810 22	GH		
carpentry200810223	KeD & SPh discuss carpentry tools	KeD, SPh	200 810 22	GH		
churning200810221			.mpg	20081022	GH	
churning200810222			.mpg	20081022	GH	
CO200802201	Cooking outside in Tabi	GH & KTsh	.mpg	20080220	P	
CO200802202	Cooking outside in Tabi	GH & KTsh	.mpg	20080220		
CO200802203	Cooking outside in Tabi	GH & KTsh	.mpg	20080220		
COW20061206	Creation of the World	GH & KTsh				S
cutrice20081022	KeD naming cut rice		.mpg	20081022	GH	
DCInterview20081231	JT interviews DC on a number of topics	JT	.wav	20081231	JT, LC	
DungkarTS20081231	TS narrates some aspects of Dungkar history	JT	.wav	20081231		
intro20090915	KTsh introduces recording of plants with SaT and SW	GH	.wav	20090915	KTsh, SaT, SW	

JT.JW20090101	JT glossing some Kurtöp words and a narration from JW		.wav	20090101	JT	
JT20090111	JT narrating his education history	GH	.wav	20090111	GH	
JTbirds20080824	Recording the bird names JT collected in his village	GH	.wav	20080824	JT	PL
JTmammals20080824	Recording the mammal names JT collected	GH	.wav	20080824	JT	PL
JTStory200901111	JT narrates a story	GH	.wav	20090111	GH	
JTStory200901112	JT narrates a story	GH	.wav	20090111	GH	
JTwords20081231	JT glosses some Kurtöp words		.wav	20081231	JT	
JWkhempo20090101	JW narrates a story about Anti Buddhist followers	JT		20090101		
karma20090913	KTsh gives a short and silly interview. Some natural conversation is in the background		.wav	20090913		KT, Ch, YJ, CD
Kconv2008082401	PL, ST, SJ talking in Kanglung	GH	.mp3	20080824		
Kconv2008082402	PL, ST, SJ talking in Kanglung	GH	.mp3	20080824		
Kconv2008082403	PL, ST, SJ talking in Kanglung	GH	.mp3	20080824		
Kconv2008082404	PL, ST, SJ talking in Kanglung	GH	.mp3	20080824		
Kconv2008082405	PL, ST, SJ talking in Kanglung	GH	.mp3	20080824		
KD20080515		GH & KTsh		20080515		
KDP20080515	Künza Dröma reciting priu	GH & KTsh		20080515	P, PZ	
khempos20090101	TrD, KeT introduce themselves and tell a short story	JT	.wav	20090101		
kitchen20081022	KeD naming kitchen utensils		.mpg	20081022	GH	
KS20061212	Kuenga's Story about an old woman meeting Drukpa Künle	GH		20061212	KL	
KT20090101	JT interviews KT	JT		20090101		
KZ20080515	Karma Zangpo	GH & KTsh		20080515	KZ	

	introducing Kurtö, talking about Rinchen Bumpa, hot springs and Khempa Jong					
Lama200812311	Lam Cung narrates a story about 3 Zangpos	JT	.wav	20081231	LC	
Lama200812312	Lam Cung discusses torma	JT		20081231	DC	
lock20081022	KeD names parts of door & lock		.mpg	20081022	KTsh	
loom20081022	KeD names loom parts and others		.mpg	20081022	GH	
marsang20090111	JT narrates the story 'Marsang Cage Phurpa' (check name!!)	GH	.wav	20090111		
MG200605	Meme Gyeltshen's narrative about his journey on foot to Thimphu to join the army	KL	200 705	MG	KL	
mill20081022	KeD names objects in mill		.mpg	20081022	GH	
MT20080530	Meme Tshipa discussing Tangmachu	GH & KTsh	200 805 30	MT		
phrummaking200810221			.mpg	20081022	GH	
phrummaking200810222			.mpg	20081022	GH	
phrummaking200810223			.mpg	20081022	GH	
phrummaking200810224			.mpg	20081022	GH	
PLanimals20080824	Recording the animal names PL collected	GH	.wav	20080824	PL	JT
plants200810221	KeD naming plants in Gangzur		.mpg	20081022	KTsh	
plants200810221	GH, KeD & KTsh getting plant names		.wav	20081022	GH	
plants2008102214	KeD naming plants in Gangzur		.mpg	20081022	KTsh	
plants2008102218	KeD naming plants in Gangzur		.mpg	20081022	KTsh	
plants2008102219	KeD naming plants in		.mpg	20081022	KTsh	

	Gangzur				
plants200810222	KeD naming plants in Gangzur	.mpg	20081022	KTsh	
plants200810222	GH, KeD & KTsh getting plant names	.wav	20081022	GH	
plants2008102221	KeD naming plants in Gangzur	.mpg	20081022	KTsh	
plants2008102224	corn details	.mpg	20081022	KTsh	
plants2008102226	pomegranate details	.mpg	20081022	KTsh	
plants2008102229	Szechuan pepper details	.mpg	20081022	KTsh	
plants200810223	KeD naming plants in Gangzur	.mpg	20081022	KTsh	
plants200810223	GH, KeD & KTsh getting plant & other names	.wav	20081022	GH	
plants2008102230	KeD naming plants in Gangzur	.mpg	20081022	KTsh	
plants2008102238		.mpg	20081022	KTsh	
plants200810224	KeD naming plants in Gangzur	.mpg	20081022	KTsh	
plants200810224	GH, KeD & KTsh getting plant & other names, especially pots	.wav	20081022	GH	
plants200810225	KeD naming plants in Gangzur	.mpg	20081022	KTsh	
plants200810225	GH, KeD & KTsh getting plant & other names	.wav	20081022	GH	
plants200810226	KeD naming plants in Gangzur	.mpg	20081022	KTsh	
plants200810226	GH, KeD & KTsh getting plant & other names	.wav	20081022	GH	
plants200810227	KeD naming plants in Gangzur	.mpg	20081022	KTsh	
plants200810227	GH, KeD & KTsh getting plant & other names	.wav	20081022	GH	
plants200810229	KeD naming plants in Gangzur	.mpg	20081022	KTsh	
plants20090915	SaT and SW name plants we discovered in the jungles	GH	.wav	20090915	SaT, SW, KTsh

