WORD ORDER IN TIBETO-BURMAN LANGUAGES[1]

Matthew S. Dryer
University at Buffalo

Abstract: This paper gives a detailed description of the word order patterns found among Tibeto-Burman languages. While Tibeto-Burmanists sometimes think that many Tibeto-Burman languages have some unexpected features for verb-final languages, this is by and large not the case. For example, verb-final languages in which one or more noun modifiers (adjective, demonstrative, numeral) follow the noun are very common elsewhere in the world. It is true that the majority of other verb-final languages in Asia put all modifiers before the noun, but it is in fact those other languages which are rather atypical crosslinguistically. The paper has separate sections on the two groups of languages in Tibeto-Burman which are VO, namely Karen and Bai. The rest of the paper focuses on the OV Tibeto-Burman languages, looking at six word order features that are not predictable from a language being OV, namely (1) adjective and noun; (2) relative clause and noun; (3) demonstrative and noun; (4) numeral and noun; (5) degree word and adjective; and (6) negative and verb. The patterns of the distribution of the various types is discussed in detail, both from a genealogical perspective and from a geographical one.

Keywords: word order, adjectives, demonstratives, numerals, degree words, negative morphemes

0. INTRODUCTION

Word order, both at the clause level and even more at the phrase level, varies among Tibeto-Burman languages. In this paper, I will 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. I will argue that when one compares word order in Tibeto-Burman languages with word order in other language families in Asia, both families with OV order (Altaic, Japanese, Korean, Indo-Iranian within Indo-European, Dravidian), and families with VO order (Chinese, Tai-Kadai,

Mon-Khmer, and Hmong-Mien), one can get a distorted picture of the ways in which word order in Tibeto-Burman languages is typical and ways in which it is atypical, and a rather different picture emerges when one compares it to word order in languages outside of Asia. Although Asia constitutes the largest continent in the world in terms of land mass, fewer than 15% of the world's languages are probably spoken in Asia (if we exclude Indonesia and the Philippines from Asia, treating them as part of a Pacific area). And as I have discussed elsewhere (Dryer 1988, 1992a, 2005b, 2005h), the OV languages of Asia outside of Tibeto-Burman are in many ways atypical of OV languages in the world, so that, as I will argue below, while OV languages in Tibeto-Burman often exhibit word order properties that are different from other OV languages in Asia, they are actually more typical in many ways of OV languages in the world as a whole.

To summarize briefly the overall picture, most of the OV languages in Asia outside of Tibeto-Burman tend to be head-final at all levels of syntactic structure, not only placing most clause constituents before the verb, but also placing most if not all modifiers of nouns before the noun and modifiers of other elements before the modified element. This widespread tendency in Asia has led many linguists to conclude that these patterns are normal for OV languages. However, as I have demonstrated in detail in Dryer (1992a), based on a sample of 625 languages, this tendency for all modifiers to precede modified elements is generally not found in OV languages outside of Asia. It is true that there are certain types of dependents which tend to precede their heads in OV languages, but for many other types of dependents, no such tendency is found. Within Asia, the OV languages within Tibeto-Burman are mostly an exception to this tendency within Asia for OV languages to place all dependents before their heads: in the majority of OV Tibeto-Burman languages, at least some modifiers of nouns, for example, typically follow the noun. Tibeto-Burman languages thus look somewhat exceptional from an Asian perspective, but turn out to be quite normal when viewed from the perspective of languages as a whole.

I will focus on six word order parameters in this paper other than the order of object and verb, the majority of them involving order between the noun and various modifiers of the noun, namely (descriptive) adjectives, numerals, demonstratives, and relative clauses, but also the order of adjective and modifying degree word (adverb) and the order of negative and verb. All of these are ones in which there is considerable variation among the OV languages of Tibeto-Burman. Furthermore, except for the order of relative clause and noun, these are all word order characteristics which do not correlate with the order of object and verb (Dryer 1988, 1992a, 2005h). The order of relative clause and noun does correlate with the order of object and verb only in the sense that RelN order (with the relative clause preceding the noun) is far more common in OV languages than it is in VO languages (Dryer 2005g). However this difference arises because the order RelN is very rare in VO languages, as discussed further in sect. 4 below. But the orders RelN and NRel are approximately equally common among OV languages, and hence the distribution of these two orders among OV Tibeto-Burman languages is worth examining.

The Tibeto-Burman languages I have examined include most languages for which I have been able to locate descriptions containing information about word order. Questions arise about the reliability of some of these sources, but I will assume for purposes of discussion that all of them are accurate. Some of the sources are less reliable in terms of their phonological accuracy, but probably more reliable in their statements about word order, since such information is easier to determine. Even here, however, some of the sources are probably inaccurate. Some contain apparently contradictory information about word order. For example, Hutton (1929: 15;1987: 11) says that in Chang "the adjective follows the noun which it qualifies" but later (1929: 43; 1987: 47) says "the adjective ordinarily precedes the noun". Some of the languages I list separately here are probably dialects of the same language by some criteria; my criterion for treating languages separately is largely based on whether they have their own description.

I do not have information on all characteristics for all languages mentioned in this paper. For example, I did not find sufficient information in Ebert (1997b) to classify Camling according to the order of adjective and noun. For many languages, only some characteristics are provided by the available descriptions. In general, I depend on explicit statements in my sources regarding particular characteristics. In some cases, where there is no explicit statement in my source, but one order is found in many examples in different parts of the source, I conclude that this order is the normal order in the language. In a few cases (e.g. Sherpa, Dumi), I have examined texts to determine the normal order. In a few other cases (e.g. Bwe Karen; Henderson 1997), I have used dictionaries as a source of information, analysing examples cited in the dictionary entries and where many examples exhibit the same order and I find no instances of the opposite order, I conclude that this is the normal order in the language.

My general practice is to classify languages for various word order parameters into one of three categories. For example, as far as the order of adjective and noun is concerned, a language could be AdjN (adjective before noun), NAdj (adjective after noun), or AdjN/NAdj (both orders occur and there is no evidence that one order is the normal or preferred order). If both orders occur in a language, but there is evidence for one order being the preferred order, I code it according to the preferred order, and this coding does not distinguish a language in which only one order is allowed from one in which both orders are allowed, but one is preferred. For example, I code Meithei as AdjN/NAdj because both orders occur, and there is no indication in Chelliah (1997) that one of these orders is more common than the other. In contrast, I code Rawang as NAdj, following the statement by Barnard (1934: 9) indicating that this is the preferred order: "Adjectives generally follow the nouns they qualify, except when followed by the verbal affix *è,* when they precede nouns". It should be noted that where two languages are coded differently, say one as 'AdjN/NAdj', the other as 'NAdj', it is possible that the facts of the two languages are the same and that this difference in coding simply reflects how the languages are described: a language with both orders in which NAdj is preferred might be described as allowing both orders without any indication of NAdj being preferred (in which case I would code it as AdjN/NAdj), or it might be described as preferring NAdj (in which case I would

code it as NAdj). Some of the differences among closely related languages that may show up in the data below may be artifacts of this.

Most of the claims made in this paper about crosslinguistic word order tendencies throughout the world as a whole are supported in detail in Dryer 1992a. They are based on a large typological database currently containing data on typological characteristics for over 1550 languages. While the size of the database is now much larger than that on which Dryer (1992a) was based (625 languages), the patterns remain the same. Other crosslinguistic claims that are not discussed in Dryer (1992a) are discussed by Greenberg (1963) or Hawkins (1983). Also relevant are Dryer (2005b, 2005c, 2005d, 2005e, 2005f, 2005g, 2005h, 2005i).

The Tibeto-Burman languages which I have examined, and the classification that I will assume in this paper, along with the sources I have used, are given in Table 1. The classification is close to that in Bradley (1997), with some adjustments partly due to Thurgood (2003), Graham Thurgood (p.c.) and Randy LaPolla (p.c.).

> BODIC
> > NEWARI
> > > Kathmandu Newari: Malla (1985)
> > > Dolakhā Newār: Genetti (1994, 2003)
> > EASTERN BODISH
> > > Tshangla: Das Gupta (1968), Andvik (2003)
> > CENTRAL BODISH [TIBETAN]
> > > Modern Literary Tibetan: Goldstein (1991)
> > > Lhasa Tibetan: DeLancey (2003)
> > > Shigatse Tibetan: Holler (2000)
> > > Dingri Tibetan: Herrmann (1989)
> > > Drokpa Tibetan: Kretschmar (1986)
> > > Kyirong: Huber (2005)
> > > Lhomi: Vesalainen and Vesalainen (1980)
> > > Ladakhi: Koshal (1979)
> > > Purki: Rangan (1979)
> > > Balti: Read (1934)
> > > Jad: Sharma (1989a)
> > > Spitian: Sharma (1992)
> > > Rang Pas: Zoller (1983)
> > > Nyamkad: Sharma (1992)
> > > Tod: Sharma (1989c)
> > > Sherpa: Schottelndreyer and Schottelndreyer (1973)
> > > Sikkimese: Sandberg (1888)
> > > Themchen Amdo: Haller (2004)
> > > Nangchen Kham[2]: Causemann (1989)

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[2] Nangchen Kham and Dege Kham are varieties of the Central Bodish language Kham, spoken in Tibet and Qinghai, and not to be confused with the.Central Himalayan language Kham that is spoken in Nepal. References to "Kham" without modifier should be interpreted as referring to the language spoken in Nepal.

Dege Kham[3]: Häsler (1999)
Baragaunle: Kretschmar (1995)
WESTERN BODISH [TAMANGIC]
Tamang: Taylor (1973), Mazaudon (1976, 2003)
Nar-phu: Noonan (2003a)
Chantyal: Noonan (2003b)
Gurung: Glover (1974)
Thakali: Georg (1996)
Manange: Hildebrandt (2004)
Tangbe: Honda (2003)
WEST HIMALAYISH
Marchha: Sharma (1989b)
Kinnauri: Sharma (1988)
Pattani: Sharma (1982, 1989c), Sharma (2000)
Tinani: Sharma (1989c)
Darmiya: Sharma (1989a)
Chaudangsi: Sharma (1989a)
Byansi: Trivedi (1991)
Johari: Sharma (1989a)
Gahri: Sharma (1989c)
Kanashi: Sharma (1992)
Thangmi: Turin (2000, p.c.)
CENTRAL HIMALAYAN
Magar: Shepherd and Shepherd (1973)
Kham[4]: Watters (1973, 1998, 2002)
Chepang: Caughley (1982)
KIRANTI
Hayu: Michailovsky (1981, 1989)
Camling : Ebert (1997b, 2003)
Kulung: Tolsma (1999)
Athpare: Ebert (1997a)
Limbu: Weidert and Subba (1985), van Driem (1987)
Belhare: Bickel (2003)
Yamphu: Rutgers (1998)
Dumi: van Driem (1993)
Khaling: Toba (1984)
Thulung: Allen (1975)
Wambule: Opgenort (2004)
DHIMAL-TOTO
Dhimal: Cooper (1999)
NORTH-EASTERN INDIA [SAL]
BODO-GARO
Deuri: Goswami (1994), Brown (1895)
Bodo: Bhattacharya (1977)
Kachari: Endle (1884)

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[3] See footnote 2.
[4] See footnote 2.

Dimasa: Dundas (1908)
Kokborok: Karapurkar (1976)
Garo: Burling (1961, 2003)
NORTHERN NAGA [KONYAK]
Jugli: Rekhung (1988a)
Lungchang: Rekhung (1988b)
Nocte: Das Gupta (1971)
Chang: Hutton (1929/1987)
JINGHPO
Jinghpo: Hertz (1917)
CENTRAL TIBETO-BURMAN
LEPCHA
Lepcha: Mainwaring (1876)
TANI
Bokar: Megu (1990)
Gallong: Das Gupta (1963)
Bori: Megu (1988)
Mising: Prasad (1991)
Milang: Tayeng (1976)
Nishi: Hamilton (1900), Tayeng (1990)
Apatani: Abraham (1985)
WESTERN ARUNACHAL
Bugun: Dondrup (1990)
DIGAROAN [=DIGARISH MISHMI]
Idu Mishmi: Pulu (1978)
Digaro Mishmi: Devi Prasada Sastry (1984)
NUNGISH
Dulong: Sun (1982), LaPolla (2003)
Rawang: Barnard (1934), LaPolla (2006)
Anong: Sun (1988)
KUKI-CHIN
SOUTHERN NAGA
Meithei: Chelliah (1997)
Lotha: Acharya (1983)
Ao: Clark (1893), Gurubasave Gowda (1975), Mills (1926)
Mao Naga: Giridhar (1994)
Sema: Sreedhar (1980)
Angami: Giridhar (1980)
Tangkhul Naga: Arokianathan (1987), Pettigrew (1918)
Zema Naga: Soppitt (1885)
CHIN
Tiddim Chin: Henderson (1965)
Siyin Chin: Naylor (1925)
Thadou: Krishan (1980)
Tarao: Singh (2002)
Mizo: Chhangte (1989), Lorrain and Savidge (1898)
Hmar: Dutta Baruah and Bapui (1996)

           Lai Chin: Hay-Neave (1953)
           Bawm: Reichle (1981)
           Mara Chin: Lorrain (1951), Savidge (1908)
       ARLENG
           Mikir: Grüssner (1978), Jeyapaul (1987)
   NORTHEAST TIBETO-BURMAN
       QIANGIC
           Qiang: Sun (1981), LaPolla (2003)
           Prinmi: Lu (1983), Ding (1998)
       BAI
           Bai: Fitzgerald (1941), Xu and Zhao (1984), Wiersma (2003)
       rGYALRONG
           Cogtse Gyarong: Lin (1993)
           Caodeng rGyalrong: Sun (2003)
       NAXI
           Naxi: He and Jiang (1985)
   BURMESE-LOLO
       BURMISH
           Achang: Dai and Cui (1985)
           Maru: Abbey (1899), Clerk (1911)
           Burmese: Cornyn and Roop (1968), Okell (1969), Stewart (1955), Wheatley
              (1982)
       LOLOISH
           Nusu: Sun (1986)
           Lisu: Hope (1974), Bradley (2003)
           Yi: Chen, Bian and Li (1985)
           Jino: Gai (1986)
           Akha: Dellinger (1969), Hansson (2003)
           Hani: Lewis and Bai (1996), Li (1990)
           Lahu: Matisoff (1973, 1988)
           Lalo: Björverud (1998)
   KAREN
       Kayah Li: Solnit (1986, 1997)
       Bwe Karen: Henderson (1997)
       Sgaw Karen: Jones (1961)
       Pwo Karen: Kato (2003)

Table 1. Tibeto-Burman languages examined with classification assumed in this paper

In Table 1, I have identified two levels of classification. In discussing the patterns of word order within Tibeto-Burman, I will use both the higher-level groupings and the lower level groupings listed in Table 1, though the claims based on the lower-level groupings are more important because these groups seem less controversial. Many of the differences in opinion about the classification of Tibeto-Burman languages appear to be about how these lower-level groups go together, and some of the higher-level groups in Table 1 are hypotheses of Bradley's that are not shared by all Tibeto-Burmanists. The

classification here differs from that proposed by Bradley in treating Nusu as Loloish rather than Nungish.

Since one of the primary things I will be discussing in this paper is the geographical distribution of word order characteristics within Tibeto-Burman, I provide Map 1 showing the approximate location of the subgroups of Tibeto-Burman that I assume in this paper.[5]
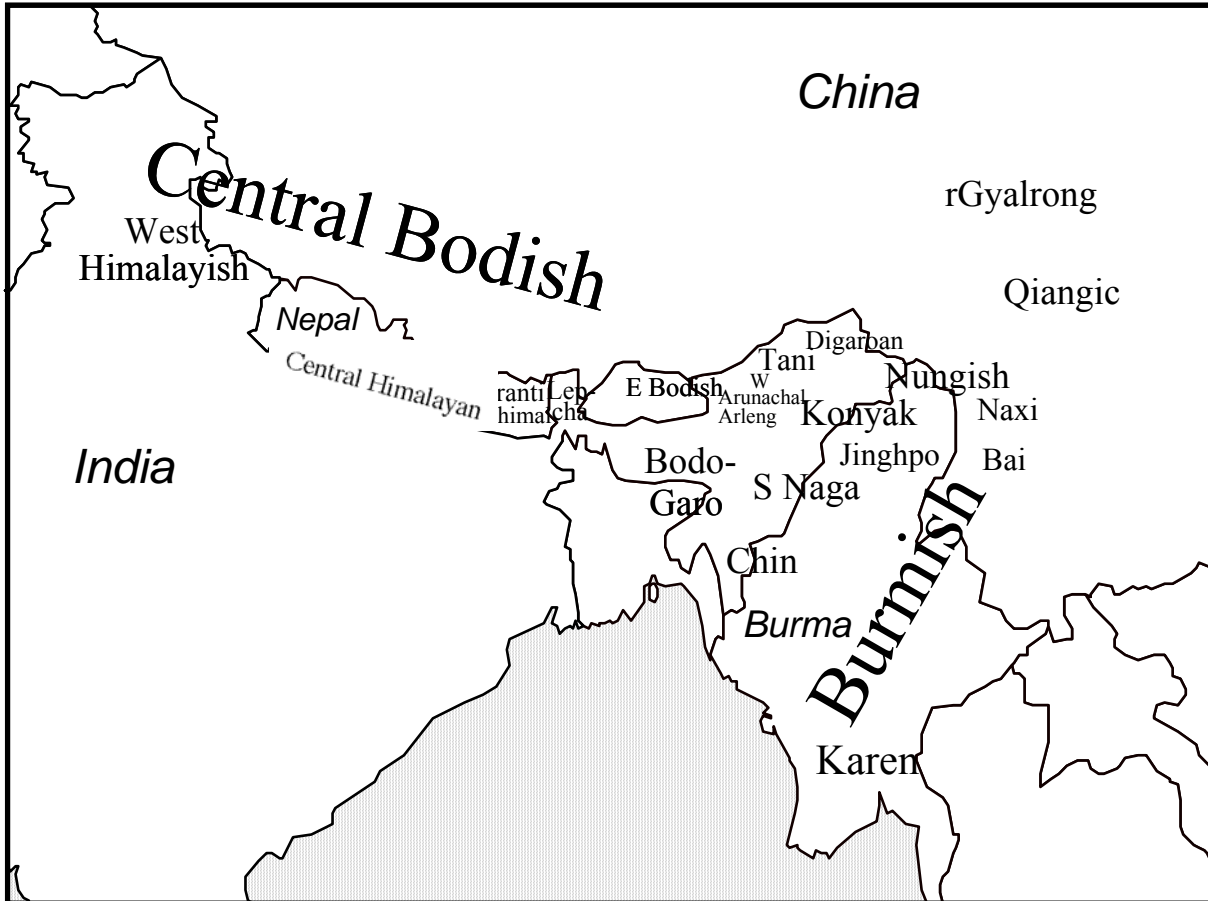

Map 1. Location of the assumed subgroups of Tibeto-Burman

Maps 2 and 3 show the specific Tibeto-Burman languages included in this study; Map 2 shows the overall area, while Map 3 zooms in on Nepal and the immediately surrounding area.[6]

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[5] A map like Map 1 cannot do justice to the complex locations of different groups. Among the things it does not represent accurately is the existence of Central Bodish [Tibetan] languages in northeastern Nepal and the existence of Loloish languages along the northern part of the Burma-China border (of the languages discussed in this paper, this includes Nusu and Lisu).

[6] One language, Themchen Amdo, does not appear on Map 2 or on the other maps showing the same area, because its location is slightly north of the area shown. It is located roughly to the north of Nangchen Kham (shown as NKh) on Map 2. There are two other later maps, namely Maps 7 and 10, where it is also not shown. In both of the latter maps it is of the same type as Nangchen Kham.

