# The Sino-Tibetan Languages

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## Second Edition

Edited by Graham Thurgood 杜冠明
and Randy J. LaPolla 羅仁地

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# THE SINO-TIBETAN LANGUAGES

There are more native speakers of Sino-Tibetan languages than of any other language family in the world. Our records of these languages are among the oldest for any human language, and the amount of active research on them has multiplied in the last few decades.

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# PREFACE TO THE SECOND EDITION

In deciding what to put into this thoroughly reworked second edition of *The Sino-Tibetan Languages*, we were still guided by the major consideration underlying the choices behind the first edition in 2003: provide a broad overview, attained by a combination of overview articles and a wide array of articles on individual languages, with an emphasis on less commonly described languages. Many new language descriptions have been added, and the articles retained from the first volume have been updated, some, in light of changes in our knowledge, being almost completely reworked. The new articles fill gaps in our earlier coverage. The coverage of languages in Northeast India, Sichuan, and Yunnan has been expanded greatly due to the opening up of those areas to fieldwork and the large number of people, both local and non-local, now working in those areas. On the other hand, even though the diversity within the Sinitic languages is equally great, little work has been done on different Sinitic varieties from a typological perspective (most descriptions just describe the varieties relative to Mandarin), and so again we were not able to include descriptions of more than a couple of the major varieties.

In Part 1 there are three overviews of Sino-Tibetan as a whole, one on genetic and areal groupings (Graham Thurgood), one on Sino-Tibetan morphology and syntax (Randy J. LaPolla), and one on Sino-Tibetan word order typology (Matthew S. Dryer).

In Part 2, Sinitic, there are overview articles on the phonological (Zev Handel) and grammatical (Anne O. Yue) features of Sinitic languages generally, and one overview of Mandarin dialects (Dah-an Ho). There is also an article on the history and function of the unique writing system (Mark Hansell). Supplementing these overviews are in-depth articles on single varieties of Shanghainese (Eric Zee and Liejiong Xu) and Cantonese (Robert S. Bauer and Stephen Matthews).

In Part 3, Tibeto-Burman, there are overviews of several geographical and genetic groupings, specifically, Mark W. Post and Robbins Burling discuss Northeast India, Boyd Michailovsky discusses the Kiranti languages, and Mark W. Post and Jackson T.-S. Sun discuss the Tani [Abor-Miri-Dafla] languages. Complementing the overviews are detailed descriptions of more than 41 individual Tibeto-Burman languages, in all cases by one of the world's leading experts. In addition, some 300-plus languages are mentioned in one survey or another. It is possible to quibble about the omission of this language or that, but the chapters in the volume manage to achieve a remarkable depth and considerable breadth.

Almost all the languages mentioned in the individual chapters are found within tentative subgroupings in the Thurgood overview. Alternative names for languages are listed in various ways: where the alternative name is an older designation, it is usually put into square brackets, as in the mention of "Tani [Abor-Miri-Dafla]" above. However Sino-Tibetan subgrouping is still in its infancy. It remains an area rife with controversy, but despite this, we (the editors) were, with quibbling here and there, able to agree to a large extent. While there were, of course, differences of opinion, the degree of consensus was

striking. Where the subgrouping was clear, we agreed on it; where it was unclear, we agreed that it was unclear.

Without exception, contributors and non-contributors alike have been supportive and helpful, providing their expertise. The individual contributors have put up with us harassing them and have helped out whenever we asked. Non-contributors have often generously given extensive feedback, adding much to the quality of the collection.

The people at Routledge, Isabelle Cheng, Camille Burns, Andrea Hartill, and last but not least Karen Greening, were generous with their help and did much to make this an even better edition than the first.

The Editors
Graham Thurgood
Randy J. LaPolla

# ABBREVIATIONS

**Publications**

| | |
|---|---|
| *BIHP* | *Bulletin of the Institute of History and Philology* |
| *BLS* n | *Proceedings of the nth Annual Meeting of the Berkeley Linguistic Society* |
| *BSOAS* | *Bulletin of the School for Oriental and African Studies* |
| *ICSTLL* | *International Conference on Sino-Tibetan Languages and Linguistics* |
| *LTBA* | *Linguistics of the Tibeto-Burman Area* |

| | |
|---|---|
| 1 | 1st person |
| 2 | 2nd person |
| 3 | 3rd person |
| A | 'actor' of transitive clause |
| ABL | ablative |
| ABS | absolutive |
| ACC | accusative |
| ADJ | adjective |
| ADV | adverb |
| AFF | affix |
| AGT | agentive |
| AMG | location in or among |
| ANIM | animate |
| ANT | antipassive |
| ANTC | anticausative |
| APPLIC | applicative |
| APPR | approximative |
| ART | article |
| ASP | aspect |
| AUG | augmentative |
| AUX | auxiliary |
| BEN | benefactive |
| CAUS | causative |
| CL | numeral classifier |
| CMPL | completive |
| COLL | collective |
| COMIT | comitative |
| COMP | complementizer |
| COMPAR | comparative marker |
| COND | conditional |
| CONT | continuous |
| CSM | change of state marker |

| | |
|---|---|
| CVB | converb |
| DAT | dative |
| DECL | declarative |
| DEF | definite |
| DEM | demonstrative |
| DEP | dependent |
| DETR | detransitivizer |
| DIM | diminutive |
| DIR | directional |
| DS | different subject (switch reference) |
| DTV | derived transitive verb |
| du | dual |
| DUR | durative |
| DYN | dynamic |
| E | extension to core |
| EMPH | emphasis/emphatic |
| ERG | ergative |
| ESS | essive (location at) |
| EVID | evidential |
| ex | exclusive |
| EXCL | exclusion particle |
| F | feminine |
| FOC | focus |
| FRUST | frustrative |
| FUT | future |
| GEN | genitive |
| GENL | general |
| HAB | habitual |
| HON | honorific |
| HORT | hortative |
| HS | hearsay |
| IMAG | imaginative |
| IMMED | immediate |
| IMP | imperative |
| IMPERF | imperfect |
| IMPERS | impersonal |
| IMPFV | imperfective |
| IN | location in |
| inc | inclusive |
| INDEF | indefinite |
| INDEP | independent |
| INDIC | indicative |
| INDTV | indirect directive |
| INF | infinitive |
| INFR | inferred |
| INST | instrumental |
| INTR | intransitive |
| L | local gender/derivational suffix |
| LAT | lative (motion towards) |

| | |
|---|---|
| LGR | Leipzig glossing rules |
| LINK | linker |
| LOC | locative |
| M | masculine/male |
| MAL | malefactive |
| MID | middle/middle voice |
| MIR | mirative (just discovered) |
| NEG | negation |
| NF | non first person actor |
| NGR | nasalizing grade |
| NOM | nominative |
| NOMZR | nominalizer |
| N-PAST | non-past affirmative |
| NR | near |
| NRPAST | near past |
| N-SG | nonsingular |
| OBJ | object case |
| OBLQ | oblique (non-subject) case |
| OPT | optative |
| P | 'undergoer' of transitive clause |
| PART | participle |
| PASS | passive |
| PAST | past |
| PERF | perfect |
| PFV | perfective |
| pl | plural |
| PN | pronoun |
| POSI | positional |
| POSS | possessive |
| POT | potential |
| PREF | prefix |
| PREP | preposition |
| PRES | present |
| PROG | progressive |
| PROH | prohibitive |
| PRSNTV | presentative |
| PURP | purposive |
| Q | interrogative/question |
| R | co-referential |
| REC | recent |
| RECIP | reciprocal |
| REDUP | reduplicated |
| REFL | reflexive |
| REL | relative |
| REM | remote |
| REQU | request marker |
| RES | resultative |
| REV | reverential second person |
| R/M | reflexive/middle |

| | |
|---|---|
| RTV | root transitive verb |
| S | single direct argument of intransitive clause |
| Sa | S marked like A |
| Sd | S marked like dative |
| sg | singular |
| Sirr | irregular S |
| Sp | S marked like P |
| SS | same subject (switch reference) |
| STAT | stative |
| SUB | subordinative |
| SUBJ | subjunctive |
| SUPER | superessive (location on a horizontal surface) |
| TAM | tense-aspect-mood |
| TMdys | past tense marker, 1 day–1 year ago |
| TMhrs | past tense marker, within today |
| TMyrs | past tense marker, years ago |
| TOP | topic |
| TR | transitive |
| UNW | unwitnessed |
| VERT | vertical |
| vi | intransitive verb |
| VIS | visual |
| VN | verbal noun |
| vt | transitive verb |
| WIT | witnessed |

# Part 1

# OVERVIEW CHAPTERS

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CHAPTER ONE

# SINO-TIBETAN: GENETIC AND AREAL SUBGROUPS

*Graham Thurgood*

## 1 INTRODUCTION[1]

Sino-Tibetan began as a single language but under the gentle push of language internal pressures and the far more intense influence of contact with other languages, it changed, repeatedly splitting and restructuring on the way to becoming the modern Sino-Tibetan language family. Little of this linguistic history is retained in even the earliest written records, but the broad outlines of the ebb and flow in the prehistory of the Sino-Tibetan languages and the peoples who spoke various versions of it are recoverable through the techniques of comparative reconstruction. Much of the relevant work, however, remains to be done. In particular, there are critical gaps in our understanding of Sino-Tibetan subgrouping—how the original language split up over time and who the speakers came in contact with. Accurate subgrouping is needed to distinguish between splits in the phylogenetic subgroups based on shared innovations—typically having as their nonlinguistic counterpart abrupt migrations, the dialect chains—areas in which a language has spread out and subsequently differentiated into separate languages, the linguistic areas—areas with typological similarities brought about by language contact, and straight-out borrowings. Much of the Sino-Tibetan subgrouping is impressionistic or geographic, some of it presenting little or no actual supporting evidence. For the most part, this chapter provides a preliminary sketch of the subgroups for which some compelling evidence has been brought forth, however, because they are often mentioned in the literature, it also discusses some subgroupings which seem to lack any serious supporting evidence.[2,3]

### 1.1 Phylogenetic 'trees' versus linguistic areas

For phylogenetic subgrouping, the standard assumptions about subgrouping need stating: only linguistic data constitutes evidence for a linguistic subgrouping—not geography, not ethnography, not folklore. Of course, if the resulting subgrouping is at variance with known history, for instance, either or both should be carefully re-examined. Only the shared innovations among the correspondence sets constitute evidence of an earlier period of common development; as a corollary, the value of an innovation for subgrouping varies inversely with the probability that it could have happened more than once independently—the less likely that it could have happened independently, the more valuable it is as a subgrouping tool.

The comparative method often discovers shared innovations in cases of common inheritance, that is, where after language change occurred, one of the languages undergoing the change subsequently went its own way. However, other scenarios exist. One possibility, which Sapir termed 'drift', occurs when independent but parallel changes occur in each language: the common starting point provided by a common origin often combines with universal tendencies to provide parallel but historically quite independent

development among genealogically related languages (Thurgood 1985: 378; LaPolla 1994). A second possibility is that the language patterns are not the product of abrupt migrations, but instead reflect a language spreading out in an area before breaking up into dialects and then distinct languages. In neither of the last two cases should one expect to find shared patterns of innovations that break up the languages into non-overlapping subgroups. Instead of an innovations-based tree structure, the data shows patterns of dialect continua which have broken up into new languages (Ross 1988, 1997). In a dialect continuum, adjacent varieties often share intersecting patterns of shared innovations with their neighbors, sometimes because the innovation was there before the two varieties diverged, sometimes because of contact postdating the diversification.

A theoretical concern is whether relatedness can be established without extensive morphology. Jacques (forthcoming) invokes this with reference to the paucity of morphology in Chinese, citing Meillet (1982 [1914]: 97), who wrote that languages lacking extensive morphology and depending on word order present a problem for determining genetic relatedness because it is difficult to demonstrate that lexical similarities are not simply the result of borrowing. Such paradigmatic richness, even if it may have once, no longer exists in Chinese, but elsewhere one finds complex verbal systems. Within Tibeto-Burman, even some of the areas with reduced morphology and a dependence on word order for case marking may not be a problem. Nichols (1996: 48) notes that the real necessity is not complex morphological paradigms *per se* but "whole systems or subsystems with a good deal of internal paradigmaticity, and involving not only categories but particular shared markers for them." Directly relevant to Tibeto-Burman, Nichols (1996: 64) notes that complex tone systems fall into this category. Once the relevant reconstructions have been worked out, rich tone systems divide the whole inherited lexicon into what are from a synchronic perspective arbitrary sets of words, making group membership relatively easy to establish. Lolo-Burmese illustrates this clearly.

### 1.2 Contact with other languages

Language contact is pervasive throughout the Sino-Tibetan region, an area where multilingualism is the norm and language shift is common, but the task of recognizing its influence varies in difficulty depending on the circumstances. It is most transparent when the influence comes from known, unrelated or at most distantly related languages such as Chinese, Tai, Mongolic, or Mon-Khmer. The superstrate Chinese influence on Tibeto-Burman is often obvious (see section 3.1 'Contact influences on Chinese'). The substrate influence of Mon-Khmer speakers, who were once prevalent in many of the areas that Tibeto-Burman speakers and some Chinese speakers now occupy, is frequently noticed as is the contemporary Chinese influence on the Tai [Thai] languages in southern China. More difficult are closely related languages such Burmese and Jingphaw, with borrowing between various Tibetan dialects being even more difficult to separate out. Finally, much, much more difficult to recognize are influences from unknown substrate languages.

### 1.3 Lingua franca status and restructuring

The use of a variety or a language as a lingua franca, if sufficiently heavy, results in restructuring, often of a simplificatory nature. This is unsurprising as the typically adult speakers who use it as a langua franca seldom possess full mastery, nor is full mastery possessed by those who shift to the lingua franca. From this perspective, while it is

recognized that Mandarin has been influenced by the Tungus, Mongol, and Manchu languages in the north and the Mon-Khmer and Kra-Tai (Tai-Kadai) languages in the south (Hashimoto 1986), it is not as widely realized that the massive shifts of non-native speakers to Mandarin along with the widespread use of Mandarin as a lingua franca have also played a significant role. Under such influences Mandarin has undergone more restructuring, much of it simplificatory, than have non-Mandarin varieties. Similarly within Tibeto-Burman, variants of languages which served as lingua francas have undergone at least partial simplification under the influence of adult learners shifting, as well as others using it as a lingua franca. If nothing else this makes reliance on just the most widespread and often the most prestigious variant of a language problematic for the reconstruction of language history (see also section 9).

### 1.4 Language names

No attempt to straighten out all the names has been undertaken here. See the relevant general discussions in Post and Burling, in Post and Sun, and in Michailovsky, as well as more specific languages and subgroups; for still further information, see Matisoff *et al*. (1996). Some groups have multiple names for themselves. Here, we have simply given a common name, sometimes with another possibility added after a slash and sometimes with an older name given in square brackets.

### 1.5 The genealogical subgroups

Not all Tibeto-Burman languages can be readily subgrouped: Meithei, Mru, Karbi [Mikir], Tujia, and Bai remain partial mysteries, although proposals have been made. The various subgroups differ radically in the strength of their supporting evidence. Some, like Lolo-Burmese, not only have a rich database but are also substantiated by lexical reconstruction. Some like Puroik-Sherdukpen-Sartang have neither, but nonetheless seem to be a valid group. Finally, there are proposed subgroups which lack both a significant database and any extensive reconstruction, although some of these are supported by the presence of marked shared innovations and impressionistic reconstructions. This chapter lists subgroups which have some degree of support, largely ignoring those which lack sufficient data to pass a judgment. Thus, higher-level groupings like ‘Baric’ and languages like Pyu have been omitted, on the one hand because the lower-level foundations are lacking, on the other because the necessary linguistic database is lacking.[4]

## 2 SINO-TIBETAN

The Sino-Tibetan languages are named after the two most salient members, the Chinese languages and the Tibetan languages, with the term Tibeto-Burman traditionally used to refer to the non-Chinese subset of these languages. The vast majority of specialists agree that the relationship between Chinese and the Tibeto-Burman languages is genealogical, with disagreement over the status of the Chinese component: some view the Chinese component as a sister to Tibeto-Burman; others view the Chinese component as one of the subgroups of Tibeto-Burman languages (see Figure 1.1); and, in light of the lack of much convincing linguistic data, many of us remain agnostic.

In this chapter, the label Sino-Tibetan refers to all these languages; Tibeto-Burman is used as a convenient way to refer to all these languages except Chinese (Sinitic), but without committing to a subgrouping scheme. Both configurations face the same

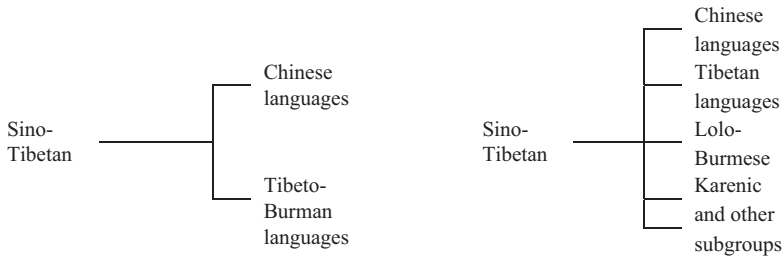


**FIGURE 1.1** TIBETO-BURMAN VERSUS CHINESE: TWO VIEWS

questions: how does Chinese subgroup with other Sino-Tibetan languages, and how do the remaining languages subgroup with one another (see Handel 2008; Sūn 1988)?

### 2.1 Wider relationships

Wider relationships linking Sino-Tibetan to other languages have been proposed. Most frequently suggested is a relationship to the Tai languages [[Chinese: Zhuang-Dong]; Kra-Dai [Tai-Kadai]] and to Hmong-Mien [Chinese: Miao-Yao]. Both positions have since been rejected by most Western scholars, but are still widely held among Chinese linguists. Another view is proposed by Sagart (2005a, 2005b), who has argued for Sino-Tibetan-Austronesian, with the Tai-Kadai languages a daughter to the Austronesian family. More far-reaching are Sapir (1920) and Shafer (1957, 1969), who both compared Sino-Tibetan with Na Dene (Athapaskan; Athabaskan, Eyak, Tlingit); more recently Vajda (2010) established a Dene connection, not with Sino-Tibetan, but with Yeniseian. A considerable number of other proposals have been put forth but most such proposals lack convincing data: it is difficult if not impossible when dealing with a very small number of forms to rule out chance relationships and ancient contact, let alone ancient genealogical relationships.

## 3 CHINESE

Chinese is not a single monolithic language, but rather a family of related languages, each with its own dialects often distinct enough to make even dialects within the same dialect group mutually unintelligible. Rather than linguistically distinct groups, the dialect families seem to reflect dialect networks with different nuclei. The grouping into six dialect families matches Norman's (1988) practice, aside from the placement of Hakka (see Figure 1.2). Alternate groupings are common in the literature (see Handel, this volume).

Each of these dialect groups is further subdivided into subgroups, but the larger groupings are sufficient to make the incredible diversity of Chinese dialects apparent to the thoughtful reader.

The national standard language, Putonghua, is based on the phonology of the dialect of Beijing but the lexicon and grammar are based on the general northern vernacular. Although in this work Chinese may also refer to the collection of Chinese dialects, to any one of the various Chinese languages, or to the national standard, it typically refers to the national language with more specific references used to refer to the dialects or to a specific language.

Northern:
- Mandarin supergroup:
  - Northeastern dialects
  - Zhongyuan dialects
  - Beijing dialects
  - Lanyin dialects
  - Jilu dialects (Beifang)
  - Southwestern dialects
  - Jiaoliao dialects
  - Jinghuai dialects

Central:
- Wu dialect family
  - Shanghaiese
- Xiang dialect family
- Gan dialect family
- Hakka dialect group

Southern:
- Yue dialect family
  - Cantonese
- Min dialect family
  - Hokkien, Taiwanese

**FIGURE 1.2** CHINESE 'DIALECTS' (LANGUAGES)

In the 2003 volume there were questions about the status of Tangut [Hsihsia] and Bai. Tangut is now recognized as unquestionably Tibeto-Burman, and, most likely close to Pumi or rGyalrong (Jacques 2012a). The situation concerning Bai is more controversial, more for political than linguistic reasons, but the data on Bai increasingly suggests it is a heavily Sinicized Tibeto-Burman language, otherwise as yet unsubgrouped. For Bai, a Lolo-Burmese connection is often suggested but the evidence is lacking.

### 3.1 Contact influences on Chinese

Throughout its history, Chinese has been prone to restructuring under the influence of intense language contact (LaPolla 2001, 2010). In fact, even the basic SVO (Subject–Verb–Object) word order of Modern Chinese seems to be the product of contact (cf. LaPolla 2015). Norman (1988) and Hashimoto (1986) correlated various phonological and syntactic characteristics of the Chinese dialects with the different language contact patterns: the more northerly the Chinese languages are, the more they resemble the non-Sino-Tibetan languages of the north, e.g. Tungus, Mongol, Manchu; the more southerly they are, the more they resemble the non-Sino-Tibetan languages of the south, e.g. Thai of the Tai-Kadai and various Mon-Khmer languages. In his contribution, Dryer documents and extends this analysis of contact, describing clear, typological correlates.

The earliest recoverable Chinese vocabulary already has borrowings from other languages. The words for 'honey' and 'goose,' found in Chinese but not in Tibeto-Burman, for instance, probably reflect early Indo-European contact of a limited nature. Norman (1988) notes borrowings from Mon-Khmer including 'tiger,' 'ivory,' 'crossbow,' and the word for 'river,' found in the Chinese name for the Yangtze (*Jiāng* < *krong), undoubtedly indicating not just contact but also a significant early Austroasiatic (Mon-Khmer) presence throughout that area. Various calendric terms also look to have been borrowed from Austroasiatic, indicating a significant cultural influence on the early Chinese.