plants20090916.1	SaT and SW name plants we discovered in the jungles	GH	.wav	20090916	SaT, SW, KTsh
plants20090916.2	SaT and SW name plants we discovered in the jungles	GH	.wav	20090916	SaT, SW, KTsh
plants20090916.3	SaT and SW name plants we discovered in the jungles	GH	.wav	20090916	SaT, SW, KTsh
plants20090916.4	SaT and SW name plants we discovered in the jungles	GH	.wav	20090916	SaT, SW, KTsh
plants20090916.5	SaT and SW name plants we discovered in the jungles	GH	.wav	20090916	SaT, SW, KTsh
plants20090916.6	SaT and SW name plants we discovered in the jungles	GH	.wav	20090916	SaT, SW, KTsh
plants20090917.1	SaT and SW name plants we discovered in the jungles	GH	.wav	20090917	SaT, SW, KTsh
plants20090917.2	SaT and SW name plants we discovered in the jungles	GH	.wav	20090917	SaT, SW, KTsh
plants20090917.3	SaT and SW name plants we discovered in the jungles	GH	.wav	20090917	SaT, SW, KTsh
plants20090917.4	SaT and SW name plants we discovered in the jungles	GH	.wav	20090917	SaT, SW, KTsh
plowing200802192	Karma Tshering interviewing Sonam Wangdi about plowing	GH	.mpg	20080219	SW KTsh, GH, unknown
plowing200802193	A farmer plowing with more plowing and conversation between KTsh & unknown in background	GH & KTsh	.mpg	20080219	
plowing200802195	Farmers plowing the field	GH & KTsh	.mpg	20080219	
plownames20081022	KeD and SPh discussing plowing parts		.mpg	20081022	GH
pot.planting200802138	Women planting potatoes and a man	GH	.mpg	20080213	P,

	plowing					
pots200810221	KeD naming pots and pottery utensils		.mpg	20081022	KTsh	
pots2008102210	KeD naming pots and pottery utensils		.mpg	20081022	KTsh	
pots200810222	KeD naming pots and pottery utensils		.mpg	20081022	KTsh	
pots200810223	KeD naming pots and pottery utensils		.mpg	20081022	KTsh	
pots200810224	KeD naming pots and pottery utensils		.mpg	20081022	KTsh	
pots200810225	KeD naming pots and pottery utensils		.mpg	20081022	KTsh	
pots200810226	KeD naming pots and pottery utensils		.mpg	20081022	KTsh	
pots200810227	KeD naming pots and pottery utensils		.mpg	20081022	KTsh	
pots200810228	KeD naming pots and pottery utensils		.mpg	20081022	KTsh	
pots200810229	KeD naming pots and pottery utensils		.mpg	20081022	KTsh	
pottery20081021	KeD interviewing Z and TC about pottery		.wav	20081021	GH	
pottery200810211	KeD interviewing Z and TC about pottery	GH	.mpg	20081021	TD, Z, TC, GH	others, unknown villages
pottery200810212	KeD interviewing Z and TC about pottery	GH	.mpg	20081021	TD, Z, TC, GH	others, unknown villages
PS20061206	Peldon narrating the story of Kala Wangpo	GH & KTsh		20061206	P	
PY20080514	Pema Yangdzom talking about Jasabi Priu	GH & KTsh		20080514	PY	
red.panda20080824	JT relaying a proverb about the Red Panda	GH	.wav	20080824		
riceharvest20081022	KeD & GH interview PS about harvesting & village work		.wav	20081022	GH	
riceharvest200810221	KeD & GH interview PS about harvesting & village work		.mpg	20081022	KTsh	
riceharvest2008102210	KeD & GH interview PS about harvesting & village work		.mpg	20081022	KTsh	
riceharvest2008102211	KeD & GH interview		.mpg	20081022	KTsh	

	PS about harvesting & village work					
riceharvest2008102212	KeD & GH interview PS about harvesting & village work		.mpg	20081022	KTsh	
riceharvest2008102213	KeD & GH interview PS about harvesting & village work		.mpg	20081022	KTsh	
riceharvest2008102214	KeD & GH interview PS about harvesting & village work		.mpg	20081022	KTsh	
riceharvest2008102216	Conclusion of KeD, DH & PS interview		.mpg	20081022	KTsh	
riceharvest200810222	KeD & GH interview PS about harvesting & village work		.mpg	20081022	KTsh	
riceharvest200810223	KeD & GH interview PS about harvesting & village work		.mpg	20081022	KTsh	
riceharvest200810224	Two women harvesting rice		.mpg	20081022	KTsh	
riceharvest200810225	Two women harvesting rice		.mpg	20081022	KTsh	
riceharvest200810226	Two women harvesting rice		.mpg	20081022	KTsh	
riceharvest200810229	KeD & GH interview PS about harvesting & village work		.mpg	20081022	KTsh	
roof20081022	KeD names rooves		.mpg	20081022	GH	
SaT.SW20090915	SaT and SW are engaged in conversation enroute from Thimphu to Wangdi		.wav	20090915	Sat & SW	GH & KTsh
SaT.SW20090917	SaT and SW engaged in conversation in Wangdi	GH & KTsh	.wav	20090917	Sat & SW	GH & KTsh
SBC320051127	Santa Barbara Conversations Day 2_3	GH & RY		20051127	PC & KW	GH & RY
SBC420051127	Santa Barbara Conversations Day 2_4	GH & RY		20051127	PC & KW	GH & RY
SBC520051127	Santa Barbara Conversations Day 2_5	GH & RY		20051127	PC & KW	GH & RY
SBC720051127	Santa Barbara	GH & RY		20051127	PC &	GH & RY