There are also some languages whose locations on the map are approximate. In two instances, the exact position of names in Map 2 and of the corresponding dots on later maps are arbitrary within varieties of what is sometimes described as a single language. This is the case
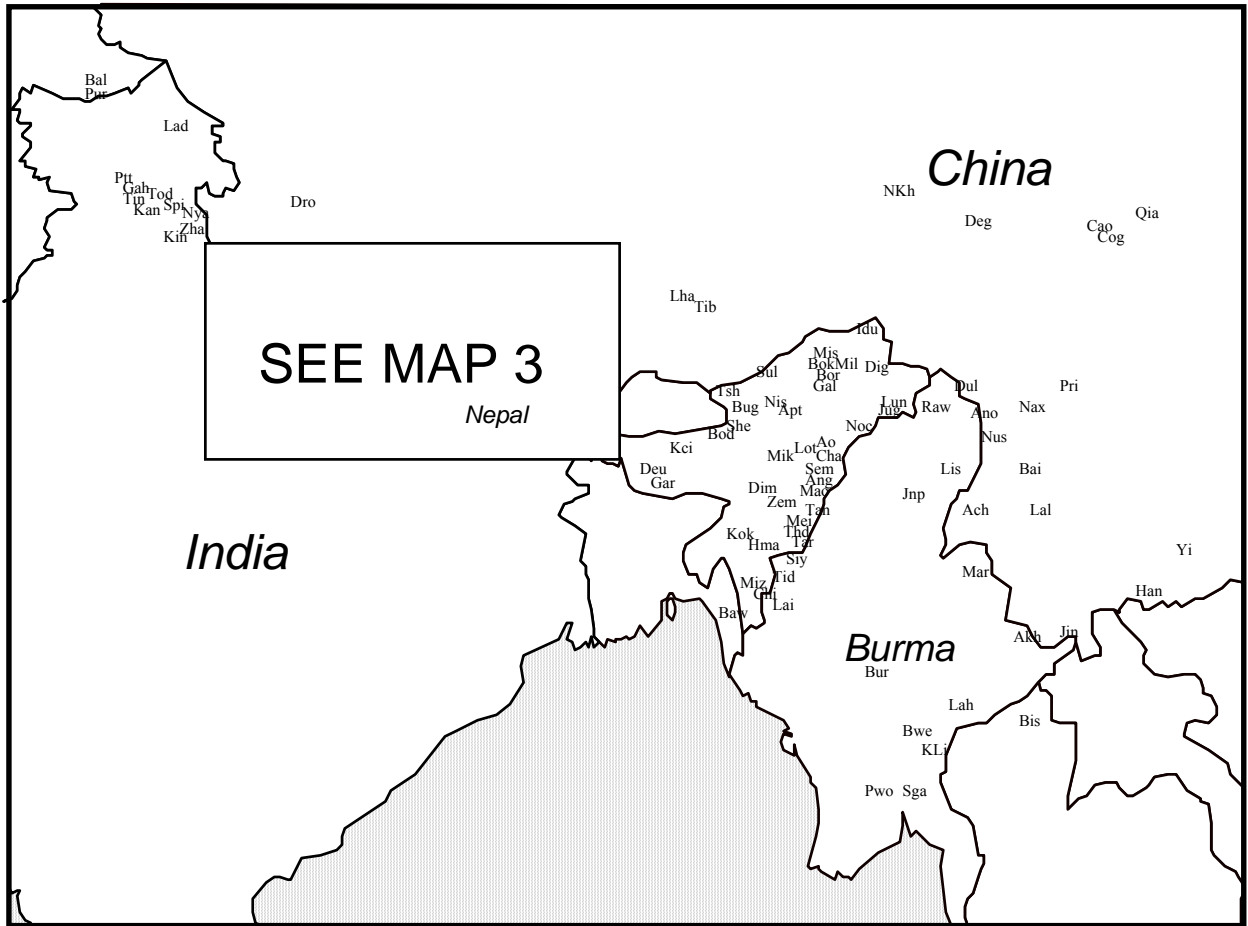
Map 2. Location of the Tibeto-Burman languages discussed (See key on next page)
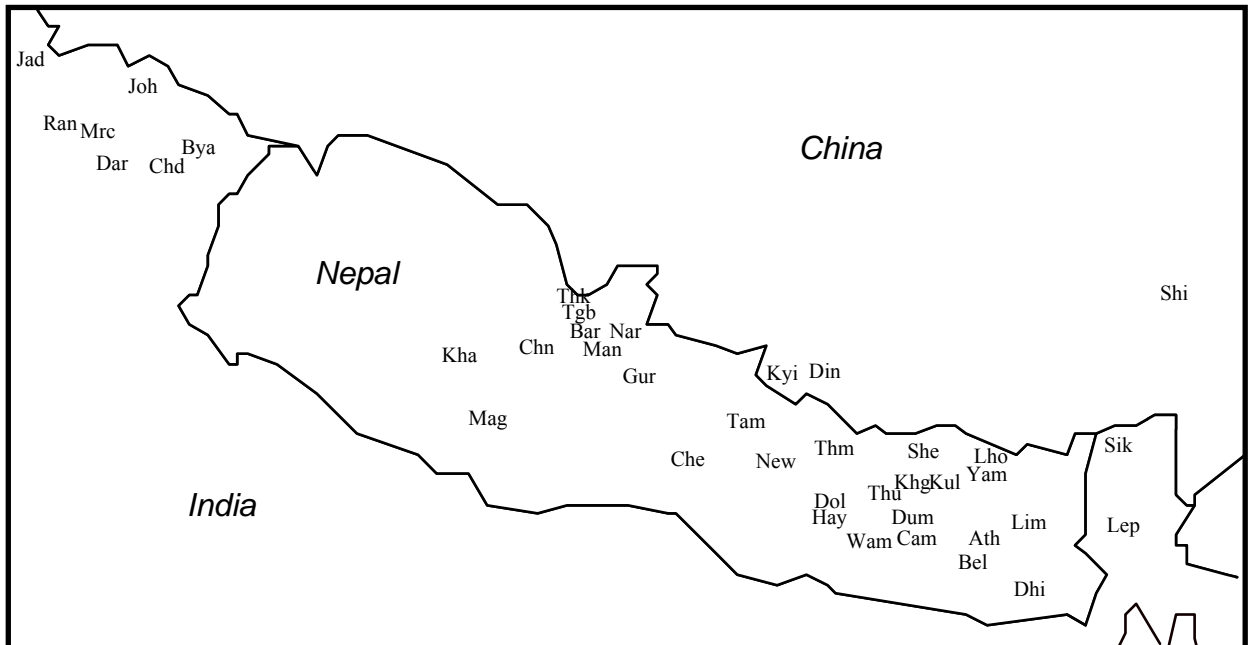
Map 3. Location of the Tibeto-Burman languages in and around Nepal discussed in this paper

for the varieties of Adi (Bokar, Gallong, Bori, Mising, and Milang) and for varieties of Tangsa (Lungchang and Jugli).

Ach	Achang	Han	Hani	Nax	Naxi
Akh	Akha	Hay	Hayu	New	Kathmandu Newari
Ang	Angami	Hma	Hmar	Nis	Nishi
Ano	Anong	Idu	Idu	NKh	Nangchen Kham
Ao	Ao	Jad	Jad	Noc	Nocte
Apa	Apatani	Jin	Jino	Nus	Nusu
Ath	Athpare	Jnp	Jinghpo	Nya	Nyamkad
Bai	Bai	Joh	Johari	Pat	Pattani
Bal	Balti	Jug	Jugli	Pri	Prinmi
Bar	Baragaunle	Kan	Kanashi	Pur	Purki
Baw	Bawm	Kay	Kayah Li	Pwo	Pwo Karen
Bel	Belhare	Kci	Kachari	Qia	Qiang
Bis	Bisu	Kha	Kham	Ran	Rang Pas
Bod	Bodo	Khl	Khaling	Raw	Rawang
Bok	Bokar	Kin	Kinnauri	Sem	Sema
Bor	Bori	Kok	Kokborok	Sga	Sgaw Karen
Bug	Bugun	Kyi	Kyirong	She	Sherpa
Bur	Burmese	Lad	Ladakhi	Shi	Shigatse
Bwe	Bwe Karen	Lah	Lahu	Sik	Sikkimese
Bya	Byansi	Lai	Lai Chin	Siy	Siyin Chin
Cam	Camling	Lal	Lalo	Spi	Spitian
Cao	Caodeng rGyalrong	Lep	Lepcha	Tam	Tamang
Cha	Chang	Lha	Lhasa Tibetan	Tan	Tangkhul Naga
Chd	Chaudangsi	Lho	Lhomi	Tar	Tarao
Che	Chepang	Lim	Limbu	Tgb	Tangbe
Chn	Chantyal	Lis	Lisu	Thd	Thadou
Cog	Cogtse Gyarong	Lot	Lotha	The	Themchen Amdo
Dar	Darmiya	Lun	Lungchang	Thk	Thakali
Deu	Deuri	Mac	Mara Chin	Thm	Thangmi
Dig	Digaro Mishmi	Mag	Magari	Thu	Thulung
Dim	Dimasa	Man	Manange	Tib	Modern Literary Tibetan
Dhi	Dhima	Mao	Mao Naga	Tid	Tiddim Chin
Din	Dingri Tibetan	Mar	Maru	Tin	Tinani
Dol	Dolakhā Newār	Mei	Meithei	Tod	Tod
Dul	Dulong	Mik	Mikir	Tsh	Tshangla
Dum	Dumi	Mil	Milang	Wam	Wambule
Gah	Gahri	Mis	Mising	Yam	Yamphu
Gal	Gallong	Miz	Mizo	Yi	Yi
Gar	Garo	Mrc	Marccha	Zem	Zema Naga
Gur	Gurung	Nar	Nar-Phu		

Key for Maps 2 and 3

In section 1, I will discuss the distribution of OV and VO order within Tibeto-Burman. Section 2 deals with word order characteristics that correlate with OV word order. Sections 3 and 4 deal with two groups of Tibeto-Burman languages which are VO, Karen and Bai, respectively. Sections 5 discusses Tibeto-Burman

with respect to six pairs of elements whose order is not predictable for OV languages: adjective and noun, relative clause and noun, demonstrative and noun, numeral and noun, degree word and adjective, and negative particle and verb.

1. ORDER OF OBJECT AND VERB

The distribution of OV and VO order among Tibeto-Burman languages is fairly clearcut and easy to describe. VO order is found is only two groups, namely Karen and Bai, and the remaining languages are all not only OV but generally fairly rigidly verb-final. At most, some OV languages are described as allowing postverbal elements only as afterthoughts (e.g. Chepang; Caughley 1982: 40), and text data for most languages tends to be fairly consistently verb-final. The VO languages are all more specifically SVO (rather than verb-initial). The OV languages are all SV and appear to be more specifically SOV, though this cannot be determined with confidence for all the languages I have examined. The examples in (1) illustrate SOV order in Naxi and Kham and the examples in (2) illustrate SVO order in Bwe Karen and Bai.

(1) a. Naxi

    khɯ**33** nɯ33 ci33   tsha55 kv55
    dog   SUBJ person bite   HABITUAL
    'dogs bite people' (He and Jiang 1985: 81)

  b. Kham[7]
    bahadur-e   o-bənduk ap-ke-o
    Bahadur-ERG 3SG-gun   shoot-PERF-3SG
    'Bahadur shot his gun' (Watters 1998: 523)

(2) a. Bwe Karen

    ʃɛ ní   dòkhí   tə-ɗó
    trap catch barking.deer one-CLSFR
    S   V   O
    'the trap catches a barking deer' (Henderson 1997: 258)

  b. Bai
    ŋɑ55 jɯ44 pɛ̃33
    1PL   eat   dinner
    'we eat dinner' (Xu and Zhao 1984: 76)

The distribution of OV and VO order within Tibeto-Burman conforms loosely to an east-west dimension that we will see is useful for understanding the distribution of a number of word order characteristics. Both of the groups exhibiting VO order, Karen and Bai are towards the east. When we look at the distribution of word order outside Tibeto-Burman, we see that the languages to

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7 This is the language of this name spoken in Nepal, not the language spoken in Tibet.

the east are VO, namely languages within Chinese, Tai-Kadai, Mon-Khmer, and Hmong-Mien, while those to the west and southwest are OV, namely Indic languages within Indo-European. Karen represents the most southeastern of the Tibeto-Burman languages, the ones closest to Tai-Kadai and Mon-Khmer languages. Bai is spoken in an area of China east of Myanmar (Burma), though Loloish languages are also spoken in the general area. The other Tibeto-Burman languages in this area are all OV. Bradley (1994: 178) describes the syntax of Bai as "Sinicized", so I assume that the VO order reflects contact influence from Chinese.

2.   OV CHARACTERISTICS IN OV TIBETO-BURMAN LANGUAGES

In 2.1, I will look at ways in which OV Tibeto-Burman languages conform to characteristics associated with OV order; in 2.2, I will look at one respect in which some OV Tibeto-Burman languages fail to conform, in the position of manner adverbs.

2.1. Predicted OV characteristics in OV Tibeto-Burman languages

Although I have argued (Dryer 1992a) that a variety of word order characteristics often claimed to correlate with the order of object and verb can be shown not to correlate when we examine a large and diverse enough sample of languages, there are still many characteristics which do correlate, where one order tends to be found in OV languages and the reverse order in VO languages. Tibeto-Burman languages do generally conform to these correlations.

   I will illustrate this with examples from Lai Chin (Hay-Neave 1953).[8] The SOV word order of Lai Chin is illustrated in (3).

   (3)   mipa nih   rawl   a-chuan
         man ERG   food   3SG-cook
             S   O   V
         'the man cooked the food' (Hay-Neave 1953: 26)

   The examples in (4) through (14) illustrate a variety of word order characteristics of Lai Chin that are typical of OV languages. The example in (4) illustrates the genitive preceding the possessed noun.

   (4)   raalkaap   fa-le
         soldier   child-PLUR
         'the soldier's children' (Hay-Neave 1953: 90)

The example in (5) illustrates the use of postpositions (rather than prepositions).

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[8] Modern work on Lai Chin appears in *Linguistics of the Tibeto-Burman Area* 20: 2. I follow Hay-Neave's orthography, except, following advice from Randy LaPolla, I represent the subject prefixes as bound to the verb, while Hay-Neave represents them as separate words.

(5) falam   ah
    Falam   LOC
    'to Falam' (Hay-Neave 1953: 54)

The example in (6) also illustrates a postposition (*in* 'from'), as well as illustrating the fact that postpositional phrases precede the verb.

(6) thilri vialte chawdawr in   nan-hmuh khawh lai
    thing all   bazaar   from 2PL-get   able   FUT
    'you can get all the things from the bazaar' (Hay-Neave 1953: 126)

The example in (6) also illustrates how a word meaning 'able' follows the verb it governs. The example in (7) illustrates how a word meaning 'want' also follows the verb it governs.

(7) amah bawmh ka-duh
    3SG   help   1SG-want
    'I want to help him' (Hay-Neave 1953: 120)

The example in (8) illustrates a predicate nominal (*mipa* 'man') preceding the copula.

(8) mipa a-si
    man   3SG-be
    'he is a man' (Hay-Neave 1953: 13)

The sentence in (9) illustrates that in the comparative construction, the order is standard-marker-adjective.

(9) mah mipa khi keimah nakin a-no-deuh
    DEM man   that 1SG   than 3SG-young-more
                     St   M   Adj
    'that man is younger than I am' (Hay-Neave 1953: 44)

Subordinators marking adverbial subordinate clauses occur at the end of the clause, as illustrated by *hnu-ah* 'after' in (10).

(10) [a-ei   dih   hnu-ah] a-kal
     3SG-eat finish after   3SG-go
     'after he ate, he went' (Hay-Neave 1953: 16)

Similarly, complementizers marking clauses functioning as arguments of the verb occur at the end of the clause, as illustrated by the complementizer *tiah* in (11).

(11) [zung ah ka-ton   lai   tiah] hei   chim
       office LOC 1SG-meet FUT COMP near.here tell
       'tell him that I will see him in the office' (Hay-Neave 1953: 84)

The example in (10) above also illustrates how subordinate adverbial clauses precede the main clause. Similarly, purpose expressions precede the main verb, as in (12).

(12) amah don ah ka-kal lai
       3SG   meet LOC 1SG-go FUT
       'I will go out to meet him' (Hay-Neave 1953: 115)

Question particles occur at the end of the sentence, as in (13).

(13) hi   na-duh   maw
       this   2SG-want   Q
       'do you want this?' (Hay-Neave 1953: 25)

Finally, interrogative phrases in content questions do not have to be placed at the beginning of the sentences, as in (14).

(14) mah lam hi   khuazeiahdah a-kal
       DEM road this where   3SG-go
       'where does this road go?' (Hay-Neave 1953: 37)

In all these respects, Lai Chin exhibits characteristics we would expect of it as an OV language, and other OV Tibeto-Burman languages are similar.

A number of the examples above illustrate a future particle in Lai Chin that follows the verb. Examples of other words indicating tense or aspect following the verb are given in (15).

(15) a. ruahpi a-sur   lio
           rain   3SG-rain CONTIN
           'it is raining' (Hay-Neave 1953: 14)

     b. ka-kal   cang
           1SG-go   PAST
           'I have gone' (Hay-Neave 1953: 15)

     c. sia   nih   a-rawl   an-ei   lengmang
           mithan ERG 3SG-food 3PL-eat   CONTIN
           'mithan have been eating his crops' (Hay-Neave 1953: 15)

As discussed in Dryer (1992a), the position of words indicating tense-aspect relative to the verb correlates with the order of object and verb only if these words are themselves verbal (i.e. if they are auxiliary verbs), in contrast to nonverbal tense-aspect particles whose position does not correlate with the order

of verb and object. Because of the generally isolating nature of Lai Chin, it is somewhat difficult to determine on the basis of superficial evidence whether these tense-aspect words in Lai Chin are verbs or not. However, the fact that they do not occur with pronominal subject prefixes argues that they are not verbs. However, other OV Tibeto-Burman languages with more extensive morphology have clear examples of auxiliary verbs, and these follow the main verb, as illustrated in (16) for Modern Literary Tibetan.

> (16) Modern Literary Tibetan
> s̠o̠bə-tsöö̀   n̄əmdru   ch̄ī   s̠o̠sh̠intu   yɔɔ̀-reè
> worker-PL.ERG airplane one make   PRES.COMPL-NONFIRST
> 'the workers are making an airplane' (Goldstein 1991: 57)

2.2. Order of manner adverb and verb in OV Tibeto-Burman languages

There is a strong crosslinguistic tendency for manner adverbs in OV languages to precede the verb. Most OV Tibeto-Burman languages conform to this tendency, as illustrated in (17).

> (17) a. Lai Chin
>   duhsan-tein a-chim
>   slow-ADV   3SG-speak
>   'he speaks slowly' (Hay-Neave 1953: 49)
>
>   b. Purki
>   kʰo-s   šoqsmo šoqsmo   sila-ṭ
>   3SG-ERG   fast   fast   read-PRES
>   'he reads very fast' (Rangan 1979: 110)

Outside of Tibeto-Burman, the majority of exceptions to this tendency are languages in which adverbial elements in general, including prepositional or postpositional phrases, follow the verb, in contrast to objects, which precede (a type found, for example, in a number of groups in west Africa, including Mande languages). And in languages in which the object and postpositional phrase must precede the verb, individual adverbs, including manner adverbs, typically must precede the verb as well. However, six OV Tibeto-Burman languages, all of them Kuki-Chin languages, are exceptions to this, allowing manner adverbs, but not objects or postpositional phrases, to follow the verb. In Tiddim Chin, in fact, the preferred position for manner adverbs is after the verb (Henderson 1965: 67). The OV and PP-V orders in Tiddim Chin are illustrated in (18a) and (18b) respectively.

> (18) Tiddim Chin
>   a. bui   in   khuang tum   ...
>   bamboo.rat PTCL drum   beat
>   O   V
>   'now the bamboo rat was beating his drum ...'

(Henderson 1965: 5, sentence 30)

b. Dahpa [a-khuang tawh] [inn   ah] a-ciah   a
   Dahpa 3-drum with house at 3-return.home PTCL
                  PP   PP   V
   'Dahpa went home with the drum'
                (Henderson 1965: 5, sentence 20)

The examples in (19) illustrate a manner adverb following the verb.

(19) a. zu   beel tung khat in   lup sim   a
        beer pot over one PTCL fill secretly PTCL
                              V   Adv
        'he secretly filled an upright beer pot'
                (Henderson 1965: 4, sentence 4)

b. '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)

This is also described as the preferred order for Angami (Giridhar 1980: 85), a Southern Naga language, as illustrated in (20).

(20) Angami
     rī   rêlī-liê
     drive slow-IMPER
     'drive slowly!' (Giridhar 1980: 85)

In addition, both orders of verb and manner adverb are reported to be common in four other Kuki-Chin-Naga languages: Mizo (Chhangte 1989: 114-118), Mara Chin (Lorrain 1951: 52-53), Mao Naga (Giridhar 1994: 416-420, 458), and Mikir (Grüssner 1978: 88-89). Examples from Mizo illustrating VAdv order are given in (21).

(21) Mizo
     a. a   thou^2 rang^2
        3SUBJ arise fast
        '(s)he gets up quickly' (Chhangte 1989: 114)

     b. a   tlaan^2 per per^3
        3SUBJ run   small.fast
        '(s)he (small) ran smoothly and rapidly' (Chhangte 1989: 116)

The two examples in (21) actually involve two distinct constructions. Chhangte (1989: 114, 116) argues that the word *rang²* 'fast' in (21a) is an adverb

(it could also precede the verb), while the expression *per per³* 'small, fast' is not a true adverb, but distinct from true adverbs in a variety of ways.

The examples in (22) illustrate each of the two orders in Mao Naga, AdvV order in (22a) and VAdv order in (22b).

(22) Mao Naga
    a. cako   caki-teo   pe
        Chakho cleverly-very   speak
        'Chakho spoke very cleverly' (Giridhar 1994: 416)

    b. ai   rü   ma-zhü   le
        1SG write ADV-good FUT
        'I will write well' (Giridhar 1994: 418)

Similarly, in Mikir (Grüssner 1978: 88-89), there are two constructions for expressing manner, one in which the word expressing manner follows the verb, as in (23).

(23) Mikir
    loséy ingplòng serák-ló
    horse run   fast-TA
    'a horse runs fast' (Grüssner 1978: 136)

However, in the construction in (23) in which the manner expression follows the verb, it is not clear whether the word *serák* 'fast' is really modifying the verb *ingplòng* 'run', as opposed to being a second verb in some sort of serial verb construction. The presence of a tense-aspect marker on *serák* 'fast' in (23) could be evidence of its being a main verb, though this also might just be a particle that cliticizes onto an adjacent word. If this is a type of serial verb construction, something like this might be the origin of the unusual position of manner adverbs in the other languages cited.