Some languages coming into contact with Chinese must have been absorbed with scarcely a trace, but others appear in the historical records. In the north, Chinese came

under intensive, long-term contact with speakers of other languages. For instance, the Sixteen Kingdoms period (roughly 303–439) refers to numerous non-Chinese dynasties that ruled at least parts of northern China at various times. These kingdoms included speakers of what have been termed Altaic languages (Tungusic, Mongolian, and so on), of Tibeto-Burman languages, and of other languages, and began the process of the Sinicization of these languages as these languages were influencing Chinese.

In the north, the influences on Chinese have been Tungusic and Mongol, a presence that stands out in the historical records. The Liao dynasty (916–1125) was a kingdom below the Great Wall that extended from Mongolia into southern Manchuria. Its capital Khitan (Khitai) was the source for the word Cathay, used in medieval Europe to refer to northern China. The Liao established their southern capital in what is now modern-day Beijing. Overlapping with the Liao dynasty was the Jin dynasty (1115–1234), another non-Chinese speaking people who originated in Manchuria and who were the ancestors of the Manchus. Just 30 years after the end of the Jin dynasty came a Mongolian dynasty, the Yuan dynasty (1264–1368) established by Genghis Khan and his successors. Finally, the Manchus, who established the Qing dynasty (1644–1911), the last of the Chinese dynasties, in 1644, spoke Manchu, a Manchu-Tungusic language still spoken by pockets of speakers here and there in parts of northeast and northwest China.

In the south, particularly south of the Yangtze, the influences are not as obvious in the historical record but the linguistic influences may have been as significant. Certainly, there is clear evidence in Chinese of contact with Austroasiatic speakers, Tai-Kadai (Thai) speakers, Hmong-Mien speakers, and Austronesian speakers. Most of the evidence of an Austroasiatic presence is found in lexical borrowings into both Chinese and into Tai-Kadai languages. Speakers of Tai-Kadai languages are still present in significant numbers in southern China; the absorption of many of these speakers is reflected both in borrowings and in structural realignments in southern Chinese dialects. The interaction with both Hmong-Mien and Austronesian is reflected most obviously in borrowings.

Pockets of most of these peoples and their languages can still be found scattered in parts of China, although their linguistic influence has diminished to the point that many of the smaller groups are now in danger of totally disappearing; the absorption of many, many speakers of these languages into various Chinese dialects over a long period of time has had a significant influence on Chinese structures.

## 4 LOLO-BURMESE BRANCH [BURMESE-LOLO]

Lolo-Burmese (= Burmese-Lolo) constitutes a well-established subgroup with a system of complex, shared innovations involving initials, tones, and rhymes (Burling 1967; Matisoff 1972; Bradley 1979; Thurgood 1974, 1977, 1982, and various other scholars). It is divided into Burmish and Loloish (Figure 1.3). Burmese has several distinct dialects in addition to the Yangon dialect: Arakanese, Tavoyan, Palaw, Merguese, Yaw, Intha, Taungyo, Danu.

To identify a language as Lolo-Burmese it is usually sufficient to establish regular correspondences for Proto-Lolo-Burmese (PLB) tone 3, however, Table 1.1 also presents the reflexes of the other two proto-tones. Note that the Zauzou reflexes for *1 and *2 are obscured by tone sandhi.

Languages which share the complex three-way patterns of tonal reflexes in checked syllables from the interaction of various PLB prefixes and initials in checked syllables are Loloish. Tables 1.1 and 1.2 give my versions of the PLB correspondences, with Table 1.2 dividing all the checked syllables into three classes (for this, see Matisoff

| **Burmish** | | **Loloish** | | | |
|---|---|---|---|---|---|
| Burmese: | | **Northern** | **Central** | **Southern** | |
| | Yangon | Nusu | Sani-Ahi | Akha | |
| | Arakanese | Nasu | Lahu | Hani | |
| | Tavoyan | Nosu | Lisu | Haoni | |
| | Yaw | Nisu | Lipho | Mpi | |
| Zaiwa (Atsi) | | Luquan | Jino, Jinuo | Khatu | |
| Maru | | | Zauzou | Bisu: | |
| Bola | | | | | Phunoi |
| Achang | | | | | Bisu |
| Lachi | | | | | Pyen |

**FIGURE 1.3** LOLO-BURMESE

**TABLE 1.1 REFLEXES OF THE THREE NON-CHECKED PLB TONES**

| Proto-tones | Initials class | Written Burmese | Zauzou | Lahu | Lisu | Akha | Jino |
|---|---|---|---|---|---|---|---|
| *1 | *voiced | low, | tone | 21 | | | |
| | *voiceless | level, | sandhi | 33 | 33 | 55 | 42 |
| | *spirantal prefix | normal | | | 33c | | |
| *2 | *voiced | fairly high, | tone | 54 | 33 | 11 | 44 |
| | *voiceless | sharp fall, | sandhi | | | | |
| | *spirantal | breathy | | 11 | | | |
| | *spirantal prefix | | | | 55 | | |
| *3 | *all initials | high, slight fall, creaky | 35 | 33 | 33c | 33 | 33 |

1972, Thurgood 1977, 1982 in particular). Checked syllables not following these patterns are borrowings.

Early Mon-Khmer influence on Proto-Lolo-Burmese is evident in the number and the basic character of the Mon-Khmer borrowings (e.g. the word for 'eat'), mostly from Mon. The earliest Burmese inscriptions were in Mon script, with subsequent inscriptions in the developing Burmese script as well as in Pali (an Indic language), in Mon (a Mon-Khmer language (the largest subgroup of Austroasiatic)), and occasionally even in Pyu (an extinct Tibeto-Burman language). All Lolo-Burmese languages have been subject to Mon-Khmer influence. In Loloish there is also Chinese influence, and Loloish languages now located in Thailand contain numerous recent Thai loanwords.

Wider relationships: It has been claimed that Lolo-Burmese itself is part of a slightly larger subgroup, whose members do not not have these initial or tonal reflexes, but, if so, the bases for a wider subgroup remain to be established.

## 5 BODISH: TIBETAN, EAST BODISH, TSHANGLA, AND PROBABLY TAMANGIC

In this survey Bodish is used as a label for the Tibetan languages; the East Bodish languages: Dakpa [Takpa]-Dzala, Bumthang, and Kurtöp; the Tshangla dialects; and probably but more distantly the Tamangic languages. Scholars consistently suggest that these language groups form a higher-level group.

**TABLE 1.2 LOLOISH CHECKED TONES**

| PLB initials classes | Sani | Ahi | Nasu | Luquan | Jino | Lisu | Lahu | Akha | Sangkok |
|---|---|---|---|---|---|---|---|---|---|
| *s-bak | ph- 55 | ph- 55 | ph- 55 | ph- 55c | ph- 55 | p- 55 | p- 35 | p- 11c | ph- 31c |
| *s-mak | m- 55 | m- 55 | m- 55 | m- 55c | m̥- 55 | m- 55 | m- 35 | m- 11c | m- 31c |
| *pak | ph- 44 | ph- 44 | ph- 32s | ph- 22s | ph- 42 | ph- 35c | ph- 54s | p- 33c | ph- 33c |
| *sak | sz̭- 44 | s- 44 | s- 32s | s- 22s | ts- 42 | s- 35c | š- 54s | s- 33c | s- 33c |
| *k-rak | h- 44 | h- 44 | x- 32s | h- 22s | x- 42 | h'- 35c | ɣ- 54s | x- 33c | x- 33c |
| *s-pak | p- 44 | p- 44 | p- 32s | p- 22s | p- 42 | p- 35c | p- 54s | p- 33c | ph- 33c |
| *(s)-mak | m- 44 | m- 44 | m- 32s | m- 22s | m̥- 42 | m- 44c | m- 54s | m- 33c | m- 33c |
| *m-pak | b- 44 | b- 44 | b- 32s | b- 22s | p- 42 | b- 44c | b- 54s | b- 33c | p- 33c |
| *ryak | h- 22s | x- 44s | x- 34 | ʔh- 55c | x- 55 | h- 21ʔ | h- 35 | y- 11c | x- 31c |
| *C-sak | s- 22s | s- 44s | s- 55 | s- 55c | s- 55 | s- 21ʔ | š- 35 | s- 11c | s- 31c |
| *C-pak | ph- 22s | ph- 44s | ph- 55 | ph- 55c | ph- 55 | ph- 21ʔ | ph- 21s | p- 11c | ph- 31c |
| *rak | ɣ- 22s | j- 44s | ɣ- 55 | ɣ- 55c | r- 55 | ɣ/w- 21ʔ | ɣ- 21s | ɣ- 11c | *r- 31c |
| *zak | z- 22s | z- 44s | dz- 55 | z- 55c | z- 55 | z- 21ʔ | y- 21s | y- 11c | *z- 31c |
| *bak | b- 22s | b- 44s | b- 55 | b- 55c | p- 55 | b- 21ʔ | p- 21s | b- 11c | p- 31c |
| *mak | m- 22s | m- 44s | m- 55 | m- 55c | m- 55 | m- 21ʔ | m- 21s | m- 11c | mb- 31c |

Note: b- = voiced stops; p- = unaspirated stops; ph- =aspirated stops; m- = nasals.

Wider affiliations: At one time or another, Western Himalayan, Kham-Magar, and Kiranti have all been suggested for this subgroup, but shared innovations between these groups have not been demonstrated.

### 5.1 The Tibetan subgroup

Proto-Tibetan is used to refer to the oldest stage, unattested and lacking written records; our knowledge of this stage comes largely from the application of the comparative method. Here the term Tibetan is restricted to languages directly descended from Proto-Tibetan; Tournadre (2014) uses "Tibetic" for these languages. Old Tibetan refers to the earliest written Tibetan; sometimes the term Written Tibetan is restricted in the same way, but this simply invites conflation of all stages of written Tibetan into one. When used carefully, Classical (Literary) Tibetan refers to the language of most documents written after the ninth-century language reforms (DeLancey, this volume), but at times is used as if it were a synonym for any form of written Tibetan. It needs to be emphasized that Written Tibetan, even Old Tibetan, meaning the earliest form of written Tibetan, is not equivalent to Proto-Tibetan. The potential for misanalysis is further compounded by the fact that the two most commonly used Tibetan–English dictionaries, Jäschke (1881) and Das (1902), are panchronic, containing words and spellings from various times and sources, many of which are not found in older records.

Thus, Tibetan languages are distinguished from Tibetan-influenced languages. The regular sound–meaning correspondences between the various Tibetan languages allow a historical linguist to separate out the Tibetan dialects from Tibetan-influenced languages. Proto-Tibetan itself also requires working out the structure of the older forms plus a set of rules connecting Proto-Tibetan to the modern languages. Note that the cumbersome phrase 'regular sound–meaning correpondences' is not equivalent to 'similarities', but rather the regularity of the correspondence sets. The problem with 'similarities' is distinguishing the borrowed from the inherited.

From an external viewpoint, still other evidence marks a language as Tibetan (Tibetic): the presence of a reflex of the innovated Tibetan word for 'seven' *bdun*, the presence of the related but obviously borrowed word for 'seven' in Japhug *βdɯnpa* 'seventh', notwithstanding (Jacques 2004), and two innovated pronouns. Without exception, all Tibetan languages share the innovation of a second person pronoun **khyot, *khyet* 'thou', the innovation of a third person singular, roughly **kho*.

Internally, the modern Tibetan languages are the residue of widespread dialect networks. The innovations diffuse in intersecting patterns or linkages (Ross 1988: 8, 1997), which suggests the Tibetan speakers entered the area, spread out, and subsequently differentiated in different ways depending upon the patterns of contact. DeLancey (this volume) breaks them up into at least four linguistically established nuclei: Amdo, Khams, Central or Ü-Tsang (*dbus-gtsang*) including Lhasa, and Western. Using both linguistic and non-linguistic evidence, both Nishi (1986) and Tournadre (2014) add other branches to these four. Nishi (1986) has six major branches: Central (or Ü-Tsang), Western Innovative, Western Archaic, Southern, Khams, and Amdo, and is much like the scheme in Bielmeier's (forthcoming) *Comparative Dictionary of Tibetan Dialects*, although Bielmeier's splits Khams into two segments. Tournadre's scheme (2014: 120) presented in Table 1.3 has eight, but is neither a shared-innovations based scheme nor a purely linguistically based scheme (nor is it intended to be); it includes "geographical parameters, migration and language contact factors," making it, like most Tibetan classifications, a hybrid system. Other recently described Tibetan varieties seem to fall outside of all these schemes (Tournadre 2014; Sun 2014) and still other suggested schemes exist. Tournadre's scheme (2014: 120–1) is presented with its eight nuclei in Table 1.3:

Wider affiliations: With some frequency various authors have proposed subgrouping the Tibetan languages with East Bodish, Tamangic, and Tshangla. The notion is appealing but convincing evidence has yet to be put forth. The innovated pronouns *khyot, *khyet 'thou' and *kho 'he/she' which characterize the Tibetan languages are not obviously attested in East Bodish, Tamangic,[5] nor Tshangla.

### 5.2 Tamang-Gurung-Thakali-Manange languages (Tamangic)

Tamangic: (according to Noonan 2011)
- Tamangic complex:
  - Tamang
- Gurungic:
  - Manange-Nar-Phu complex
  - Gurung
- Thakali complex:
  - Thakali, Chantyal, Seke

Mazaudon's (1977, 1978, 2005) reconstruction of a three manner–two tone system for Proto-Tamangic [Tamang-Gurung-Thakali-Manange [TGTM; Gurung] subgroup establishes the core Tamangic languages as a subgroup. It is not Tibetan; trivially, it lacks Tibetan *bdun* 'seven' and the innovated second and third person pronouns found in Tibetan. Internally, the subgrouping is less clear (Noonan 2011).

Wider relationships: Tamangic membership has been suggested for Ghale (Paudel 2008) and Kaike (Honda 2008) but neither language shares the reconstructed tone

**TABLE 1.3 TOURNADRE'S (2014: 120–1) EIGHT NUCLEI**

| | | | |
|---|---|---|---|
| Central | | | |
| | Ü | Tsang | Lhasa |
| | Kad | Lhokha | Phenpo |
| | Kongpo | Tö | Shigatse |
| Southwestern | | | |
| | Sherpa | Jirel | Lhomi |
| | Kagate | Humla | Mugu |
| | Dolpo | Nubri | Tsum |
| | Langtang | Kyirong | Yolmo |
| | Gyalsumdo | Walung | Tokpe Gola |
| Northwestern | | | |
| | Balti | Ladakhi | Purik, Purki |
| | Zanskari | NW | |
| Western | | | |
| | Lahul | Spiti | Tod |
| | Jad | Garzha | Khunu |
| Southeastern | | | |
| | Khams | Hor Nagchu | Hor Bachen |
| | Yushu | Pembar | Rongdrak |
| | Minyak | Dzayul | Derong-Jol |
| | Chaktreng | Muli-Dappa | Semkyi Nyida |
| Southern (Sikkim, Bhutan) | | | |
| | Dzongkha | Tsamang | |
| | Dhromo Lakha | Drengjong, Lhoke | |
| | Dur Brokkat | Mera Sakteng Brokpa-ke (Ladkhi) | |
| Northeastern | | | |
| | Amdo | gSerpa | Khalong |
| | Sikkimese | | |
| Eastern | | | |
| | Chone | Baima | Drugchu |
| | Khöpokhok | Palkyi [Pashi] | Sharkhok |
| | Thewo | Zhongu | |

system. Hence, at most they might constitute a sister to Tamangic, but strong evidence is lacking and alternatives exist: Noonan (2008a, 2008b, 2008c, 2008d), for example, puts Kaike together with Kham, Magar, and Raji.

### 5.3 East Bodish

The oldest description of an East Bodish language is Hodgson's (1853) description of Dakpa[6] [Dwags], which Hodgson thought was a Tibetan dialect, a misconception corrected by Shafer (1955). There are two descriptions of the Mama dialect, termed Cuònà Ménbà, one a wordlist in Sūn *et al*. (1991) and the other the Lu (1986) dialect; despite the fact that the low tone is 13 in Sūn *et al*. (1991) but 35 in Lu, these are probably the same dialect by the same author. Lu's Wenliang dialect (also in Lu 1986) and van Driem's Dakpa (1997) are two other Dakpa dialects. Van Driem (1997) puts Lu's Wenliang dialect together with his own Dzala, terming them both Dzala; the two appear to be dialectal variants of each other, rather sister languages. Two other languages for which we have good descriptions

are Bumthap, a Bumthang language (van Driem 1997, 2015), and Kurtöp (Hyslop 2011), with Hyslop (2011) being a comprehensive grammar with rich diachronic insights.

Preliminary reconstruction establishes the East Bodish languages as a well-substantiated subgroup. For several varieties of Dakpa as well as for Bumthap and Kurtöp, the languages with the richest databases, many of the basic regular sound–meaning correspondences have already been worked out. Much of this was laid out in Michailovsky and Mazaudon (1994); much more is laid out, often quite explicitly, in Hyslop (2009, 2011, 2013).

More evidence is provided by tonogenesis, the earliest stage of which dates back to Proto-East Bodish. An examination of Table 1.4 shows Written Tibetan compared to the East Bodish languages Dakpa, Dzala, Bumthap, and Kurtöp. The earliest stage, still retained in all the richly documented East Bodish languages, evolved from forms with *s-* before a nasal, providing a modern high tone register throughout East Bodish.

Finally, certain intersecting shared correspondences can be seen in the innovated second and third person pronouns and in the shared innovation of **l- > y.* The innovated third person singular pronouns *pé*, *bé* and the innovated second person singular *ʔi* and so on groups all the Dakpa dialects together, while the **l > y/j* groups Kheng, Bumthap, and Kurtöp as well as Chalikha together. Despite having limited data, the data in two of the remaining languages shows intersecting shared innovations that show a linking pattern left over from a former dialect network (Table 1.5): Chalika groups with the Dakpa data with reference to the innovated pronouns, but with the Bumthap and Kurtöp cluster with **l > y/j*; Phobjip, a ‘Nyenkha dialect, clusters with Dakpa except for the second person *khi*. For the other ‘Nyenkha dialects possibly including Mangdep, the data is too limited to conclude much.

Following Ross (1997), we term such configurations linkages, further dividing them into dialect chains and networks. In dialect chains the innovations are linked from one language to another in some sort of a line; prototypically a chain is found around the shore of an island. Network chains involve languages in various directions, as one might expect of a group established inland. East Bodish appears to reflect a network (or linkage; see Figure 1.4); following Ross the double line indicates a linkage (were my knowledge more complete this representation would be extended to other parts of this chapter).

**TABLE 1.4 WRITTEN TIBETAN S+ NASAL COMPARED WITH EAST BODISH TONES[1]**

| | Written Tibetan | Dakpa in Sūn *et al*. (1991) | Dzala van Driem (1997) | Bumthap van Driem (2015) | Kurtöp Hyslop (2011) |
|---|---|---|---|---|---|
| H tone | | /H/ | /H/ | /H/ | /H/ |
| green | sŋon-po | $^{H}$ŋʌu$^{53}$po$^{53}$ | $^{H}$ŋă̆u | — | $^{H}$ŋúnti |
| heart | sn̥iŋ | $^{H}$niŋ$^{53}$ | $^{H}$néŋ | nengma -i | $^{H}$neng |
| medicine | sman | $^{H}$mʌn$^{53}$ | — | — | $^{H}$mán |
| nose | sna | $^{H}$nʌ$^{53}$ | $^{H}$nă̆ | $^{H}$naphang | $^{H}$ná |
| oil | snum | $^{H}$num$^{53}$ | — | — | — |
| L tone | | /L/ | /L/ | /L/ | /L/ |
| 1sg; I | ŋa | ˪ŋe$^{35}$ | ˪ŋe | ˪nat (A) | ˪ngɑt (A) |
| barley | nas | ˪nʌʔ$^{35}$ | — | [˪nat] | ˪naːʔ |
| cry; weep | ŋu | ˪ŋu$^{35}$ | — | — | ˪ŋò |
| inside; interior | naŋ | ˪neŋ$^{35}$ | — | ˪nɑ˪nɑŋ | ˪nɑŋ |
| name | miŋ | ˪meŋ$^{35}$ | ˪meŋ | ˪meŋ | ˪meŋ |

1 The Dakpa is from Lu (1986); most of Lu’s pitch labels converted rather readily into disyllabic entities with high register and low register. Other labels have been standardized to facilitate clarity of exposition.

**TABLE 1.5 LINKING SHARED INNOVATIONS IN EAST BODISH**

| | Dakpa Hodgson (1853) | Dakpa Lu (1986) | Dakpa van Driem (1997) | Dzala van Driem (1997) | Phobjip Hyslop (2011) | Chalika Hyslop (2011) | Kheng Hyslop (2011) | Bumthap van Driem (2015) | Kurtöp Hyslop (2011) |
|---|---|---|---|---|---|---|---|---|---|
| 1sg | gné, nyé | ŋe$^{35}$ | ŋe | ŋe | ŋɑ | ŋɑt | ŋat; ŋa | ŋat (A); ŋai (E) | ngɑt (A); ngɑi (E) |
| 2sg | i’ | ʔi$^{53}$ | ‘i | ‘i | yi | i | we | wet (A); wi (E) | wit (A); wî (E) |
| 3sg | pé, bé | pe$^{35}$ | bi | be | khi | be | gon | khit (A); khi (E); gon | khit (A); khî (E) |
| *l> j | ʟl- | l- | l- | l- | l- | j- | j- | y- | j- |

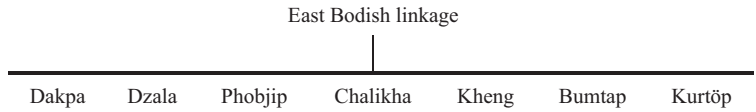


**FIGURE 1.4** THE EAST BODISH LINKAGE

Wider affiliations: Although East Bodish is part of a larger group that includes the Tibetan dialects [Tibetic varieties], it is not itself a Tibetan dialect; it has neither the *bdun* 'seven' nor the innovated second and third pronoun characteristic of the Tibetan dialects, nor does it share the innovated second person *khyot, *khyet 'thou' or the third person *kho 'he/she.' Burling (2003) suggests that East Bodish and Tshangla are closer to each other than either is to Tibetan, but Hyslop (2014), for instance, suggests Tshangla is quite distinct.