	Conversations Day 2_7					KW
SBC820051127	Santa Barbara Conversations Day 2_8	GH & RY		20051127	PC & KW	GH & RY
SBC920051127	Santa Barbara Conversations Day 2_9	GH & RY		20051127	PC & KW	GH & RY
shelters20081022	KeD names 2 shelters in Gangzur		.mpg	20081022	GH	
shingchen20090111	JT narrates the story 'Shingchen Tali Dongpo'		.wav	20090111	GH	
SI20061212	Seldon's Inteviu about village vs. city life	GH	200 612 12	SP		SP, KL, baby
song20090913.1	Ch, SL and UT sing a Kurtöp song (same as song20090913.1SL)	GH	.wav	20090913	Ch, SL, UT,	GH, KTsh, KT, YD
song20090913.1	SL, UT and Ch sing a song	GH	.wav	20090913	SL, UT, Ch	
song20090913.1SL	Ch, SL and UT sing a Kurtöp song, with the mic mounted on SL (same as song20090913.1)	GH	.wav	20090913	Ch, SL, UT,	KTsh, GH, KT, YD, unknown
song20090913.2	Ch, SL and UT sing a Kurtöp song (same as song20090913.2SL)		.wav	20090913	Ch, SL, UT,	
song20090913.2	SL, UT and Ch sing a song	GH	.wav	20090913	SL, UT, Ch	
song20090913.2SL	Ch, SL and UT sing a Kurtöp song, with the mic mounted on SL (same as song20090913.2)	GH	.wav	20090913	CH, SL, UT	GH
sormi20090111	JT narrates the story 'Sormi Threngwa'		.wav	20090111	GH	
SPhTsC20081022	SPh & TsC discuss life in the village & SPh tells a story		.wav	20081022	GH	
SPhTsC200810221	SPh & TsC discuss life in the village & SPh tells a story		.mpg	20081022	KTsh	
SPhTsC200810222	SPh & TsC discuss life in the village & SPh tells a story		.mpg	20081022	KTsh	

	Sherab Pemo Interview about village vs. city					
SPI20061212	life	GH		20061212	SP	S, KL, baby
Thimphu20090913.1	YD and Ch engaged in normal household conversation	GH	.wav	20090913	YD, Ch, ?	GH
Thimphu20090913.1M AR	Conversation in Thimphu	GH	.wav	20090913	YD, Ch, KT, UT, SL	GH, KTsh
Thimphu20090913.2	Conversation at a Kurtöp's home in Thimphu	GH	.wav	20090913	KT, YD, Ch	GH, KTsh, CD
Thimphu20090913.2M AR	Conversation in Thimphu	GH	.wav	20090913	YD, Ch, KT,	GH, UT, SL, KTsh
Thimphu20090913.3	Conversation at a Kurtöp's home in Thimphu, some English and Dzongkha in background	GH	.wav	20090913	KT, YD, Ch, CD	GH, KTsh
Thimphu20090913.4	short conversation about Karma's camera	GH	.wav	20090913	KT, YD	GH, KTsh
Thimphu20090913.5	Conversation while I am preparing to record	GH	.wav	20090913	KT, Ch	GH, KTsh, CD, SL, UT
Thimphu20090913.6	Conversation about my Kurtöp research, including Dzongkha conversation between KTsh & KT		.wav	20090913	KT, KTsh, SL, UY, Ch	GH, CD
Thimphu20090913.7	SL, UT and Ch give lyrics for their songs. There is a short explanation in Dzongkha and then KT and YD continue on in Kurtöp conversation		.wav	20090913	SL, UT, Ch, KT, YD, KTsh	GH
TInterview20090106	JT interviews To about himself and Dungkar			20090106	JT	DC
TT20080514	Tshering Tshomo talking about Jasabi Priu	GH & KTsh		20080514	TT, PY, KTsh	GH
w.working200802193	KTsh interviewing Ph about his work	GH	.mpg	20080219	Ph, KTsh	
w.working200802194	KTsh interviewing KaTsh & T about their work	GH	.mpg	20080219	KTsh, KaTsh, D	

w.working200802195	KTsh interviewing SP about his work	GH	.mpg	20080219	
women20090913	SL, UT, and Ch engaged in conversation, first about history of singing in Dungkar before moving on to other topics	GH	.wav	20090913	
words20090913.1	Ch, UT and SL say the lyrics of the first song they sang (song20090913.1)		.wav	20090913	KT, Ch, UT, SL
words20090913.2	Ch, UT and SL say the lyrics of the second song they sang (song20090913.2)		.wav	20090913	KTsh, Ch, UT, SL GH