I will return to discussion of word order in OV Tibeto-Burman languages in 5, where I examine the distribution of characteristics whose position does not correlate with the order of object and verb. I first discuss the two subgroups of Tibeto-Burman that exhibit VO order, Karen and Bai.

3. KAREN

Karen languages exhibit a number of characteristics that are expected of VO languages, though also a number of characteristics which are less expected. The example in (24) illustrates the VO order in Bwe Karen.

(24) yə-ca   dɛyo   lɔ
    1SG-see picture PTCL
    'I'm looking at a picture' (Henderson 1997: 39)

The examples in (25) to (30) from Bwe Karen illustrate some characteristics which we would expect to find in a VO language. (25) illustrates a preposition preceding its object with the resulting prepositional phrase following the verb.

(25) yə-ɔ   dó   London
     1SG-live LOC London
     'I live in London' (Henderson 1997: 417)

The example in (26) illustrates a complementizer, a word marking a complement clause, introducing that clause (rather than following it, as in the Lai Chin example above in (11)).

(26) yə-bɔ́dá   mɪ   yə-cɛ   ɓe-nu   lémè thó
     1SG-think COMP 1SG-book CLSFR-that lost PERF
     'I thought that my book was lost' (Henderson 1997: 379)

The example in (27) illustrates an adverbial subordinator *kɔ́* 'when' introducing an adverbial clause.

(27) yə-khɔ́ ge   kɔ́ yə-dɛ-mɛ   wá   lɔ
     1SG-FUT go.back when 1SG-NOMIN-do complete DECL
     'I shall go back when my work is done' (Henderson 1997: 395)

In (28), a manner adverb is following the main verb.

(28) gə-θí   pwá   ...
     1PL-die quickly
       V   Adv
     'we die quickly ...' (Henderson 1997: 187)

In (29), an inflected auxiliary verb precedes the main verb.

(29) cə-ɗɔ mɪ   jə-khɔ́ phɪ má nɔ
     3-say COMP 3-FUT take what
                  Aux   V
     'what did he say he would take?' (Henderson 1997: 187)

In (30), a nominal predicate follows a copula verb.

(30) yə-pa   mɪ   θo khwi θərà lɔ
     1SG-father be   doctor   DECL
                 Cop Pred
     'my father is a doctor' (Henderson 1997: 240)

In contrast to the example above in (27) with an apparent clause-initial subordinator, (31) has a clause final subordinator *kha lɛ́* 'if, when' (in addition to a separate conditional word preceding the verb). This is quite unusual for a VO language.

(31) nə-ɗɛ́ ɔ   kha lɛ́, yə-khɔ́ ɔ   kɔ́
    2SG-if stay if   1SG-FUT stay then
    'if you stay, I will stay' (Henderson 1997: 78)

Words meaning 'able' typically precede the main verb in VO languages, as in English *We can go*. However, this follows the main verb in Bwe Karen, as illustrated in (32).

(32) a. yə-le   ja   pwə'ɛ́
      1SG-go   able   certainly
      'I can go' (Henderson 1997: 142)

     b. kə-pwa   phá   ɗó   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)

The example in (32b) shows that the verb meaning 'able' not only follows the verb but follows the complements of the main verb as well. 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: 47-48, 55), Mon-Khmer (e.g. Chrau; Thomas 1971: 97), and Hmong-Mien (Hmong Njua; Harriehausen 1990: 179-180).

    The example in (32b) also illustrates what appears to be a postposition *kháchɪ* 'near', following its object. Morphologically, it is a head noun in a genitive-noun construction, bearing the prefix *a-* that occurs on head nouns in possessive constructions. Whether this element should be considered a postposition is partly a matter of definition, and partly a question of whether it has grammaticized at all from its original role as a noun (see Dryer 2005a for discussion of these issues). Kayah Li is similar in having both prepositions and postpositional-like elements, illustrated in (33).

(33) a. ʔa   cwá dɤ́ vɛ̄ hi
      3SG go   to 1SG house
             Pr   NP
      'he went to my house' (Solnit 1986: 74)

     b. he   khu
      ground on
      NP   Po?
      'on the ground' (Solnit 1986: 308)

    Solnit (1986: 307; 1997: 188) is quite explicit in denying that elements like *khu* 'on, upper surface' in (33b) are postpositions, though, as noted, the issue is partly terminological. These postpositional words are clearly nominal in a way that the prepositions are not. These postposition-like words must co-occur with

one of the prepositions, reflecting their nominal nature, as in (34), where *hi klɔ̄* is the object of the preposition *dɤ̂*.

(34) dɤ̂ hi   klɔ̄
      at   house behind
      'behind the house' (Solnit 1986: 309)

Solnit refers to these postposition-like words as "localizers", and treats them as a grammatically distinct subclass of nouns, but we could just as easily call them postpositions, and still treat them as a grammatically distinct subclass of nouns.

The Karen languages are GenN, as illustrated in (35)

(35) a. Bwe Karen
          əbòmú ə-hi
          girl   POSS'D-house
          'the girl's house' (Henderson 1997: 24)

      b. Kayah Li
          Phāʌ hi
          Pha'a house
          'Pha'a's house' (Solnit 1986: 284)

While the order of genitive and noun correlates with the order of object and verb, with GenN order associated with OV and NGen order with VO, GenN order is not really an unexpected characteristic in Karen because, as discussed in Dryer (1991), the two orders of genitive and noun are about equally common in SVO languages. In other words, although SVO languages pattern with verb-initial languages for most word order characteristics where there is a correlation, they pattern between verb-initial and verb-final languages as far as the order of genitive and noun is concerned. The order GenN is most common in SVO languages that are at the geographical boundary between OV and VO languages, a property of Karen languages since they are between OV languages in other branches of Tibeto-Burman and VO languages in Tai-Kadai and Mon-Khmer.

Other modifiers of the noun follow the noun in Karen languages. This is illustrated in (36) for Bwe Karen: (36a) illustrates NAdj order; (36b) illustrates NDem order; (36c) illustrates NNum order; and (36d) illustrates NRel order.

(36) a. hi   ə-ɗo
          house NOMIN-big
          'big houses' (Henderson 1997: 297)

      b. pho   bwɛ-nu
          child CLSFR-that
          'that child' (Henderson 1997: 14)

    c.   bəya   nwé ʃi θɔ́   θU   də-bwɛ
        person seven ten three pair one-CLSFR
        'seventy-seven men' (Henderson 1997: 266)

    d.   ʃídi [dó   cə-í-yɛ]   mɛ́-yo
        egg REL 3-give-1SG CLSFR-this
         N   Rel
        'the egg he gave me' (Henderson 1997: 86)

It might be thought that these various ways in which modifiers follow the noun in Karen languages simply reflect the fact that they are VO. However, as shown in Dryer (1992a), except for relative clauses, the modifiers that follow the noun in Karen languages do so no more often in VO languages than they do in OV languages. The explanation for this feature of Karen languages appears to be areal: Tai-Kadai and Mon-Khmer VO languages typically place adjectives and demonstratives after the noun, and the more westerly of the languages in these groups, which are the languages immediately to the east of Karen languages, typically place numerals after the noun as well, such as Thai (Anthony, French and Warotamasikkhadit 1968: 48-50) within Tai-Kadai and Mon (Bauer 1982: 360) and Khmu (Smalley 1961: 23) within Mon-Khmer. As we move further east, the numeral typically precedes the noun, as in Yay (Hudak 1991: xxvii) and Nung (Saul and Wilson 1980: 14, 21) within Tai-Kadai and Chrau (Thomas 1971: 127) and Katu (Costello 1969: 22, 34) within Mon-Khmer. (See Dryer 2001 for discussion of these issues as they apply to Mon-Khmer languages.) In short, the Karen languages belong to a geographical area in Southeast Asia in which languages put adjectives, demonstratives, and numerals all after the noun. Karen differs from these languages primarily in placing genitives before the noun; in this respect, they are behaving more like the OV languages to the west and north of them. The place of Karen in the areal patterning is discussed further in section 6 below.

4. BAI

The second group of VO languages in Tibeto-Burman is the single language Bai. My primary source for Bai is Xu and Zhao (1984), though I have also examined Wiersma (2003) and a very short grammatical sketch in Fitzgerald (1941). The SVO order of Bai is illustrated in (37).

   (37) ɑ^{31}ti^{33} tshi^{55} tɕhi^{55}
        grandpa add   fertilizer
        'Grandpa add(ed/s) fertilizer (to the field).'
                              (Xu and Zhao 1984: 77)

Bai also allows SOV order, with the object marked with a postposition *no^{33}*, as in (38), though Xu and Zhao (1984: 76) describe this order as less common than the SVO order in (37).

(38) ɑ³¹nɛ̠⁴⁴ suɑ̃⁵⁵   xo̠⁴⁴   no³³li⁵⁵ ko̠²¹ lɯ³³
     grandma grandchild PL.INDEF OBJ also love DECLAR
     'Grandma loves grandchildren.' (Xu and Zhao 1984: 77)

Xu and Zhao (1984: 78) report that the order SOV is commonly used in interrogative and negative clauses.

    Bai word order is in many ways atypical for an SVO language, though in some respects it is atypical in ways that are reminiscent of the Chinese languages and it is plausible that much of the word order of Bai reflects the influence of Chinese (see Dryer 2003). The existence of an alternative SOV word order with the object marked by an adposition-like element, as in (38), is at least vaguely reminiscent of the *ba*-construction in Mandarin. Perhaps a more convincing example of word order reminiscent of Chinese is the use of prenominal relative clauses, as in (39).

(39) [vɛ̃⁴²   tse̠²¹tsɑ̠⁴² no³³] sɤ⁵⁵   xɑ̃⁵⁵ ɣo̠⁴²
     write tidy   LINK word   read   easy
     'words that are written tidily are easy to read.'
                           (Xu and Zhao 1984: 73)

This RelN order is extremely unusual among VO languages. In fact, the only VO languages in my database in which RelN is attested as the dominant order are Bai, the Chinese languages, and Amis, an Austronesian language of Taiwan (Amis data from Joy Wu, p.c.).

    A linking word *no³³* connects the relative clause with the noun modified, as in (39). This word is also used as a linker in a variety of other constructions in Bai, including a manner adverbial use illustrated in (40).

(40) a. si⁵⁵ɣɯ³³lɯ³¹tsɯ³¹ xɛ̃⁵⁵ no³³ tuĩ⁵⁵
       willow this CLSFR grow LINK straight
       'this willow has grown straightly.' (Xu and Zhao 1984: 53)

     b. xɯ³³tsi³³   lɯ³¹ suɑ̃⁵⁵   tshɛ̠⁴⁴ no³³   xɑ̃⁵⁵tɕɛ̠⁴²
       plum   this CLSFR red   LINK   good-looking
       'the plums are red and beautiful.'
       (literally 'red in a beautiful way') (Xu and Zhao 1984: 54)

The linker *no³³* is homophonous with the object postposition illustrated above in (38). I am not sure if this is a coincidence or whether these two morphemes are related.

    Bai has both prepositions and postpositions. Examples with prepositions are given in (41).

(41) a. pĩ⁵⁵si⁵⁵ sɑ³⁵   no̠²¹ tsho̠⁴⁴ ɣɯ³⁵
       wind   from south blow   come
       'the wind blows from the south.' (Xu and Zhao 1984: 45)

    b. ŋo³¹ li⁵⁵ pɯ³¹ nɯ⁵⁵ no³³ ɕi³¹xuɑ̃⁵⁵
       1SG also for you OBJ happy
       'I am also happy for you.' (Xu and Zhao 1984: 44)

Note that the prepositional element *pɯ³¹* in (41b) co-occurs with the object postposition *no³³*. In addition to the object postposition *no³³,* there is a benefactive postposition *ŋɤ⁵⁵,* as in (42).

(42) mo³¹ sɤ³¹ ɑ³¹ne̤⁴⁴ ŋɤ⁵⁵ tɯ²¹po²¹
    3SG comb grandmother BENEF head
    'he combed grandmother's hair'
    (literally: 'he combed the head for grandmother')
                          (Xu and Zhao 1984: 54)

Adpositional phrases (prepositional or postpositional phrases) sometimes precede, sometimes follow the verb. Both precede the verb in (41), while the benefactive phrase in (42) follows the verb. As noted above, the object postposition is used for objects preceding the verb. The example in (43) illustrates the object postposition with a recipient (indirect object) in a ditransitive clause following the verb.

(43) ŋɑ⁵⁵ si³¹ nɯ⁵⁵ no³³ pe̤²¹xo⁵⁵ ku⁵⁵
    1PL give 2SG OBJ flower CLSFR
    'we gave you a flower' (Xu and Zhao 1984: 51)

Manner adverbs similarly occur on either side of the verb, as in (44).

(44) a. tɕi̤⁴²tsuɑ̤⁴² pe̤⁴⁴   b. pe̤⁴⁴ tɕi̤⁴²tsuɑ̤⁴²
      quick go   go quick
      'go quickly'   'go quickly' (Xu and Zhao 1984: 41)

In expressions of ability, the word for 'able' follows the main verb, as in (45).

(45) ɑ⁵⁵nɑ̤⁴⁴ li⁵⁵ ŋɛ̤²¹ tɑ̤⁴²
    where all go able
    'I can go anywhere' (Xu and Zhao 1984: 22)

While the normal order for VO languages is AbleV, the opposite order is common among VO languages of Southeast Asia, as noted in section 3 above.
    The genitive precedes the noun in Bai, as in (46).

(46) lu³⁵tɕĩ³³po⁵⁵ mɯ⁵⁵ tsɤ̃²¹ sɛ̃⁴²
    LuJin   3SG.POSS hoe CLSFR
    'Lu Jin's hoe' (Xu and Zhao 1984: 71)

As noted above in the discussion of Karen, this order is less common among VO languages than NGen order, but among SVO languages in particular, the two

orders GenN and NGen are both common, so this order is not an atypical characteristic in Bai.

Bai employs sentence-final question particles, as in (47).

(47) jĩ⁵⁵ ɑ̃³³   ŋo³¹ nɛ⁵⁵
    2SG find 1SG Q
    'are you looking for me?' (Xu and Zhao 1984: 18)

Again, this is something that is more common in OV languages, but, as discussed in Dryer (1991), both sentence-initial and sentence-final question particles are common among SVO languages. Furthermore, they are especially common among SVO languages in Southeast Asia, in Mandarin, in Tai-Kadai (e.g. Nung; Saul and Wilson 1980: 116), in Mon-Khmer (e.g. Chrau; Thomas 1971: 63, 180), and in Hmong-Mien (e.g. Mjen; Court 1985: 83).

One characteristic that is illustrated by examples in Xu and Zhao (1984), but which may not be the only order possible, is the order of copula and predicate; Xu and Zhao cite a number of examples with the order CopPred, as in (48).

(48) ŋo³¹ tsɯ³³ nɯ⁵⁵   tɑ⁵⁵
    1SG COP   2SG.POSS sister
    'I am your sister' (Xu and Zhao 1984: 40)

If this is the normal order in Bai, it is a characteristic expected of it as a VO language.

In summary, Bai exhibits few characteristics that are expected of it as a VO language. The prenominal position of relative clauses is highly unusual for a VO language, and for a variety of characteristics, we find two orders, one associated with OV and one associated with VO. Its word order resembles that of the Chinese languages in some respects, and it is not clear to what extent its "mixed" word order reflects a residue of a former OV order or whether the mixed characteristics are themselves due to influence from Chinese languages. If we assume that Proto-Sino-Tibetan and Proto-Tibeto-Burman were both OV and RelN, then we might say that whether the VO order in Bai is due to Chinese influence or an independent change from OV to VO, the fact that Bai is RelN can be explained solely in terms of the fact that Proto-Tibeto-Burman was RelN and that that order has simply been retained in Bai. However, influence from adjacent languages plays a role, not only in causing languages to change, but also in causing them to remain the way the same. In fact, the latter is probably the overwhelming greater effect of contact. The extreme rarity crosslinguistically of languages which are VO and RelN means that when we find two such languages which are not only in contact with each other but for which there is clear evidence that one has greatly influenced the other in many other respects, the fact that both are VO and RelN is unlikely to be a coincidence. The extreme rarity of VO and RelN languages means that whatever the cause of that rarity, that cause normally prevents a language from changing from OV&RelN to VO without also changing to NRel (and in fact it may be that such languages normally change

from RelN to NRel before they change from OV to VO)[9]. Thus, if we assume that Bai was originally OV&RelN, something must have prevented the normal change from RelN to NRel from occurring, something must have made it possible in this one instance for a language to change from OV to VO without changing from RelN to NRel. Given that we know that Bai was under heavy influence from Chinese in other domains, it seems most likely that the cause of Bai not changing from RelN to NRel was the influence of Chinese as a VO&RelN language. In other words, suggesting that Bai is VO&RelN due to influence from Chinese does not mean that Chinese caused Bai to change from NRel to RelN (though this is a possible scenario). It means that Chinese caused Bai not to change from RelN to NRel, in the sense that if not for the influence of a language that is VO&RelN, Bai would never have ended up another instance of a language of this type.

It should be noted that with respect to a number of characteristics that do not correlate with the order of object and verb, Bai has different orders from the Chinese languages: it apparently has both orders of adjective and noun, and both demonstratives and numerals follow the noun. Xu and Zhao (1984) do not appear to comment on the order of adjective and noun, and the examples they cite seem to all be AdjN. Wiersma (2003) describes the position of adjectives as prenominal. In contrast, Fitzgerald (1941) says that both orders occur. These characteristics are illustrated in (49): AdjN order is illustrated in (49a), NAdj order in (49b), and both NDem and NNum order in (49c).

(49) a. kã⁵⁵ tsɯ³¹
         tall   tree
         'tall tree' (Xu and Zhao 1984: 41)

     b. sur   a   kuai   ga
         mountain one   CLSFR   high
         'a high mountain' (Fitzgerald 1941: 233)

     c. ke̠⁴² lɯ⁵⁵   ŋɤ³³   pe³¹
         bowl this   five   CLSFR
         'these five bowls' (Xu and Zhao 1984: 24)

---

[9] This argument assumes that the cause of the rarity of VO&RelN order is not grammaticization, in contrast to the relative infrequency of OV&Pr or VO&VAux, where grammaticization presumably plays a major role. I am aware of no plausible explanation for the rarity of VO&RelN in terms of grammaticization. Furthermore the rarity of VO&RelN is part of a more general phenomenon that structures of the form Clause+Word are rare in VO languages (Dryer 1992b). This includes the extreme rarity of clause-final complementizers and adverbial subordinators in VO languages. Some suggestions regarding explaining this are in Hawkins (1991), though see Dryer 1992b for problems with Hawkins' account.

While Fitzgerald's data suggests that NAdj order is possible in Bai, the claims and examples in Wiersma (2003) and Xu and Zhao (1984) lead me to conclude that the AdjN order is dominant in Bai.[10]

With respect to these characteristics, Bai word order is much more like Tibeto-Burman than Chinese. As we will see in the next section, we find considerable diversity of orders of modifiers with respect to the noun among Tibeto-Burman languages. In fact, these particular characteristics are highly reminiscent of word order in Loloish languages, which are spoken in the same general area as Bai. Lahu, Lisu, Nusu, and Hani are, like Bai, NDem and NNum and they employ both orders or adjective and noun (although in the case of Lisu and Nusu, I code the NAdj order as dominant).

5. DISTRIBUTION OF SIX NONPREDICTABLE WORD ORDER CHARACTERISTICS

In the next six sections, I will discuss six pairs of elements whose order is, at least in some cases, not predictable from the order of object and verb, and discuss the distribution of the different orders within Tibeto-Burman. In 5.1, I discuss the order of adjective and noun; in 5.2, the order of relative clause and noun; in 5.3, the order of demonstrative and noun; in 5.4, the order of numeral and noun; in 5.5, the order of degree word and adjective; and in 5.6, the order of negative and verb. Five of these six pairs of elements exhibit considerable variability within Tibeto-Burman, and I describe this variability both in terms of different subgroups and in terms of geography. The one pair out of these six pairs of elements where there is less variability within Tibeto-Burman is the order of numeral and noun, where NNum order predominates. Note that in describing these six word order characteristics as nonpredictable, I only mean that they are not predictable from the order of object and verb. As we will see, there are a number of relationships among the first five of these six characteristics that allow us to partially predict some of these characteristics from others.