Other members of this subgroup: It is now clear that two languages once tentatively considered East Bodish are not East Bodish: Sherdukpen (Bradley, personal communication) and Black Mountain Mönpa (Hyslop 2011, and elsewhere; van Driem 2011).

### 5.4 Tshangla

Tshangla is known as Sharchopkha ('the eastern language') in Dzongkha, the national language of Bhutan. Andvik describes Bhutanese Tshangla (Andvik 2010, this volume), Cangluo Monpa (= Motuo Monpa, Sūn *et al*. 1980; Zhāng 1986; Sūn *et al*. 1991), and Central Monpa (Das Gupta 1968) as closely related dialects of the same language, something an examination of comparative wordlists readily confirms.

Not members of Tshangla: Lhokpu and Gongduk are not in the Tshangla branch. An overview of the Gongduk data presented in van Driem (2001: 463–8) and the Lhokpu data in Sharma (2005: 232–8) make it clear that neither language is obviously close to other Tibeto-Burman languages. For example, Gongduk *daŋli* 'water', *taɦ* 'meat', *diŋ* 'wood; firewood',[7] *ɤn* 'tooth', *um* 'face' have no known cognates.

Wider relationships: Hard evidence for Tshangla being Bodish is not available, although the lexicon suggests Tibetan to many analysts. It is certainly not Tibetan; it has neither the *bdun* 'seven' nor the innovated *khyot, *khyet 'thou' and *kho 'he/she.' Nor is Tshangla obviously East Bodish; Hyslop (personal communication) suggests the grammar is quite different.

## 6 QIANGIC LANGUAGES

On the basis of similarities found among the Qiangic, Pumi, rGyalrongic, and Ersuic as well as certain other languages of the West Sichuan Ethnic Corridor, Sūn (1990 [1983] and elsewhere) has labeled these languages a subgroup, which he terms Qiangic. However, Sūn's supporting evidence includes not just similarities due to genealogical inheritance but also similarities due to areal language contact. Chirkova (2012, 2014) argues, "the similarities among certain proposed 'Qiangic' languages may be at least as likely to reflect convergence due to language contact as it is due to linguistic genealogy." Certainly, both influences coexist, but in some cases the genealogical and the areal can be teased apart.

The systems of directional prefixes in some languages (see Shirai 2009; Sūn 1981a) appear to be not only genealogically inherited, but to also suggest a tree structure (implicit in Table 1.6).[8] For the directional prefixes, the broadest group of related languages is Qiang, Pumi, Ersuic, and rGyalrong, which are in turn distinguished from each other by

shared innovations not found in the other subgroups: At the highest level, Qiang, Pumi, Ersuic, Muya, and rGyalrong all share the directional prefix for 'up,' an innovation which distinguishes them from non-Qiangic languages. The Qiangic languages are divided into Qiang and Pumi-Muya-Ersuic-rGyalrongic by the latter's shared innovations of 'down' and 'away.' This group is divided into rGyalrongic and Pumi-Muya-Ersuic by the latter's shared innovations of 'inward, upstream,' and this group is divided into Ersuic and Pumi-Muya by the latter's innovation of 'outwards, downstream.' Finally Pumi subgroups with Muya rather strikingly.

As noted, each of the lowest-level subgroups has at least one set of innovated prefixes not shared with any of the other four low-level subgroups: Qiang has a unique innovation for 'down' and for 'outwards, downstream,' Pumi has a unique innovation for 'toward center,' Ersuic has a unique innovation for 'outwards, downstream' and rGyalrong has a unique innovations for 'inwards, upstream.'

Notice that, while the evidence for Pumi, Muya, and Proto-Ersuic is intriguing, the evidence for the remaining candidates is weaker. That is, Tangut and Qiang may ultimately be grouped elsewhere, and the placement of Queya and nDrapa [Zhaba] is tentative. Finally, other languages within the Qiangic linguistic area have directional verb prefixes with no obvious genetic connection to the genealogically related prefixes in Table 1.6; these will be dealt with in discussions of individual low-level subgroups.

**TABLE 1.6 DIRECTIONAL VERB PREFIXES**

| | 'up' | 'down' | 'away' | 'inward, upstream' | 'outwards, downstream' | 'toward center' |
|---|---|---|---|---|---|---|
| Qiang: | | | | | | |
| Mawo | tə- | a- | | | sə- | |
| Ronghong (Yadu) | tə- | ɦɑ- | | | sə- | |
| Longshi | tə-/tə | ɦà- | | | sì- | |
| Taoping | tə$^{55}$- | | | | sʅ$^{31}$- | |
| Mianchi | tɛ̀ - | ɦà- | | | ʂɛ̀- | |
| Pumi: | | | | | | |
| Qinghua | tə$^{55}$- | nə$^{13}$- | thə$^{13}$- | khə$^{13}$- | xə$^{13}$ | də$^{13}$- |
| Taoba | tə$^{55}$- | nə$^{35}$- | thə$^{35}$- | khə$^{35}$- | xə$^{35}$- | də$^{35}$- |
| Prinmi Niuwozi | tɜ- | nɜ- | thɜ- | (x)ɜ- | gə-/khə- | dɜ-/də- |
| Muya | tɯ$^{55}$- | nɯ$^{55}$- | thɯ$^{35/55}$ | khi$^{35}$- | ɦɛ$^{35}$- | |
| Proto-Ersuic | *de- | *ne- | *tʰe- | *kʰe- | *ŋe- | |
| Kala Lizu | de- | ne- | the- | khə- | | |
| Mianning Lizu | de- | ne- | | khə- | | |
| Kala Lizu | de- | ne- | the- | khe- | ŋe- | |
| Naiqu Lizu | də- | nə- | thə- | khə- | | |
| Qingshui | dɛ- | nɛ- | (thɛ-) | khɛ- | ŋɛ- | |
| Zeluo Ersu | dɛ- | nɛ- | | khɛ- | ŋɛ- | |
| Tangut [Xixia] | | nja$^{1}$- | | khə$^{1}$- | | |
| Queya, nDraba ? | ʌ- | a- | | | ŋʌ- | |
| rGyalrong: | | | | | | |
| Stau [Ergong] | rə- | nə- | | | | |
| Tshobdun [Caodeng] | tə- | nɐ- | thɐ- | lɐ- | | |
| Japhug rGyalrong | tɤ- | pjɯ-; nɯ- | tʰɯ- cʰɤ- | lɤ- | | |
| lCogtse rGyalrong | to-/ta | no/na | | ko/ka | | |

Constructions with formally similar structures but with unrelated forms are evidence for language contact (Shirai 2009). LaPolla (2003: 30) in a parallel way notes that case markers and existential verbs often have similar patterns but largely unrelated forms (LaPolla 1994, 2003: 30). Various authors are worried about low cognacy rates, but low rates only seem to rule out a genetic relationship with a shallow time depth.

### 6.1 The Qiang varieties

Subgrouping the Qiang varieties has proven a far more complex task than previously thought. Chang's (1967) work contains the oldest reconstructions. Sūn (1981b) divides the Qiang varieties into Northern Qiang and Southern Qiang, but given its heavy reliance on typological evidence, it is a typological subgrouping. Evans (2001) reconstructs Southern Qiang, often offering data from two Northern Qiang varieties for comparison. Most recently Sims (2016) adds Yonghe and Goudou to the Qiang database, terming the subgroup Southeastern Maoxian. Attempts to subgroup on the bases of shared innovations establishes that neither Yonghe nor Goudou fit with either Northern or Southern Qiang. Sims' work on the phylogenetic grouping suggests more complexity and thus probably more time depth than we originally suspected. As Sims concludes, more work needs to be done (see LaPolla, on Qiang, this volume).

### 6.2 Pumi and Ersuic

Prinmi [Primi, Pumi]:
  Northern Prinmi
  Southern Prinmi (Niuwozi Prinmi; see Ding, this volume)
Muya [Minyak; Miyao]
Ersuic:
  Ersu
  Lizu (Chirkova, this volume)
  (but not Duoxu [Tosu])

### 6.3 The Ersuic languages

Dominic Yu's (2012) reconstruction of what he terms Proto-Ersuic establishes that Ersu and Lizu are closely related. However, the innovated directional verb prefixes and other evidence leave Duoxu outside of not just Proto-Ersuic but outside of Proto-Qiangic. Duoxu seems to have two directional verb prefixes, but they match neither Proto-Qiang nor anything else so far, a pattern that suggests the presence of directional prefixes in Duoxu is areal, not genetic. Sūn's (1990) evidence for the subgrouping of Duoxu with Ersu and Lizu is largely typological, establishing only its inclusion in the Qiangic linguistic area. As for genetic evidence, Chirkova and Handel (2013) present a shared chain of innovations—a change they schematize as *sN > *N̥N > *N̥ > h̃ > x̃. This constitutes evidence for subgrouping Ersu and Lizu (that is, for Ersuic), but it is quite weak evidence for the inclusion of Duoxu since Duoxu only shares the first part of the chain (the *s-N- > N̥N-), and the devoicing of the nasal onset component of the change is fairly widely distributed in Tibeto-Burman. The picture is further complicated, as Huáng and Yǐn (2012) point out, by Duoxu being analytic like the Loloish languages, rather than agglutinative like most Qiangic languages, suggesting that Duoxu has undergone considerable contact influence.

### 6.4 rGyalrongic

rGyalrongic (to use Sun's term (2000a))
  rGyalrong (proper) (three main dialects)
    Situ (eastern rGyalrong)
      lCogtse rGyalrong
    Japhug [Chabao; WT Ja-phug] (northeastern rGyalrong)
    Tshobdun Sidaba [Caodeng] (northwestern rGyalrong)
    Zbu, Showu
  Horpa [Ergong: Sūn 1990; Daofu: Huang 1991]
    Stau [Horpa, Tre-Hor]; Ergong: Sūn (1990)
    Dgebshes [Chinese Geshizha]
    Stodsde [Chinese Shangzhai]
      Gyurong Horpa
    Khroskyabs [Guanyinqiao > Lavrung: Huang 1991]
      Mu'erzong

Sun (2000a, 2000b) establishes that rGyalrongic subgroups together against Qiangic using three striking parallel innovations shared between the rGyalrongic languages: what Sun (2000a: 171) calls "glottality-inversion in past-stem formation, (ii) ablaut, (iii) transitivity marking via vocalic alternation in the orientation prefixes." Also Jacques (on Stau in this volume) offers compelling evidence that, within the larger rGyalrongic, Horpa-Khroskyabs subgroups together against rGyalrong: (i) the generalization of the inverse forms in the non-local scenario and the complete loss of the inverse in the direct 3→3 forms, (ii) the loss of most traces of the nominalization prefixes, and (iii) a pattern of verbal reduplication unattested elsewhere, and so on.

There is clear evidence of Tibetan influences on rGyalrong resulting in mis-subgrouping it with Tibetan but as Nagano points out (this volume), most Tibetan-looking words are borrowings, while actual cognates between Tibetan and rGyalrongic are few (Jacques 2004: 169–70 reports fewer than 150 examples). The more basic vocabulary is typical of Tibeto-Burman in general, while the Tibetan-like forms are cultural items.

Wider affiliations: More important in terms of a genetic subgrouping are the similarities between the rGyalrong pronominalization system and the somewhat parallel systems in certain Kiranti languages, something also observed by Ebert (1990) and LaPolla (2003, 2006, 2013). More work remains to be done in this area.

### 6.5 Naish languages (Naxi)

| | **Core Naish** | | **Outliers** |
|---|---|---|---|
| Naxi | Na [Mosuo, Narua] | | Shixing [Xumi, Shuhing] |
| Western | Eastern | Laze [Lare, Shuitian] | Namuyi |
| Dayanzhen | Yongning Na | Baidi | |
| Lijang Naxi 'Naxi proper' | Guabie | | |
| Baoshanzhou | Ninglang [Beiqu] | | |

Jacques and Michaud's (2011) preliminary reconstruction with its numerous regular sound-meaning correspondences establish the core Naish languages as a close knit subgroup (see Lidz [LD], Yongning, this volume).

The directional verb prefixes in Table 1.7 resemble the directional verb forms in Qiangic, but the forms are quite distinct; so when Sūn (1990) uses this as evidence for the connection of Naish with Qiangic, it must be an areal connection, not a genealogical connection we are talking about. In addition to Sūn (1990), Sūn (2001) and Bradley (1997) both offer a Qiangic connection, but it must be areal influence since, while the constructions are similar the actual forms are not.

Jacques and Michaud (2011) and Michaud *et al*. (forthcoming) provide ample evidence for a Naish subgroup, with Namuyi and Shixing the closest relatives.

Table 1.8 shows reflexes of *ry- (and, *rw- and *s-wy-) in Core Naish, in Namuyi and Shixing, and in Lisu (as a representative of the Loloish component of PLB (Table 1.2 shows other reflexes of Loloish *ry-)). Dismissing random chance, one could argue the parallelism in the reflexes of *ry- was parallel but independent development—Sapir's 'drift'—but it would reconstitute a peculiar-looking group.

Alternately, it might be argued that Naish represents a group split off of Loloish, an analysis consistent with the Jacques and Michaud (2011; see also Chirkova 2012) finding that Naish and Lolo-Burmese—particularly Loloish—share a significant number of common lexical innovations. The remaining question would be is Naish a sister language to PLB or is it connected at a lower level to just Loloish? The preliminary guess is that Naxi (that is, Naish) is, as Matisoff (2003: 40) suggests, outlier Loloish. If the shared lexical innovations were inherited from, say, a hypothetical Burmo-Qiangic branch, the distribution should not be restricted as it is disproportionately to Naish and Loloish.[9] In any case, without considerably more evidence, it would be premature to jump to any conclusions about Naish and Lolo-Burmese.

Wider relationships: Sūn (2001) and Bradley (1997) offer a Qiangic connection, which is an areal contact phenomenon. Nishida (1973, 1976) argues for a closer relationship with Burmese (hence, with Lolo-Burmese), which if one limits it to Loloish seems true. The evidence for a Burmo-Qiangic node is only suggestive.

**TABLE 1.7 DIRECTIONAL VERB PREFIXES IN CORE NAISH, SHIXING, AND NAMUYI**

| | 'up' | 'down' | 'in' | 'out' |
|---|---|---|---|---|
| Shixing | dʑi$^{33}$- | miæ$^{33}$- | ji- | wu- |
| Namuyi | luo$^{33}$- | mi$^{33}$- | | |
| Yongning Na (Mosuo) | gɤ$^{11}$ | muɯ$^{11}$ 'downward' | | |
| Guìqióng [Yútōnghuà] | thu- | mi- 'downward' | | |

**TABLE 1.8 REFLEXES OF *RY- IN CORE NAISH, SHIXING AND NAMUYI, AND IN PLB**

| Lijiang Naxi | Yongning Na (LD) | Yongning Na | Namuyi | Shixing | PLB | Lisu Fraser | |
|---|---|---|---|---|---|---|---|
| ɕi$^{33}$ | ɕi$^{33}$ | ʤ$^{33}$ ɕi$^{55}$ | hiɔ$^{53}$ | dʑi$^{33}$ɕɛ$^{55}$ | *rya$^{1}$ | h'yá$^{4}$ | hundred |
| xɯ$^{31}$- | hɑ$^{33}$ | xa$^{31}$khəɹ$^{33}$ | xĩ$^{33}$qho$^{33}$ | — | *ryak | h'yà$^{6}$ | full day |
| xy$^{55}$ | hĩ$^{31}$ | xĩ$^{33}$ | hĩ$^{13}$ | dʑɛ$^{33}$ɕi$^{55}$ | *ryap | h'i$^{6}$ | stand |
| xo$^{55}$ | hɔ$^{13}$ | xu$^{13}$ | hĩ$^{33}$ | ɕyi$^{55}$ | *ryat | h'i$^{6}$ | eight |
| xu$^{55}$ | hũ$^{31}$ | xo$^{13}$mi$^{33}$ | hĩ$^{33}$mbi$^{55}$ | — | *s-wyik | hi$^{6}$- | stomach |
| xɯ$^{31}$ | ɕi$^{33}$-gi$^{13}$ | xi$^{31}$ | hĩ$^{55}$ ŋɛ$^{35}$ | ɸui$^{55}$ zɑ$^{55}$ | *rwa$^{1}$ | -h'a$^{4}$ | rain |
| x>ɕ-/__i | h-> ɕ-/__i | x-> ɕ-/__i | x->h-/_i | h-> ɕ/__i | | | |

## 7 THE 'SAL' LANGUAGES

Burling (1983, 2012b) posited this upper-level subgroup, consisting of Bodo-Koch, Northern Naga[10] (Konyakian) and Jinghpaw, on the basis of shared lexical innovations, e.g. PTB *b-war 'fire' and PTB *tsyar 'sun', naming it after the innovation of *sal* 'sun' (Burling 1983). As Burling suspected, many of the lexical innovations, instead of being restricted to Burling's *sal* languages, are more widely distributed in Tibeto-Burman. This finding undermines the relationship between Boro-Koch and Konyak somewhat, and even more so in the case of the Jinghpaw.

Each of the smaller components is established by strong evidence. The first two are reconstructed: Boro-Koch by Burling (1959), and Konyak by French (1983). The third is expanded; Matisoff (2013), based on new descriptions of Sak/Chak (Huziwara 2008) and of Kadu (Sangdong 2012), has assembled considerable comparative evidence for sub-grouping the Asakian languages with Jinghpaw.

### 7.1 Bodo-Koch [Boro-Garo, Bodo-Garo] (see Burling 2012a)

Boro: Boro [Bodo]
Dimasa
Tiwa [Lalung]
Mech
Kachari
Hill Kachari
Kokborok [Tripuri]
Garo: Garo
Koch: Koch: Tintinkiya Koch, Wa'nang Koch and Pani Koch
Rabha
A'tong
Ruga

Deori [Deuri], Chutia

### 7.2 Konyakian (Northern Naga)

Tangsa
Yogli [= Jugli]
Lungcang (Lungchang, Longchang)
Nocte [Namsangia]
Wancho [Banpara]
Konyak [Tableng]
Phom (Chingmengnu, Tamlu)
Chang
Khiamniungan
Moshang
Wakching

### 7.3 Jinghpaw and Asakian

Jinghpaw[11] [Jingpho, Singhpo (in parts of India)]
Asakian (Luish is apparently pejorative):
Sak/Chak (Huziwara (2008)

Kadu (Sangdong 2012)
Andro†
Sengmai†
Chairel†

Wider relationships: The once posited subgrouping relationship between Jinghpaw and Rawang [Nungish] on the one hand and between Jinghpaw and Lolo-Burmese has been withdrawn. The frequent connection of Jinghpaw with Lolo-Burmese in part reflects contact-based convergence, not inheritance. Jinghpaw speakers are often bilingual in Zaiwa (Atsi), a Burmish language, in many cases living interspersed with Zaiwa speakers. Other Jinghpaw speakers also know Maru, Lachi, or Bola, and Burmese, all Burmish languages.

## 8 THE NORTHEASTERN BORDER AREA

The eastern border area of Nagaland, Manipur, and Mizoram, and a neighboring strip of Myanmar is home to Central Naga [Ao], the Angami-Pochuri, the Zeme, the Tangkhul, and the (Kuki-)Chin groups along with the Meitei and Karbi. These languages are often assumed to be a subgroup. However, as Burling (2003) writes, the proof is still lacking, not just for the higher-level subgroup but also for some of the component subgroups. The situation is further complicated by language contact. Until these are better understood, we will be using Post and Burling's geographical designation 'the eastern border area' (see Post and Burling, this volume).

### 8.1 Central Naga

Proto-Central Naga (PCN)

Proto-Ao
Chungli Ao
Mangmetong Mongsen Ao (Coupe 2007)
Changki (dialect of Mongsen)
Yacham
Tengsa

Sangtam [Tukumi]
Yimchungrü [Yachumi]
Lotha [Lhota]

Central Naga is thoroughly established by Bruhn (2014), who reconstructs Proto-Ao from Chungli Ao and Mangmetong Ao and then Proto-Central Naga from Proto-Ao, Sangtam, Yimchungü, and Lotha. Correspondences are given for the transition from PTB > PCN > CN (see also Burling 2003; Post and Burling, this volume). The relational morphology, particularly cognate forms of agentive/instrument and locative compounds, give additional support for this grouping.

### 8.2 The Angami-Pochuri group

Post and Burling (this volume) characterize the Angami-Pochuri group as having two nuclei: an Angami nucleus and a Pochuri nucleus.

Angami [Tenyidie/Tenedyie]
Chakhesang [Chokoso, Chokri-Kheza]
Mao [Sopvoma, (E)memei, Poumai]
Pochuri [southern Sangtam, eastern Rengma]
Meluri [Anyo]
Ntenyi
Sumi [Simi, Sema]
Rengma proper

### 8.3 The Zelingrong [Zeme]

Zeme [Empeo, Kachcha•]
Mzieme
Liangmai [Kwoireng]
Nruanghmei [Rongmei, Kabui]
Puiron
Khoirao
Marām

Shafer (1955), Marrison (1967), Burling (2003), and Post and Burling (this volume) all agree on this subgrouping, with the latter suggesting these varieties constitute a dialect chain.