REFERENCES CITED

- Ahga, Asif. 1998. Stereotypes and registers of honorific language. *Language in Society* 27(2): 151-193.
- Aldenderfer, Mark, and Zhang Yinong. 2004. The Prehistory of the Tibetan Plateau to the Seventh Century A.D.: Perspectives and Research from China and the West Since 1950. *Journal of World Prehistory* 18, 1(3): 1-55.
doi:[10.1023/B:JOWO.0000038657.79035.9e](https://doi.org/10.1023/B:JOWO.0000038657.79035.9e).
- Alpatov, Vladimir M., and Vera Podlesskaya. 1995. Converbs in Japanese. In *Converbs in cross-linguistic perspective: structure and meaning of adverbial verb forms - adverbial participles, gerunds*, 465-486. Empirical approaches to language typology 13. Berlin/New York: Mouton de Gruyter.
- Anderson, Gregory D.S. 2006. *Auxiliary verb constructions*. Oxford: Oxford University Press.
- Anderson, Gregory D.S., K. David Harrison, and Ganesh Murmu. 2009. The Aka-Miji language cluster of the Kameng region, Arunachal Pradesh. Paper presented at the 15th Himalayan Languages Symposium, August 1, Eugene, OR.
- Andvik, Erik. to appear. Tshangla orthography. In *North East Indian Linguistics 4*. New Delhi: Foundation/Cambridge University Press.
- . 2003. Tshangla. In *The Sino-Tibetan languages*, 439-455. London/New York: Routledge.
- . 2010. *A grammar of Tshangla*. Leiden/Boston: Brill.
- Balodis, Uldis. 2009. The numeral system of Dzala, a language of eastern Bhutan presented at the 15th Himalayan Languages Symposium, August 1, Eugene, OR.
- Barnes, Gina. 1993. *China, Korea and Japan: the rise of civilization in East Asia*. London: Thames & Hudson.
- Baruah, K.L. 1962. *Early history of Kamarupa, from the earliest times to the end of the sixteenth century*. Guwahati: Lawyer's Book Stall.

- Bellezza, John. 2008. *Zhang Zhung: foundations of civilization in Tibet: a historical and ethnoarchaeological study of the monuments, rock art, texts, and oral tradition of the ancient Tibetan upland*. Wien: Österreichischen Akademie der Wissenschaften.
- Benedict, Paul. 1972. *Sino-Tibetan, a conspectus*. Cambridge: University Press.
- Beyer, Stephan. 1992. *The classical Tibetan language*. Albany: State University of New York Press.
- Bickel, Balthasar. 1998. Review article: Converbs in cross-linguistic perspective. *Linguistic Typology* 2(3): 381-397.
- Borah, Gautam K. to appear. Classifiers in Assamese and their meaning chains. In *North East Indian Linguistics 4*. New Delhi: Foundation/Cambridge University Press.
- Bossong, Georg. 1991. Differential object marking in Romance and beyond. In *New analyses in Romance linguistics*, 143-170. Amsterdam/Philadelphia: John Benjamins.
- Bradley, David. 1997. Tibeto-Burman languages and classification. In *Tibeto-Burman languages of the Himalayas*, 1-72. Papers in Southeast Asian linguistics 14. Canberra: Pacific Linguistics.
- Brantingham, J., H Ma, J Olsen, X Gao, D Madsen, and D Rhode. 2003. Speculation on the timing and nature of Late Pleistocene hunter-gatherer colonization of the Tibetan Plateau. *Chinese Science Bulletin* 48(14): 1510-1516.
- Busch, John M. 2007. Verbal nominalization in Kurtoep. University of Oregon M.A. Thesis. Eugene, OR.
- Butt, Miriam. 1993. Conscious choice and some light verbs in Urdu. In *Complex predicates in South Asian languages*, 31-46. Delhi: Manohar.
- . 1995. *The structure of complex predicates in Urdu*. Stanford CA: CSLI Publications.
- Chafe, Wallace. 1976. Givenness, contrastiveness, definiteness, subjects, topics and point of view. In *Subject and Topic*, 25-55. New York: Academic Press.
- Chakravarti, B. 1979. *A cultural history of Bhutan*. Vol. 1. 2 vols. Calcutta: Self Employment Bureau Publication.

- Chang, Kwang-chih. 1986. *The archaeology of ancient China*. 4th ed. New Haven CT.: Yale University Press.
- Chelliah, Shobhana. 1997. *A Grammar of Meithei*. Mouton Grammar Library 17 17. Berlin/New York: Mouton de Gruyter.
- Chowdhary, Runima. to appear. On classifiers in Asamiya. In *North East Indian Linguistics 4*. New Delhi: Foundation/Cambridge University Press.
- Comrie, Bernard. 1978. Ergativity. In *Syntactic typology*, 329-94. Austin: University of Texas Press.
- Coupe, Alexander. 2007. *A grammar of Mongsen Ao*. Berlin: de Gruyter.
- DeLancey, Scott. 1985. On active typology and the nature of agentivity. In *Relational Typology*, 47-107. Berlin: Mouton de Gruyter.
- . 1992. Sunwar copulas. *Linguistics of the Tibeto-Burman Area* 15, no. 1: 31-38.
- . 1998. Semantic categorization in Tibetan honorific nouns. *Anthropological Linguistics* 40, no. 1: 109-123.
- . 2003a. Lhasa Tibetan. In *The Sino-Tibetan languages*. London/New York: Routledge.
- . 2003b. Classical Tibetan. In *The Sino-Tibetan languages*, 255-269. London/New York: Routledge.
- . to appear. On the origins of Bodo-Garo. In *North East Indian Linguistics 4*. Delhi: Foundation/Cambridge University Press.
- Diffloth, Gerard. 2005. The contribution of linguistic palaeontology to the homeland of Austro-Asiatic. In *The people of East Asia: putting together archaeology, linguistics, and genetics*, 77-80. London/New York: RoutledgeCurzon.
- Ding, Picus Sizhi. 2003. Prinmi: a sketch of Niuwozi. In *The Sino-Tibetan languages*, 588-601. London/New York: Routledge.
- Dixon, R. M. W. 1972. *The Dyirbal language of North Queensland*. Cambridge: Cambridge University Press.
- . 1979. Ergativity. *Language* 55(1): 59-138.