5.1. Adjective and noun

The first pair of elements I discuss is adjective and noun. I should emphasize that, following the tradition in word order typology of Greenberg (1963), I use the

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[10] It is of course possible that NAdj order has died out since Fitzgerald collected his data; influence from Chinese could lead to a lesser-used word order dying out when Chinese uses the more frequent order. However, the claims and data of all three sources are consistent with both orders being possible but with NAdj order being dominant. Fitzgerald's claim that both orders are possible does not mean that one order isn't more common. And Wiersma's claim that adjectives are prenominal doesn't mean that NAdj order is not possible, though it does imply that if possible it is not common. It is also possible that given the questionable nature of Fitzgerald (1941) as a source, (49b) is misanalysed, and that *ga* 'high' is actually the predicate rather than a modifier of the noun. One thing that suggests this might be the case is that it is unusual both among Tibeto-Burman languages and crosslinguistically for an attributive adjective to follow a numeral when both follow the noun, although this order is found in Jad (Sharma 1989a: 43) and as one possible order in Chang (Hutton 1987: 48).

term "adjective" here is a semantic sense, without any assumption as to the word class in each language of the words in question. In a number of the languages I discuss, the words in question may actually be verbs grammatically, and in some of my sources, they are described as such. In such cases, what I refer to as an "adjective" modifying a noun may really be a case of a relative clause modifying a noun. For some languages, two constructions co-exist, one in which there is an adjective directly modifying the noun and one in which the adjective is really in a relative clause modifying the noun. Where I know that this is the case, I base my classification of a language on the basis of the construction with the adjective directly modifying the noun, but for many languages I lack sufficient information to allow me to conclude this. For this reason, it is likely that for some languages, additional information would lead to reclassification of the language.

As noted above, and as discussed in greater detail in Dryer (1988, 1992a, 2005b), most OV languages in Asia outside of Tibeto-Burman place adjectives before the noun, but outside of Asia, both AdjN and NAdj order are common, and in fact NAdj order is about twice as common. Both orders are found among OV Tibeto-Burman languages. The examples in (50) illustrate each of these orders, from two Bodic languages, AdjN order from Byansi in (50a) and NAdj order from Modern Literary Tibetan in (50b);

(50) a. Byansi
     chiṭṭī hyuk-te kin
     more deep-REL pit
         Adj   N
     'a deeper pit' (Trivedi 1991: 52)

    b. Modern Literary Tibetan
     traba sāāba de-e
     monk new   that-LOC
      N   Adj
     'that new monk' (Goldstein 1991: 36)

Table 2 lists my data for the order of adjective and noun in Tibeto-Burman languages. As discussed in section 0, classifying a language as AdjN does not mean that this is the only order, only that it appears to be the dominant order. Languages that are listed as AdjN/NAdj allow both orders and there is no indication in my sources that one order is dominant.[11] For each genetic group, the totals of each of the three types are listed in the format [x/y/z], where x is the number of AdjN languages in that group in my sample, y the number of NAdj languages, and z the number of AdjN/NAdj languages.

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[11] Randy LaPolla (p.c.) has suggested to me that Dulong should be NAdj by my criteria.

TIBETO-BURMAN [38/56/17]
    BODIC [30/16/3]
        NEWARI [1/0/0]
            AdjN: Kathmandu Newari, Dolakhā Newār
        CENTRAL BODISH [TIBETAN] [2/14/2]
            AdjN: Purki, Balti
            NAdj: Modern Literary Tibetan, Lhasa Tibetan, Dingri Tibetan, Drokpa
                Tibetan, Kyirong, Nangchen Kham, Dege Kham, Ladakhi, Jad, Spitian,
                Nyamkad, Sherpa, Sikkimese, Baragaunle
            AdjN/NAdj: Themchen Amdo, Shigatse
        EASTERN BODISH: [1/0/0]
            AdjN: Tshangla
        WESTERN BODISH [TAMANGIC]: [4/1/1]
            AdjN: Tamang, Gurung, Thakali, Chantyal
            NAdj: Nar-Phu
            AdjN/NAdj: Manange
        WEST HIMALAYISH: [10/1/0]
            AdjN: Marchha, Kinnauri, Pattani, Tinani, Darmiya, Chaudangsi, Byansi,
                Johari, Rang Pas, Thangmi
            NAdj: Gahri
        CENTRAL HIMALAYAN: [2/0/0]
            AdjN: Kham, Chepang
        KIRANTI: [9/0/0]
            AdjN: Hayu, Thulung, Dumi, Khaling, Kulung, Athpare, Limbu, Belhare,
                Yamphu
        DHIMAL-TOTO: [1/0/0]
            AdjN: Dhimal
    NORTH-EASTERN INDIA [SAL] [2/5/4]
        BODO-GARO: [2/3/1]
            AdjN: Deuri, Bodo
            NAdj: Dimasa, Kokborok, Garo
            AdjN/NAdj: Kachari
        NORTHERN NAGA [KONYAK]: [0/1/3]
            NAdj: Nocte
            AdjN/NAdj: Jugli, Lungchang, Chang
        JINGHPO [0/1/0]
            NAdj: Jinghpo
    CENTRAL TIBETO-BURMAN [5/4/3]
        LEPCHA [0/1/0]
            NAdj: Lepcha
        TANI: [4/1/2]

AdjN: Gallong, Mising, Milang, Nishi
NAdj: Apatani
AdjN/NAdj: Bori, Bugun
DIGAROAN [DIGARISH "MISHMI"]: [1/1/0]
AdjN: Idu
NAdj: Digaro Mishmi
NUNGISH: [0/1/1]
NAdj: Rawang
AdjN/NAdj: Dulong
KUKI-CHIN [0/13/4]
SOUTHERN NAGA: [0/7/1]
NAdj: Lotha, Ao, Mao Naga, Sema, Angami, Tangkhul Naga, Zema Naga
AdjN/NAdj: Meithei
CHIN: [0/6/2]
NAdj: Tiddim Chin, Thadou, Mizo, Hmar, Bawm, Mara Chin
AdjN/NAdj: Siyin Chin, Lai Chin
ARLENG: [0/0/1]
AdjN/NAdj: Mikir
NORTHEAST TIBETO-BURMAN [1/5/0]
QIANGIC: [0/2/0]
NAdj: Prinmi, Qiang
rGYALRONG: [0/2/0]
NAdj: Cogtse Gyarong, Caodeng rGyalrong
BAI [1/0/0]
AdjN: Bai
NAXI [0/1/0]
NAdj: Naxi
BURMESE-LOLO [0/13/3]
BURMISH: [0/2/1]
NAdj: Maru, Burmese
AdjN/NAdj: Achang
LOLOISH: [0/7/2]
NAdj: Nusu, Yi, Lalo, Jino, Bisu, Akha, Lisu
AdjN/NAdj: Hani, Lahu
KAREN: [0/4/0]
NAdj: Kayah Li, Bwe Karen, Sgaw Karen, Pwo Karen

Table 2. Order of adjective and noun

The pattern of distribution of the two orders of adjective and noun within Tibeto-Burman is complex. Not only is it common to find languages within the same higher-level group with different orders, but it is also common within the same lower-level groups. Within the Central Bodish [Tibetan] languages, the most western languages, Purki and Balti, have AdjN order, while the others have NAdj order, except for two languages which I classify as AdjN/NAdj. The AdjN order of Purki is illustrated in (51a), while NAdj order in Jad is illustrated in (51b).

(51) a. Purki
      rgya: la bucʰa
      good   boy
      'good boy' (Rangan 1979: 107)

      b. Jad
      khi nagpo məŋpo cig
      dog black very   one
      'a very black dog' (Sharma 1989a: 44)

Among the West Himalayish languages, Gahri [Bunan] is NAdj while the others are AdjN. This is illustrated in (52): (52a) illustrates NAdj order in Gahri while (52b) illustrates AdjN order in Kinnauri.

(52) a. Gahri
      pyaci phecei-ti
      bird   small-one
      'a small bird' (Sharma 1989c: 224)

      b. Kinnauri
      id   gaṭoc pyac
      one small bird
      'one small bird' (Sharma 1988: 114)

Among Western Bodish [Tamangic] languages, Nar-phu is NAdj and Manange is AdjN/NAdj, while the others I have data on are all AdjN. Similarly, among Bodo-Garo languages, Deuri and Bodo are are AdjN and Kachari is AdjN/NAdj, while the others for which I have data are NAdj. The AdjN order in Deuri is illustrated in (53a), while (53b) illustrates NAdj order in Garo.

(53) a. Deuri
      shu   áshi
      high hill
      'a high hill' (Brown 1895: 13)

      b. Garo
      reka   ba'-a
      paper thin-NOMIN.INDEF
      'thin paper' (Burling 1961: 32)

Among Tani languages, Apatani is NAdj, as in (54a), Bori and Bugun are AdjN/NAdj, while the other ones for which I have data are AdjN, as illustrated in (54b) for Mising.

(54) a. Apatani
 aki   atu
 dog   small
 'the small dog' (Abraham 1985: 23)

 b. Mising
 azɔ́në dɔ́luŋ
 small   village
 'small village' (Prasad 1991: 69)

Similarly, among the Digaroan languages, Idu is AdjN while Digaro Mishmi is NAdj. In short, it is very common in Tibeto-Burman for languages with lower-level groupings to have different orders of adjective and noun.

There are many other instances in Table 2 where one order is dominant in one language in a lower-level group while both orders are described for other languages in the same group. For example, among Loloish languages, I list Nusu, Yi, Jino, Lalo, Bisu, Lisu, and Akha as NAdj, but Hani and Lahu as having both orders, with neither order dominant. As noted above, in some cases this may be an artifact of how different languages are described rather than a difference between languages. However, it is striking how many groups have this feature; apart from Loloish, it is also true in my data for Northern Naga [Konyak], Nungish, Southern Naga, Chin, and Burmish.

Map 4 shows the geographical distribution of the two orders of adjective and noun within Tibeto-Burman. This map includes only those languages for which I was able to ascertain a dominant order. When we examine this map, a clear overall pattern emerges: NAdj order is more common towards the east while AdjN order is more common towards the west. In Nepal and in the area of India west of Nepal, the majority of languages are AdjN; six of the eight exceptions to this are Central Bodic [Tibetan] languages. Conversely, east of Nepal, the only AdjN languages other than Bai are in northeast India, and within this area, the AdjN languages are the ones closer to the Himalayas.
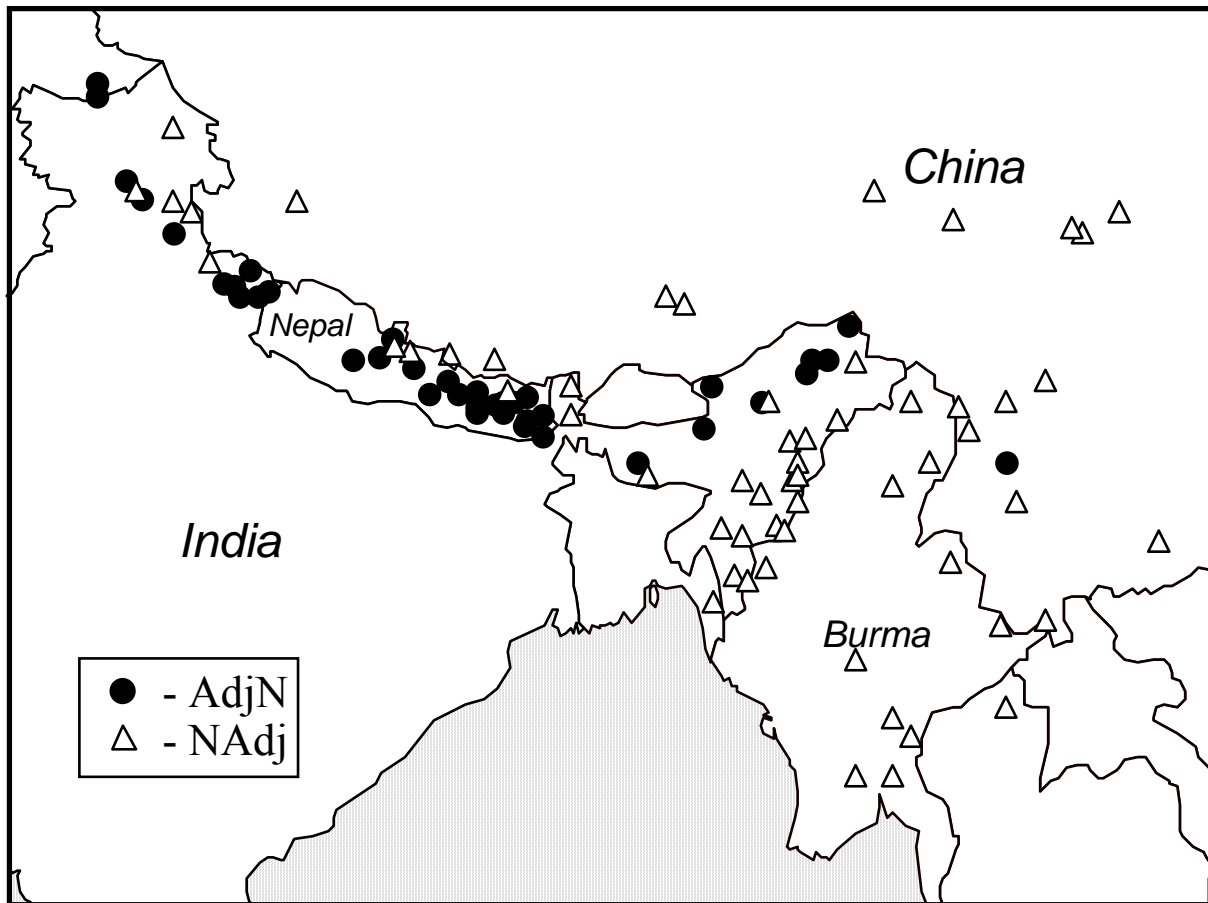
Map 4. Order of adjective and noun

This general east-west distribution makes sense in the context of non-Tibeto-Burman languages surrounding Tibeto-Burman, namely languages towards the east are closer to Tai-Kadai and Mon-Khmer languages, which are NAdj, while languages towards the west are closer to the large area stretching from northern Asia down into India, including Indic languages within Indo-European, which are almost entirely AdjN. This is shown in Map 5, which gives the order of adjective and noun in a larger area of Asia that includes both Tibeto-Burman languages and surrounding languages.
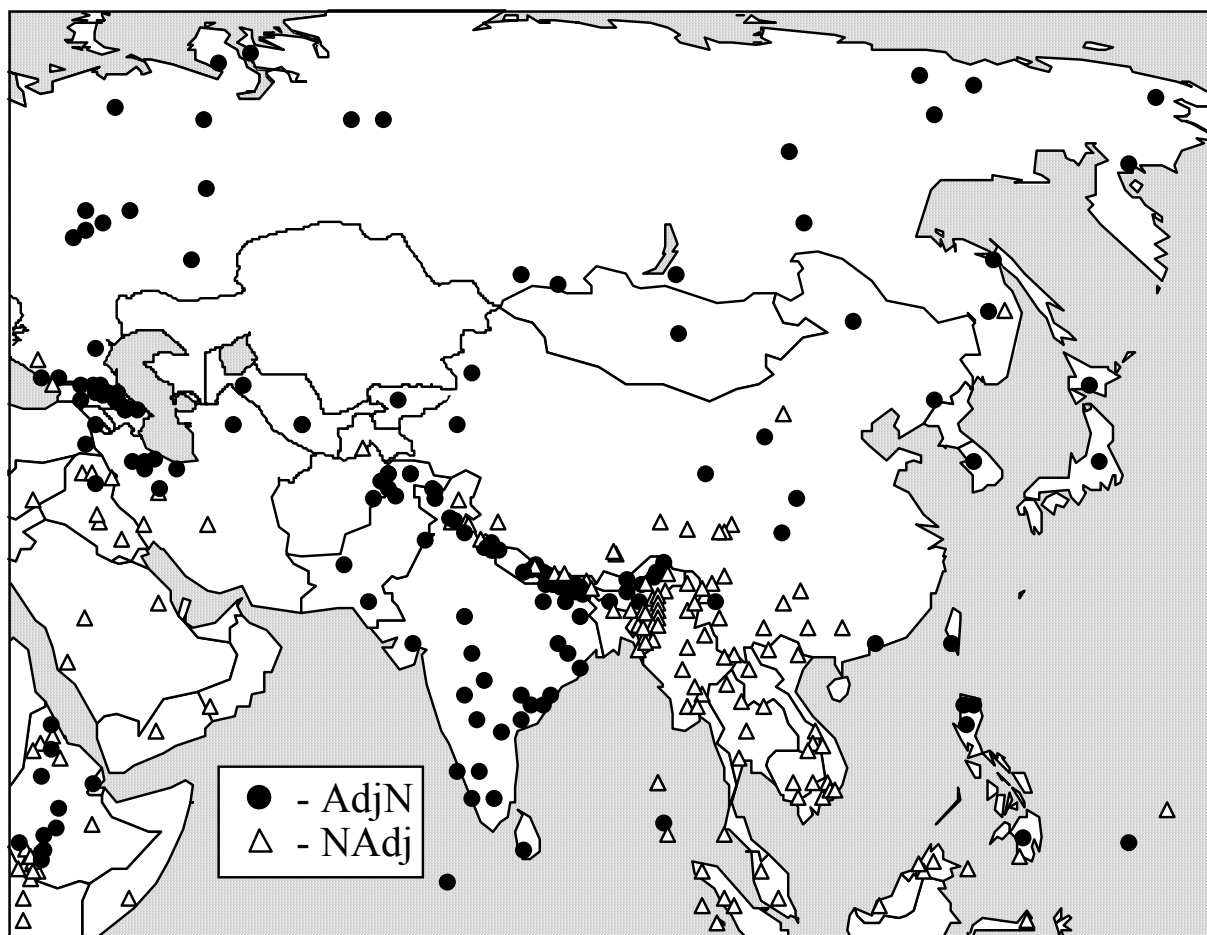
Map 5. Order of adjective and noun in Asia

The map shows a large area of NAdj order in Southeast Asia, including eastern Tibeto-Burman, Tai-Kadai, Mon-Khmer, and Hmong-Mien languages, and extending down into Austronesian languages in western Indonesia. To the west of this is a large area of AdjN order, including the majority of Bodic languages, plus Indic, Dravidian, and Munda languages. It must be emphasized that although for the non-Tibeto-Burman languages in this larger area the order of adjective and noun might seem to be predictable from the order of object and verb, it is clear from the broader worldwide pattern that this is simply a coincidence, since outside of Asia, OV languages are no more likely than VO languages (and if anything less likely) to place the adjective before the noun. In other words, the order of object and verb and the order of adjective and noun are two independent typological parameters that distinguish Southeast Asia from south Asia and from northeast Asia, independent of each much the way that tone is a third parameter distinguishing the languages within this overall region. The fact that the VO languages of Southeast Asia tend to be tonal while VO languages in India and northeast Asia tend not to be does not represent any typological connection between VO word order and tone: rather, tone, VO, and NAdj order are simply three typologically independent parameters that are areal characteristics of Southeast Asia. The exact boundaries vary for different typological parameters, however, in that the eastern Tibeto-Burman languages

other than Karen and Bai are outside the boundary of VO in Southeast Asia, but within the boundary of NAdj order and tone.

A systematic exception to the general pattern of OV Tibeto-Burman languages towards the west being AdjN is that a number of the languages in my database in the Central Bodish [Tibetan] subgroup of Bodic (Modern Literary Tibetan, Lhasa Tibetan, Drokpa Tibetan, Ladakhi, Jad, Nyamkad, Sherpa, Baragaunle, Kyirong, Sikkimese) are NAdj despite being towards the west. If we take the location of Tibetan itself as representative of this group, then it is to the north of other languages. As noted above, two Central Bodish [Tibetan] languages, namely Balti and Purki, are AdjN. However, they are further west than the NAdj Tibetan languages in my database, at the western extreme of Tibeto-Burman, and are likely to have been more subject to contact influence from non-Tibeto-Burman AdjN languages.

5.2. *Relative clause and noun*

The order of relative clause and noun contrasts with the order of adjective and noun among the Tibeto-Burman languages in that most of the OV Tibeto-Burman languages are RelN, placing the relative clause before the noun. The order of relative clause and noun, unlike the order of adjective and noun, does correlate with the order of object and verb. However, this correlation arises because RelN order is much more common among OV languages than it is among VO languages. In fact, as already noted, RelN order in VO languages is exceedingly rare crosslinguistically; the only attested instances are Bai and Chinese languages, both Sino-Tibetan, and Amis, an Austronesian language of Taiwan. We thus find NRel order in Karen languages, as illustrated in (55) from Sgaw Karen.

(55) Sgaw Karen
    pɣa [lə́ ʔəʔ ʔóʔ lə́   pɣàlàklá]
    man REL 3SG be.at PREP forest
    'the man who lives in the forest' (Jones 1961: 34)

Although crosslinguistically VO languages are almost exclusively NRel, the two orders RelN and NRel are about equally common among OV languages outside of Tibeto-Burman. The fact that the OV Tibeto-Burman languages are overwhelmingly RelN is thus not something that is expected of them just because they are OV.

Table 3 lists the OV Tibeto-Burman languages for which I have data on the order of relative clause and noun.[12]

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[12] Randy LaPolla (p.c.) has brought to my attention that Yakha, Classical Tibetan, and Classical Newari also have postnominal relative clauses, and that Mizo has postnominal relative clauses in addition to prenominal and internally-headed relative clauses.