### 8.4 Tangkhul

Proto-Tangkhul
Standard Tangkhul
Kachai
Huishu
Tusom
Phadāng (McCulloch 1859 wordlist)
Champhung (Brown 1837 wordlist)
Maring (is at least outside core Proto-Tangkhul, if not even more distant).

Based primarily on Standard Tangkhul, Kachai, and Huishu, Mortensen (2003) and Mortensen and Miller (2013) provide a reconstruction of Proto-Tangkhul with a focus on the rhymes. A wide range of innovations are presented including not just correspondences but also some lexical and morphological items. A tentative internal structure of Tangkhul (Mortensen 2003: 5) is given but not defended.

Having established a convincing set of Proto-Tangkhul correspondences, it is possible to determine that the following languages fall outside of the domain of Proto-Tangkhul: Liangmai and Maram are better placed in Zeliangrong, and Maring (Mortensen 2003) and Sorbung (Mortensen and Keogh 2011) fall outside the group, but it is not clear where they go (see also Burling 2003 and Post and Burling, this volume).

### 8.5 Chin [Kuki-Chin]

| Central Chin[12] | Maraic | Northern Chin | Southern Chin | Northwestern (Kuki-) Chin | |
|---|---|---|---|---|---|
| Mizo [Lushai] | Mara | Tedim [Tiddim] | Daai Chin | Aimol | Langrong |
| Laizo Lai | [Lakher/ | Paite | Hyow | Anal | Monsang |
| Hakha Lai | Maram] | Sizang [Siyin] | Asho [Shö] | Hallam | Moyon |
| Laamtuk Thet | Senthang | Gangte | K'Cho Khyang | Bete | Tarao |
| Bawm | Zothung | Thado | Chinbok | Rangkol | Purum |
| [Banjogi] | Zophei | Ralte | Khomic | Chothe | Lamkang |
| Zahao | Lautu | Pawi | | Koireng | |
| Hmar | | | | Kom | |

VanBik (2009) and other scholars have assembled strong shared morphological and phonological evidence both for (Kuki)-Chin-(Mizo) as a subgroup of TB and for an internal subgrouping of (Kuki-)Chin.

Externally, (Kuki-)Chin is distinguished from the rest of TB by several distinct shared changes. Phonologically, it has the change PTB *s-,*sy- > PKC *th- (VanBik 2009: 9). Several reflexes at first look like counterexamples: In Tedim, [s-] is an allophone of /t-/ occurring before /___i, as may also be the case in Paite.

Here we use VanBik's classification. Core Kuki-Chin indicates VanBik's KC, which excluded Old Kuki (for want of sufficient data).

Morphologically, it has two striking shared innovations. One is its system of subject agreement proclitics derived "probably as an outcome of denominalization (reanalysis of nominalized verb forms as finite verbs)" (DeLancey 2013a). Long recognized for their subgrouping value (e.g. Thurgood 1985), these possessive forms **kai* 'I', **nang* 'thou', and **a-mi* 'third person' developed into a prefixal proclitic subject–verb agreement system that consists of **ka-* 'first', **na-* 'second', and **a-* 'third.' The second striking shared innovation is the KC system of morphologically determined verb stem alternations (VanBik 2009: 9–17). To greatly oversimplify, Stem I forms are typically associated with main clauses and intransitive predicates, while Stem II forms are typically associated with subordinate clauses and transitive predicates (and often associated with closed syllables). Northwestern (Kuki-)Chin (NW(K)C) forms do not seem to manifest this stem alternation. However, the value of this for subgrouping is greatly reduced by the failure of the stems to correspond.

Finally, perhaps the strongest evidence for being a subgroup is VanBik's (2009) reconstruction of the phonology and lexicon.

Internally, (Kuki-)Chin has three branches: 1. Central, 2. Maraic, and 3. 'Peripheral', the latter the combination of Northern Chin and Chin (Gierson's Northern (Kuki-)Chin) and Southern (Plains) Chin, the latter a suggestion of Peterson. VanBik (2009) offers various shared phonological innovations in support of this configuration. The fourth column contains Northwestern (Kuki-)Chin ['Old Kuki']; the precise nature of its relationship to the rest of KC remains a question. VanBik, in lieu of more data, remains agnostic.

### 8.6 Mru-Hkongso

Peterson and Wright (2009) note that Mru-Hkongso (probably including Anu) apparently lacks the change PTB **s* > *th* and the stem alternations characteristic of (Kuki-)Chin languages, suggesting in lieu of positive evidence of their inclusion these are not (Kuki-)Chin.

### 8.7 Karbi [Mikir]

Linguists who have worked with Karbi [Mikir] usually suggest it is closely related to the (Kuki-)Chin and the Naga languages. Extensive contact with Austroasiatic Khasian languages, particularly Pnar, has left its mark on the language (Konnerth 2014; Grüßner 1978). Burling (2003) leaves it unclassified.

### 8.8 Meithei/Meitei

Like Karbi, the place of Meithei within Tibeto-Burman subgrouping remains to be determined, in part because the picture has been clouded by long-term contact with Kuki and

Tangkhul among others (formerly Manipuri, among various older names; see Chelliah, this volume; Burling 2003; Post and Burling, this volume).

## 9 THE 'RUNG' LANGUAGES

LaPolla (2013 and elsewhere) proposes a subgroup based on, among other things, a cognate hierarchical person marking system (including a first person singular suffix, a second person singular suffix, a dual, and a plural marker), an inverse marker with the same distribution, and a #-*si* reflexive/middle marking verb suffix (not present in rGyalrong) which has largely the same distribution (Table 1.9; LaPolla 2013). The first and second person suffixes are transparently related to PTB *ŋa 'I' and *naŋ 'you.' LaPolla argues that the data provides evidence for an intermediate-level subgrouping termed 'Rung' encompassing the rGyalrongic languages, the Dulong-Rawang languages (T'rung, Rawang), the Kiranti languages, and the West Himalayan languages (Kinauri, Almora) as well as perhaps Kham and Chepang (LaPolla 2003, 2013).

LaPolla argues that a crucial part of early Tibeto-Burman migration involved a split into two different dispersal groups, each with its own distinct paths and which developed in different ways. Rung with migrations south down the river valleys represents one line of development and Qiangic (minus rGyalrong) is another. The relevant pattern is not found outside the circle these languages form around the edge of the Tibetan plateau (LaPolla, personal communication; see LaPolla, Chapter 2, this volume).

Two basic interpretations of the data in Table 1.9 exist. LaPolla argues that the languages with this particular configuration represent a complex shared innovation and thus these languages form a subgroup within Tibeto-Burman. In contrast, DeLancey (2010, 2013a, 2014, personal communication) and Jacques (2012b, personal communication) suggest that the verbal indexation system shared by rGyalrongic and Kiranti goes all the way back to Proto-Sino-Tibetan. Paraphrasing Jacques, this proto-system was subsequently completely lost in some languages (Tibetan, Lolo-Burmese, Chinese, Karen, etc.) and considerably restructured in others (Kuki-Chin, Kham, Jinghpo, etc). In this conceptualization, it is not just the suffixes but the combination of suffixes and prefixes that is crucial. Particular emphasis is placed on the fact that the second person is represented by #tV- in both rGyalrongic and Southern Kiranti and on the presence of a common inverse prefix (see LaPolla 1992 for counter arguments).

Certainly reconstructing the system back further than the evidence justifies is not a methodologically sound practice. Notice this is not to say the system does not reconstruct back to Tibeto-Burman; it is only the comment that the crucial evidence is not yet in. If it does go back that far, we should be able to find the evidence.

Independent of the choice of models are the numerous instances in closely related languages where one and the same system is present in one but missing in another.

**TABLE 1.9 THE 'RUNG' LANGUAGES**

| | 1sg suf | 2sg suf | dual | plural | reflexive |
|---|---|---|---|---|---|
| P-rGyalrong | #-ŋ | #-n | #-tsh | #-i | — |
| P-Dulong-Rawang | #-ŋ | #-n | #-si | #-i | #-si |
| P-Kiranti | #-ŋ | #-n | #-ci | #-i | #-nsi |
| P-West Himalayan | #-g/-ŋ | #-n | #-si | #-ni | #-si |

Note: # indicates a rough reconstruction.

Few of these suggest independent innovation. For most, the system was present at an earlier time but subsequently lost. The most obvious cases are like Jingphaw (Kurabe, this volume), in which the younger generation is losing the verbal morphology (still present in older records), and in the closely related Singpo, which has lost it entirely (Morey 2012). Sūn and Liu's (2009) Anong similarly shows massive loss of morphology under intense contact with Lisu in a short time period—most of it was still there in the 1950s when Sūn and Liu began recording it. Now only part of the older generation retain it. In Newar, the Kathmandu dialect has lost the system but it is retained in the Dolakhae dialect (Genetti, this volume). All three examples are examples of what is sometimes termed creoloid, that is, creole-resembling. Although the process is sometimes termed creolization, it does not necessarily imply a prior pidgin-to-creole scenario, but instead such creoloids may be simply the product of intense language contact (DeLancey 2013b). Certainly numerous examples also exist outside of Tibeto-Burman: Eastern Chamic, a Chamic language which served as a lingua franca, Mandarin, which has undergone both intense contact and has functions as a lingua franca, and various other prominent languages including English (McWhorter 2002), which have undergone intense language contact (McWhorter 2007). The main relevance of this for subgrouping is that the lack of agreement in language subgroups like Lolo-Burmese and Tibetan is difficult to evaluate.

## 10 RAWANG AND RELATED LANGUAGES [NUNGISH]

Dulong (an exonym) [other names: Taron, T'rung, Kiu (Qiu), Kiutze (Qiuzi), Kiupa, or Kiao]
Anong
Rawang

Agreement is a Nungish feature found in all dialects, but it is rapidly becoming lost in the Anong described by Sūn and Liu (2009), under intense pressure from Lisu.

Wider relationship: The literature often suggests a genetic connection with Jinghpaw, but strong substantiating evidence is lacking.

## 11 KIRANTI

Like Werner Winter, Ebert (2003) is tentative about the existence of a Kiranti subgroup; instead Ebert refers to the 30-plus languages as the Kiranti cluster. There is limited evidence for designating them as a subgroup: shared innovations in the pronouns, a related verbal agreement system, and the beginnings of some historical reconstruction (Michailovsky 1994, this volume). The line between similarities inherited from a common proto-language and those due to a long period of mutual contact and interaction is often difficult to distinguish.

Athpare
Bahing
Bantawa
Belhare (this volume)
Camling (this volume)
Chilling
Dumi
Hayu (this volume)
Jero
Khaling
Kulung
Limbu
Nachiring
Sunwar
Thulung
Wambule (this volume)
Yakkha
Yamphu

Contact has restructured all of these languages to some degree, with language shift putting most in danger of disappearing. Nepali, the locally dominant language, has been a major influence. Ebert (2003) notes similarities between the Southeastern Kiranti languages and the Naga and Chin languages in the prefixed person markers and the participle formation with *ka-*, and similarities between the inverse marking of Camling and Bantawa and inverse marking in rGyalrong. Parts of Kiranti show non-Tibeto-Burman influences: parallels with reduplication in North-Dravidian Kurukh, syllable-final *k* in eastern Indo-Aryan and in Munda languages, and a highly agglutinative morphology characteristic of North Munda languages.

## 12 WEST HIMALAYAN GROUP

| Kinauri cluster | Almora cluster |
|---|---|
| Kinauri, Kanauri | Rangkas |
| Chamba Lahuli | Byangsi |
| Kanashi | Chaudangsi |
| Rangloi, Gondla, Tinan | Darma |
| Bunan | |
| Jahri | |
| Manchad | |

Sometimes referred to as West Himalayish and sometimes as Kinauri–Almora, this group is characterized by innovations in the pronouns and in the same shared innovated agreement markers (Thurgood 1985: 390–2) as are found in the other Rung languages (see Table 1.10). Whether or not this represents a dialect chain remains unclear.

Other languages: Raute [Raji] is sometimes added into West Himalayish, but it does not fit well.

Wider relationships: see 'Rung', above.

## 13 THE KHAM, MAGAR, AND CHEPANG LANGUAGES

Kham (see Watters, this volume)
Magar
Chepang

**TABLE 1.10 WEST HIMALAYAN PRONOUNS AND PRONOMINALIZATION**

| | 1st sg | 1sg suf | 2sg | 2sg suf | 3sg | 3sg suf |
|---|---|---|---|---|---|---|
| P-West Himalayan | *gai | *-g/-ŋ | *ga-na | *-n | *do | |
| Kinauri cluster | | | | | | |
| Kinauri | gə | -g | kə | -č/-ñ | do | -ñ |
| Chamba Lahuli | ge | -ga; -g | ka; ku | -na; -n | du | — |
| Kanashi | gu | -k | ko | -n | du | — |
| Manchad | gye | -g | kàʔ | -ñi | du | -ñi |
| Almora cluster | | | | | | |
| Byangsi | ji | -ʔ | gan | -n | vaii; u | |
| Rangkas | ji; jin | #-ʔ | ga | *-ʔ | hve; u | |
| Chaudangsi | ji | -ʔ | gan | -n | vo; u | -ni |
| Darma | ji | #-ʔ | ge | -n- | ʔu | — |

Kham, Magar, and Chepang have been subgrouped in various ways. Watters (2003, this volume) puts Kham and Magar together, noting that "a careful examination of more innovative vocabulary makes it apparent that Magar is indeed Kham's closest relative." DeLancey (1987) likewise puts Kham and Magar together as sisters to Chepang. Kham and Magar have agreement, however, it is worth noting that while eastern Magar dialects have no agreement, western dialects do have it. It is not likely that the western dialects borrowed it from Kham, as Kham has biactantial systems, but the Magar dialects have subject agreement.

Wider relationships: Several authors suggest a relationship with Kiranti.

## 14 THE KARENIC BRANCH

| Northern | Central | Southern |
|---|---|---|
| Pa-O | Kayah Li (Karenni)<br>Brè (= Bwe)<br>Yintale<br>Palayachi<br>Mopwa | Pwo Sgaw |

Padaung (transitional) between Northern and Central

Externally, Karenic is a well-defined subgroup of Tibeto-Burman. Internally, its division into northern, central, and southern is geographical. Following general linguistic practice, Solnit (this volume) concludes that western Kayah State (Karenni) and the adjoining area of Karen State, the area of greatest diversity, is the probable homeland. Solnit points out that the Karenic languages are found at the southeastern edge of Tibeto-Burman territory (along with Lolo-Burmese and Tujia speakers), bringing Karen into close contact with members of two characteristically SVO language families, Tai-Kadai and Mon-Khmer. He notes the Tai influence is strikingly evident in the Proto-Karen consonant system and reports Tai interaction with the evolution of tones. Karen has significant numbers of loanwords from Tai-Kadai and from Mon-Khmer (specifically, the Palaungic and Monic branches). The Mon-Khmer influence is pervasive culturally and linguistically, including considerable bilingualism. Thus, despite the opinions sometimes expressed in older scholarship, modern scholarship sides with Solnit in assuming that Karen's SVO word order is the result of contact with Subject–Verb–Object [SVO] Tai-Kadai and SVO Mon-Khmer languages (see chapters by Solnit and by Kato).

## 15 TANI (MIRISH)

| | | |
|---|---|---|
| Adi [Abor] | Gallo | Nishi [formerly Dafla], Nishing |
| Apatani/Apa Tani | Milang | Nyisu |
| Bengni | Miri | Padam Adi |
| Bokar | Mising (Plains Miri) | Padam-Minyong Adi |
| Damu | Na Bengni | Padam-Mising |

Various scholars have argued that the Tani languages constitute a distinct Tibeto-Burman subgroup, a finding confirmed by Sun's (1993a, 1993b) reconstruction of Proto-Tani. For a fuller discussion of the internal relationships within Tani, see Post and Sun (this volume). The wider relationships with nearby Tibeto-Burman languages are not clear yet.

## 16 KAMENGIC [PUROIK, LESS OFTEN PUROIT, ETC.]

The relationship between Puroik [Sulung, reportedly pejorative]; Bugun [Khoa, Khowa]; Chug; Lish; Mey; Rupa; Shergaon; and Sartang [= But Monpa] was apparently first recognized by Sun (1993a: 12 fn. 18), who suggested that Sherdukpen, Bugun, and Lish might form a subgroup, with Puroik being added in somewhat more tentatively. Chug, Lish, and Gompatse, according to Blench and Post (2011: 3–5), are probably a single language. Sherdukpen labels a cluster formed from the names of the two largest villages (Bradley 1997: 12): Shergaon and Rupa [Tukpen]; despite the paucity of forms, it is clear that Mey fits in Sherdukpen.

The perception of aberrancy is seen in Rutgers' (1999) suggestion that they are isolates and in the Blench and Post (2011) suggestion that the data reflects the influence of a yet-to-be-identified substrata. In any case, Matisoff (2009) recognizes that Puroik (and by extension the group) is certainly Tibeto-Burman. Puroik, the only member for which we have anything other than meager data (Sūn *et al*. 1991; Li 2004), yields an abundance of cognates with wider Tibeto-Burman. Van Driem (2001: 479–81) uses the words for 'water' *kho* and 'fire' *bwa* for Kho-Bwa, his label for the subgroup. Neither word, however, is unique to this cluster of languages: for 'water; snow', Hyslop (2011: 40 fn. 14) gives Kurtöp *khwe* 'water', Dzongkha *khau* 'snow', Bodo *khwa* 'snow', and Dakpa *kho* 'snow', and could give more. As for the 'fire' etymon, *mey 'fire' is the most common TB word for 'fire.' As Matisoff (2009) notes, it is obvious that this subgroup underwent the change of nasals to voiced stops, e.g. *m- > b-. The limited database kept the change from being obvious; most of these languages only have the relevant data for 'fire' and 'name' but in the larger Puroik database (Sūn *et al*. 1991; Li 2004) there are at least six instances: *mey 'fire' > Puroik bæ$^{33}$; *miŋ 'name' > a$^{33}$bɛ$^{r}$ŋ$^{33}$; *ma 'not' > ba$^{33}$; *mak 'son-in-law' > a$^{33}$bua$^{53}$; *maŋ 'dream' > mə$^{33}$bak$^{33}$; and, *mi 'man' > bi$^{33}$.[13] The forms in Table 1.11 show additional cognate forms, while Table 1.12 (adapted from Blench and Post 2011), despite the suggestion that they are not cognate, show cognacy with wider Tibeto-Burman on the one hand and the frequent uniqueness in their reflexes within the subgroup on the other.

The evidence that Hruso (the first two columns in Table 1.13) and Miji (the next three columns in Table 1.13) has a special relationship to the Miji languages is at best weak, the sporadic *s- > *t- in 'die,' 'three,' and others (and sometimes further palatalization), the *sw- > *t- in 'tooth,' and other teasingly semi-regular correspondence patterns notwithstanding.

## 17 IDU-DIGARU (TAWRÃ)

Idu [Yidu, Chulikata]
Digaru [Taraon, Tawrã, Darang Deng]

Idu and Digaru are closely related. Kaman, however, is not linguistically close to Idu-Digaru, despite the fact that Kaman is included in the Deng nationality along with Idu (see Post and Burling, this volume).

## 18 KAMAN-MEYOR [MIDZUISH]

Kaman [Miju, Geman]
Meyor [Zakhring, Zaiwa, Zhá]

Strong evidence for a genealogical relationship between these two is lacking.