- _____. 1994. *Ergativity*. Cambridge/New York: Cambridge University Press.
- _____. 2002. *Word: a cross-linguistic typology*. Cambridge ; New York: Cambridge University Press.
- Doley, Sarat Kumar, and Mark W. Post. to appear. Classifiers in Mising. In *North East Indian Linguistics 4*. New Delhi: Foundation/Cambridge University Press.
- Driem, George van. 1991. Report on the first linguistic survey of Bhutan. Royal Government of Bhutan.
- _____. 1995a. Black Mountain verbal agreement morphology, Proto-Tibeto-Burman morphosyntax and the linguistic position of Chinese. In *New horizons in Tibeto-Burman morphosyntax*, 229-259. Senri Ethnological Studies 41. Osaka: National Museum of Ethnology.
- _____. 1995b. *Een eerste grammaticale verkenning van het Bumthang, een taal van Midden-Bhutan: met een overzicht van de talen en volkeren van Bhutan*. Leiden: Research School CNWS.
- _____. 1997. Sino-Bodic. *Bulletin of the School of Oriental and African Studies* 60, no. 3: 455-488.
- _____. 2001a. *Languages of the Himalayas : an ethnolinguistic handbook of the greater Himalayan Region : containing an introduction to the symbiotic theory of language*. Leiden/New York: Brill.
- _____. 2001b. Zhangzhung and its next of kin in the Himalayas. In *New research on Zhangzhung and related Himalayan languages*, 31-44. Bon Studies 3. Osaka: National Museum of Ethnology.
- _____. 2004. Bhutan's endangered languages programme under the Dzongkha Development Authority: Three rare gems. In *The Spider and the Piglet: Proceedings of the First International Seminar on Bhutan Studies*, ed. by Karma Ura and Sonam Kinga., 294-326. Thimphu: Centre for Bhutan Studies. <http://www.bhutanstudies.org.bt/publications/spdr-pglt.htm>.
- _____. 2005a. Tibeto-Burman vs. Indo-Chinese. In *The Peopling of East Asia: Putting Together Archaeology, Linguistics and Genetics*, 81-106. London: Routledge.

- . 2005b. Sino-Austronesian vs. Sino-Caucasian, Sino-Bodic vs. Sino-Tibetan, and Tibeto-Burman as default theory. In *Contemporary Issues in Nepalese Linguistics*, 285-338. Kathmandu: Linguistic Society of Nepal.
- . 2007. Dakpa and Dzala form a related subgroup within East Bodish, and some related thoughts. In *Linguistics of the Himalayas and beyond*, 71-84. Berlin/New York: Mouton de Gruyter.
- Driem, George van and Karma Tshering. 1991. གཞུང་འབྲེལ་རྫོང་ཁ་ལོ་མན་ (འཛམ་གླིང་རྒྱལ་ཕྱོགས་པའི་ཡིག་ཐོག་) འབྲེལ་གསལ་ལམ་སྟོན། *Guide to Official Dzongkha Romanization*. Thimphu: Royal Government of Bhutan.
- Dwyer, Arienne M. 2006. Ethics and practicalities of cooperative fieldwork and analysis. In *Essentials of Language Documentation*, 31-66. Berlin: Mouton de Gruyter.
- Elson, Benjamin (ed.). 1964. *Verb studies in five New Guinea languages*. Norman: University of Oklahoma and Summer Institute of Linguistics.
- Epps, Patience. 2008. *A grammar of Hup*. Berlin/New York: Mouton de Gruyter.
- Eränkö, O, and L Eränkö. 1977. Morphological indications of SIF cell functions. *Advances in Biochemical Psychopharmacology* 16: 525-531.
- Fabricius, Otho. 1801. *Forsøg til en forbedret grønlandsk grammatika*. Copenhagen: E.F. Sehnsart.
- Gait, Edward. 2005. *A history of Assam*. Assam: LBS Publication, originally published in 1926.
- Garrett, Edward John. 2001. Evidentiality and assertion in Tibetan. UCLA PhD dissertation. Los Angeles: University of California - Los Angeles.
- Gayden, T. 2007. The Himalayas as a Directional Barrier to Gene Flow. *The American Journal of Human Genetics* 80(5): 884-894. doi:[10.1086/516757](https://doi.org/10.1086/516757).
- Genetti, Carol. 1988. A syntactic correlate of topicality in Newari narrative. In *Clause combining in grammar and discourse*, 29-40. Amsterdam/Philadelphia: John Benjamins.
- . 2005. The participial construction in Dolakha Newar: syntactic implications of an Asian converb. *Studies in language* 29(1): 35-87.

- . 2009. An introduction to Dzala, an East Bodish language of Bhutan presented at the 15th Himalayan Languages Symposium, August 1, Eugene, OR.
- Georg, Stefan. 1996. *Marphatan Thakali: Untersuchungen zur Sprache des Dorfes Marpha im Oberen Kāli-Gaṇḍaki-Tal Nepal*. München/Newcastle: LINCOM Europa.
- Gilchrist, J. B. 1796. *A grammar of Hindustani language*. Calcutta: the Scholar Press, Menston, reprinted 1970.
- Gippert, Jost. 2006. *Essentials of language documentation*. Berlin/New York: Mouton de Gruyter.
- Giri, Seeta. 2004. *The Vital Link: Monpas and their forests*. Thimphu: Galing Printing & Publishing.
- Grinevald, Colette. 1998. Language endangerment in South America: a programmatic approach. In *Endangered Languages: Language Loss and Community Response*, ed. by Lenore A. Grenoble and Lindsay J. Whaley, 124-159. Cambridge: Cambridge University Press.
- Groot, Casper de. 1995. The Hungarian converb or verbal adverbial in -va/-ve. In *Converbs in cross-linguistic perspective: structure and meaning of adverbial verb forms - adverbial participles, gerunds*, 283-312. Empirical approaches to language typology 13. Berlin/New York: Mouton de Gruyter.
- Gussenhoven, Carlos. 2004. *The phonology of tone and intonation*. Cambridge/New York: Cambridge University Press.
- Hale, Austin, and Iswaranand Shresthachrya. 1973. Is Newar a classifier language? *Journal of the Institute for Nepal and Asian Studies* 1(1):1-21.
- Hall, T. Alan. 1999. The phonological word: a review. In *Studies on the phonological word*. Current issues in Linguistic Theory 174. Amsterdam/Philadelphia: John Benjamins.
- Hall, T. Alan, and Ursula Kleinhenz. 1999. *Studies on the phonological word*. Amsterdam/Philadelphia: John Benjamins.
- Haspelmath, Martin. 1995a. The converb as a cross-linguistically valid category: structure and meaning of adverbial verb forms - adverbial participles, gerunds. In *Converbs in cross-linguistic perspective*, 1-56. Empirical approaches to language typology 13. Berlin/New York: Mouton de Gruyter.