OV & RelN:

    BODIC
        NEWARI: Kathmandu Newari, Dolakhā Newār
        EASTERN BODISH: Tshangla
        CENTRAL BODISH [TIBETAN]: Modern Literary Tibetan, Lhasa Tibetan,
            Dege Kham, Purki, Balti, Sikkimese, Themchen Amdo, Shigatse,
            Baragaunle
        WESTERN BODISH [TAMANGIC]: Tamang, Manange, Gurung, Nar-Phu,
            Chantyal
        WEST HIMALAYISH: Byansi
        CENTRAL HIMALAYAN: Kham, Chepang
        KIRANTI: Hayu, Camling, Thulung, Khaling, Athpare, Limbu, Belhare
        DHIMAL-TOTO: Dhimal
    NORTH-EASTERN INDIA [SAL]
        BODO-GARO: Dimasa, Garo
        NORTHERN NAGA [KONYAK]: Nocte, Chang
        Jinghpo
    CENTRAL TIBETO-BURMAN
        TANI: Gallong, Mising, Apatani
        DIGAROAN [DIGARISH "MISHMI"]: Digaro Mishmi
        NUNGISH: Rawang
    KUKI-CHIN
        SOUTHERN NAGA: Meithei, Ao, Mao Naga, Tangkhul Naga
        CHIN: Siyin Chin, Lai Chin, Bawm
    NORTHEAST TIBETO-BURMAN
        QIANGIC: Prinmi, Qiang
        Bai
    BURMESE-LOLO
        BURMISH: Achang, Maru, Burmese
        LOLOISH: Akha, Hani, Lahu, Lisu

OV & NRel:

    BODIC
        CENTRAL BODISH [TIBETAN]: Nangchen Kham
        WEST HIMALAYISH: Pattani
    KUKI-CHIN
        SOUTHERN NAGA: Angami

Table 3. Order of relative clause and noun in OV Tibeto-Burman languages

The examples in (56) illustrate RelN order in three OV Tibeto-Burman languages.

(56) a. Byansi (West Himalayish)
         [bayirā   toci-de]   came
          song   sing-PTCPL   girl
                  Rel   N
         'the girl who sings songs' (Trivedi 1991: 151)

     b. Rawang (Nungish)
         [Vpə̀ng Pū:ng-í shvngøt dvtú   yà:ng-à]   mvshǿl
          PN   PN-AGT teach   guide TMyrs-TR.PAST   story
         'the story taught by Apang Pung' (LaPolla 2006: 4)

     c. Akha (Loloish)
         [mínaq   ngà   ner   máw   ow]   ghà
          yesterday1SG   by   see   PTCL person
         'the man I saw yesterday' (Dellinger 1969: 112)

The only OV Tibeto-Burman languages I code as NRel are Pattani (West Himalayish), Nangchen Kham (Central Bodish), and Angami (Southern Naga). An example illustrating this for Angami is given in (57).[13]

(57) Angami
     têfə̂ [â   mêkîkêwâ]-ù
     dog 1SG   bite-DEF
     'the dog that bit me' (Giridhar 1980: 92)

Contrast the NRel order in this example with the RelN order in two other languages in the same subgroups as Pattani and Angami, namely Byansi (West Himalayish) in (56a) above and Tangkhul Naga (Southern Naga) in (58).

(58) Tangkhul Naga
     [aiyā   kha-rā]   mī   chi
      yesterday   REL-come   man that
     'the man who came yesterday' (Pettigrew 1918: 24)

In addition, in one Southern Naga language fairly closely related to Angami, namely Sema, the evidence from my source (Sreedhar 1980) is not sufficient for me to determine with confidence the order of relative clause and noun, but the two examples I have found are both NRel, like Angami, as in (59).

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[13] Some languages which are described as NRel may actually have internally-headed relative clauses (Dryer 2005e). For example, without further evidence, the noun *têfə̂* 'dog' (57) from Angami might be inside the relative clause. There are many instances of languages outside Tibeto-Burman that have been described as being NRel, when further examination reveals that the relative clauses are actually internally-headed.

(59) Sema
     akì   [kikhi isi   ileqi-we kew] ti-ye
     house REL   today fall-PAST PTCPL that-FOCUS
     'the house which fell today' (Sreedhar 1980: 157)

The fairly consistent RelN order among the OV Tibeto-Burman languages is rather surprising, since the order of relative clause and noun is something that often varies considerably across single language families. Within the Cushitic branch of Afro-Asiatic, for example, some languages (e.g. Afar) are RelN, while others (e.g. Somali) are NRel. It is also the one modifier of nouns that occasionally follows the noun in the large OV area of Asia stretching from Japanese to the northeast, north and west of Sino-Tibetan around and south to Dravidian in which modifiers otherwise always precede the noun: for example in Brahui (Dravidian), Pashto (Iranian), and Chaladsch (Turkic), modifiers precede the noun, except for the relative clause, which follows the noun. A number of languages around the world with prenominal nonfinite relative clause constructions have borrowed a postnominal finite relative clause construction from other languages, typically from Indo-European. A number of sources on Tibeto-Burman languages (e.g. Trivedi 1991 on Byansi) describe, in addition to the prenominal relative construction, a correlative construction apparently borrowed from Indic languages (cf. Keenan 1985, Dryer 2005e), but none that I am aware of have borrowed a postnominal construction, perhaps due to the absence of such in relevant contact languages. For example, alongside the prenominal relative construction in Byansi illustrated in (56a) above is the correlative construction in (60).

(60) Byansi
     ji   ge   nhā   ge   halau se   jayi lukso
     1SG GEN mother GEN friend ERG which told
         ati   kathāmaŋ shyarcimo nā   yin
         those matters   trustworthy   are
     'those matters which my mother's friend told are trustworthy'
     (literally: 'what my mother's friend told, those matters are trustworthy')
                                                    (Trivedi 1991: 160)

In addition to RelN order (and correlative constructions apparently borrowed via contact with Indic), some of the Tibeto-Burman languages also have internally-headed relative clauses (cf. Keenan 1985). This is illustrated in (61) for Tiddim Chin, Bawm, and Caodeng rGyalrong.

(61) a. Tiddim Chin
         [ka sial   gawh] a   vom   thau khat a   hi
         1SG mithan kill   3SG black fat   one 3SG INDIC
         'the mithan that I killed was a fat black one'
                                          (Henderson 1965: 88)

b. Bawm
   mipâ nih chabu a   hawng ka pêk   mi chu
   man   ERG book 3SG 1SG   give REL that
   'the book that the man gave me' (Reichle 1981: 93)

c. Caodeng rGyalrong
   [ʃorʔ   tə́mɛ   nɐ-mti-ɑŋ]   nəʔ
   yesterdaywoman PERF-see.PAST-1SG SUB
      jɐ-wɛʔ-cə
      PERF-come.PAST-MED
   'the woman that I saw yesterday has come' (Sun 2003: 500)

In discussing the order of relative clause and noun in this section, I will ignore correlative and internally-headed relative clauses. Both of these are rarely found in VO languages, so they are associated with OV order, and their occurrence in OV Tibeto-Burman languages is not unexpected.

The consistent RelN order among the OV Tibeto-Burman languages is also surprising in light of the number of these languages which place the adjective after the noun. There are four possible language types in terms of the order of adjective and noun and of relative clause and noun: AdjN&RelN, AdjN&NRel, NAdj&RelN, and NAdj&NRel. The figures in Table 4 give the frequency of these four types first among non-Tibeto-Burman OV languages in the rest of the world for which I have the relevant information, followed by the corresponding frequencies for Tibeto-Burman.

	Non-Tibeto-Burman	Tibeto-Burman
AdjN&RelN	65 (38%)	20 (44%)
AdjN&NRel	19 (11%)	1 (2%)
NAdj&RelN	11 (7%)	22 (49%)
NAdj&NRel	74 (44%)	2 (4%)
Total	169 (100%)	45 (100%)

Table 4. Order of adjective and noun and order of relative clause and noun among OV languages by number of languages in my database

Table 5 lists the specific Tibeto-Burman languages of each of the four types. In Table 5, the totals of each of the four types for each genetic group are listed in the format [w/x/y/z], where w is the number of AdjN&RelN languages in that group in my sample, x the number of AdjN&NRel languages, y the number of NAdj&RelN languages, and z the number of NAdj&NRel languages.

TIBETO-BURMAN [20/1/22/2]
   BODIC [18/1/5/1]
      NEWARI [2/0/0/0]
         AdjN&RelN: Kathmandu Newari, Dolakhā Newār
      EASTERN BODISH [1/0/0/0]
         AdjN&RelN: Tshangla

CENTRAL BODISH [TIBETAN] [2/0/4/1]
    AdjN&RelN: Purki, Balti
    NAdj&RelN: Modern Literary Tibetan, Lhasa Tibetan, Sikkimese,
       Baragaunle
    NAdj&NRel: Nangchen Kham
WESTERN BODISH [TAMANGIC] [3/0/1/0]
    AdjN&RelN: Tamang, Gurung, Chantyal
    NAdj&RelN: Nar-Phu
WEST HIMALAYISH [1/1/0/0]
    AdjN&RelN: Byansi
    AdjN&NRel: Pattani
CENTRAL HIMALAYAN [2/0/0/0]
    AdjN&RelN: Kham, Chepang
KIRANTI [6/0/0/0]
    AdjN&RelN: Hayu, Thulung, Khaling, Athpare, Limbu, Belhare
DHIMAL-TOTO [1/0/0/0]
    AdjN&RelN: Dhimal
NORTH-EASTERN INDIA [SAL] [0/0/4/0]
    BODO-GARO [0/0/2/0]
       NAdj&RelN: Dimasa, Garo
    NORTHERN NAGA [KONYAK] [0/0/1/0]
       NAdj&RelN: Nocte
    JINGHPO [0/0/1/0]
       NAdj&RelN: Jinghpo
CENTRAL TIBETO-BURMAN [2/0/3/0]
    TANI [2/0/1/0]
       AdjN&RelN: Gallong, Mising
       NAdj&RelN: Apatani
    DIGAROAN [DIGARISH "MISHMI"] [0/0/1/0]
       NAdj&RelN: Digaro Mishmi
    NUNGISH [0/0/1/0]
       NAdj&RelN: Rawang
KUKI-CHIN [0/0/4/1]
    SOUTHERN NAGA [0/0/3/1]
       NAdj&RelN: Ao, Mao Naga, Tangkhul Naga
       NAdj&NRel: Angami
    CHIN [0/0/1/0]
       NAdj&RelN: Bawm
NORTHEAST TIBETO-BURMAN [0/0/2/0]
    QIANGIC [0/0/2/0]
       NAdj&RelN: Prinmi, Qiang
BURMESE-LOLO [0/0/4/0]
    BURMISH [0/0/2/0]
       NAdj&RelN: Maru, Burmese
    LOLOISH [0/0/2/0]
       NAdj&RelN: Akha, Lisu

Table 5. Order of adjective and noun and relative clause and noun among OV languages

The figures in Table 4 show that the least frequent type outside Tibeto-Burman, found in only 7% of OV languages, is the type NAdj&RelN. The figures in Table 4 for Tibeto-Burman are significantly different. The type that is by far the least common outside Tibeto-Burman, NAdj&RelN, is actually the most frequent type in Tibeto-Burman, found in 49% of the languages for which I have relevant data (and excluding languages that are AdjN/NAdj). And while the type AdjN&RelN is almost as common among Tibeto-Burman languages (found in 44% of the languages for which I have data), it is far less widespread in the family than NAdj&RelN in that all but two of the twenty AdjN&RelN languages are Bodic languages, while the type NAdj&RelN is distributed across all six of the higher-level groups assumed here that contain OV languages (i.e. every group other than Karen).

The example in (62) from Tangkhul Naga is a noun phrase illustrating this type that is so common within Tibeto-Burman, but infrequent outside Tibeto-Burman.

(62) Tangkhul Naga
    ci-li   [khəŋəniŋŋə] iwuy   naw khəmatha-piŋ ci-li
    DEF-to stand.REL   my   child beautiful-PLUR DEF-to
              Rel   N   Adj
    'to my beautiful children who stand there' (Arokianathan 1987: 145)

5.3. Demonstrative and noun

The order of demonstrative and noun, like the order of adjective and noun, does not correlate crosslinguistically with the order of object and verb[14]. As with the order of adjective and noun, both orders of demonstrative and noun are common among Tibeto-Burman languages, though DemN order is more common. My data for the order of demonstrative and noun in Tibeto-Burman languages is given in Table 6. The totals of each of the four types for each genetic group are listed in the format [w/x/y/z], where w is the number of DemN languages in that group in my sample, x the number of NDem languages, y the number of DemN/NDem languages, and z the number of languages I call DemNDem languages, as explained below.

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[14] There is a trend for DemN order to be more frequent among OV languages. This trend falls short of statistical significance (see below), though the trend comes much closer to statistical significance in my current database than it did in the data reported in Dryer (1992). If one tries to test for a correlation using the data in the electronic version of Haspelmath, Dryer, Gil and Comrie (2005) from Dryer (2005c, 2005j), there does appear to be a correlation, in that among OV languages, there are more than twice as many DemN languages as NDem languages and among VO languages there are more than twice as many NDem languages as DemN languages. However, by the test argued for in Dryer (1989) and used extensively in Dryer (1992), for there to be a statistically significant correlation between DemN and OV, it would have to be the case that the proportion of genera (language groups comparable to the standard subgroups of Indo-European) that are DemN is higher among OV languages than it is among VO languages in all six of six large continental-sized areas. In this particular case, DemN is higher among OV languages than it is among VO languages in only five of the six areas.

TIBETO-BURMAN [63/27/4/7]
    BODIC [37/6/2/0]
        NEWARI: [2/0/0/0]
            DemN: Kathmandu Newari, Dolakhā Newār
        EASTERN BODISH: [1/0/0/0]
            DemN: Tshangla
        CENTRAL BODISH [TIBETAN]: [8/6/2/0]
            DemN: Kyirong, Ladakhi, Purki, Balti, Spitian, Nyamkad, Sherpa,
                Baragaunle
            NDem: Modern Literary Tibetan, Lhasa Tibetan, Drokpa Tibetan, Nangchen
                Kham, Dege Kham, Lhomi
            DemN/NDem: Dingri Tibetan, Sikkimese
        WESTERN BODISH [TAMANGIC]: [5/0/0/0]
            DemN: Tamang, Gurung, Thakali, Nar-Phu, Chantyal
        WEST HIMALAYISH: [9/0/0/0]
            DemN: Marchha, Kinnauri, Pattani, Tinani, Darmiya, Chaudangsi, Byansi,
                Johari, Thangmi
        CENTRAL HIMALAYAN: [2/0/0/0]
            DemN: Kham, Chepang
        KIRANTI: [9/0/0/0]
             DemN: Hayu, Camling, Thulung, Dumi, Khaling, Athpare, Limbu,
                Wambule, Yamphu
        DHIMAL-TOTO: [1/0/0/0]
            DemN: Dhimal
    NORTH-EASTERN INDIA [SAL] [9/0/1/0]
        BODO-GARO: [5/0/0/0]
            DemN: Bodo, Kachari, Dimasa, Kokborok, Garo
        NORTHERN NAGA [KONYAK]: [3/0/1/0]
            DemN: Lungchang, Nocte, Chang
            DemN/NDem: Jugli
        JINGHPO [1/0/0/0]
            DemN: Jinghpo
    CENTRAL TIBETO-BURMAN [6/0/0/3]
        LEPCHA [1/0/0/0]
            DemN: Lepcha
        TANI: [2/0/0/3]
            DemN: Mising, Apatani
            DemNDem: Nishi, Bori, Milang
        DIGAROAN [DIGARISH "MISHMI"]: [1/0/0/0]
            DemN: Idu
        NUNGISH: [2/0/0/0]
            DemN: Dulong, Rawang
    KUKI-CHIN [5/7/1/4]
        SOUTHERN NAGA: [1/6/1/0]
            DemN: Zema Naga
            NDem: Meithei, Lotha, Ao, Sema, Angami, Tangkhul Naga
            DemN/NDem: Mao Naga

CHIN: [3/1/0/4]
    DemN: Tiddim Chin, Siyin Chin, Thadou
    NDem: Bawm
    DemNDem: Mizo, Hmar, Lai Chin, Mara Chin
ARLENG: [1/0/0/0]
    DemN: Mikir
NORTHEAST TIBETO-BURMAN [4/2/0/0]
    QIANGIC: [1/1/0/0]
        DemN: Prinmi
        NDem: Qiang
    rGYALRONG: [2/0/0/0]
        DemN: Cogtse Gyarong, Caodeng rGyalrong
    NAXI [1/0/0/0]
        DemN: Naxi
    BAI [0/1/0/0]
        NDem: Bai
BURMESE-LOLO [2/8/0/0]
    BURMISH: [2/1/0/0]
        DemN: Maru, Burmese
        NDem: Achang
    LOLOISH: [0/7/0/0]
        NDem: Nusu, Lisu, Yi, Lalo, Akha, Hani, Lahu
KAREN: [0/4/0/0]
    NDem: Kayah Li, Bwe Karen, Sgaw Karen, Pwo Karen

Table 6. Order of demonstrative and noun

As shown in Table 6, four of the seven higher-level groups (Bodic, Kuki-Chin, Northeast Tibeto-Burman, and Burmese-Lolo) contain both DemN and NDem languages. Among the other three higher-level groups, NDem order is not found in Northeast India (Sal) or Central Tibeto-Burman, and DemN order is not found in Karen. We thus find considerable variation across Tibeto-Burman in terms of the order of demonstrative and noun, analogous to what we found with adjectives.

A few Tibeto-Burman languages are notable in that the normal construction with demonstratives is for demonstrative elements to simultaneously precede and follow the noun, indicated in Table 6 by the notation 'DemNDem'. This is true in three Chin languages (Mizo, Mara Chin, and Lai Chin) and two Tani languages (Nishi and Milang). The examples in (63) illustrate this for Lai Chin.

(63) Lai Chin
    a. mah lam hi   khuazeiahdah a-kal
        DEM road this   where   3SG-go
        'where does this road go?' (Hay-Neave 1953: 37)

    b. mah mipa khi keimah nakin a-no-deuh
       DEM man that 1SG   than 3SG-young-more
       'that man is younger than I am' (Hay-Neave 1953: 44)

Note that the prenominal demonstrative *mah* in Lai Chin is a general demonstrative morpheme that does not distinguish proximal from distal, this distinction being represented by the postnominal demonstratives *hi* 'this' and *khi* 'that'. In Milang, in contrast, the same demonstrative word simultaneously precedes and follows the noun, as in (64).

(64) Milang
    yo miu yo
    this boy this
    'this boy' (Tayeng 1976: iv)

In Nishi, the prenominal demonstrative is one that also functions as a demonstrative adverb, either one meaning 'here' or one meaning 'there', as illustrated in (65).

(65) Nishi
    a. sɑ   nyem sî
       here woman this
       'this woman' (Hamilton 1900: 20)

    b. hɑ   nyî ha
       there man that
       'that man' (Hamilton 1900: 21)

This construction is somewhat analogous to the English expression 'this woman here', except that the position of the two types of demonstratives with respect to the noun is the opposite from English.

    There are some other languages in which one finds a construction with a demonstrative simultaneously preceding and following the noun, but in which it is also possible to get a single demonstrative, as in Bawm (a Chin language, like Mizo and Lai Chin), illustrated in (66).

(66) Bawm
    hi   Pathian biakin hi râwk   u   le!
    this God   temple this break.down 2PL IMPER
    'break down this temple of God!' (Reichle 1981: 136)

Since it is also common in Bawm to get just a postnominal demonstrative, as in (67), I treat NDem order as dominant in Bawm.

(67) Rêtâi hi   lal a   si le
    Retai this king 3SG be LINK
    'this (man called) Retai was a king' (Reichle 1981: 137)

The situation in Meithei (Southern Naga) is similar: one can get a prenominal demonstrative, but when one does, one also gets a postnominal one, as in (68).

(68) Meithei
 ə-si   ləy-si
 ATTR-this   flower-this
 'this flower' (Chelliah 1997: 83)

Turning to the higher-level groups in which we find some languages with dominant DemN and others with dominant NDem, the majority of the Bodic languages are DemN, but many of the Central Bodish languages, primarily ones closer to Tibetan, are NDem. The examples in (69) illustrate DemN order in Balti and Chepang, while (70) illustrates NDem order in Lhomi.

(69) a. Balti
 de   rgom
 that box
 'that box' (Read 1934: 23)

 b. Chepang
 ʔowʔ   manta
 that   person
 'that person' (Caughley 1982: 45)

(70) Lhomi
 čhačuŋma   'uko
 bird   that
 'that bird' (Vesalainen and Vesalainen 1980: 13)

The variation between DemN and NDem is more evenly split within Kuki-Chin languages. Geographically, the more southern languages tend to be DemN (with Bawm being an exception, though, as noted above, it also allows demonstratives simultaneously preceding and following), while the more northern ones tend to be NDem (with Mikir as an exception, though this might be due to contact with DemN Indic languages). Furthermore, we find both orders in each of the Southern Naga and Chin subgroups. Within Southern Naga, Zema Naga is DemN, while the other languages for which I have data are NDem, as in Tangkhul Naga, illustrated in (71).

(71) Tangkhul Naga
 shim hi
 house this
 'this house' (Pettigrew 1918: 16)

Among the Chin languages, other than the four languages that are DemNDem, Bawm is NDem (though it also has DemNDem order, as mentioned above), but the other three are DemN, as illustrated in (72) for Tiddim Chin.