**TABLE 1.11 ADDITIONAL EVIDENCE FOR TB MEMBERSHIP AND SUBGROUPING**

| gloss | PTB JAM | Puroik | Bugan | Chug | Lish | Rupa | Shergaon | Sartang |
|---|---|---|---|---|---|---|---|---|
| fire | *mey | bæ$^{33}$ | boe | bei | bei | ba | ba | be |
| name | *miŋ | a$^{33}$bɛ$^{r}$ŋ$^{33}$ | — | biŋ | biŋ | — | — | — |
| six | *d-k-ruk | ɣək$^{33}$ | — | ʧyk | ʧ$^{h}$uʔ | ʧuk | ʧuk | kit |
| nine | *gəw | dɔŋ$^{33}$gɛ$^{r}$$^{53}$ | dige | ʈ$^{h}$ik$^{h}$u | ʈ$^{h}$ik$^{h}$u | d$^{h}$ik$^{h}$it | t$^{h}$ik$^{h}$i | t$^{h}$ek$^{h}$e |
| eight | *gyat | [la$^{33}$] | [mla] | sarge? | sarge? | sardʒat | sargyat | sardʒe |
| seven | *ni | [liɛ$^{33}$] | [milye] | his | ʃis | sit | sit | siʔ |
| star | *kar | — | — | karma | karma | zik | tʃuzuk | tʃydʒy |
| leaf | *lap | — | arap | ulaʔ | ulap | alap | alap | arap |
| four | *b-ləy | və$^{r}$i$^{33}$ | — | psi | p$^{h}$əhi | bsi | phsi | pʃĩ |
| woman | *mi$^{2}$ PLB | a$^{33}$mui$^{53}$ | bimi | d$^{h}$udma | esma | dʒimi | dʒimi | dʒymy k$^{h}$re |
| sun | *nəy | — | — | nami | nami | nini | nini | nimiʔ |
| leg | *krəy | lae$^{33}$ | loe | lai | lei | la | la | le |
| two | *nis | ŋi$^{33}$ | ɲeŋ | niʃ | ɲes | ɲik | ɲit | niʃ |
| pig | *wak | — | wak | abaʔ | ʃaba | swok | swag | swaʔ |
| tongue | *s-lay | rye$^{33}$ | — | loi | loi | lapon | laphõ | le |
| tree | *siŋ | he$^{r}$n$^{33}$ | hiŋmua | ʃiŋ | hiŋ | siŋtiŋ | hiŋt$^{h}$uŋ | hiŋ |
| three | *sum | — | im | om | ʔum | uŋ | uŋ | um |
| male | *pu | p$^{h}$u | bp$^{h}$ua | pədəŋ | bŭḍŭn | ʃirin | dʒuhu | dʒiriŋ |

**TABLE 1.12 REPUTEDLY NON-TIBETO-BURMAN COGNATES (ADAPTED FROM BLENCH AND POST 2011)**

| gloss | PTB | Puroik | Bugan | Chug | Lish | Rupa | Shergaon | Sartang |
|---|---|---|---|---|---|---|---|---|
| head | | — | k$^{h}$ruk | k$^{h}$loʔ | k$^{h}$oloʔ | k$^{h}$ruk | k$^{h}$ruk | k$^{h}$ruʔ |
| stomach | *ri:l | θui$^{33}$ | lui | hiliŋ | hiɲiŋ | sliŋ | siriŋ | fəriŋ |
| mouth | *ka | — | ʃyam | k$^{h}$otʃu | hotʃok | tʃaw | nitʃaw | ʧonə |
| dog | *kwəy | — | — | wat$^{h}$i | wat$^{h}$i | bt$^{h}$a | p$^{h}$it$^{h}$a | pet$^{h}$e |
| five | *ŋa | — | kua | k$^{h}$a | k$^{h}$a | k$^{h}$u | k$^{h}$u | k$^{h}$u |
| bone | *rus | — | — | ʃukuʃ | ʃukuʃ | skik | skit | skiʔ |
| moon | *s-la | — | — | atnamba | namba | namblu | namblu | namluʔ |
| tooth | *swa | kə$^{33}$tuaŋ$^{33}$ | — | hintuŋ | ʃiŋtuŋ | toktʃe | nuthuŋ | nit$^{h}$iŋ |
| water | *twiy ? | — | k$^{h}$o | k$^{h}$u | k$^{h}$au | k$^{h}$o | k$^{h}$o | k$^{h}$ow |
| ten | *tsyay | suat$^{53}$pa$^{53}$ | suŋwa | ʃan | ʃan | sõ | sõ | sou |
| hand | *l(y)ak | geʈ$^{33}$ | — | hut | hu | ik | ik | ik |
| eye | *mik | — | — | k$^{h}$um | k$^{h}$umu | kivi | khibi | k$^{h}$aʔby |
| nose | *na | [pɔk$^{33}$] | ep$^{h}$uŋ | heŋp$^{h}$oŋ | hempoŋ | nəfuŋ | nup$^{h}$uŋ | ap$^{h}$uŋ |

Wider relationships: So far there is no evidence that Miju [Kaman] has a special relationship with any Mishmi language. Suggestions to the contrary probably result from the confusion of ethnicity with language since the Miju speakers are ethnically Mishmi (see Post and Burling, this volume).

## 19 KORO-MILANG

Only weak evidence for a genealogical relationship for these exists.

**TABLE 1.13 HRUSO, DHIMMAI, AND LEVAI**

| PTB Matisoff 2003 | Hruso Shafer 1947 | Hruso Simon 1970 | Dhimmai Shafer 1947 | Dhimmai Simon 1979 | Levai Bodt and Lieberherr 2015 | |
|---|---|---|---|---|---|---|
| *səy | tsu | dzañe | t'i | ci/__i | tai | die |
| *g-sum | tzû -i | zi | ge-t'an | githin | kətɛ̃ĩ | three |
| *swa | -t'u | itcu/__u | t'u | thu | mətu: | tooth |
| *mi | næ- | nina | nə | ñih | — | man |
| *myak | -nyi | eñi | mre | mih | mejà$^{ʔ}$ | eye |
| — | p'u | phu | p'oṅ | phung | səpi: | hill |
| *tsa | -sa | sa | zə | zu | mədz͡u: | child; son |
| *ba:r | -ba | -ba | — | -boh | -bua: | flower |
| *s-riŋ | -śu | -ishshi | — | shin | səŋ | alive |
| *dzya | tśa- | tsa- | sə- | tsuh | t͡ɕə̀$^{ʔ}$ | eat |
| *doŋ -i | t'u | thu | — | thung | tuŋ | drink |

## 20 RAUTE, RAJI

It is unclear what to do with Raute, Raji. Raute [Raji] is sometimes added into West Himalayish, but it does not fit well.

## 21 UNSUBGROUPED LANGUAGES

The languages immediately below are otherwise unsubgrouped Tibeto-Burman, and have been particularly resistant to a more precise subgrouping.

Lepcha [Rong] (see Plaisier, this volume)
Newar:
  Dolakhae dialect (see Genetti, this volume)
  Kathmandu dialect (see Hargreaves, this volume)

It is noteworthy that while the Kathmandu dialect lacks agreement, the Dolakhae dialect has it.

- Pyu. Pyu is an extinct language of a Tibeto-Burman people who once dominated much of what is now northern Burma, while southern Burma was part of a Mon Kingdom. The former influence of the Pyu is reflected in the fact that early Burmese inscriptions were occasionally written in the Pyu script and in the references to them found in Chinese records of the time.
- Tujia. The two mutually unintelligible Tujia varieties are found on the southeastern edge of Tibeto-Burman in northwest Hunan, where Tujia has come under considerable contact pressure. Its subgrouping within Tibeto-Burman remains a mystery (see Xu Shixuan, this volume).
- Bai. In Wiersma's (1990) excellent dissertation on Bai, she notes that some scholars argue that Bai is a Tibeto-Burman language with a heavy layer of Chinese loanwords while others argue that it is an Old Chinese dialect that split off from the rest of Chinese some 3,000 years ago. It has been difficult for scholars to determine whether the similarities between Chinese and Bai reflect the results of long-term contact or reflect inherited features, because Bai has been under the influence of

both Tibeto-Burman languages (for instance, Lisu, Yi, and Naxi) and Chinese. However, the evidence increasingly suggests that Bai is a Tibeto-Burman language influenced by Chinese, rather than the reverse. As Dryer notes (this volume), some of the morphological oddities shared by Chinese and Bai are likely to be contact-induced, just as is some of the shared lexical material. The most compelling evidence is Xu (2015), which demonstrates that where third-century mainstream Chinese and Shāndōng differ dialectally, current mainstream Chinese shows the Shāndōng forms, but Bai shows the third-century mainstream forms. In short, Bai borrowed from the third-century mainstream Chinese rather than inheriting from Shāndōng (see also Hefright 2011).

## 22 CONCLUSION

The subgrouping of these languages is still in its infancy. For the majority, the evidence is suggestive, and in many even the minimal database for a proper analysis is lacking. However, one is greatly encouraged by the appearance of dissertations that have laid the foundations for the future.

## NOTES

1 I thank Scott DeLancey, Guillaume Jacques, and Randy LaPolla, who gave generously of their time discussing the hierarchical person agreement systems and the subgrouping of Tibeto-Burman as well as elsewhere. Thanks are also owed to Gwendolyn Hyslop, David Peterson (on Chin), Mark Post, Liberty Lidz, Alexis Michaud, and David Bradley. All caught errors of fact and concept. The remaining errors however are my own and I shall be astonished if the mistakes should be minor and would be grateful for the corrections of the readers.

2 It is not a survey of the history of Sino-Tibetan subgrouping; for this, the reader can consult, among the most widely cited works, Shafer (1974), Benedict (1972), Hale (1982), and Matisoff (1991), all partially updated by Bradley (2002: 74–5, 2012). Other chapters in this volume also have a focus on subgrouping: on subgrouping in general see LaPolla, on Northeast India see Post and Burling, on Kiranti see Michailovsky, and on Tani see Post and Sun, and most chapters at least mention it.

3 In most cases, space limitations as well as time limitations prevent a full discussion of much of the available. Nonetheless this chapter frequently criticizes proposals for not providing sufficient supporting evidence. The irony of this has not been lost on me.

4 Genetti (forthcoming) is a valuable overview, giving bottom-up language groupings frequently accompanied by evaluations. More extensive is Bradley (1997) partially updated in Bradley (2002). Given the lack of a clear understanding of higher-level relationships, Bradley organizes his survey in the only way possible: essentially by geographical areas, supplemented by what is known about the genetic subgrouping. Van Driem (2001) is another widely cited source.

5 Thurgood's (1985) suggestion that Tamangic had a related velar-initial second person pronoun has not held up (Nishi 1991; Honda 2008).

6 Dakpa is sometimes termed Northern Monpa, but Monpa is used so imprecisely and so broadly that it is avoided here.

7 Perhaps *siŋ 'tree; wood' (< Mark Post).

8 The vowels of the prefixes often display vowel harmony (ignored in Table 1.6). The semantics have their patterns of variation. The cardinal directions north, south, east, west vary as they were originally the location and orientation of where the speakers lived. The notion of toward the center and upriver may be coded differently or the

same way; likewise with other prefixes. Matching prefixes across languages, however, is largely straightforward.

9 That the Lolo-Burmese tones do not seem to correspond to Naish tones (Lidz, personal communication; also the author, independently) is noteworthy but not a counterexample. One suspects that these formerly Loloish speakers lost their tonal system under contact, and that the current system is a subsequent development. For a parallel case in Jiamao, see Thurgood 1992.

10 French used Northern Naga for this group; in light of the ambiguity of Naga, for clarity of reference we have chosen Konyak.

11 Jinghpaw is the name for the language; Kachin is the name for the ethnic group.

12 Chin and Kuki are essentially synonyms for the same thing, with Chin being used more in India and Kuki more in Burma. However, Kuki has taken on a strongly pejorative flavor so as far as possible Chin will be used in this work.

13 The initials in 'corpse' *s-maŋ; 'ripe' *s-miŋ; and *nam 'smell', however, remain nasals.

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CHAPTER TWO

# OVERVIEW OF SINO-TIBETAN MORPHOSYNTAX

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## 1 SINO-TIBETAN

At the earliest reconstructable stage of the development of the Sino-Tibetan (ST) language family, possibly as much as 6,000 years ago (Thurgood 1994),[1] the proto-language was monosyllabic. Matisoff (2014) reconstructs the syllable canon as *($P^2$) ($P^1$) Ci ($G^1$) ($G^2$) V (:) (w/y) (Cf) (s).[2] It is not clear whether the prefixes in some or all cases entailed a vocalic element. If so, the structure might have been sesquisyllabic (e.g. as in the name *tărùng* 'T'rung/Dulong', the vocalic element of the *tă-* prefix is very slight).

There was no relational morphology (LaPolla 1990, 1992a, 1992b, 1994b, 1995a, 1995b, 2004, 2012b), but there was derivational morphology in the form of prefixes, suffixes, and voicing alternations of the initial consonants (Wolfenden 1928, 1929; Benedict 1972; Pulleyblank 1962–3, 1972, 1973a, 1973b, 1977–8, 1991, 2000; Bodman 1980; Mei 1980, 1988, 1989, 2012; LaPolla 1994c; Sagart 1999; Sagart and Baxter 2010, 2012; Jin 1998a, 1998b, 2000, 2004, 2005a, 2005b, 2005c, 2006, 2012; Gong 2000; Matisoff 2003; Handel 2012). In §1.1 are examples of several types of derivational morphology.[3] Sections 1.2–1.5 discuss other aspects of morphosyntax common to all of ST. Following that are sections that discuss aspects of the morphosyntax unique to Sinitic or Tibeto-Burman (TB).

### 1.1 Affixal morphology

#### *1.1.1 *s- prefix*

The **s-* prefix in most cases had a causativizing, denominative, or 'intensive' (change of state) function (Wolfenden 1929; Pulleyblank 1973a, 2000; Bodman 1980; Mei 1989, 2008a, 2008b, 2012; Gong 2000, 2001; Dai 2001; Matisoff 2003; Phua 2004; Sagart and Baxter 2012; Handel 2012). For example, Old Chinese (OC) **mjiet* (滅) 'extinguish, destroy' : **smjiet* (威) 'to cause to extinguish, destroy'; OC **mək* (墨) 'ink' : **smək* (黑) 'black' : Written Tibetan (WT) *smag* 'dark'; OC **C-rjəs* (吏) 'clerk', 'minor official' : **srjəʔ* (使) 'to cause (someone to be an emissary)', 'to send'; **tjuʔ* (帚) 'broom' : **stuʔ* (掃) 'to sweep'; **ljek* (易) 'to exchange' : **sljeks* (賜) 'to give', 'gift'; WT *grib* 'shade', 'shadow' : *sgrib-pa* 'to shade, to darken'; *gril* 'a roll' : *sgril-ba* 'to roll together', 'to form into a roll'; *mnan* 'smell (intr.)' : *snam* 'smell something (trans.).' There is broad agreement that there was an **s-* prefix with these uses, but there is still much controversy as to which forms are due to this prefix and which might be due to other factors, such as a *voiced prefix or *voicing contrasts (see below).

### *1.1.2 *Voiced prefix and/or *voicing contrasts*

In both OC and TB, we find pairs of cognate lexical items which differ phonetically only in terms of the voicing or aspiration of the initial, and differ semantically in terms of transitivity, where the item with the voiced initial is intransitive, and the item with the voiceless initial is transitive (e.g. see §4.2.3 in the chapter on Classical Tibetan[4] and §2.5.1 of the Tangut chapter). Benedict (1972: 124) discussed this for TB, but argued that in OC no consistent pattern of morphological alternation could be recognized. Most scholars now would see the OC forms as parallel to the TB forms, and part of a cognate phenomenon. Pulleyblank (1973a, 2000) argues these variant forms should be the result of an intransitivizing prefix **ă-* (a non-syllabic pharyngeal glide) which voiced the initial of the original transitive roots. Mei (1989, 2008a, 2008b, 2012) includes this prefix in a paradigm with the **s-* directive prefix and the **-s* direction of action changing suffix (below).[5] Both Pulleyblank and Mei base the idea for the prefix mainly on the WT *a-chung* ('small a') prefix (here marked with an apostrophe). Pulleyblank also equates this prefix with the *a-* nominalizing prefix found in Burmese. Baxter (1992) adopts this view in reconstructing OC forms, and uses **ɦ-* for the form of the prefix,[6] e.g. **kens* (見) 'see': **ɦkens* (> **gens*) (現) 'appear/be visible.' While this analysis is attractive from a systemic point of view, Benedict (1972) points out that the prefixing and the voicing alternation in Tibetan are two different phenomena that interact in the specialization of different forms as 'present,' 'perfect,' 'future' and 'imperative,' such that the present and future forms have the voiced initial and are intransitive or durative, while the perfect and imperative forms have the voiceless initial and are transitive or active. As an example, for the verb 'put off, pull off, take off,' we have present *'bud-pa* and future *dbud*, which derive from an intransitive stem **bud*, and perfect and imperative *phud*, which derives from a transitive stem **pud*. Evidence that it is not the *a-chung* prefix that is involved in the contrast in Tibetan is the fact that in many cases both forms of a pair of contrasting forms have the prefix, e.g. Tibetan *'gril-ba* 'to be twisted or wrapped round' : *'khril-ba* 'wind or coil round, embrace.' Bodman (1980: 54) also mentions that he did not find any Tibetan–Chinese cognates where prefixation or lack of it in Tibetan corresponds with the voicing distinction in OC. We also find the voicing alternation in TB languages independent of prefixation, e.g. **kh(r)jok* (曲) 'bend,' 'bent' : **ɦkh(r)jok* (**g(r)jok*) (局) 'compressed,' 'bent', 'curved (body)' :: Bahing *kuk* 'make bent' : *guk* 'to be bent' (TB **kuk* ~ **guk*; Benedict 1972: 125). Pulleyblank's association of the voicing distinction in OC with the *a-* prefix in Burmese is also problematic, as the latter is a nominalizer, not an intransitivizer, and is independent of the voicing distinction, e.g. Burmese *phai* 'break off a small piece from a larger,' 'crumble' : *pai* 'to be broken off,' 'chipped'; (cf. also Qiang *ɦe-phe* 'tear (clothes)' : *de-pe* 'be torn'; TB **pe* ~ **be*; Benedict 1972: 59) (:: OC **phajs* (破) 'to break' : **paj?* (跛) 'lame'). Other examples: OC **prats* (敗) 'to defeat' : **ɦprats* (**brats*) (敗) 'to be defeated'; **krujs* (壞) 'to destroy,' 'ruin' : **ɦkrujs* (**grujs*) (壞) 'to be ruined'; **trjang?* (長) 'grow tall,' 'increase'; 'elder' : **ɦtrjang* (**drjang*) (長) 'long'; Bodo *beŋ* 'to be straight' : *pheŋ* 'to make straight' (TB **bleŋ* ~ **pleŋ*; OC **breŋ* (平) 'level').

In a 2010 debate (published in 2012), Mei (2012) argued for the **s-* prefix as the cause of the voicing contrasts (also the view of Dai 2001, Gong 2000, 2001, and Phua 2004) and Sagart and Baxter (2012) argued for a **N-* prefix as the cause of many of the voicing contrasts said by the others to be due to **s-*. Handel (2012) critically evaluated both positions, and argued that neither is the ultimate answer, and so there should be consideration that there may have been several different productive and non-productive morphological

forms, plus analogical leveling, involved in the contrasts found in different periods before and during the OC period.

There clearly were intransitivizing and nominalizing prefixes in PTB and possibly PST, but these are represented by WT *m-* (e.g. *mkho-ba* 'desirable,' 'to be wished for': *'kho-ba* 'to wish, to want'; Wolfenden 1929: 27—notice the *a-chung* in the active form, showing that that doesn't have an intransitivizing function). Wolfenden (1929: 26) described verbs marked with *m-* as "of intransitive nature, or which at most describe an act on the part of the subject which does not entail any change in position on the part of such subject," and connected this prefix with the *m-* found on many substantives (1928). Matisoff (2003: 117) says "the nasal prefix generally signals *inner-directed states or action* . . . PTB etyma like **m-nwi(y)* 'laugh', **m-tu:k* 'spit', **m-sow* 'awaken' . . . it is sometimes found in paradigmatic opposition to the **s-* prefix, which marks *outer-directed action,* transitivity, causativity: e.g. WT *mnam-pa* 'smell, stink' (v.i.) vs. *snam-pa* 'sniff, take a smell of' (v.t.)" (italics in original). See Matisoff 2003: 87–156 for extensive dicussion of the PST/PTB prefixes with exemplification from many languages.

We also find **b-* and/or **g-*, e.g. T'rung *ruut* 'to tear down (a house)' : *bruut* 'to collapse (of a house)'; *la* 'to throw (down)' : *glà* 'to fall (down)'[7] (there is also a separate intransitivizing/stativizing *ə-* prefix in T'rung as well: *tāl* 'roll (vt)' > *ətāl* 'roll (vi)'; LaPolla and Yang 2004; see also LaPolla 2000, 2011 on Rawang). These are independent of the voicing alternation, which is also found in Rawang: *zàn-ē* 'follow (intr.)' : *sàn-òē* 'follow (trans.).' In Ronghong Qiang (LaPolla with Huang 2003; LaPolla 2011) we also find both the voicing distinction (*ɦe-phe* 'tear (clothes)' : *de-pe* 'be torn') and a reflex of the **s-* prefix (*ɛtɛə* 'feed' < *tɛhə* 'eat' (with assimilation of the prefix to point of articulation of the initial; see also Sun 1981a:192–3 for more examples of each type from the more conservative Mawo dialect)). So my own view is that all three phenomena exist; while some of the voicing distinctions can be shown to be due to either an **s-* prefix or a **nasal* prefix, we need to also recognize the possibility that some of the voicing contrasts can't be explained by either of these prefixes and so are an independent phenomenon.

### *1.1.3 *ʔaŋ- (*ʔã-) ≍ *ʔak- ≍ *ʔa- (ə-) prefix*

Matisoff (2003: 104) reconstructs **ʔa- ≍ *(ʔ)ə- ≍ ʔə̃- ≍ *ʔaŋ- ≍ *ʔak-* as a single prefix for PTB (but see his discussion on p. 108 of that work, which leaves the door open to other possibilities). He says the "essential component of the prefix was its initial glottal stop" (p. 105), and so calls it "the glottal prefix." He sees all the forms as related, and includes the functions of marking kinship (usually as *a-*), third person possessive and subject, nominalization of verbs, stativity or intransitivity or causativizing of verbs.[8] All of the forms can appear in a single language, e.g. Lahu (Matisoff 2003: 108–9). In Rawang (LaPolla 2000) the functions are similar, but distinguishable. The nominalizing prefix *àŋ-* (which has the allomorph *ak-* before voiceless stops) is the third person pronoun and third person possessive prefix, and is used quite productively to form nominals. Some of these have become lexicalized, such as *àŋdál* 'fool (n.)' (< *dál-ē* 'to be foolish'), *àŋwəm* 'lid' (< *wəm* 'to cover'). This prefix is actually more of a general formative prefix, and so can be used on some nouns as well, such as in *àŋtʰì* 'liquid' (< *tʰì* 'water'), and on classifiers, e.g. *àŋtʃʰəŋrì* 'the trucks' (< *tʃʰəŋ* 'classifier for round or lump-like objects,' with the plural marker *-rì*). The prefix *ə-,* when used on verbs, is mainly for intransitivizing (*əŋaʔ-ē* 'fall over' < *ŋaʔ-òē* 'push over'), which includes forming reciprocals (*àŋmaʔ əʃəʔnē* 'They are arguing/fighting' <*ʃət-òē*), but is also involved in some deverbal nominals as well, such as *əŋú* 'one who cries easily' (< *ŋū-ē* 'to cry'; note the tone change, which can mark

nominalization alone) and *əkʰú* 'thief' (< *kʰū-ē* / *kʰú-òē* 'to steal'), though it is not very productive. The kinship use of *ə-* marks first person possessive (*əpè* 'my father' vs. *nəpè* 'your father' and *àŋpè* 'his father'). In Sinitic it seems we only find the kinship/vocative use (generalized for vocatives), so this might be a separate morpheme.[9]

### *1.1.4 *-t suffix*[10]

The **-t* suffix most often has the function of transitivizing an intransitive verb, as in WT *ɦbye-ba* 'open,' 'separate' (vi) : *ɦbyed-pa* 'open,' 'separate' (vt), Rawang *ŋū* 'weep' : *ŋut* 'mourn,' 'cry for someone (vt),' but in some cases seems to nominalize intransitive verbs, as in WT *ŋu-mo* 'weep' : *ŋud-mo* 'a sob' (see also Benedict 1991), and in still other cases seems not to have had any effect on the valency, e.g. WT *gči-ba*, *gčid* 'to urinate'; *bka* 'word,' 'speech,' *skad* 'speech' (for other examples and discussion, see Benedict 1972: 98–102; Dai and Xu 1992; Michailovsky 1985; van Driem 1988; Jin 1998a, 2004; Matisoff 2003: 439ff). In OC we find pairs of related forms that differ only in the final consonant, but no clear derivational pattern can be determined, e.g. **ŋji* (尼) 'near,' 'close' : **njit* (昵) 'intimate,' 'familiar'; 'glue' (from Pulleyblank 1972: 11; this set is cognate with WT *nye* 'near,' *nyen* 'relative'; see also LaPolla 1994c; Matisoff 2003: 439ff).