- . 1995b. Contextual and specialized converbs in Lezgian. In *Converbs in cross-linguistic perspective: structure and meaning of adverbial verb forms - adverbial participles, gerunds*, 13:415-440. Empirical approaches in language typology. Berlin/New York: Mouton de Gruyter.
- Haspelmath, Martin, and Ekkehard König. 1995. *Converbs in cross-linguistic perspective : structure and meaning of adverbial verb forms-- adverbial participles, gerunds*. Berlin/New York: Mouton de Gruyter.
- Haudricourt, A. 1954. De l'origine des tons en Vietnamien. *Journal Asiatique* 242: 69-82.
- Himmelmann, Nikolaus P. 2006. Language documentation: what is it and what is it good for? In *Essentials of Language Documentation*, 1-30. Berlin: Mouton de Gruyter.
- Hoffman, H. 1967. *Žaŋ-žuŋ* The holy language of the Tibetan Bonpos. *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 117(2): 378-381.
- Hombert, J.-M. 1978. Consonant types, Vowel Quality and Tone. In *Tone: a linguistic survey*, 77-111. New York: Academic Press.
- Hook, Peter. 1974. *The compound verb in Hindi*. [Ann Arbor]: University of Michigan Center for South and Southeast Asian Studies.
- . 1977. The distribution of the compound verb in the languages of North India and the question of its origin. *International Journal of Dravidian Linguistics* 6: 336-351.
- . 1991. The emergence of Perfective aspect in Indo-Aryan languages. In *Approaches to grammaticalization*, 2: 59-89. Typological Studies in Language 19. Amsterdam/Philadelphia: John Benjamins.
- Huang, W. 1984. The prehistoric human occupation of the Qinghai-Xizang plateau. *Göttinger Geographische Abhandlungen* 95: 201-219.
- Huber, Brigitte. 2005. *The Tibetan Dialect of Lende (Kyirong): a grammatical description with historical annotations*. Bonn: VGH Wissenschaftsverlag GmbH.
- Hummel, S. 1986. Der Ursprung der Sprache von Zhang-Zhung. *Journal of the Tibet Society* 6: 3-16.
- . 1995. Neues Material zur Sprache von Zhang-Zhung. *Acta Orientalia* 56: 162-168.

- Huo, W. 2000. Jin shi nian Xizang kao gu de fa xian yu yan jiu [Archaeological findings and researches in the late ten years]. *Wenwu* 8(85).
- Hyslop, Gwendolyn. 2008. Kurtöp phonology in the context of Northeast India. In *Northeast Indian Linguistics 1: papers from the first International Conference of the North East Indian Linguistic Society*, 3-25. Delhi: Foundation/Cambridge University Press.
- _____. 2009. Kurtöp Tone: A tonogenetic case study. *Lingua* 119 (6): 827-845. doi:10.1016/j.lingua.2007.11.012.
- _____. 2010. Kurtöp case: the pragmatic ergative and beyond. *Linguistics of the Tibeto-Burman Area* 33 (1): 1-40.
- Hyslop, Gwendolyn, and Karma Tshering. 2010. Preliminary notes on Dakpa (Tawang Monpa). In *North East Indian Linguistics 2*. New Delhi: Cambridge University Press/Foundation.
- Johanson, Lars. 1995. On Turkic converb clauses. In *Converbs in cross-linguistic perspective: structure and meaning of adverbial verb forms - adverbial participles, gerunds*, 312-348. Empirical approaches to language typology 13. Berlin/New York: Mouton de Gruyter.
- Kakati, B. 1941. *Assamese, its formation and development: a scientific treatise on the history and philology of the Assamese language*. 2nd ed. Guwahati: Lawyer's Book Stall.
- Kellogg, S. H. 1875. *A grammar of the Hindi language*. London: Routledge and Kegan Paul, reprinted in 1938, 1965.
- Kingston, John. 2004. Mechanisms of tone reversal. In *Proceedings of the Third Symposium on Crosslinguistic Studies of Tone*, 57-120. Tokyo: Institute of the Study of the Languages and Cultures of Asia and Africa, Tokyo University of Foreign Studies,
- Klaproth, Julius Heinrich von. 1823. *Asia Polyglotta*. Paris: A. Shubart.
- LaPolla, Randy. 1995. 'Ergative' marking in Tibeto-Burman. In *New horizons in Tibeto-Burman morphosyntax*, 189-228. Osaka: National Museum of Ethnology.
- _____. 2001a. The role of migration and language contact in the development of the Sino-Tibetan language family. In *Areal diffusion and genetic inheritance: case studies in language change*. Oxford: Oxford University Press.