(72) Tiddim Chin
    'tu   ni
    this day
    'this day' (Henderson 1965: 121)

The split within Burmese-Lolo follows genetic lines to the extent that all the Loloish languages in my data are NDem while, except for Achang, the Burmish languages are DemN. The fact that the Loloish languages are NDem may reflect the fact that they are generally geographically closer to Tai-Kadai languages, which are also NDem. Examples illustrating the two orders within Burmese-Lolo are given in (73).

(73) a. Maru (Burmic)
        chè   yauk
        this   man
   'this man' (Clerk 1911: 11)

     b. Lisu (Loloish)
        làthyu   nɔ́   ma
        person   that one
        'that person' (Hope 1974: 84)

Within Northeast Tibeto-Burman, Bai and Qiang are NDem while Cogtse Gyarong, Caodeng rGyalrong, Prinmi, and Naxi are DemN.

The overall geographical pattern is shown in Map 6 on p. 45. Although the distribution of the two orders of demonstrative and noun in Tibeto-Burman languages is quite complex, there is something of an east-west pattern, similar to the pattern observed with the order of noun and adjective, though not as marked. Except for Modern Literary Tibetan, Lhasa Tibetan, Drokpa Tibetan, and Lhomi, DemN is dominant in all of the more westerly languages. To the east, we find both orders, but DemN order is common towards the northeast, while NDem order is common towards the southeast.

I have described the order of demonstrative and noun as a nonpredictable word order characteristic because it is not predictable from the order of object and verb. However, it is partly predictable from the order of adjective and noun, in that of the four possible types DemN&AdjN, DemN&NAdj, NDem&AdjN, and NDem&NAdj, three are common, while the fourth is rare. The three common types are DemN&AdjN, DemN&NAdj, and NDem&NAdj, while the infrequent type is NDem&AdjN. In other words, if the adjective precedes the noun, then we can predict that the demonstrative probably precedes the noun as well (or equivalently, if the demonstrative follows the noun, then the adjective probably will as well). We can also describe this crosslinguistic pattern by saying that it is somewhat more common for the demonstrative and adjective to occur on the same side of the noun but if the demonstrative and adjective occur on different sides of the noun, it is generally the case that it is the demonstrative that precedes the noun and the adjective that follows. Tibeto-Burman conforms to this in that the three types that are common cross-linguistically are also common within

Tibeto-Burman, while the fourth type is attested by only one language, Bai, as shown in Table 7, below Map 6. The totals of each of the four types for each genetic group are listed in the format [w/x/y/z] in Table 7, where w is the number of DemN&AdjN languages in that group in my sample, x the number of NDem&AdjN languages, y the number of DemN&NAdj languages, and z the number of NDem&NAdj languages.
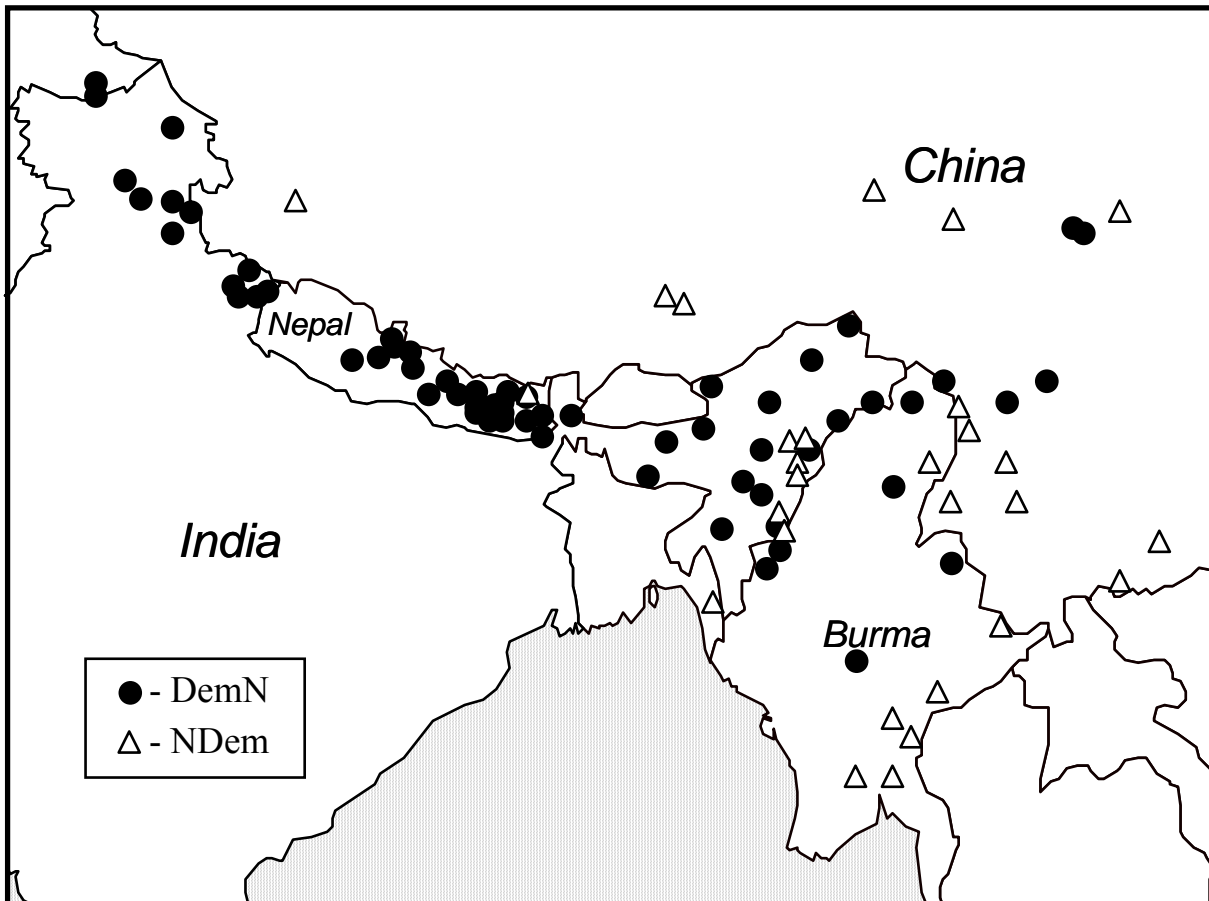
Map 6. Order of demonstrative and noun

TIBETO-BURMAN [31/1/24/20]
    BODIC [27/0/7/4]
        NEWARI [2/0/0/0]
            DemN&AdjN: Kathmandu Newari, Dolakhā Newār
        EASTERN BODISH [1/0/0/0]
            DemN&AdjN: Tshangla
        CENTRAL BODISH [TIBETAN] [2/0/6/4]
            DemN&AdjN: Purki, Balti
            DemN&NAdj: Kyirong, Ladakhi, Spitian, Nyamkad, Sherpa, Baragaunle
            NDem&NAdj: Modern Literary Tibetan, Lhasa Tibetan, Nangchen Kham,
                Dege Kham
        WESTERN BODISH [TAMANGIC] [4/0/1/0]
            DemN&AdjN: Tamang, Gurung, Thakali, Chantyal
            DemN&NAdj: Nar-Phu

WEST HIMALAYISH [8/0/0/0]
    DemN&AdjN: Marchha, Kinnauri, Pattani, Tinani, Darmiya, Chaudangsi,
        Byansi, Johari
    CENTRAL HIMALAYAN [2/0/0/0]
    DemN&AdjN: Kham, Chepang
    KIRANTI [7/0/0/0]
    DemN&AdjN: Hayu, Thangmi, Thulung, Dumi, Khaling, Athpare, Limbu
    DHIMAL-TOTO [1/0/0/0]
    DemN&AdjN: Dhimal
NORTH-EASTERN INDIA [SAL] [2/0/5/0]
    BODO-GARO [2/0/3/0]
    DemN&AdjN: Deuri, Bodo
    DemN&NAdj: Dimasa, Kokborok, Garo
    NORTHERN NAGA [KONYAK] [0/0/1/0]
    DemN&NAdj: Nocte
    JINGHPO [0/0/1/0]
    DemN&NAdj: Jinghpo
CENTRAL TIBETO-BURMAN [2/0/3/0]
    LEPCHA [0/0/1/0]
    DemN&NAdj: Lepcha
    TANI [1/0/1/0]
    DemN&AdjN: Mising
    DemN&NAdj: Apatani
    DIGAROAN [DIGARISH "MISHMI"] [1/0/0/0]
    DemN&AdjN: Idu
    NUNGISH [0/0/1/0]
    DemN&NAdj: Rawang
KUKI-CHIN [0/0/3/6]
    SOUTHERN NAGA [0/0/1/5]
    DemN&NAdj: Zema Naga
    NDem&NAdj: Lotha, Ao, Sema, Angami, Tangkhul Naga
    CHIN [0/0/2/1]
    DemN&NAdj: Tiddim Chin, Thadou
    NDem&NAdj: Bawm
NORTHEAST TIBETO-BURMAN [0/1/4/1]
    QIANGIC [0/0/1/1]
    DemN&NAdj: Prinmi
    NDem&NAdj: Qiang
    rGYALRONG [0/0/2/0]
    DemN&NAdj: Cogtse Gyarong, Caodeng rGyalrong
    NAXI [0/0/1/0]
    DemN&NAdj: Naxi
    BAI [0/1/0/0]
    NDem&AdjN: Bai
BURMESE-LOLO [0/0/2/5]
    BURMISH [0/0/2/0]
    DemN&NAdj: Maru, Burmese

LOLOISH [0/0/0/5]
    NDem&NAdj: Nusu, Yi, Lalo, Akha. Lisu
KAREN [0/0/0/4]
    NDem&NAdj: Kayah Li, Bwe Karen, Sgaw Karen, Pwo Karen

Table 7. Order of adjectives and demonstratives with respect to noun

Note that the type in Table 7 that occurs in the largest number of subgroups is DemN&NAdj, with the two modifiers on opposite sides of the noun.

Because of the implicational relationship between the order of adjective and noun and the order of demonstrative and noun, the similarities and differences between Map 4, which shows the distribution of AdjN and NAdj order among Tibeto-Burman languages, and Map 6, which shows the same for DemN and NDem order, are worth drawing attention to. Namely, both maps display an overall east-west pattern, with prenominal position more common to the west and postnominal position more common to the east. But they differ in where the rough boundary falls. On Map 4, the boundary falls within northeast India, with AdjN order more common to the west (or more accurately to the northwest) and NAdj more common to the east (or more accurately to the southeast). On Map 6, the rough boundary falls further east, within Burma, where languages are more often DemN, except towards the southeast. These two rough boundaries divide the Tibeto-Burman region into three rough areas, a western area, where both modifiers precede the noun, an eastern area, where both modifiers follows the noun, and a middle area where the demonstrative precedes the noun and the adjective follows. The fact that AdjN predicts DemN (but that NAdj does not predict NDem) would lead us to expect that the boundary for the order of adjective and noun would be to the west of the boundary for the order of demonstrative and noun, as it is.

Of course, the pattern on both maps is more complex than this. In particular, many of the languages to the north, in China (including Tibet), are NDem, even those in western Tibet. And the fact that NDem languages are normally NAdj correctly predicts that this area will also be exceptional to the overall east-west pattern for the order of adjective and noun as well, that we will find NAdj languages to the north as well. Furthermore, the rough northern boundary between DemN and NDem is different from the northern boundary between AdjN and NAdj. The former roughly corresponds to the southern boundary of Tibet, while the latter is further south, with many NAdj languages along but to the south of the southern boundary of Tibet, extending from Kashmir to Sikkim, Again the fact that NDem predicts NAdj would lead us to expect that the NAdj area will encompass the NDem area but possibly extend beyond it, as it does.

5.4. Numeral and noun

As discussed in Dryer (1992a), the order of numeral and noun exhibits a weak correlation with the order of object and verb that is sufficiently weak that it may

be accidental.[15] The direction of this correlation is the opposite of what one might expect, given the distribution of different orders in Asia, in that NumN order is somewhat more common crosslinguistically among VO languages, while NNum order is slightly more common among OV languages. For the purposes of this paper, I will assume that this distribution is not significant and that the order of numeral and noun does not correlate with the order of object and verb.

In describing the order of numeral and noun in a language with numeral classifiers, I classify the language according to the position of the numeral plus classifier with respect to the noun, ignoring the order of numeral with respect to classifier. Greenberg (1963) and Hawkins (1983) appear to base their characterization, in at least some cases, on the order of numeral and classifier. For example, they classify Burmese as NumN, apparently basing this on the order of numeral and classifier, while I classify Burmese as NNum, based on fact that the numeral plus classifier follows the noun, as in (74).

(74) Burmese
    qahkan: hcau'-hkan:
    room   six-CLSFR
    'six rooms' (Cornyn and Roop 1968: 228)

As with the order of adjective and noun and the order of demonstrative and noun, we find both orders of numeral and noun among Tibeto-Burman languages. The distribution of the three types is shown in Table 8. For each genetic group, the totals of each of the three types are listed in the format [x/y/z], where x is the number of NumN languages in that group in my sample, y the number of NNum languages, and z the number of NumN/NNum languages.

---

[15] The proportion of genera (see Dryer 2005l) that are NumN among VO languages is higher than it is among OV languages in five of the six areas (see footnote 14). The situation is complicated by the fact that the syntactic status of numerals varies considerably among languages (Dryer 2005d, Dryer 2007), sometime behaving just as a modifier of the noun, sometimes exhibiting head-like features (such as governing case in Russian), and sometimes combining with classifiers to form a phrase that often exhibits head-like features relative to the noun. Further research is required to see whether separating out these different sorts of languages brings out patterns that are currently obscured by lumping all of these language types together. However, a preliminary study, using the electronic version of Haspelmath et al (2005), based on the maps for Gil (2005) and Dryer (2005d, 2005j) shows that among languages that have classifiers, there are 37 languages which are OV&NumN or VO&NNum and 25 languages which are OV&NNum or VO&NumN and among languages that lack classifiers, there are 66 languages which are OV&NumN or VO&NNum and 82 languages which are OV&NNum or VO&NumN. So we observe a difference that suggests that languages with numeral classifiers are different from those without, but there is no easy way from the way the data is presented to determine whether this difference approaches statistical significance.

TIBETO-BURMAN [21/77/7]
    BODIC [21/24/4]
        NEWARI: [0/1/1]
            NNum: Kathmandu Newari
            NumN/NNum: Dolakhā Newār
        EASTERN BODISH: [0/1/0]
            NNum: Tshangla
        CENTRAL BODISH [TIBETAN]: [0/18/0]
            NNum: Modern Literary Tibetan, Lhasa Tibetan, Dingri Tibetan, Drokpa
                Tibetan, Kyirong, Nangchen Kham, Dege Kham, Ladakhi, Purki, Balti,
                Jad, Spitian, Nyamkad, Sherpa, Sikkimese, Themchen Amdo, Shigatse,
                Baragaunle
        WEST HIMALAYISH: [10/0/0]
            NumN: Marchha, Kinnauri, Pattani, Tinani, Darmiya, Chaudangsi, Byansi,
                Johari, Rang Pas, Thangmi
        WESTERN BODISH [TAMANGIC]: [1/4/1]
            NumN: Chantyal
             NNum: Tamang, Gurung, Thakali, Nar-Phu
            NumN/NNum: Manange
        CENTRAL HIMALAYAN: [3/0/0]
            NumN: Magar, Kham, Chepang
        KIRANTI: [6/0/2]
            NumN: Camling, Thulung, Khaling, Athpare, Limbu, Belhare
            NumN/NNum: Hayu, Dumi
        DHIMAL-TOTO: [1/0/0]
            NumN: Dhimal
    NORTH-EASTERN INDIA [SAL] [0/7/2]
        BODO-GARO: [0/5/1]
            NNum: Bodo, Kachari, Dimasa, Kokborok, Garo
            NumN/NNum: Deuri
        NORTHERN NAGA [KONYAK]: [0/1/1]
            NNum: Chang
            NumN/NNum: Nocte
        JINGHPO [0/1/0]
            NNum: Jinghpo
    CENTRAL TIBETO-BURMAN [0/9/0]
        LEPCHA [0/1/0]
            NNum: Lepcha
        TANI: [0/4/0]
            NNum: Gallong, Mising, Nishi, Apatani
        DIGAROAN [DIGARISH "MISHMI"]: [0/2/0]
            NNum: Idu, Digaro Mishmi
        NUNGISH: [0/2/0]
            NNum: Dulong, Rawang

KUKI-CHIN [0/17/1]
  SOUTHERN NAGA: [0/8/0]
    NNum: Meithei, Lotha, Ao, Mao Naga, Sema, Angami, Tangkhul Naga,
      Zema Naga
  CHIN: [0/9/0]
    NNum: Tiddim Chin, Siyin Chin, Thadou, Tarao, Mizo, Hmar, Lai Chin,
      Bawm, Mara Chin
  ARLENG: [0/0/1]
    NumN/NNum: Mikir
NORTHEAST TIBETO-BURMAN [0/6/0]
  QIANGIC: [0/2/0]
    NNum: Prinmi, Qiang
  BAI [0/1/0]
    NNum: Bai
  rGYALRONG: [0/2/0]
    NNum: Cogtse Gyarong, Caodeng rGyalrong
  NAXI [0/1/0]
    NNum: Naxi
BURMESE-LOLO [0/10/0]
  BURMISH: [0/3/0]
    NNum: Achang, Maru, Burmese
  LOLOISH: [0/7/0]
    NNum: Nusu, Lisu, Yi, Lalo, Akha, Hani, Lahu
KAREN: [0/4/0]
    NNum: Kayah Li, Bwe Karen, Sgaw Karen, Pwo Karen

Table 8. Order of numeral and noun

Although both orders of numeral and noun are found among Tibeto-Burman languages, the distribution is less variable than it is for adjectives or demonstratives in that NNum order is much more common and languages with dominant order NumN are found only in Bodic. Examples of NNum order in various subgroups are given in (75).

(75) a. Prinmi (Qiangic)
    qüá xüé
    pig eight
    'eight pigs' (Ding 1998: 191)

   b. Rawang (Nungish)
    mahka hti sel
    bead   one ten
    'ten bead' (Barnard 1934: 41)

   c. Lotha (Southern Naga)
    ōkì   mʰōm ēnì
    house good two
    'two good houses' (Acharya 1983: 152)

    d. Lepcha
       maró   nyum
       person two
       'two persons' (Mainwaring 1876: 27)

As noted above, the only subgroup of Tibeto-Burman in which there are languages with dominant order NumN is Bodic, but, as shown in Table 8, both types of languages are common within Bodic. However, the distribution within Bodic is largely predictable on the basis of subgroups: ignoring NumN/NNum languages, West Himalayish, Central Himalayan, and Kiranti are NumN, while Kathmandu Newari, Eastern Bodish, Central Bodish [Tibetan], and Western Bodish [Tamangic] (except for Chantyal) are NNum. The example in (76a) illustrates NNum order in Ladakhi, a Central Bodish [Tibetan] language, while the example in (76b) illustrates NumN order in Byansi, a West Himalayish language.

(76) a. Ladakhi
       mi   ñis
       man two
       'two men' (Koshal 1979: 62)

    b. Byansi
       nishi rhitishā   maŋ
       two   wife   PLURAL
       'two wives' (Trivedi 1991: 149)

Although Bodic is the only subgroup with languages in which NumN order is dominant, there are three non-Bodic languages (Deuri, Nocte, and Mikir) which I code as NumN/NNum, where both orders occur and where there is no evidence from the source for one order being dominant. The two orders are illustrated in (77) from Nocte.