### *1.1.5 *-n suffix*

The **-n* suffix generally had a nominalizing function, e.g. WT *rku* 'steal': *rkun-po* 'thief'; *nye* 'near,' *nyen* 'relative,' but in some cases seems to have had a collective sense (Benedict 1972: 99ff; Matisoff 2003: 446ff), e.g. Proto-Tibeto-Burman (PTB) **r-mi* 'person' : OC **mjin* (民) 'the people.' Pulleyblank (1991, 2000) also suggests that Proto-Sino-Tibetan (PST) had a morphological **-n* suffix (as well as a **-t* suffix), which could explain the correspondences among pairs such as **ŋja* (語) 'speak' ~ **ŋjan* (言) 'say', 'word' (see also Jin 1998a for more examples). Following Graham (1983), Pulleyblank argues that the **-n* suffix marks a durative or continuative aspect, and **-t* marks a punctual or perfective aspect. Norman (1988: 86) argues that the forms **njan* (然) and **w(r)jan* (焉) are fusions of **nja* (如) and **w(r)ja* (于) with an **n-* initial pronoun, possibly **njəjʔ* (爾) or **njak* (若). While a demonstrative may have been the ultimate origin of the **-n* suffix, it seems this **-n* could have been a more general suffix, and not the result of a chance fusion of isolated lexical items. Especially when we see the patterns of variants, it is hard not to assume there was some systematicity to it, e.g. **ŋja* (如) 'like' : **njan* (然) 'like this' : **njak* (若) 'like', 'that.' There is also **ʔa* (烏) : **ʔan* (安) both 'interrogative pronoun' ('where'), and possibly **ʔak* (惡) 'interrogative pronoun.'[11]

This is not to say there were no fusions. Some variation within word families may be due to a coalescence of two forms, as suggested for Tibetan by Walter Simon (1941, 1942, 1949, 1977). Simon's idea was that many of the finals in Tibetan, such as *-g*, *-n*, *-l*, *-r*, *-s* were from the coalescence of two syllables, the second of which originally also had lexical content, such as *-s* < *sa/so* 'place.'[12] We find synchronic variation in Tibetan that points to this kind of development, such as *da-ra* ~ *dar-ba* 'type of buttermilk,' *ź a-la* ~ *źal* 'clay,' *bu-ga* ~ *bug* 'hole,' *lco-ga* ~ *lcog* 'lark,' *nya-ga* ~ *nyag* 'steelyard,' and *yi-ge* ~ *yig* 'letter.' Norman (1988: 85ff.) gives the following as examples of fusion words in OC: **tja* (諸) from **tjə ʔja* (之於) 'third person patient pronoun' + adposition 'in,' 'at,' 'to'; **njəʔ* (耳) from **njə ljəʔ* (而已) 'linking particle' + 'end'; **lja* (歟) from **le hwa* (也呼) 'sentence final particle' + 'question particle'; **gap* (盍) 'negative question ("why not") particle' from **gaj pə* (何不) 'question word' + 'negative particle.'

### *1.1.6 *-s suffix*

The **-s* suffix generally had a nominalizing function (Pulleyblank 1973b; Mei 1980, 1989, 2012; Matisoff 2003: 439ff), where the derived noun is the patient of the action represented by the verb, but also had a function that Mei (1980, 1989) and Schuessler (1985) have characterized as 'change of direction' or 'inversion of attention flow' respectively. Mei (2012) suggests these two functions derive from a marker that was used originally for perfective aspect but was then extended to marking nominalizations of the result of the action. In Modern Chinese this suffix is now reflected in the 'departing' tone.[13] In some cases, the addition of the suffix resulted in the creation of a new Chinese character, but in many cases there are simply two pronunciations for the same character. For example OC **C-rjang* (量) 'measure': **C-rjangs* 'an amount' :: WT *'grang-ba* 'to number,' 'to count' : *grangs* 'a number'; OC **tjək* (織) 'weave' : **tjəks* 'thing woven' :: WT *'thag-pa* 'to weave' : *thags* 'texture,' 'web'; OC **nup* (納) 'bring in' : **nups* (内) 'inside'; **mreʔ* (買) 'buy' : **mres* (賣) 'sell'; **djuʔ* (受) 'to receive' : **djus* (授) 'to give.'

### *1.1.7 *-j suffix*

Matisoff (1989, 1995, 2003: 482ff) discusses etyma that show palatal-final and non-palatal-final variants, and posits three different sources for variants with morphological differences: PST **s-waj* ≍ **s-jaj* 'go'; 'motion away,' for transitive motion/motion away from the deictic centre or emergent quality in stative verbs; PST **ja* (≍ **za* ≍ **tsa* ≍ **dza*) 'child,' 'son' for a diminutive or affective sense; and PST **waj* ≍ **raj* copula for nominalization, subordination, or other grammatical functions. The clearest examples are in the system of pronouns, where for the first person pronoun we get PTB **ŋa* : *ŋaj* :: OC **ŋa* (吾): **ŋaj* (我).

### *1.1.8 *-ʔ suffix*

OC seems to have had a glottal stop suffix which developed into the rising tone category (Baxter 1992; Zhengzhang 2013), e.g. **trjang* (張) 'to make long,' 'stretch' : **trjangʔ* (長) 'grow tall,' 'increase', 'elder'; **wək* (或) 'someone' : **wjəkʔ* (有) 'there is'; **kak* (各) 'each' : **k(r/j)akʔ* (舉) 'all.' In these last two examples I am assuming that the suffix caused the loss of the root final consonant, just as is assumed to have happened with the **-s* suffix (Baxter 1992: 323ff.; cf. also Bodman 1980: 132), but this assumption is not widely accepted. An alternative possibility, discussed immediately below, is that there was a **-k* suffix. Glottalized forms do appear in some TB languages, e.g. T'rung, but it is clear at least in T'rung that these are developments from **-k.*

### *1.1.9 *-k suffix*

There may have been a **-k* suffix as well, as we find a large number of lexical items in both TB and Sinitic that have open final and **-k* final variants, e.g. TB **yu*(*w*) : **yuk* 'descend' (Benedict 1972: 101); OC **m(r)ja* (無) 'there is not' : **mak* (莫) 'no one'; **djuj* (誰) 'who' : **djuk* (孰) 'which one.' This possibility was suggested by Pulleyblank (1972: 13, 1973a: 122) as an explanation for some of the pairs given above as examples of the glottal stop suffix: **wjəʔ* (有) 'there is' : **wək* (或) 'someone'; **k(r/j)aʔ* (舉) 'all'; 'lift' : **kak* (各) 'each.' Pulleyblank only discusses this in relation to pronominal forms, and says the suffix marks a distributive sense. There is also the set **nja* (如) 'like' : **njak* (若)

'like', 'that' mentioned above. As the largest number of variants involve the difference between an open final and a **-k* final (63 out of 99 rhymes in the *Book of Poetry* where the finals differed, as marked in Wang 1980; see LaPolla 1994c for discussion), it may be that there is more than one explanation; some velar stop finals may have dropped due to the influence of the glottal stop suffix, and some may have been the result of a **-k* formative suffix (see also Jin 1998b).[14] If PST had a particle similar to Tibetan *-ga*, which Das (1902: 203) says "is sometimes used as an affixed particle of a word to complete it," then this would be at least one explanation for the large number of **-Ø* ~ **-k* variants.

It has long been known that within ST we must deal with word families rather than isolated words (Karlgren 1933, 1956; Wolfenden 1936, 1937, 1939; Wang 1982; Zhang 1999). Given what we now know about these derivational processes, we can see clearly how the word families are created. These forms seem to have formed paradigms (sets of choices), but of derivational possibilities rather than inflectional possibilities. Following are two examples (from Baxter 1992: 317 and 324 respectively; see also Mei 1989; Matisoff 2003: 440): **kat* (割) 'to injure,' 'to harm' (vt) : **ɦkat* (**gat*) (害) 'to suffer harm or injury' (vi) : *ɦkats* (**gats*) (害) 'harm,' 'injury' (n); **trjang* (張) 'to make long,' 'stretch' (vt) : **trjangʔ* (長) 'grow tall,' 'increase'; 'elder' (intransitive active verb) : **ɦtrjang* (**drjang*) (長) 'long' (stative verb). To this last set Mei (2012) adds (脹) **trjangs* 'distended, swollen' (perfective).

Aside from the suffixes mentioned above, Mei Tsu-lin (personal communication, November 1994) has suggested some of the frequent variations found in Chinese between homorganic stop and nasal final might be due to Chinese having had suffixes similar to WT *-ma* and *-pa* (which have both gender marking and formative functions). The nasal-initial suffix would cause a final stop to nasalize, while the stop-initial suffix would denasalize a final nasal. We see this sort of development with the diminutive in some dialects of Chinese, where the diminutive suffix reduces to a nasal element (e.g. in Wenzhou, and some areas of Anhui, Zhejiang, Guangxi, and Guangdong), and in some cases nasalizes final stops, e.g. in Xinyi of Guangdong, the nasal suffix *-n* causes final *-p*, *-t*, and *-k* to become *-m*, *-n*, and *-ŋ* respectively, as in *ap*$^{33}$ 'duck' > *am*$^{35}$ 'duckling.' Certainly the use of reflexes of PTB **pa* (and to a lesser extent **ma*) as a gender marker and as a nominalizer (usually producing an agentive noun) is widespread throughout TB, though there is the possibility that many of these were independent parallel developments, such as in the case of the frequent development of diminutives from a word meaning 'son' or 'child' (Matisoff 1995), and of causatives from a word meaning 'make,' 'cause,' or 'send' (LaPolla 1994b). In Chinese the form **p(r)ja(ʔ)* (夫/父/甫) was used as an extra-syllabic suffix for creating agentive nouns, just as in TB (e.g. **din p(r)jaʔ* (田父) 'farmer'), and this may be the cognate of PTB **-pa*.

### 1.2 Clausal morphology

In terms of clausal morphology, there may have been a clause-final question particle **la*, as there is evidence for such a particle in several languages across the family: OC **lja* (歟), Newar *lā*, Burmese *lâ*, Meithei *la* (Matisoff 1995: 73–4). Matisoff (2003: 599) reconstructs PTB **la-j*. As mentioned above, though, the Chinese form has been said to be a fusion form, from **le hwa* (也呼) (Norman 1988: 95), so may not be cognate with the PTB form.

Unmarked clausal negation in PST took the form of a preverbal particle **ma-j* (Matisoff 2003: 488). For PTB we can also reconstruct a prohibitive (negative imperative) particle **ta-* ~ **da* (Matisoff 2003: 586; see ex. (1) below for a Lahu example), but this is not

found in the Sinitic languages. OC instead had two negative imperative particles **mja* (毋), which was homophonous with the unmarked negator but written with a different character, and **mjət* (or **mjut*) (勿), which is often assumed to be due to fusion of the negative **mja* with another particle (assumed to be the demonstrative pronoun **tjə* (之)).[15]

Most languages in the family have not grammaticalized grammatical relations, but many have grammaticalized semantic role marking.[16] For detailed arguments against the existence of syntactic functions in particular ST languages, see Andersen 1987 (Classical Tibetan), Bhat 1991 (Manipuri), and LaPolla 1990, 1993b (Chinese). See also the discussions of Lisu in Hope 1973, 1974 and Mallison and Blake 1981. Benedict (1972: 95ff) also expressed the view that relational morphology was not part of the grammatical system of PTB. A corollary of the fact that very few languages have grammaticalized grammatical relations is that there are few true passive constructions in the family. As the order of NPs is generally determined by pragmatic factors, variations of word order can affect the interpretation of utterances in a way similar to the effect of passives.

### 1.3 Pronouns

First and second person pronouns are reconstructable to the family as a whole (first person **ŋa* ≍ *ŋaj*; second person **na* ≍ *naŋ*), with both variants of each pronoun found on both sides of the family (see LaPolla 1994c; Matisoff 2003), but there is no third person pronoun or plural marker reconstructable to the PST or PTB or even Sinitic level. The deictic pronouns are reconstructable, though (**ndaj* ≍ **ndi*), and they became the source for many of the third person forms. A survey of inclusive and exclusive forms in TB (LaPolla 2005b) showed that the inclusive forms were innovative, and the exclusive form in such systems generally involved the inherited pronoun.

### 1.4 Classifiers and definite marking

Classifiers were not part of PST, but evolved individually in quite a few of the languages in the family (see, for example, Xu 1987, 1989; Dai 1994, 1997a, 1997b for prosodic reasons for some languages developing classifiers, and some not). Even within some of these groups, such as the Lolo-Burmese languages, while the nouns they derive from may be cognate, the use of the nouns as classifiers is recent (see Bradley 2012 for discussion). There was no definite marking in PST, and only a few languages in TB, such as Qiang (see LaPolla with Huang 2003), have developed something that can be considered as definite marking (in the case of Qiang, the marking seems to have developed from demonstratives). Several languages that have developed classifiers, both in TB and in Sinitic, have developed a use of the classifiers that resembles definite or specific marking. This generally involves use of the classifier without a numeral, e.g. Rawang *lègā tiq bok* [book one CL] 'one book,' *lègā bok* 'the book,' Cantonese *yat*$^{55}$ *ga*$^{33}$ *che*$^{55}$ [one CL vehicle] 'one car,' *ga*$^{33}$ *che*$^{55}$ (roughly) 'the car.' This feature is an areal feature of part of Southeast Asia (Baron 1973).

### 1.5 Constituent order

In terms of constituent order (LaPolla 2002, 2015), all ST languages have GENITIVE–HEAD order and MODIFIER–MODIFIED order in N-N structures (the former is actually a subcase of the latter in PST). All ST languages have RELATIVE–NOUN order (Karen also has a less

productive post-nominal relative clause—Solnit 1997: 249ff, this volume). Originally there were no nominalizers or relative markers in relative clauses, but various languages have developed one or the other since that time (see LaPolla 2008a, 2008b for discussion of the process). In cases where the relative clause is nominalized, this construction then is also a subcase of the N-N modifier–modified construction (see LaPolla 2013c for the example of Mandarin and the implications of such a structure). It seems the original position of attributes was after the head, but in many languages (e.g. Burmese), the attribute can be nominalized and appear before the head. This then becomes another subcase of the N-N modifier–modified construction. The overwhelming majority of ST languages have NEGATIVE–VERB order, and where there is a deviation from this, the pattern is either due to reinforcement of the original negative, as in Karen, or due to the grammaticalization of a post-main-verb negative verb out of a negative-auxiliary verb combination. We can therefore assume MODIFIER–MODIFIED order in N-N structures, and GENITIVE–HEAD, HEAD–ATTRIBUTE, NEGATIVE–VERB, and RELATIVE–NOUN word order patterns for PST.

The TB languages generally have verb-final word order with an immediately preverbal unmarked focus position (including in many cases for interrogative words, e.g. in Tangut). At present, the Sinitic languages, the Karen languages, and Bai have an unmarked post-verbal focus position (rather than an immediately preverbal unmarked focus position as in the other languages), and so the patient argument often appears in post-verbal position in the clause.[17] From the fact that we can clearly see changes in the word order of these three languages over time, and cannot see such changes in the TB languages other than Bai and Karen, we assume that it was Bai, Karen, and Chinese that changed rather than all the other TB languages (but see Wheatley 1984, 1985 for possible ongoing changes in the Yi language). As argued in LaPolla 1993a and 2015, these three languages show a remarkable similarity in the particular patterns they developed. In OC, verb-medial order (which implies a post-verbal position for unmarked focus) was the unmarked word order, but there was a marked verb-final word order pattern used for contrastive focus that seems to have been due to an earlier preverbal focus position. In Karen and Bai, we have the same situation as in OC in terms of the major constituents: unmarked verb-medial order, but NP-NP-V as a marked word order possibility. What is significant is that the conditions on the use of the marked word order pattern in Bai are almost exactly the same as those of OC: it is used when the second NP is a contrastive pronoun or when the sentence is negative or a question (Xu and Zhao 1984). Also interesting about the use of the different word order patterns in Bai is the fact that the older people prefer the verb-final order, whereas the younger and more Sinicized people prefer the verb-medial order (ibid.). This would seem to point to the change in word order as being relatively recent. Karen (Solnit 1997, this volume) has some similar word order patterns, with genitives and nominal modifiers coming before the noun, and number and classifier following the noun, while adjectival and verbal modifiers (i.e. relative clauses) can follow the head. Karen does not appear to have a preverbal focus position; from the data in Solnit 1997, it seems that focus position is sentence-final as in Modern Chinese. In terms of phrase-internal order, Karen is very similar to OC, differing mainly in terms of having HEAD–ATTRIBUTE order as the unmarked word order, as opposed to Chinese, which has it only as a marked order. Karen and Bai differ from most of the rest of the TB languages mainly in terms of the position of the NP representing the undergoer referent and in terms of having prepositions. Based on the relative frequency of patterns and patterns of change witnessed in some languages, we can assume PST also had the following word order patterns: DEMONSTRATIVE–HEAD, HEAD–NUMBER, NOUN–ADPOSITION, and STANDARD–(MARKER)–ADJECTIVE (see LaPolla 1993a, 1994a/2002, 2015; also Dryer, this volume).

## 2 SINITIC

In OC, there was a gradual loss of productivity of the derivational morphology sometime around the formation of the characters (roughly 3,500 years ago), and the language became more isolating. A gradual change occurred in the word order and information structure pattern to verb-medial word order and post-verbal focus position (LaPolla 1993a, 2015). There has been no grammaticalization of grammatical relations; the basic structure of the clause is topic–comment rather than subject–predicate (Chao 1955 [1976], 1959 [1976], 1968; Lyu 1979; LaPolla 1990, 1993b, 2009). Information structure is the chief determinant of word order in Chinese (LaPolla 1995c; LaPolla and Poa 2005, 2006). The prepositions now found in the language all derive transparently from verbs. In the past there was an assumption among Chinese linguists that the grammar of all the dialects is roughly the same, and so until recently little serious work was done on the grammar of the dialects. With the work by Yue-Hashimoto (1993, this volume), Huang (1996), Chappell (2001, 2004), and Liu (2008, 2013), serious investigation of the grammar of the dialects has begun, but much more needs to be done to understand the differences between the dialects, particularly in more difficult-to-understand areas such as information structure and its relation to grammatical structure (compare LaPolla 1995c, on Mandarin, and Lee 2002, on Cantonese, in this regard). As Yue (this volume) and Ho (this volume) give us an overview of modern dialect grammar, I will not say more about this, and devote the rest of this chapter to the TB languages.

## 3 TIBETO-BURMAN

After the split-up of ST into Sinitic and TB due to the divergent migrations (LaPolla 2001), there were a number of developments in the realm of grammar, some of which have areal coverage, some of which are subgroup specific. I will first discuss the different groups and some of their characteristics, and then some more general morphosyntactic phenomena.

### 3.1 Language groups

Based on morphological paradigms and migration history (LaPolla 2001, 2013a, 2013b), I divide TB into the following groups:[18]

**The Bodish group:** Tibetic[19] and the other languages, such as Tamang, Gurung, Lepcha, Dzongka, and Newar (Newari), derived from the original migrations west into Tibet and then later migrations south down into Nepal, India/Sikkim, and Bhutan; in terms of morphology, this group is characterized by an **-s* ablative/ergative suffix on nouns (see LaPolla 1995a). Non-classificational morphological features include development of evidentiality and conjunct–disjunct[20] systems in many varieties (see, for example, Hale and Watters 1973: 207ff. on Jirel, Newar, and Sherpa; Hale 1980; Hargreaves, this volume, on Kathmandu Newar; DeLancey, this volume; Tournadre and LaPolla 2014 and references therein on Tibetan), and a lack of a bound pronominal person marking system[21] or reflexive/middle marking.