- . 2001b. The role of migration and language contact in development of the Sino-Tibetan language family. In *Areal diffusion and genetic inheritance: case studies in language change*, 225-54. Oxford: Oxford University Press.
- . 2003a. Qiang. In *The Sino-Tibetan Languages*, 573-587. London/New York: Routledge.
- . 2003b. Overview of Sino-Tibetan morphosyntax. In *The Sino-Tibetan languages*, 22-42. London/New York: Routledge.
- Lawrence, Martin. 1972. Structure and function of Oksapmin verbs. *Oceanic Linguistics* 11(1): 47-66.
- Lee, G.-A., G. W. Crawford, L. Liu, and X. Chen. 2007. Plants and people from the Early Neolithic to Shang periods in North China. *Proceedings of the National Academy of Sciences* 104, 3(1): 1087-1092.
doi:[10.1073/pnas.0609763104](https://doi.org/10.1073/pnas.0609763104).
- Lewis, M. Paul. 2009. *Ethnologue: Languages of the World*. 16th ed. Dallas, TX: SIL International. <http://www.ethnologue.com/>.
- Lillehaugen, Brook Danielle. 2004. Syntactic and semantic development of body part prepositions in Valley Zapotec languages. In *Proceedings from the Sixth Workshop on American Indian Languages*, 69-82. Santa Barbara: Santa Barbara Papers in Linguistics, University of California Santa Barbara.
- Lisker, L, and A. Abramson. 1964. A Cross-Language Study of Voicing in Initial Stops: Acoustical Measurements 20: 384-422.
- Liu, Li. 2004. *The Chinese neolithic : trajectories to early states*. Cambridge UK ; New York: Cambridge University Press.
- Liu, Z., and F. Wang. 1986. Xi zang gao yuan duo ge ze yu zha bu di dian de jiu shi qi—jian lun gao yuan gu huan jing dui shi qi wen hua fen bu de ying xiang [Paleoliths from the Duogeze and Zhabu sites of the Tibetan plateau—On the paleo-environmental influence on the distribution of stone culture on Tibetan plateau]. *Kaogu* 4: 289-299.
- Longacre, Robert. 1985. Sentences as combinations of clauses. In *Language typology and syntactic description, volume 2: complex constructions*, 235-286. Cambridge: Cambridge University Press.
- Lowes (Hyslop), Gwendolyn. 2006. Kurtoep phonetics and phonology. M.A. Thesis, University of Oregon.

- Lù, Shaozun. 1986. *Cuona Menba-yu jianzhi*. Beijing.
- Mainwaring, G. B. 1971. *A Grammar of the Róng (Lepcha)*. Delhi: Skylark Printers (originally published in Calcutta: C.B. Lewis, Baptist Mission Press.).
- Masica, Colin. 1976. *Defining a linguistic area : South Asia*. Chicago: University of Chicago Press.
- Maspero, H. 1912. Études sur la phonétique historique de la langue Annamite: les initiales. *Bulletin de l'Ecole Française d'Extrême Orient* 12: 1-126.
- Matisoff, James. 1970. Glottal dissimilation and the Lahu high-rising tone: a tonogenetic study. *Journal of the American Oriental Society* 90(1): 13-44.
- . 1999. Tibeto-Burman tonology in an areal context. In *Proceedings of the Symposium 'Cross-Linguistic Studies of Tonal Phenomena: Tonogenesis, Typology, and Related Topics*, 3-32. Tokyo: Institute for the Study of Languages and Cultures of Asia and Africa, Tokyo University of Foreign Studies,
- . 2003a. *Handbook of Proto-Tibeto-Burman: system and philosophy of Sino-Tibetan reconstruction*. Berkeley: University of California Press.
- . 2003b. Lahu. In *The Sino-Tibetan languages*, 208-221. London/New York: Routledge.
- McCarthy, Joy. 1965. Clause chaining in Kanite. *Anthropological Linguistics* 7: 59-70.
- McGregor, William B. 2009. Typology of Ergativity. *Language and Linguistics Compass* 3(1): 480-508. doi:[10.1111/j.1749-818X.2008.00118.x](https://doi.org/10.1111/j.1749-818X.2008.00118.x).
- Michailovsky, Boyd, and Martine Mazaudon. 1994. Preliminary notes on languages of the Bumthang groups. In *Tibetan Studies: Proceedings of the 6th Seminar of the International Association for Tibetan Studies*, 2: 545-557. Fagernes: The Institute for Comparative Research in Human Culture.
- Mithun, Marianne. 2001. Who shapes the record: the speaker and the linguist. In *Linguistic Fieldwork*, ed. by Paul Newman and Martha Ratliff, 34-54. Cambridge: Cambridge University Press.
- Mohanan, Tara. 1994. *Argument structure in Hindi*. Stanford Calif.: CSLI Publications.

- Namgyel, Singye. 2003. *The language web of Bhutan*. 1st ed. Thimphu: KMT Publisher.
- Nedjalkov, Igor' V. 1995. Converbs in Evenki. In *Converbs in cross-linguistic perspective: structure and meaning of adverbial verb forms - adverbial participles, gerunds* -, 441-464. Empirical approaches to language typology 13. Berlin/New York: Mouton de Gruyter.
- Nedjalkov, Vladimir P. 1995. Some typological parameters of converbs. In *Converbs in cross-linguistic perspective: structure and meaning of adverbial verb forms - adverbial participles, gerunds*, 97-136. Empirical approaches to language typology 13. Berlin/New York: Mouton de Gruyter.
- Nishida, Fuminobu. 2009. A Preliminary Report on Mandebi-kha (in Japanese). *The Journal of Humanities. Chiba University*: 63-74.
- Opgenort, Jean. 2004. *A grammar of Wambule : grammar, lexicon, texts, and cultural survey of a Kiranti tribe of eastern Nepal*. Leiden/Boston: Brill.
- Payne, Thomas. 1991. Medial clauses and interpropositional relations in Panare. *Cognitive linguistics* 2, no. 3: 247-281.
- Plaisier, Heleen. 2007. *A grammar of Lepcha*. Leiden ;;Boston: Brill.
- Platts, J. T. 1898. *A grammar of the Hindustani or Urdu language*. London.
- Poornima, Shakthi. 2009. The Role of Ergative Case Assignment in Discourse presented at the 28th South Asian Languages Analysis Roundtable, Denton, TX.
- Post, Mark William. 2007. A grammar of Galo. PhD Dissertation, LaTrobe University. Melbourne, Australia.
- Poudel, Kedar. 2006. *Dhankute Tamang grammar*. München: LINCOM EUROPA.
- Przyluski, Jean. 1924. Le sino-tibétain. In *Les Langues du Monde*, 361-384. Paris: Librairie Ancienne Édouard Champion.
- Qian, F., and X. Wu. 1988. Zang bei gao yuan ge ting shi qi chu bu guan cha [A preliminary observations on the stone artifacts collected from Geting in northern Tibetan plateau]. *Ren Lei Xue Xue Bao* 7: 75-83.
- Rekhung, Winlang. 1992. *Tutsa Language Guide*. Itanagar.