(77) Nocte
    a. la-nyi   wa
       CLSFR-two bamboo
   'two bamboos' (Das Gupta 1971: 13)

    b. wan kha-banga
       dish CLSFR-five
       'five dishes' (Das Gupta 1971: 14)

Although postnominal position for numerals is dominant among Tibeto-Burman languages in a way that is not the case for adjectives or demonstratives, the geographical distribution of the two orders within Tibeto-Burman displays the

same overall pattern we saw with these other two noun modifiers, as shown in Map 7.[16]
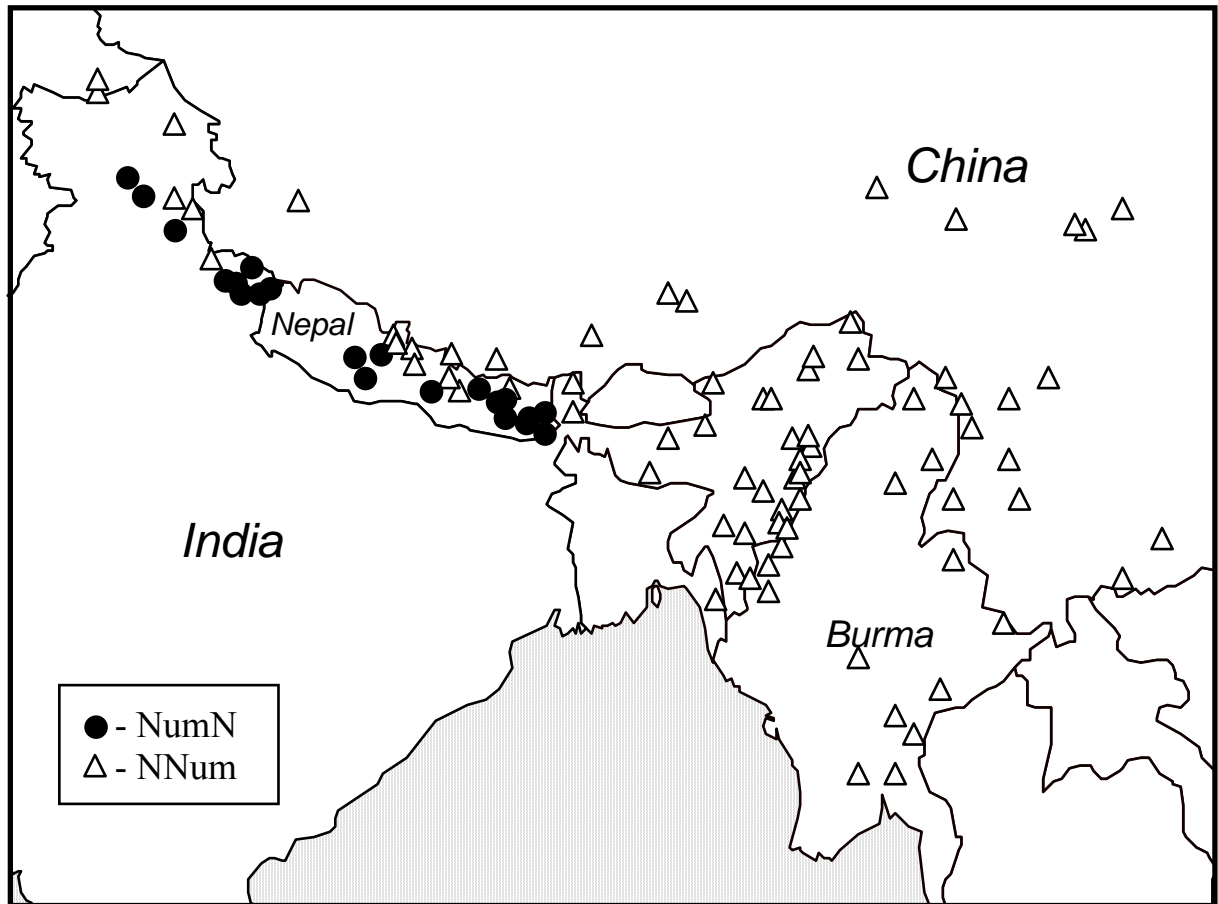
Map 7. Order of numeral and noun

Namely the prenominal position is only found in the most westerly of the Tibeto-Burman languages, among Bodic languages. On the other hand, the geographical distribution of the two orders within Bodic conforms to this pattern only slightly. The most westerly Tibeto-Burman languages for which I have data, Purki and Balti, are NNum, as illustrated for Balti in (78).

(78) Balti
        chuli   bjī
        apricot   four
        'four apricots' (Read 1934: 77)

However, the more southern of the western Bodic languages, namely the West Himalayish languages, are generally NumN, as illustrated in (76b) above for Byansi. Similarly, within Nepal, NNum order tends somewhat to be found to the

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[16] As noted in footnote 6, Themchen Amdo is not shown in Map 7, since it is north of the area shown. It is NNum. It is roughly north of Nangchen Kham, which is represented by the triangle down and to the left of the 'C' in 'China'.

north, in languages closer to Tibet. This tendency may simply reflect lesser Indo-Aryan influence.

The order of numeral and noun interacts crosslinguistically with the order of adjective and noun in a way that is similar to what we saw with demonstratives. Just as AdjN order predicts DemN, AdjN also predicts NumN (or, equivalently, NNum predicts NAdj). This means that of the four possible types, three are common (namely AdjN&NumN, NAdj&NumN, and NAdj&NNum), while the fourth (AdjN&NNum) is much less common. In other words, if the adjective and numeral occur on opposite sides of the noun, it is more common for the numeral to precede and the adjective to follow.

Interestingly, however, Tibeto-Burman languages exhibit a rather different pattern from what we find elsewhere in the world. First, there are a number of Tibeto-Burman languages of the least common AdjN&NNum type. In fact, 13 of the 35 languages I am aware of which are this type are Tibeto-Burman; they are listed in Table 9.

BODIC
    NEWARI: Kathmandu Newari
    EASTERN BODISH: Tshangla
    CENTRAL BODISH [TIBETAN]: Purki, Balti
    WESTERN BODISH [TAMANGIC]: Tamang, Gurung, Thakali
NORTH-EASTERN INDIA [SAL]
    BODO-GARO: Bodo
CENTRAL TIBETO-BURMAN
    TANI: Gallong, Mising, Nishi
    DIGAROAN [DIGARISH "MISHMI"]: Idu
NORTHEAST TIBETO-BURMAN
    Bai

Table 9. AdjN&NNum Tibeto-Burman languages

Examples illustrating this property are given in (79) for Purki and Kathmandu Newari.

(79) a. Purki
    rḍamo   bomo ŋis
    beautiful girl   two
    'two beautiful girls' (Rangan 1979: 122)

    b. Kathmandu Newari
     tho ji-gu   nhu:-gu   saphu: ni-gu:
     this 1SG-MOD   new-MOD   book two-CLSFR
     'these two new books of mine' (Malla 1985: 70)

Tibeto-Burman is not only unusual in having an unexpectedly large number of AdjN&NNum languages. It is also unusual in lacking the mirror image of this, NAdj&NumN languages. The figures in Table 10 give the frequency of the four possible types, first among non-Tibeto-Burman languages in the rest of the world

for which I have the relevant information, and then the corresponding frequencies for Tibeto-Burman.

	Non-Tibeto-Burman	Tibeto-Burman
AdjN&NumN	216 (27%)	19 (22%)
AdjN&NNum	22 (3%)	13 (15%)
NAdj&NumN	153 (19%)	0 (0%)
NAdj&NNum	400 (51%)	56 (64%)
Total	791 (100%)	88 (100%)

Table 10. Order of adjective and noun and order of numeral and noun
among OV languages by number of languages in my database

Table 10 shows that among non-Tibeto-Burman languages, NAdj&NumN order outnumbers AdjN&NNum by 153 languages to 22, while among Tibeto-Burman languages, it is AdjN&NNum order that outnumbers NAdj&NumN order by 13 to zero. Furthermore, these 13 AdjN&NNum languages are spread over four of the higher-level subgroups of Tibeto-Burman.

An anonymous reviewer of this paper raises the interesting question of whether the high frequency of the rare type AdjN&NNum among Tibeto-Burman might be due in part to the frequency of numeral classifiers among Tibeto-Burman languages.[17] As noted in footnote 15, further research is needed to see to what extent the crosslinguistic patterns involving the order of numeral and noun are different in languages with numeral classifiers from languages without numeral classifiers. There are two reasons why this might be relevant to occurrences of AdjN&NNum. One (noted by the reviewer) is that a numeral plus a classifier is somewhat heavier than a numeral by itself, so that postposing a numeral plus classifier would involve postposing a heavier element. However, differences in heaviness usually seem to play a role only when they are greater than the difference from adding a classifier; adding degree words to an adjective, for example, rarely affects word order possibilities. Furthermore, the high incidence of RelN&NAdj in Tibeto-Burman reflects a tendency for heavy elements to occur *earlier* rather than later. This is in fact common among OV languages (see Dryer 1992a). A second reason that classifiers might be relevant is that numeral-plus-classifier combinations often exhibit head-like properties, with the noun as a dependent, so that AdjN&NNum would actually be consistently head-final if the numeral plus classifier is head.

However, a preliminary study using the electronic version of Haspelmath et al (2005), based on the data for Gil (2005) and Dryer (2005b. 2005d), provides no support for the idea that AdjN&NNum languages are more likely in a language

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[17] It should be noted that in the Balti example in (78) and the Purki example in (79a), there is no classifier. The existence of AdjN&NNum in Purki and Balti, the two most westerly Tibeto-Burman languages in my sample, seems to reflect the influence of Indo-European languages on the order of adjective and noun, without affecting the NNum order that is normal in Central Bodish. But this leaves it unanswered why Indo-European languages have caused a change in the order of adjective and noun without also causing a change in the order of numeral and noun.

with numeral classifiers. Table 11 gives the number of languages in the world for the sample of languages formed by the intersection of the languages used by Gil (2005) with those used by Dryer (2005b, 2005d) for each of the four word order types, distinguishing languages with numeral classifiers from those without.

	With classifiers		No classifiers	
AdjN&NumN	18	(31%)	57	(38%)
AdjN&NNum	1	(2%)	4	(3%)
NAdj&NumN	14	(24%)	27	(18%)
NAdj&NNum	25	(43%)	63	(42%)
Total	58	(100%)	151	(100%)

Table 11. Orders of adjective and noun and of numeral and noun among languages with and without numeral classifiers

Table 11 shows a slight trend in the opposite direction from the pattern predicted: AdjN&NNum order is found in only 2% of languages with numeral classifiers but in 3% of languages without numeral classifiers. Furthermore, the mirror image type, NAdj&NumN, is proportionally more common among languages with numeral classifiers, found in 24% of the languages with numeral classifiers, but only 18% of those without. So there is little basis for thinking that the high incidence of AdjN&NNum order among Tibeto-Burman languages is related to the high incidence of numeral classifiers among these languages.

While this paper primarily discusses the order of various modifiers with respect to the noun, it is also worth mentioning briefly another way in which Tibeto-Burman languages are somewhat unusual, and that is in terms of the order amongst various modifiers of nouns. Universal 20 of Greenberg (1963) states that

> When any or all of the items (demonstrative, numeral, and descriptive adjective) precede the noun, they are always in that order. If they follow, the order is either the same or its opposite.

Since 1963, many exceptions to this universal have been found and in fact among languages in which all three of these modifiers follow the noun, all six logical possibilities are attested. One of these types is N-Adj-Dem-Num, which is somewhat unusual in that the demonstrative occurs closer to the noun than the numeral does. My database codes eighteen languages among the world of this sort, and seven of them are Tibeto-Burman. These seven languages are spread over three higher-level groups and are listed in Table 12.[18]

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[18] An anonymous reviewer suggests that the high frequency of N-Adj-Dem-Num order among Tibeto-Burman languages might again be due to the fact that numeral classifiers are common among Tibeto-Burman languages. However, it is not clear why this should be relevant. Even if we view the numeral plus classifier as head, the combination of noun plus adjective plus numeral plus classifier forms a semantic unit and we would not expect the demonstrative to intervene between them.

BODIC
    CENTRAL BODISH [TIBETAN]: Modern Literary Tibetan, Lhasa Tibetan
NORTHEAST TIBETO-BURMAN
    QIANGIC: Qiang
BURMESE-LOLO
    LOLOISH: Lisu, Lalo, Akha, Hani

Table 12. Noun-Adj-Dem-Num languages

An example illustrating this order in Akha is given in (80).

(80) Akha
    tshɔ́-hà jɔ-mỳ xhø njì ɣà
    person good those two CLSFR
    'those two good persons' (Hansson 2003: 241)

5.5. *Degree word and adjective*

We turn now to the first of two word order characteristics which I will examine in detail and which do not involve modifiers of nouns, namely the order of degree word with respect to adjective. As in the previous discussion, the term 'adjective' is used here in a purely semantic sense; in many languages, these words are arguably verbs. By 'degree word', I intend words with meanings like 'very', 'more', and 'a bit' (as in English *a bit cold)* which are traditionally called adverbs and which indicate the degree denoted by the adjective. I have data on this characteristic for a smaller number of languages than for the other characteristics I have discussed, primarily because it is something that is mentioned in fewer grammatical descriptions.

Both orders of adjective and degree word are represented among Tibeto-Burman languages. Examples illustrating AdjDeg order for two degree words in Bwe Karen, *lèdù* 'most' and *ó* 'very', are given in (81).

(81) Bwe Karen
    a. θabwe lèdù
       old   most
       'oldest' (Henderson 1997: 84)

    b. wɪ   ó
       beautiful very
       'very beautiful' (Henderson 1997: 130)

Examples illustrating the opposite order, DegAdj order, for two degree words in Burmese, *thei'* 'very' and *ne: ne:* 'a little', are given in (82).

(82) Burmese
    a. hsaun:qahka-hma thei'   ma-hcan:-bu:
       cold.season-at   very   NEG-cold-NEG
       'it isn't very cold in the cold season'

    b. ne: ne: qei:-de
        a.little cool-NONFUT
        'it's a little cool' (Cornyn and Roop 1968: 160)

In many languages, degree words do not function together as a well-defined class of words, and the position of degree words may depend on the particular degree word. For example, in Digaro Mishmi, the degree word *dɨgyõ* 'more' precedes the adjective, as in (83a), while the degree word *grag* 'very' follows, as in (83b).

(83) Digaro Mishmi
    a. dɨgyõ syî-yà
        more fair-PRES.3
        'is fairer ' (Devi Prasada Sastry 1984: 101)

    b. tháyg   grag
        poisonous   very
        'very poisonous' (Devi Prasada Sastry 1984: 170)

Because of this variability across degree words within a single language, there may be languages that I have coded one way because I have found evidence for the order of one degree word with respect to the adjective, but where other degree words behave differently.

Some languages use constructions in which one degree word precedes the adjective and another follows in the same phrase, as in the examples in (84) from Akha and Hani.

 (84)a. Akha
       ádzèr ghaq dzów
       very   hard too
       'too hard' (Dellinger 1969: 140)

    b. Hani
       hal   meeq zeiq
       most   good   more
       'best' (Lewis and Bai 1996: 15)

Zema Naga and Yi use a construction where the adjective is repeated in degree constructions, with the degree affix or word following the first occurrence, as in (85).

(85) a. Zema Naga
       ai   jingbâng hu-sâng hu-dâ
       this tree   tall-very tall-NONFUT
       'this tree is exceedingly tall' (Soppitt 1885: 30)

b. Yi
va^{55} dʑz̩^{33} va^{55}
good very   good
'very good' (Chen, Bian, and Li 1985: 101)

Except in Table 13 below, my discussion excludes morphemes with the same sorts of meaning that are represented in my sources as attached to the adjective, as in (85a) above from Zema Naga and in (86) from Lotha, although it is often unclear whether there is a good linguistic reason to treat them as suffixes rather than separate words and I suspect that with some grammatical descriptions, there is in fact little linguistic significance associated with the orthographic representations used.

(86) Lotha
sə̄pʰō-kātà
tall-more
'taller' (Acharya 1983: 124)

The data on this characteristic is given in Table 13. For languages where my sources indicate a degree morpheme that is represented as bound to the adjective, the notation '(B)' is placed after the name of the language. The table contains five cases of this, and in all five languages, these bound degree morphemes are suffixes rather than prefixes. These languages are ignored in the subsequent discussion and are not shown on Map 8. In the counts for each type, the first number excludes languages with these bound degree morphemes, but is followed by a number in parentheses that includes these languages. For each genetic group, the totals of each of the three types are listed in the format [x/y/z], where x is the number of DegAdj languages in that group in my sample, y the number of AdjDeg languages, and z the number of DegAdj/AdjDeg languages.

TIBETO-BURMAN [34/13(18)/6]
    BODIC [20/1(2)/0]
        NEWARI [1/0/0]
            DegAdj: Kathmandu Newari
        EASTERN BODISH [1/0/0]
            DegAdj: Tshangla
        CENTRAL BODISH [TIBETAN] [5/1/0]
            DegAdj: Balti, Spitian, Rang Pas, Nyamkad, Sikkimese
            AdjDeg: Jad
        WESTERN BODISH [TAMANGIC] [1/0/0]
            DegAdj: Gurung
        WEST HIMALAYISH [7/0/0]
            DegAdj: Kinnauri, Pattani, Tinani, Darmiya, Chaudangsi, Byansi, Kanashi.
   CENTRAL HIMALAYAN [1/0/0]
            DegAdj: Kham

KIRANTI [4/0(1)/0]
    DegAdj: Hayu, Khaling, Limbu, Wambule
    AdjDeg: Kulung (B)
NORTH-EASTERN INDIA [SAL] [2/0(1)/1]
  NORTHERN NAGA [KONYAK] [1/0/0]
    DegAdj: Lungchang
  JINGHPO [1/0/0]
    DegAdj: Jinghpo
  BODO-GARO [0/0(1)/1]
    AdjDeg: Garo (B)
    DegAdj/AdjDeg: Bodo
CENTRAL TIBETO-BURMAN [5/1/2]
  TANI [2/1/1]
    DegAdj: Mising, Apatani
    AdjDeg: Bokar
    DegAdj/AdjDeg: Nishi
  WESTERN ARUNACHAL [1/0/0]
    DegAdj: Bugun
  NUNGISH [2/0/0]
    DegAdj: Dulong, Rawang
  DIGAROAN [DIGARISH "MISHMI"] [0/0/1]
    DegAdj/AdjDeg: Digaro Mishmi
KUKI-CHIN [1/7(10)/1]
  SOUTHERN NAGA [1/2(4)/1]
    DegAdj: Ao
    AdjDeg: Lotha (B), Mao Naga (B), Angami, Tangkhul Naga
    DegAdj/AdjDeg: Sema
  CHIN [0/5/0]
    AdjDeg: Siyin Chin, Mizo, Lai Chin, Bawm, Mara Chin
  ARLENG [0/0(1)/0]
    AdjDeg: Mikir (B)
NORTHEAST TIBETO-BURMAN [3/0/0]
  QIANGIC [2/0/0]
    DegAdj: Prinmi, Qiang
  rGYALRONG [1/0/0]
    DegAdj: Cogtse Gyarong
BURMESE-LOLO [4/2/2]
  BURMISH [2/0/0]
    DegAdj: Maru, Burmese
  LOLOISH [2/2/2]
    DegAdj: Nusu, Lisu
    AdjDeg: Lalo, Lahu
    DegAdj/AdjDeg: Akha, Hani
KAREN [0/2/0]
    AdjDeg: Bwe Karen, Sgaw Karen

Table 13. Order of degree word and adjective

The distribution for degree word and adjective follows a fairly clear geographical pattern, as shown in Map 8.
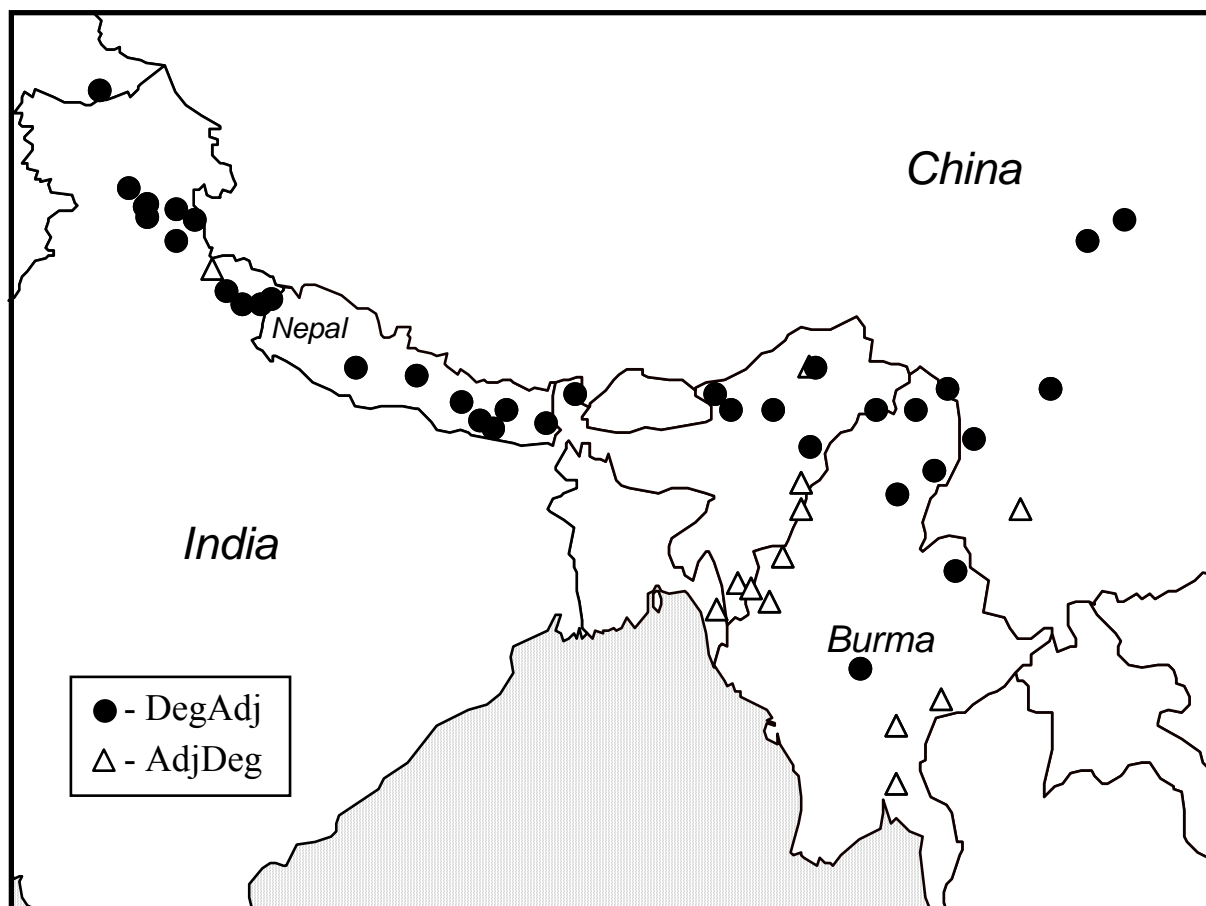
Map 8. Order of degree word and adjective

The dominant order within Tibeto-Burman is DegAdj, with AdjDeg order found towards the southeast, especially in Kuki-Chin and Karen languages. At a crude level, this conforms to the general pattern we have seen with modifiers of nouns, where orders with modifiers preceding their heads occur more often to the west, while orders with modifiers following their heads occur more often to the east. However, the pattern differs from that for adjective and noun in that towards the eastern part of the Tibeto-Burman area, AdjDeg order is found only in the southern part of this area. The reverse order is found to the north, for example in Tani, Jinghpo and Prinmi, and is also found further south, in Burmic (Burmese and Maru). Within Loloish, DegAdj order is found in the more northern Lisu and Nusu, the latter illustrated in (87a), while AdjDeg order is found in the more southern Lahu, illustrated in (87b).