**The Qiangic group:** Qiang, Pumi, Shixing, Ergong, Daofu, Queyu, Guiqiong, Muya, Namuyi, Zhaba, and possibly a few others, the speakers of which migrated only a short distance from the original ST homeland in Northwest China (these languages are now spoken in Sichuan and Yunnan Provinces, China). The genetic rather than area affiliation of this group has been called into question (e.g. Chirkova 2012a; LaPolla 2005a), as the

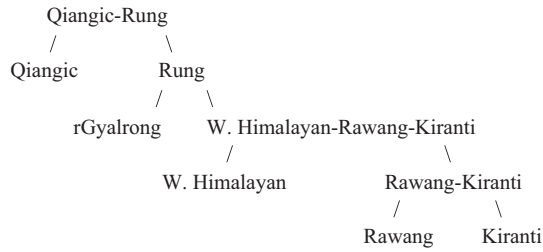


**FIGURE 2.1** THE SUBGROUPING OF QIANGIC-RUNG (FROM LAPOLLA 2005A: 394)

similarities seem to be more typological than genetic, and at least two of them, Shixing and Namuyi, have been argued to be closer to Naxi (Chirkova 2012b). Languages of this group characteristically have a set of five to ten directional prefixes on the verb, marking action up, down, up-river, down-river, inward, outward, towards the speaker, away from the speaker, and sometimes towards the mountain, away from the mountain, although the actual forms of the systems in different languages do not all correspond in any clear way (see Sun 1981b; Huang 1991; Chirkova 2012a), and so may be considered an areal phenomenon (Shirai 2009; Chirkova 2012a). They have cognate person marking systems which often have an actor–non-actor contrast (as opposed to a hierarchical system as in many other TB languages—see LaPolla 2010 on the hierarchical system in Rawang). The exception would be Tangut, if this language is in fact to be included in the Qiangic group (Sun 1991, 2001), as the very simple person marking system there is clearly hierarchical (see Ebert 1987; LaPolla 1992a). It may be that the Qiangic system was originally hierarchical and later developed into an actor/non-actor system, as it seems this system may be related at a very deep time depth to the system of the Rung group (see Figure 2.1 and discussion of the Rung group below), which is clearly hierarchical. These languages generally have evidential systems, but it is not clear if there is any cognacy among the systems. The case markers fill similar categories, but generally are not cognate. (See Sun 1982, 1985, 2001; Huang 1991 for more on this group.) Sun (1982, 1985, 2001), who first established the Qiangic group as a group, includes rGyalrong as part of the group, but the relation of rGyalrong to the Rawang and Kiranti groups is much clearer than that to the Qiangic group. The similarities rGyalrong shares with Qiangic are at a deeper level and there is also areal influence.

**The Rung group:** rGyalrong, T'rung[22] (Dulong), Rawang, Kiranti, Kham, and Western Himalayan (Byangsi, Darma, Chaudangsi, Kinnauri), languages that (except for rGyalrong) migrated down along the eastern edge of the Himalayas and then across Burma and into Northern India and Nepal.[23] These languages have clearly cognate complex person marking systems, and all but rGyalrong have a **-si* reflexive/middle marking suffix on the verb (adapted from LaPolla 2013b):

| | *1sg* | *1pl* | *2pl* | *dual* | *refl/middle* |
|---|---|---|---|---|---|
| Proto-rGyalrong | **-ŋ* | **-i* | **-ñ* | **-tsh* | |
| Proto-Dulong-Rawang | **-ŋ* | **-i* | **-n* | **-si* | **-si* |
| Proto-Kiranti | **-ŋ* | **-i* | **-ni* | **-ci* | **-nsi* |
| Proto-W. Himalayan | **-g/ŋ* | **-ni* | **-ni* | **-si* | **-si* |

Within this group then, there is a branching where the languages other than rGyalrong split off from rGyalrong, as it does not manifest the innovation of the reflexive/middle

marking. This accords well with the migrations assumed. A second branching of Western Himalayan off from Rawang and Kiranti is assumed, as the latter two share the innovation of a non-first-person-actor marking prefix.[24]

**The Karenic group:** The Karen were one of the earliest groups to migrate down into Burma along the river valleys. As the earliest migrants into Mon and Tai territory, this group has been greatly influenced by the latter two languages. Most striking is the verb-medial word order, prepositions, and post-nominal relative clauses (see Kato, this volume; Solnit, this volume).

**The Kuki-Chin group:** Now straddling the India–Burma–Bangladesh borders, the speakers of these languages closely followed the Karen down the eastern edge of the Tibetan plateau and into Burma, but went more westerly and so had less contact with Mon and Tai. This group has also innovated person marking, but independent of the system found in the Rung group. In the Kuki-Chin system we find the Proto-Kuki-Chin pronouns **kai* '1sg,' **naŋ* '2sg,' and **a-ma* '3sg' grammaticalized into the person marking prefixes **ka-*, **na-*, and **a* respectively (Thurgood 1985).

**The Lolo-Burmese group:** This group came down along the same path as the Karen and Kuki-Chin but at a later time and displaced them in many areas in Burma. They are now stretched from Sichuan and Yunnan Provinces in China (the Yi languages (Nasu, Nosu, etc.), Lisu, Zaiwa, Langsu) down along the migration path to southernmost Burma. Lisu is now found in Northeast India as well. Within Lolo-Burmese, some Loloish languages have been greatly influenced by contact with Tai (e.g. Lahu—Matisoff, this volume), while Burmese has been more influenced by Mon (see Bradley 1980; Wheatley, this volume). Within this group there is no relational morphology that can be reconstructed to the PLB stage. They do not show person marking, and most adpositions and auxiliaries are recent transparent grammaticalizations (see, for example, Matisoff 1991b; see also Bradley 2012 on the phonetic and morphosyntactic characteristics of this group).

**The Bai language** shared the same origin and territory as the Lolo-Burmese (initially Sichuan and later Yunnan Province in China), but broke off from the main TB group culturally (aligning themselves culturally with the Chinese), forming what was known in Chinese in the eighth century as the Bái Mán (White Barbarians), in contrast to the Wū Mán (Black Barbarians), the rest of the Lolo-Burmese, who were not as Sinophilic. Because of the cultural orientation of the Bai people, the Bai language came to be heavily influenced by Chinese, and now the lexicon is comprised largely of Chinese loanwords, and the word order is now verb medial (see Lee and Sagart 2008; Matisoff 2008). See Wang (2013) for an alternative view of the affilation of Bai.

**The Tani group:** Sun (1993a: ch. 5, 1993b; see also Post and Sun, this volume) argues convincingly that the Tani group (formerly called Mirish or Abor-Miri-Dafla, including the languages of the Adi, Nishi, Bengni, Apatani, and Mishing peoples) constitutes a separate branch of TB at the highest level. Thurgood (1985: 397) shows there is a high degree of uniformity in the case marking systems of the languages. I have little information about their migration to Southern Tibet and Northeastern India, only anecdotal information about the members of this group now in Arunachal Pradesh having come across northern Burma.[25]

**The Sal or Bodo-Konyak-Jinghpaw group:** This group, which includes the Luish/Askaian (Sak/Cak: Bernot 1967, Luce 1985, Huziwara 2008a, 2008b, 2010; Kadu/Kanan: Brown 1920, Sangdong 2012), Bodo-Garo (Burling, this volume, on Garo), Koch, Konyak, and Jinghpaw/Singpho (Kurabe, this volume) languages (Burling 1983; Post and Burling, this volume; see Matisoff 2013 for Asakian-Jinghpaw comparisions), was given central importance by Benedict (1972: 6) partly because of its central geographic

location. There are early Chinese records that seem to point to the Jinghpaw having been in northern Burma in the early part of the current era, but there is nothing definitive on their time of arrival. A number of linguists have grouped Rawang and Dulong (the so-called Nungish languages) with Jinghpaw, but I do not find a pattern of shared innovations that would lead to seeing them as forming a group. While Jinghpaw does have a person marking system, it is not cognate with that of the Rung group. Resemblances between the languages seem to be due to shared retentions rather than innovations, or due to long-term contact.

Aside from these genetic groupings, and a split in prosodic type between a southeastern iambic stress area and a northern trochaic stress area due to contact with Austro-Asiatic languages in the southeast,[26] there are two other broader areas of language contact, the Indo-sphere and the Sino-sphere (Matisoff 1990, 1991a). These terms refer to whether the languages are more influenced by Indic languages and culture, or by Sinitic languages and culture. There are certain features that we frequently find in languages in the Indo-sphere that we do not find in the Sino-sphere. In phonology we find, for example, the development of retroflex stop consonants. In syntax we find, for example, post-head relatives or correlatives of the Indic type (relative clauses are generally pre-head and without relative pronouns in ST languages). In Sino-spheric languages we often find the development of tones. Contact with Chinese can also result in monosyllabicity and an isolating structure (the most extreme example of this is Vietnamese).[27]

### 3.2 Person marking

Several branches of TB have independently innovated person marking, possibly due to areal influence (LaPolla 1992a, 1994b, 2001). The marking develops from copies of the free pronouns becoming prefixed or suffixed to the verb. Even groups that do not normally have person marking systems, such as Karen, have recently developed such systems in some dialects (see, for example, the Delugong dialect of Sgaw Karen discussed in Dai *et al*. 1991).[28] The pattern discussed most often is that of the Rung group, because of its wide geographic distribution along the edge of the Tibetan plateau. This pattern seems to have developed out of the Tangut pattern (1sg **-ŋa*$^{2}$, 2sg **-na*$^{2}$ (the same forms as for the free pronouns), first and second person plural *ni*$^{2}$),[29] though the pattern found in the Rung languages expanded greatly after the split of Qiangic and Rung (see Figure 2.1). Attempts to associate the Rung pattern with other patterns in the family and reconstruct it to PTB have been unsuccessful (see LaPolla 1992a, 2012b for discussion).

### 3.3 Multiple existential verbs

In a number of unrelated languages we find a pattern of multiple existential or locative verbs, with the difference between them being, if there are only two, as in Idu (Sun 1983: 72) a difference between an animate (Idu *i*$^{55}$) and an inanimate (Idu *kha*$^{55}$) referent. A language may have as many as seven different verbs with distinctions between the verbs being of the type animate vs inanimate, abstract vs concrete, location within a container vs location on a plane, and others. For example, Hani has a general existential *dzɑ̲*$^{33}$, an existential for people and animals *dzo*$^{55}$, an existential *bo*$^{33}$ for people and their organs, *dɔ*$^{31}$ for liquids, *de̲*$^{31}$ for general animates, *kɤ̲*$^{31}$ for existence within a group, and one existential verb, *sɔ*$^{55}$, which is used only in the poetic language (Li and Wang 1986: 54). In Queyu there are seven existential verbs (Wang 1991: 61): *tʃi*$^{55}$, for animals; *tɕy*$^{13}$, for location in a vessel or certain area; *ʁo*$^{31}$, for non-movable objects; *ɕi*$^{13}$, for movable

objects; *lo*[13], for an object mixed up in another object; *ru*[13], for abstract objects; and *ʈʃe*[13], for possession by a person. In Zaiwa (Xu and Xu 1984: 80–1) there are six existential verbs, two of which are specialized for animate beings and can be causativized: *nji*[51], which seems to mark the existence or long-term location of animate beings and has the causative form *njɨ̲*[51]; *luŋ*[55], for short-term location of animate beings and has the causative form *lu̲ŋ*[55]; *vo*[55], for possession by a person; *ʈʃoʔ*[31], for inanimates; *po*[51], for containment within a vessel; and *toŋ*[51], for roads and footprints. Other languages that have this feature are Jinghpaw, Apatani, Tamang, Naxi, Nusu, Pumi, rGyalrong, Qiang (this volume) and most of the other Qiangic languages. While some of the categories of existential verbs correspond among the languages, particularly within Lolo-Burmese, such as 'containment in a vessel or area' (Hani *tɛy*[13], Zaiwa *po*[51]), 'possession by a person' (Hani *ʈʃe*[13], Zaiwa *vo*[55]), the forms used in these languages are clearly not cognate.

### 3.4 Causative constructions

The PST **s-* causative prefix and voicing alternations are no longer productive in most TB languages, and so languages throughout the family (in more than 80 languages and dialects I have counted) have innovated analytical causatives, usually by serializing a verb meaning 'send on an errand,' 'entrust with a commission,' 'make,' 'do,' or 'give' to create a causative construction (Matisoff 1976, 1991b; LaPolla 1994b). For example, in Lahu the verb *cɨ* 'send on an errand' is used to create causatives, as in *Johnny thàʔ qay-cɨ-ve* [OBJ go-CAUSE-PART] 'Make Johnny run' (Matisoff 1976: 418). Though occasionally different languages will use cognate verbs to form such causatives (e.g. Lahu and Burmese), the pattern cannot be reconstructed to even some of the lower (e.g. the Proto-Lolo-Burmese) levels; it must have been independently grammaticalized in each of the languages (Matisoff 1976). Even among the very closely related languages and dialects of Northern Burmish we find radically different forms used for causative marking: Longchuan Achang *xu*[55], Xiandao Achang *ʂaŋ*[31], Bola *nɔ̃*[55], and Leqi/Langsu *lɔ̲ʔ* [55]. In each case we have the independent grammaticalization of a free verb into a post-verbal causative marker.

### 3.5 Benefactive constructions

Another commonly found development among TB languages is the grammaticalization of a benefactive construction. This most commonly takes the form of an auxiliary verb derived from a verb meaning 'to give,' as in Jinghpaw (*-ʈʃa*[33]), Tamang (*pín*), Tshangla (*bi*), Camling (*bi*), Belhare (*-per*), and Lahu (*pî*; for third person benefactives; Matisoff 1991b). As can be seen from these examples, the verb used in this construction is often the PST verb **biy* 'give,' but the constructions themselves were independently innovated. A fully morphological benefactive such as is found in Rawang, where the suffix *-ā* has an applicative benefactive function (LaPolla 2000; e.g. *rí-ā-ò-ē* (carry-BEN-TR.NPAST-NPAST) '(He) is carrying (something) for him') is rare (see LaPolla and Yang 2007 for the possible origin of this marker).

### 3.6 Semantic case marking

As mentioned above, there is no relational morphology that we can reconstruct to the PST stage, but there has been grammaticalization of different types of adpositions in every branch of the family (see Hale and Watters 1973; DeLancey 1984; LaPolla 1994b, 2004). These adpositions are also often used for subordinate clause marking (Genetti 1986,

1991; Ebert 1993). There is a regular path for the development of adpositions in the family, where locational markers first develop, then these are extended in use to cover other types of relation, in a predictable way along two different paths: ablative > instrumental > manner adverbial > agentive > anterior or causal clause subordinator (see Hargeaves, this volume for one example of the full set); locative > dative > patient > purposive, temporal, or conditional clausal subordinator (LaPolla 1995b). Large-scale surveys of agentive marking (LaPolla 1994b, 1995a) and 'object' marking (LaPolla 1992b, 1994b) were carried out, and the results indicate that although 106 languages (out of 145 surveyed) have an agentive marker, and such a marker can be reconstructed to some of the lower-level groupings within TB, such as Proto-Bodish, there is no form that cuts across the upper-level groupings to the extent that it could be reconstructed to PTB. The conditions on the use of agentive marking in each language were also surveyed. The results point to the existence of at least two major types of 'ergative' marking in TB: systemic and non-systemic (or 'paradigmatic' and 'non-paradigmatic'). Non-systemic marking can be seen as a relatively recent development, and has the same function as 'anti-ergative'/'anti-agentive' marking (LaPolla 1992b, 1994b), i.e. disambiguation of two potential agents. It is used only when needed for this purpose and does not pattern paradigmatically, so is unlike what is normally referred to as 'ergativity.' Systemic ergativity is much more complex, often involving semantic and pragmatic functions beyond simple disambiguation (see, for example, Genetti 1988; Nagano 1987; Tournadre 1991, 1996; Saxena 1991; Chelliah 2009, forthcoming; Donohue and Donohue 2016). Though discussed as two types for expository purposes, these two types, as they are manifested in TB, are actually points on a continuum of types from completely non-systemic to fully systemic, with movement along the continuum corresponding to degree of grammaticalization.[30]

From the survey of 'object' marking in TB (LaPolla 1992b), it was found that out of 126 languages surveyed, 22 languages had no nominal object marking, 20 languages had nominal morphology consistently marking the patient as object, regardless of whether the clause included another non-agent argument (i.e. was either transitive or ditransitive), and 84 languages, from a broad spectrum of languages in all sub-branches and areas of TB, had a type of marking where the patient in monotransitive clauses is often or always marked with the same postposition as the recipient, beneficiary, or other non-actor argument in ditransitive clauses. For example, in the Lahu examples below (Matisoff 1973: 156–7), *thàʔ* marks a patient argument in (1a), but a recipient argument in (1b).

(1) a. *ŋà thàʔ tâ dɔ̂ʔ.*
1sg OBJ NEG.IMP hit
'Don't hit me.'

b. *liʔ chi ŋà thàʔ pîʔ.*
book that 1sg OBJ give
'Give me that book.'

I refer to this type of marking as 'anti-ergative' or 'anti-agentive' marking, as the crucial function of this type of marking is to mark an animate argument that might otherwise be interpreted as an actor being something other than an actor. In this way it is the opposite of the type of ergative marking we find in some of these same languages, which marks an argument as being an actor.[31] In those languages that have both types of marking, it is often optional whether to use one or the other or both, but the marking is often not systemic, as it is used only to disambiguate two arguments when that becomes necessary due to the semantics of the referents, the actions involved, or the pragmatic viewpoint (see, for example, Matisoff 1973: 155–8 on Lahu *thàʔ*, Wheatley 1982 on Burmese *kou*). It is especially common for overt marking (either ergative or anti-ergative) to be necessary when the most natural (unmarked) topic, the agent, is not the topic, and instead appears in the preverbal focus position.

Most of the languages have grammaticalized different morphemes to mark anti-ergative arguments, and so while it is possible to reconstruct forms for some low-level groupings such as Tani or Tibetan, in other branches even closely related languages have different anti-agentive markers (e.g. Lahu (*thàʔ*), Akha (*áŋ*)), or differ in terms of having anti-agentive marking or not (e.g. Akha, which has anti-agentive marking, and Hani, which does not). We can assume that this marking is not of great time depth.

Those languages that have postpositions, but do not have the anti-agentive marking pattern (e.g. Tujia, Hani) generally mark NPs by strictly semantic principles. That is, a locative/goal (when marked) will always be marked the same way, and a patient/theme (when marked) will always be marked the same way, and there are no relation changing (or 'promotion') rules (e.g. passive, dative, antidative). We then have two types of role marking in TB. Both are semantically based, but one (agentive and patient marking) is based on what semantic role a referent has, and the other (anti-agentive marking) on what semantic role a referent does not have. The development of both types of marking can be said to be related to the importance of semantic role, pragmatic viewpoint, and animacy to the users of these languages.

### 3.7 Evidential marking

Evidential marking, the marking of how one came to know the information one is reporting in making a statement (e.g. seen with one's own eyes, heard from someone else, inferred—see Aikhenvald and LaPolla 2007; Tournadre and LaPolla 2014) has grammaticalized in quite a few languages within TB. The systems may be as simple as having only a contrast between hearsay and non-hearsay (e.g. Rawang, where the hearsay particle *wā* is derived from the verb 'say'), to more complex systems, as in different varieties of Tibetic (DeLancey 1986, this volume; Woodbury 1986; Sun 1993c; Hongladarom 1993). Some other languages which have evidential marking are Qiang (LaPolla 2003, this volume), Kathmandu Newar (Hargreaves 1983, this volume), and Akha (Hansson this volume; Egerod 1985; Thurgood 1986).

### 3.8 Reflexive/middle marking

Reflexive marking of different types, using reflexive pronouns or verb suffixes, is found throughout the family, but a small number of languages have independently innovated patterns like that found in French, where marking that was originally used only for true reflexives has been extended to middle voice situations (i.e. situations where there is no clear distinction between the 'doer' and the one 'being done to'; LaPolla 1996, LaPolla and Yang 2004). One pattern found was mentioned above. This is the **-si* suffix found in the Rawang, Kiranti, Kham, and Western Himalayan languages. For example, in Dulong, *àŋ sat-ɕiŭ* 'He is hitting himself' and *àŋ et-ɕiŭ* 'He is laughing/smiling' have the same morphological form, but the semantics of the reflexive are less clear in 'laugh,' and this verb must take this suffix to mean 'laugh' rather than 'laugh at (someone).' This suffix has also become extended to use as a detransitivizer in some contexts (see LaPolla and Yang 2004; LaPolla 2000, this volume, on Dulong and Rawang). Several Tani languages, e.g. Padam, Nishi, have a similar suffix **su* (Lorrain 1907; Tayeng 1983; Das Gupta 1969; Sun 1993a), but it is unclear whether this suffix is cognate to the one in Rawang. rGyalrong has a verbal prefix *nə-* which marks indirect reflexives and middles and also functions as an emphasizer of intransitiviness (Nagano 1984: 55, this volume; Jin *et al*. 1958: 81). Mizo (Chhangte 1993; Lorrain and Savidge 1898) has a verb prefix *ni-* which marks reflexive, reciprocal, and middle semantics.

Quite a few other frequent patterns could be discussed, but the above should suffice to show that with the loss of the original PST derivational morphology the daughter languages each went their own way in creating new morphology, but due to inherited typological features and areal contact, there were certain regularities in the types of morphology they developed (see LaPolla 1994b for more detailed discussion).

## NOTES

1 The comparative method is limited in how far back it can go. Arguments trying to link genetic or archeology findings of earlier periods to languages carry no weight in discussions of language history, as there is no necessary connection between these sorts of evidence and language forms.

2 P = prefix, $C_i$ = initial consonant, G = glide, : = vowel length, $C_f$ = final consonant, s = suffixal **-s*; parentheses mark that the item does not appear in all syllables. This is an expansion of the syllable canon given in Matisoff 1991a: 490 and 2003: 12.