- Renfrew, Colin. 1990. *Archaeology and language : the puzzle of Indo-European origins*. 1st ed. New York: Cambridge University Press.
- Rogers, Henry. 2005. *Writing systems: a linguistic approach*. Malden, MA: Blackwell.
- Savada, Andrea, and Library of Congress. 1993. *Nepal and Bhutan: country studies*. 3rd ed. Washington D.C.: Federal Research Division Library of Congress.
- Saxena, Anju. 2007. Contrastive focus in Kinnauri narratives. *Linguistische Berichte Special. Special volume on Endangered Languages*: 191-206.
- Schuchardt, Hugo. 1896. Über den passiven Charakter des Transitivs in den kaukasischen Sprachen. *Sitzungsberichte der kais. Akademie der Wissenschaften, phil.-hist. Klasse* 133, no. 1.
- Shafer, Robert. 1954. The linguistic position of Dwags. *Oriens, Zeitschrift der Internationalen Gesellschaft für Orientforschung* 7: 348-356.
- . 1957. *Bibliography of the Sino-Tibetan languages*. Vol. 1. Wiesbaden: Otto Harrassowitz.
- . 1966. *Introduction to Sino-Tibetan*. Wiesbaden: Harrassowitz.
- Sharif, M, and B.K. Thapar. 1992. Food-producing communities in Pakistan and northern India. In *History of Civilizations of Central Asia*. Vol. 1.
- Sharma, A. 1958. *A basic grammar of modern Hindi*. Delhi: Government of India, Ministry of Education and Scientific Research.
- Sharma, A.K. 1981. Prehistoric explorations in Sikkim. *Purattava, Bulletin of the Indian Archaeological Society* 10: 82-83.
- Sharma, B. 2005. *Lhops (Doya) of Bhutan: an ethnographic account*. 1st ed. New Delhi: Akansha Pub. House.
- Sharma, D. D. 1989. *Tribal Languages of Himachal Pradesh. Part 1*. Delhi: Mittal Publishers.
- Sircar, D.D. 1990. Epico-Puranic myths and allied legends. In *The comprehensive history of Assam: from the pre-historic times to the twelfth century A.D.* Guwahati: Publication Board Assam.

- Snellgrove, David Llewellyn. 1987. *Indo-Tibetan Buddhism*. Boston: Shambala.
- Threlkeld, Lancelot. 1834. *An Australian grammar, comprehending the principles and natural rules of the language, as spoken by the Aborigines in the vicinity of Hunter's River, Lake Macquarie, &c. New South Wales*. Sydney: Stephens and Stokes.
- Thurgood, Graham. 2002. Vietnamese tonogenesis: revising the model and the analysis. *Diachronica* 19(2): 333-363.
- Tournadre, Nicholas. 1991. The rhetorical use of the Tibetan ergative. *Linguistics of the Tibeto-Burman Area* 14: 93-108.
- Tournadre, Nicolas. 1996. *L'ergativité en tibétain : approche morphosyntaxique de la langue parlée*. Louvain/Paris: Peeters.
- . 2008. The notion of scale in linguistic classification: is 'Tibetan' a language? or a family of languages? presented at the 14th Himalayan Languages Symposium, August 21, University of Gothenburg, Sweden.
- Traugott, Elizabeth Closs, and Bernd Heine. 1991. *Approaches to grammaticalization*. 2 vols. Typological Studies in Language. Amsterdam: John Benjamins.
- Verma, M. K. 1971. *The structure of the noun phrase in English and Hindi*. India: Motilal Banarsidass.
- Watters, Stephen. 1996. A preliminary study of Prosody in Dzongkha. University of Texas at Arlington.
- Weiss, Daniel. 1995. Russian converbs: a typological outline. In *Converbs in cross-linguistic perspective: structure and meaning of adverbial verb forms - adverbial participles, gerunds*, 239-281. Empirical approaches to language typology 13. Berlin/New York: Mouton de Gruyter.
- West, Barbara, and Zhou Ben-Xiong. 1989. Did chickens go north? New evidence for domestication. *World's poultry* 45: 205-218.
- Wheatley, Julian K. 2003. Burmese. In *The Sino-Tibetan languages*, 195-207. London/New York: Routledge.
- Whyte, Brendan R. 2004. *Waiting for the Esquimo: An historical and documentary study of the Cooche Behar Enclaves of India and Bangladesh*. Vol. 8. Research Paper. Melbourne: The University of Melbourne.

- Willis, Christina M. 2007. A descriptive grammar of Darma, an endangered Tibeto-Burman language. PhD Dissertation, University of Texas.
- Woodbury, Tony. 2003. Defining documentary linguistics. *Language Documentation and Description* 1: 35-51.
- Yamda, Racquel-María. 2007. Collaborative linguistic fieldwork: practical application of the empowerment model. *Language Documentation & Conservation* 1(2): 257-282.
- Zhang, D., and S. Li. 2002. Optical dating of Tibetan human hand- and footprints: An implication for the palaeoenvironment of the last glaciation of the Tibetan Plateau. *Geophys. Res. Lett.* 29: 1069.
- Zhimin An, *et al.* 1982. Paleoliths and microliths from Shenja and Shuanghu, northern Tibet. *Current Anthropology* 23,(5): 493-499.