3 This list is not exhaustive, and the necessarily brief discussion glosses over many controversies and details. As is always the case in attempting to find ST correspondences, the lack of a single standard for the reconstruction of OC (ideally based mainly on the comparative method) makes comparative work difficult and more conjectural than would otherwise be the case. What constitutes a cognate set using one reconstruction system might not be seen as cognate using another system (see LaPolla 2012a for discussion). I have here used the system of Baxter 1992, as this is the best system I have found to date, though even this system is in flux (see Baxter 1995; Baxter and Sagart 1998, 2014 for discussion of some of the recent changes, and Schuessler 2015 for a critical reaction to the changes).

4 See Hill (2014) for a different analysis of the Tibetan data.

5 In a slightly earlier paper, Mei (1988) argues for reconstructing a voiced initial rather than a prefix.

6 Baxter (1992: 221; following Chang and Chang 1976, 1977) also associates his **N*-prefix (posited to account for characters with phonetic elements that appear in syllables with both stop and homorganic nasal initials) with Tibetan *a-chung*. Gong (2000; also following Chang and Chang 1976, 1977) associates Tibetan *a-chung* with a nasal prefix, but uses it to explain the development of Middle Chinese **d-*, items that Baxter (1992) reconstructs with **ml-* clusters (e.g. Gong: **N-ljək* (食), Baxter **mljək* (see Matisoff 1995, fn. 1; originally **Ljɪk* in Baxter 1992).

7 See also Konnerth's (2009) discussion of the voiced velar nominalizing prefix found in many languages in the family, which she associates with these functions, but those velar prefixes might instead be related to the nominalizing **aŋ-* prefix found in other parts of the family (see §1.1.3).

8 Matisoff (2003: 107): states that as far as verbal valence is concerned, "**m-* is consistently stativizing/intansitive, **s-* is consistently causativizing/transitivizing, while **ʔ-* behaves sometimes one way, sometimes the other."

9 Although the intransitivizing prefix Pulleyblank (1973a, 2000) reconstructed (see §1.1.2) was written as **ă-*, it was seen as a non-syllabic pharyngeal glide; no one has argued for a prefix such as the one here to explain the voicing and transitivity contrasts found in Chinese, and no one has given arguments why it couldn't have been such a prefix.

10 Although not often explicitly mentioned, except by Jin (1998a, 1998b, 2006, 2012), the idea is that some of the finals we find on words are etymological, while others are due to affixation. Here we are only talking about affixation.

11 The usual reading of this last character when used as an interrogative pronoun is **ʔa*, but it is written using a character that is in other contexts pronounced **ʔak*. If it is the same pronunciation as the one otherwise written (烏), it seems odd to use a character that normally is read with a stop final.

12 This may also be the origin of the *-s* nominalizing suffix found in many languages in TB.
13 See Wang 1958[1980], Downer 1959 on the derivational process of the departing tone.
14 Our answer to this question will affect our understanding of certain word families. For example, Pulleyblank (1991: 30) suggests that **k(r/j)aʔ* (舉) 'all'; 'lift' has an allofam **kjat* (揭) 'lift' (and so the latter would involve a **-t* suffix). This set would stand only if we assume the root did not originally have a **-k* final.
15 One might conjecture that the mysterious **-t* final of the OC negative imperative **mjət* is actually the prohibitive **ta*, but we do not find **ma-* and **ta-* occurring together in TB.
16 By grammatical relations is meant the grammatical singling out of a particular NP (the 'pivot' of a construction) for special grammatical treatment in a construction, such that a restricted neutralization of semantic roles occurs (has conventionalized/grammaticalized) in that position in the construction for the purpose of aiding referent identification. See Van Valin and LaPolla 1997, ch. 6, for the concept of pivot and its relation to grammatical relations. See Dixon 1995, ch. 2, and also Hale and Watters 1973 on semantic marking vs grammatical marking.
17 This is due to the fact that crosslinguistically agents are overwhelmingly more likely to be topical and patients are more likely to be focal in discourse. See Du Bois 1987, Mallison and Blake 1981 and Sun and Givón 1985 for statistics.
18 These groupings are not definitive, as much more work needs to be done on comparing the morphology (rather than random samples of words) to prove genetic relatedness (see LaPolla 2012a, 2013b for arguments). For earlier hypotheses on the genetic groupings, see Benedict 1972; Burling 1983; Dai *et al*. 1989; DeLancey 1987; Matisoff 1990, 1991a; Shafer 1955; Sun 1988; Thurgood 1984, 1985; Bradley 1997.
19 See Tournadre 2014 for this term, used for all of the varieties that can be shown to be derived from Old Tibetan.
20 See Tournadre 2008 for arguments against the use of the term "conjunct–disjunct" for the relevant phenomenon.
21 Dolakha Newar (Genetti, this volume), a Newar variety surrounded by Kiranti languages, is an exception in not manifesting the sort of conjunct–disjunct or evidential systems found in the other varieties of this language and in having innovated a person marking system on the verb. Classical Newar did not have such a system, and in the only other variety to have innovated such a system, Pahari, the system is not cognate with that in Dolakha, and neither system is cognate with the Rung or other known systems. See Kansakar 1999 for discussion and evidence.
22 See LaPolla 1987 on the lack of correspondence in the tone systems. Commonalities shown in that paper between Jinghpaw and T'rung are shared retentions, as both are rather conservative phonologically.
23 Ebert (1990) has argued for a Kiranti-rGyalrong-Rawang genetic grouping (see also Thurgood 1985), based largely on the person marking systems; I am including also Western Himalayan in this grouping, based on the person marking and the reflexive/middle marking (LaPolla 2013b). See also Grierson (1909, vol. III), for particular characteristics shared between the Western and Eastern Himalayan pronominalized languages not shared by the Tibetic languages, and Watters (1975: 50) for discussion of the "remarkable similarities" between the pronominals and subject marking systems of the Eastern (now including Kham) and Western Himalayan pronominalized languages. Chang and Chang (1975) also argued for a close connection between rGyalrong and T'rung. Given that the distribution of the group is due to migration along the eastern and southern edges of the Tibetan plateau, we would expect other languages found along that path, particularly in Northeast India, would be members of the group, but so far no language of that area fits the strict criteria established in LaPolla 2013b for membership in the group. The name Rung was coined by Thurgood (1984), but used for a somewhat larger grouping of languages identified using

different principles and methodology. That original grouping is no longer recognized, and so I have used the name for this grouping, as my original name for the group, GRKW, is less euphonious.

24 Thurgood (1984) discusses the fact that rGyalrong, T'rung, and Kham all have a pre-verbal yes–no interrogative particle **ma-* (< PTB **ma* 'negative particle'), and argues this is a shared innovation (a reduction of an alternative (A–not A) question) that points to a common parent language. If only these three share this innovation, it would cloud the picture presented above, unless there was an assumption that this form was lost in Kiranti, just as it is now being lost in T'rung.
One interesting commonality is what I have talked about as "transitivity harmony" in Rawang (LaPolla 2008c, 2011) and Kiranti, e.g. Hayu.

25 The Rawang people feel that the speakers of the Tani languages are related to the Rawang people, being simply a further extension of the Rawang migration west. They point to the name *Abor* as evidence (*Abur* is a Rawang clan name), and tell stories of Rawangs who have been to India and can speak in Rawang with the people there and be understood. Given the major differences in the languages, this would seem unlikely.

26 Cf. Donegan and Stampe's (2004) discussion of the shift in Munda due to the prevailing rhythm patterns in South and Southeast Asia.

27 As discussed in LaPolla 2001: 236, there is also the subjective aspect of the training of the scholars documenting the languages, which influences the description of the languages.

28 Independent innovation of bound pronominal paradigms in various languages in a family is not unique to TB, but occurred also in Amerindian (Mithun 1991) and Australian (Dixon 1980) languages.

29 The correspondence of the latter form with the Western Himalayan first and second person plural marker **ni* is interesting in this regard, but the Western Himalayan form may be due to leveling of the original second person plural form to marking both plurals.

30 See also DeLancey 2011, Sawada 2012, and the other papers from the two special issues (34.2 and 35.1) of *LTBA* on 'Optional Case Marking in Tibeto-Burman.'

31 The term anti-ergative may be somewhat infelicitous, as, like the term ergative itself, it may lead the reader to credit these particles with more of a paradigmatic nature than they actually have, but this term is already somewhat established in the literature (e.g. Comrie 1975, 1978; LaPolla 1992b), and clearer than Blansitt's (1984) term for this phenomenon, dechticaetiative. I also do not use Dryer's (1986) term primary object because he defines it as a grammatical function. The use of this type of marking in most of the TB languages that have it is not of the nature of a grammatical function, and in some languages it is also not limited to marking objects and recipients.

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CHAPTER THREE

# WORD ORDER IN SINO-TIBETAN LANGUAGES FROM A TYPOLOGICAL AND GEOGRAPHICAL PERSPECTIVE[1]

*Matthew S. Dryer*

## 1 INTRODUCTION

Word order, both at the clause level and even more at the phrase level, varies among Sino-Tibetan languages. In this chapter, I describe some of this variation and examine it in the light of word order tendencies found among the languages of the world as a whole. In section 2, I briefly summarize some of the variation in word order within Tibeto-Burman (TB) languages, and discuss what features of word order in these languages are typical and atypical. In section 3, I discuss word order in Chinese, identifying some typologically unusual features and discussing possible explanations for them. An overall theme shared by the two sections is that word order in Sino-Tibetan is best understood in an areal context.

## 2 WORD ORDER IN TIBETO-BURMAN

The discussion in this section summarizes briefly what I discuss in much greater depth in Dryer (2008). It is based on an examination of descriptions of 93 TB languages.

### 2.1 Order of object and verb and word order features that correlate with it

The distribution of the two orders of object and verb in TB is straightforward: all TB languages are OV, except for Bai and the Karen languages, which are VO (and more specifically SVO). Although available data varies in the descriptions, the OV languages within TB generally share a variety of other word order characteristics typical of OV languages, in employing postpositions rather than prepositions, in placing genitive modifiers before the possessed noun, in placing relative clauses (if they are externally headed) before the head noun, in placing postpositional phrases before the verb, in employing clause-final markers for subordinate clauses, in placing markers of polar questions (if they employ them) at the end of sentences, and in placing auxiliary verbs after the main verb. An example of an exceptional feature found in a few TB languages is the placement of manner adverbs. While most TB languages more commonly place manner adverbs before the verb, a few TB languages, all of them Kuki-Chin-Naga languages, commonly if not preferentially,

place manner adverbs after the verb. This is described as the preferred position in Tiddim Chin (Henderson 1965) and Angami (Giridhar 1980) and is illustrated for Tiddim Chin in (1).

(1) *'Hawi'* *ci* *in* *dawng* *zel zal* *a*
hello say PTCL answer loudly PTCL
V ADV
'He called out loudly, as if answering someone.' (Henderson 1965: 4, sentence 5)

In some cases, the VO TB languages exhibit the mirror image of the characteristics mentioned above for OV TB languages; however, in many other cases, they do not. Both Bai and the Karen languages employ genitive–noun order. In fact this order is the one word order feature that I have data on that is apparently shared by all Sino-Tibetan languages. In employing this order, Bai and the Karen languages are actually not atypical: as discussed in Dryer (1991), the two orders of genitive and noun are about equally common among SVO languages.

The Karen languages exhibit a number of features that are atypical of VO languages. I illustrate this with features from Bwe Karen. While Bwe Karen does employ some clause-initial markers of subordinate clauses, there are also some clause-final subordinators, illustrated by *kha lɛ́* 'if' in (2).

(2) *nə-dɛ̋* *ɔ* *kha lɛ́,* *yə-kh*a *ɔ* *k*a
2SG-if stay if 1SG-FUT stay then
'If you stay, I will stay.' (Henderson 1997: 78)

Another feature of Bwe Karen that is atypical for a VO language is the placement of a word meaning 'able' after the main verb, as in (3).

(3) *kə-pwa* *phá* *dɔ̋* *ə-kháchɪ* *də-ja-nɔ*
1PL-build granary village POSS'D-near NEG-able-NEG
'We can't build our granaries close to the village.' (Henderson 1997: 142)

While this is rather unusual among VO languages, it is something found in a number of VO languages in other families in southeast Asia, including Tai-Kadai (e.g. Nung: Saul and Wilson 1980: 47–8, 55), Mon-Khmer (e.g. Chrau: Thomas 1971: 97), and Hmong-Mienic (Hmong Njua: Harriehausen 1990: 179–80).

Bai also exhibits features atypical of VO languages. Foremost among these is the placement of relative clauses before the modified noun, as in (4).

(4) [*vi*$^{42}$ *tse*$^{21}$*tsa*$^{42}$ *no*$^{33}$] *sɤ*$^{55}$ *xã*$^{55}$ *ɤo*$^{42}$
write tidy LINK word read easy
'Words that are written tidily are easy to read.' (Xu and Zhao 1984: 73)

As discussed in greater detail in section 3 on Chinese, this order is extremely rare among VO languages. There is at least one word meaning 'able' that follows the main verb, as in (5).

(5) *a*$^{55}$*na*$^{44}$ *li*$^{55}$ *ŋɛ*$^{21}$ *ta*$^{42}$
where all go able
'I can go anywhere.' (Xu and Zhao 1984: 22)

And although Bai has some prepositions, it also has some postpositions, like *no*$^{33}$ marking the indirect object in (6).

(6) *ŋa*$^{55}$ *si*$^{31}$ *nɯ*$^{55}$ *no*$^{33}$ *pe*$^{21}$*xo*$^{55}$ *ku*$^{55}$
1PL give 2SG OBJ flower CLSFR
'We gave you a flower.' (Xu and Zhao 1984: 51)

## 2.2 Noncorrelating word order characteristics

As discussed in detail in Dryer (1992), there are a number of word order characteristics which, contrary to widespread belief, do not correlate with the order of object and verb. These include the order of adjective, numeral, and demonstrative with respect to a modified noun and the order of degree words with respect to a modified adjective. Among the vast majority of OV languages in Asia that are not TB, these pairs of elements occur in the order modifier–modified, and this has led some linguists to the mistaken belief that these features are to be expected of OV languages. However, as shown in Dryer (1992), it is not the case that these features are typical of OV languages. For example, with respect to the order of adjective and noun, it is actually somewhat more common for these to follow the noun in OV languages outside of Asia. The OV TB languages are in many respects atypical among OV languages in Asia, but normal for OV languages in the world as a whole, in that in most OV TB languages, some of these modifiers normally follow the modified word. The distribution of these word order characteristics among TB languages is also interesting in that there is considerable variation in their distribution, and it is often the case that even within a given subgroup of TB, some languages will employ one order while others employ the opposite order. It is possible to describe this variation only very briefly here; I discuss it in much greater detail in Dryer (2008).

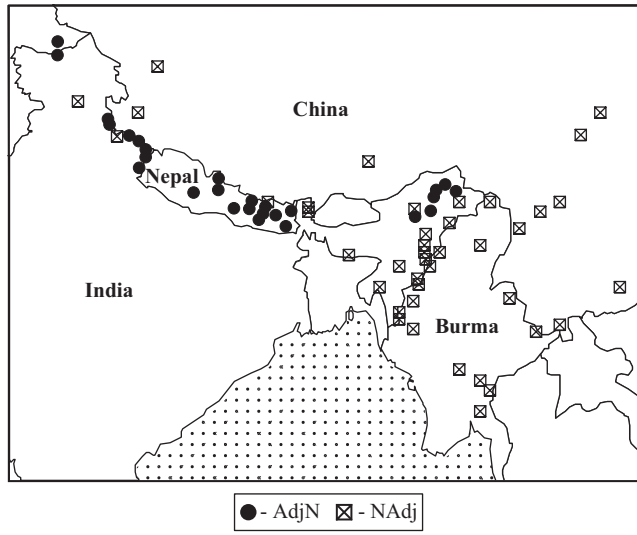
### *2.2.1 Order of adjective and noun*

Both orders of adjective and noun are well-attested as preferred orders among TB languages. Among the 85 TB languages for which I was able to obtain information on this, the preferred order is AdjN in 28 languages and NAdj in 40 languages, and in 17 languages, both orders occur without any indication in my source that one order is preferred. Furthermore, assuming for the purposes of discussion the classification of TB languages proposed by Bradley (1997), in three of Bradley's six highest-level subgroups of TB (Bodic, North-Eastern India, and Central), there are some languages in which AdjN is the preferred order and other languages in which NAdj is the preferred order. In the other three subgroups, all of the languages are either NAdj or allow both orders, with neither order dominant. Even within a number of groups at the next level down in Bradley's classification, there are four groups containing languages of each of the two types (Bodish, Bodo-Garo, Tani, and Digarish 'Mishmi'). For example, within Bodo-Garo, Deuri (Brown 1895) is AdjN, while Kokborok (Karapurkar 1976) and a few others are NAdj.

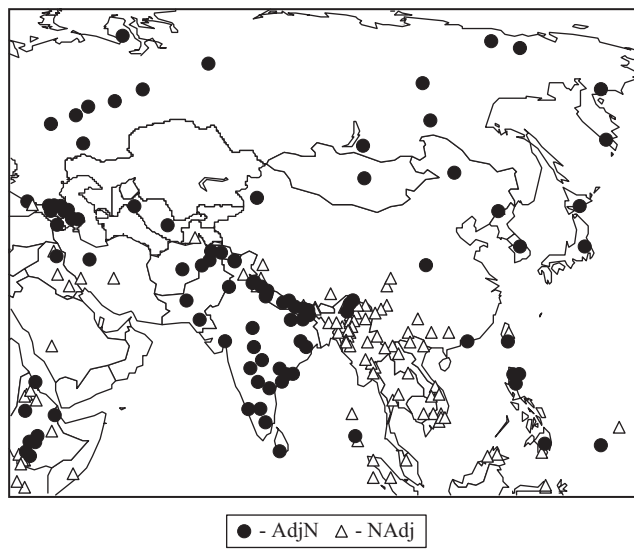
The geographical distribution of the two orders of adjective and noun is shown in Map 3.1. This map makes clear the extent to which AdjN order is found in the western part of the area in which TB languages are spoken while NAdj order is found more to the east.

This distribution can be understood in terms of the distribution of the two orders in non-TB languages in the surrounding area. The languages to the west and southwest of TB, especially the Indic languages within Indo-European, are consistently AdjN, while the languages to the east of TB other than Chinese, namely, Tai-Kadai and Mon-Khmer languages, are consistently NAdj. Map 3.2 shows the distribution of the two orders of adjective and noun in a larger area of Asia that surrounds TB languages. The overall impression given by Map 3.2 is two clear areas in South and Southeast Asia, one to the west which is AdjN and one to the east which is NAdj. But these two areas split TB down the middle.

Note that the clearest exceptions to the tendency for AdjN order in the west are a number of NAdj TB languages in the extreme western side of TB. These languages are all languages that are closely related to Tibetan, however, and they thus represent either




**MAP 3.1** ORDER OF ADJECTIVE AND NOUN




**MAP 3.2** ORDER OF ADJECTIVE AND NOUN IN ASIA

languages which have moved into that area relatively recently, and thus have been less subject to influence from Indic languages, or languages whose less accessible location in the Himalayas has also meant that they have been less subject to influence from Indic languages.

### *2.2.2 Order of demonstrative and noun*

The overall pattern of the distribution of the two orders of demonstrative and noun among TB languages is somewhat similar to the distribution of the two orders of adjective and noun: DemN order is more common to the west, while NDem order is more common to the east. However, DemN order is more common than AdjN order and there are a number of languages which are DemN but NAdj. Among the 79 TB languages for which I was able to obtain information on the order of demonstrative and noun, 51 are DemN, 20 are NDem, three allow both orders without there being evidence for one order being dominant, and five normally have demonstrative words simultaneously preceding and following the noun, as in the example in (7) from Nishi.

(7) *sa* *nyem* *sî*
here woman this
'this woman' (Hamilton 1900: 20)

As with the order of adjective and noun, we find both orders represented within the same subgroup. In four of Bradley's highest-level subgroups there are some languages which are DemN and others which are NDem (Bodic, Kuki-Chin, North-Eastern, and South-Eastern). Note that this set of subgroups is very different from the analogous set with the order of adjective and noun: Bodic is the only subgroup in both sets. In other words all six subgroups are inconsistent, either in the order of adjective and noun or in the order of demonstrative and noun. Again we find languages of each type even within lower-level subgroups. For example, among the Burmish languages, Maru (Clerk 1911) is DemN while Achang (Dai 1985) is NDem.

### *2.2.3 Order of numeral and noun*

There is less variability in the order of numeral and noun among TB languages. The only languages in which NumN is dominant are Bodic, although both types are about equally common in Bodic. Within Bodic, the distribution is largely predictable from lower-level subgroups in Bradley's classification: West Himalayish and Kiranti are NumN while Central Bodish (Tibetan), Western Bodish (Tamangic), and Eastern Bodish (e.g. Monpa) are NNum. Within what Bradley classifies as Central Himalayan, all are NumN except for Newari; however, the classification of Newari is notoriously problematic.

### *2.2.4 Order of degree word and adjective*

I was able to obtain data on this characteristic for fewer languages, and I did not include affixes expressing degree. Again, there is a split, with 25 languages in which DegAdj is preferred, 11 languages in which AdjDeg is preferred, and four in which both orders occur with no evidence that one is preferred. The subgroup with the most AdjDeg languages is actually geographically central, namely, Kuki-Chin. And again, we find inconsistencies within lower-level groups. Among the western languages of Central Bodish, Jad (Sharma 1989) is AdjDeg while Nyamkad (Sharma 1992) is DegAdj.

## 3 CHINESE

I use the expression 'Chinese languages' to apply to what are traditionally called 'dialects' of Chinese, following the use of these terms within linguistics. I will, however, largely