(87) a. Nusu
ma^{31}iã^{31} mɹɯ^{35}a^{55}
very   tall
'very tall' (Sun and Liu 1985: 95)

　　b. Lahu
　　　kho　　　　　jâ
　　　mischievous　very
　　　'very mischievous' (Matisoff 1988: 373)

Lalo, however, does not fit this pattern within Loloish languages, since it is further north, but is AdjDeg.

　　It is striking that the Bodic languages, which show inconsistency with respect to a number of other word order characteristics, are almost consistently DegAdj. I code only two Bodic languages, Jad and Kulung, as AdjDeg (and in Kulung it is a suffix). The AdjDeg order in Jad is illustrated in (88a); the DegAdj order found more commonly in Bodic languages is illustrated in (88b), from Pattani, which is geographically quite close to Jad.

(88) a.　Jad
　　　　　nagpo　　məŋpo
　　　　　black　　very
　　　　　'very black' (Sharma 1989a: 44)

　　　b.　Pattani
　　　　　mhəss roki
　　　　　very　black
　　　　　'very black' (Sharma 1989c: 68)

　　It is again worth examining the interaction of this word order characteristic with other characteristics, most notably the order of adjective and noun. It is again the case that crosslinguistically, three of the four possible types are common (AdjN&DegAdj, NAdj&DegAdj, and NAdj&AdjDeg) while the fourth type (AdjN&AdjDeg) is uncommon. Tibeto-Burman languages overall conform to this pattern: the three patterns that are common crosslinguistically are all common among Tibeto-Burman languages, while the less common fourth type is not attested.[19] The distribution of these three types in Tibeto-Burman is given in Table 14. The totals of each of the four types for each genetic group are listed in the format [w/x/y/z], where w is the number of AdjN&DegAdj languages in that group in my sample, x the number of AdjN&AdjDeg languages (which is not attested in Tibeto-Burman), y the number of NAdj&DegAdj languages, and z the number of NAdj&AdjDeg languages.

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[19] An anonymous reviewer asks why I examine the relationship between the order of degree word and adjective and that of adjective and noun rather than the relationship between the order of degree word and adjective and that of adverb and verb. One reason is that the former relationship is interesting since one of the four types is rare (for reasons that are not clear). But the main reason is that the order of adverb and verb is less interesting in Tibeto-Burman languages since it is almost always predictable from the order of object and verb, in that the VO Karen languages are VAdv and the OV languages are almost all AdvV (though see section 2.2 for a few exceptions). Hence the OV Tibeto-Burman languages are mostly DegAdj&AdvV or AdjDeg&AdvV and the list for these two types is approximately the same as the lists for DegAdj and AdjDeg.

TIBETO-BURMAN [14/0/13/9]
    BODIC [13/0/3/1]
        NEWARI [1/0/0/0]
           AdjN&DegAdj: Kathmandu Newari
        EASTERN BODISH [1/0/0/0]
           AdjN&DegAdj: Tshangla
        CENTRAL BODISH [TIBETAN] [1/0/3/1]
           AdjN&DegAdj: Balti
           NAdj&DegAdj: Spitian, Nyamkad, Sikkimese
           NAdj&AdjDeg: Jad
        WESTERN BODISH [TAMANGIC] [1/0/0/0]
           AdjN&DegAdj: Gurung
        WEST HIMALAYISH [6/0/0/0]
           AdjN&DegAdj: Kinnauri, Pattani, Tinani, Darmiya, Chaudangsi, Byansi
        CENTRAL HIMALAYAN [1/0/0/0]
           AdjN&DegAdj: Kham
        KIRANTI [2/0/0/0]
           AdjN&DegAdj: Khaling, Limbu
    NORTH-EASTERN INDIA [SAL] [0/0/1/0]
        JINGHPO [0/0/1/0]
           NAdj&DegAdj: Jinghpo
    CENTRAL TIBETO-BURMAN [1/0/2/0]
        TANI [1/0/1/0]
           AdjN&DegAdj: Mising
           NAdj&DegAdj: Apatani
        NUNGISH [0/0/1/0]
           NAdj&DegAdj: Rawang
    KUKI-CHIN [0/0/1/5]
        SOUTHERN NAGA [0/0/1/2]
           NAdj&DegAdj: Ao
           NAdj&AdjDeg: Angami, Tangkhul Naga
        CHIN [0/0/0/3]
           NAdj&AdjDeg: Mizo, Bawm, Mara Chin
    NORTHEAST TIBETO-BURMAN [0/0/2/0]
        QIANGIC [0/0/1/0]
           NAdj&DegAdj: Prinmi
        rGYALRONG [0/0/1/0]
           NAdj&DegAdj: Cogtse Gyarong
    BURMESE-LOLO [0/0/4/1]
        BURMISH [0/0/2/0]
           NAdj&DegAdj: Maru, Burmese
        LOLOISH [0/0/2/1]
           NAdj&DegAdj: Nusu, Lisu
           NAdj&AdjDeg: Lalo
    KAREN [0/0/0/2]
        NAdj&AdjDeg: Bwe Karen, Sgaw Karen

Table 14. Order of adjective and noun and of degree word and adjective

The type represented by the most subgroups of Tibeto-Burman languages is the type NAdj&DegAdj: it is attested in six subgroups while the other two are found only in no more than four subgroups. Crosslinguistically, this type is actually less common than the two orders AdjN&DegAdj and NAdj&AdjDeg, which are consistent in their order of head and modifier. Examples illustrating the NAdj&DegAdj type are given in (89) and (90): (89a) illustrates the NAdj order in Prinmi, while (89b) shows the degree word preceding the adjective; the examples in (90) are analogous examples from Jinghpo.

(89) Prinmi
    a. miâbbu dai
       eyelid   big
       'big eyelids' (Ding 1998: 194)

    b. lealián ggáo
       very   deep
       'very deep' (Ding 1998: 107)

(90) Jinghpo
    a. sanat   galu
       gun   long
       long gun (Hertz 1917: 11)

    b. grai   htat
       very   thick
       'very thick' (Hertz 1917: 30)

The examples in (91) and (92) illustrate the two other combinations: (91) illustrates AdjN&DegAdj order from Kinnauri while the two examples in (92) illustrate NAdj and AdjDeg order from Bawm.

(91) Kinnauri: AdjN, DegAdj
     id   kəttəi rɔk   kui
     one very   black dog
     'a very black dog' (Sharma 1988: 114)

(92) Bawm: NAdj, AdjDeg
    a. in   tê
       house small
       'small house' (Reichle 1981: 42)
    b. ṭha   thlo
       good   very
       'very good' (Reichle 1981: 66)

The distribution of the three combinations of these orders follows a clear geographical pattern, with the premodifying languages to the west, the

postmodifying languages to the southeast, and the mixed type, NAdj&DegAdj, occurring in between. This is shown in Map 9.
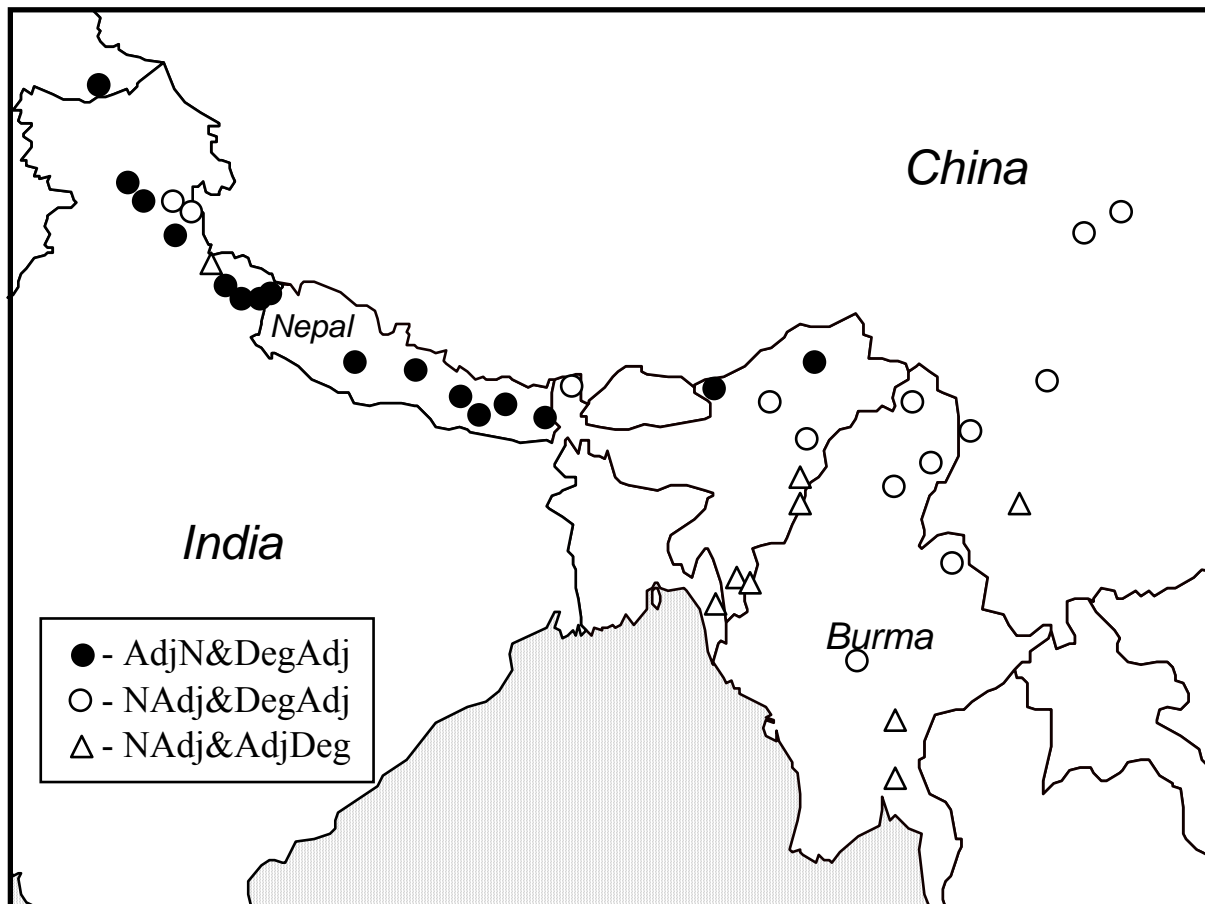
Map 9. Order of adjective and noun and of degree word and adjective

5.6. Negative and verb

The final word order characteristic I will discuss is the order of negative morphemes with respect to the verb. Crosslinguistically, we need to distinguish three sorts of negative morphemes: negative affixes, verbal negative words (i.e. negative auxiliaries), and nonverbal negative words (i.e. negative particles). The distinction between verbal negative words and nonverbal negative words depends on whether the negative word is itself a verb or not, whether it exhibits grammatical properties associated with verbs. The only candidate for a verbal negative word within Tibeto-Burman that I am aware of is Mao Naga, in which the habitual suffix attaches to verbs and to negative words, as illustrated in (93).

(93) Mao Naga
    a. camaikho   cars-li   vu-we
       Chamaikho church-to go-HABITUAL
       'Chamaikho goes to church' (Giridhar 1994: 382)

b. camaikho   cars-li   vu   mo-we
   Chamaikho church-to go   NEG-HABITUAL
   'Chamaikho does not go to church' (Giridhar 1994: 382)

A number of other verbal suffixes in Mao Naga also can attach to negative words. It is possible, however, that these suffixes ought to be viewed as particles and that the negative is also a nonverbal particle and that morphemes like the habitual morpheme simply cliticize onto the negative morpheme.

Otherwise, negative morphemes in Tibeto-Burman languages are either affixes or particles, as illustrated respectively in (94).

(94) a. Tshangla
         jang   ma-lem-ba
         1SG   NEG-dance-FUT
         'I shall not dance' (Das Gupta 1968: 53)

     b. Tiddim Chin
         lo   a-kuan nawn   kei hi
         field 3-go   anymore NEG INDIC
         'he did not go out to work any more that day'
                                              (Henderson 1965: 4)

As discussed in Dryer (1992a), the three different sorts of negatives behave differently with regard to whether their order with respect to the verb correlates with the order of object and verb. Namely, verbal negatives and negative affixes tend to follow the verb or verb stem in OV languages more often than they do in VO languages, but the position of negative particles does not correlate with the order of object and verb. What this means is that we might expect negative affixes in the OV Tibeto-Burman languages to be suffixes, but we should have no expectation as to whether negative particles that are not attached to the verb should precede or follow the verb. However, it is in general not clear that much significance should be assigned to whether grammatical descriptions of negative morphemes are written as separate words or not, particularly given the nature of many of the sources for Tibeto-Burman languages. Unlike the word order characteristics discussed in the preceding sections, in discussing the clausal negative, we are often discussing the same morpheme in different languages, a common form of which is *ma*. It is also often difficult to determine on the basis of superficial evidence whether a negative word is a verb or not. The primary criterion I have used is the possibility of verbal morphology, but in languages which are fairly isolating, with little or no verb morphology, the absence of morphology on the negative word does not provide a basis for concluding that it is not a verb. For this reason, it is difficult to determine whether there might be reasons to analyse the negative word *ma* in (95) from Nusu as a verb or not.

(95) Nusu
    ŋa³⁵ ma⁵⁵ su³⁵   dɯ³⁵
    1SG NEG understand still
    'I still don't understand' (Sun and Liu 1985: 53)

For these reasons, I will ignore the distinction between the three types of negatives in the following discussion. While this makes it impossible to determine the extent to which different languages conform to crosslinguistic generalizations, we can still examine the variability across the family.

As is common in other language families, a number of Tibeto-Burman languages use constructions involving double negation, where one negative morpheme precedes the verb or verb stem while the other follows. The examples in (96) illustrate this both for negative affixes and for negative particles. The example in (96a) from Limbu illustrates a simultaneous prefix and suffix, and the example in (96b) from Bwe Karen shows a negative prefix co-occurring with a negative particle at the end of the clause.

(96) a. Limbu
        allɔ nam mɛ-se·k-nɛn
        now sun NEG-shine-NEG
        'the sun is not shining now' (van Driem 1987: 91)

     b. Bwe Karen
        dɛ ə-mu   dəlà-yo yə-də-θə́'ɛ́
        thing POSS'D-plant PLUR-this 1SG-NEG-know
          ə-mi   nɔ
          POSS'D-name   NEG
        'these plants, I don't know their names'
                                    (Henderson 1997: 247)

The discussion in the rest of this section excludes languages like these in which negation normally involves simultaneous preverbal and postverbal negation, though I list these languages under the designation NegVNeg in Table 15 below.

Negation in some languages is sometimes a suffix, and sometimes a prefix, as in the Ladakhi examples in (97).

(97) Ladakhi
     a. rgyəlpo-gun-ni khər   rtsigge-mə-nok
        king-PLUR-ERG   palace build-NEG-HISTORICAL.PRES
        'kings do not build palaces' (Koshal 1979: 243)

     b. ŋə   bənərəs-lə mə-soŋ-pin
        1SG.ABS   Banares-to NEG-go-PAST
        'I did not go to Benares' (Koshal 1979: 245)

The apparent historical explanation for this (Honda 1994) is that the prefixal negative is the original negative and the suffixal negative arose because it was a

prefix on auxiliary verbs that became attached as suffixes to the main verb. This seems fairly transparent in some languages, like Prinmi, in which there is a negative prefix on the verb, as in (98a), but which attaches as a prefix to certain postverbal words, as in (98b).

(98) Prinmi
    a. ma-kú
        NEG-want
        'not want' (Ding 1998: 199)

    b. jiân ma-dûu
        see NEG-EXPERIENTAL
        'not see' (Ding 1998: 200)

Table 15 shows the data for the order of negative and verb in Tibeto-Burman languages. Map 10 shows the geographical distribution.[20] For each genetic group, the totals of each of the four types are listed in the format [w/x/y/z], where w is the number of NegV languages in that group in my sample, x is the number of VNeg languages, y is the number of NegV/VNeg languages, and z the number of NegVNeg languages. Languages of the third and fourth type are not shown on Map 10.

    TIBETO-BURMAN [59/34/9/6]
        BODIC [38/5/6/3]
            NEWARI [2/0/0/0]
                NegV: Kathmandu Newari, Dolakhā Newār
            EASTERN BODISH [1/0/0/0]
                NegV: Tshangla
            CENTRAL BODISH [TIBETAN] [10/2/4/0]
                NegV: Lhasa Tibetan, Drokpa Tibetan, Kyirong, Nangchen Kham, Dege
                    Kham, Nyamkad, Sherpa, Themchen Amdo, Shigatse, Baragaunle
                VNeg: Purki, Sikkimese
                NegV/VNeg: Modern Literary Tibetan, Lhomi, Ladakhi, Balti
            WESTERN BODISH [TAMANGIC] [6/0/0/0]
                NegV: Tamang, Gurung, Nar-Phu, Chantyal, Manange, Tangbe
            WEST HIMALAYISH [12/0/0/0]
                NegV: Gahri, Tod, Kinnauri, Pattani, Tinnani, Darmiya, Chaudangsi,
                    Byansi, Johari, Rang Pas, Kanashi, Thangmi
   CENTRAL HIMALAYAN [2/1/0/0]
                NegV: Magar, Kham
                VNeg: Chepang

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[20] As noted in footnote 6, Themchen Amdo is not shown in Map 10, since it is north of the area shown. It is NegV. It is roughly north of Nangchen Kham, which is represented by the triangle down and to the left of the 'C' in 'China'.

KIRANTI [4/2/2/3]
    NegV: Hayu, Khaling, Wambule, Yamphu
    VNeg: Athpare, Belhare
    NegV/VNeg: Dumi, Kulung
    NegVNeg: Thulung, Limbu, Camling
DHIMAL-TOTO [1/0/0/0]
    NegV: Dhimal
NORTH-EASTERN INDIA [SAL] [2/6/1/0]
    BODO-GARO [0/5/1/0]
        VNeg: Deuri, Kachari, Dimasa, Kokborok, Garo
        NegV/VNeg: Bodo
    NORTHERN NAGA [KONYAK] [1/1/0/0]
        NegV: Chang
        VNeg: Nocte
    JINGHPO [1/0/0/0]
        NegV: Jinghpo
CENTRAL TIBETO-BURMAN [3/8/0/1]
    WESTERN ARUNACHAL [1/0/0/0]
        NegV: Bugun
    NUNGISH [2/0/0/0]
        NegV: Dulong, Rawang
    TANI [0/6/0/0]
        VNeg: Gallong, Bori, Mising, Nishi, Apatani, Bokar
    DIGAROAN [DIGARISH "MISHMI"] [0/2/0/0]
        VNeg: Idu, Digaro Mishmi
    LEPCHA [0/0/0/1]
        NegVNeg: Lepcha
KUKI-CHIN [3/14/0/0]
    SOUTHERN NAGA [3/5/0/0]
        NegV: Lotha, Ao, Tangkhul Naga
        VNeg: Meithei, Mao Naga, Sema, Angami, Zema Naga
    CHIN [0/8/0/0]
        VNeg: Tiddim Chin, Siyin Chin, Tarao, Mizo, Hmar, Lai Chin, Bawm,
            Mara Chin
    ARLENG [0/1/0/0]
        VNeg: Mikir
NORTHEAST TIBETO-BURMAN [4/0/1/0]
    QIANGIC [1/0/1/0]
        NegV: Qiang
        NegV/VNeg: Prinmi
    rGYALRONG [1/0/0/0]
        NegV: Cogtse Gyarong
    BAI [1/0/0/0]
        NegV: Bai
    NAXI [1/0/0/0]
        NegV: Naxi

BURMESE-LOLO [8/0/1/0]
    BURMISH [1/0/1/0]
      NegV: Maru
      NegVNeg: Burmese
    LOLOISH [7/0/0]
      NegV: Lisu, Yi, Lalo, Bisu, Akha, Hani, Lahu
KAREN [1/1/0/2]
      NegV: Pwo Karen
      VNeg: Kayah Li
      NegVNeg: Bwe Karen, Sgaw Karen

Table 15. Order of negative and verb
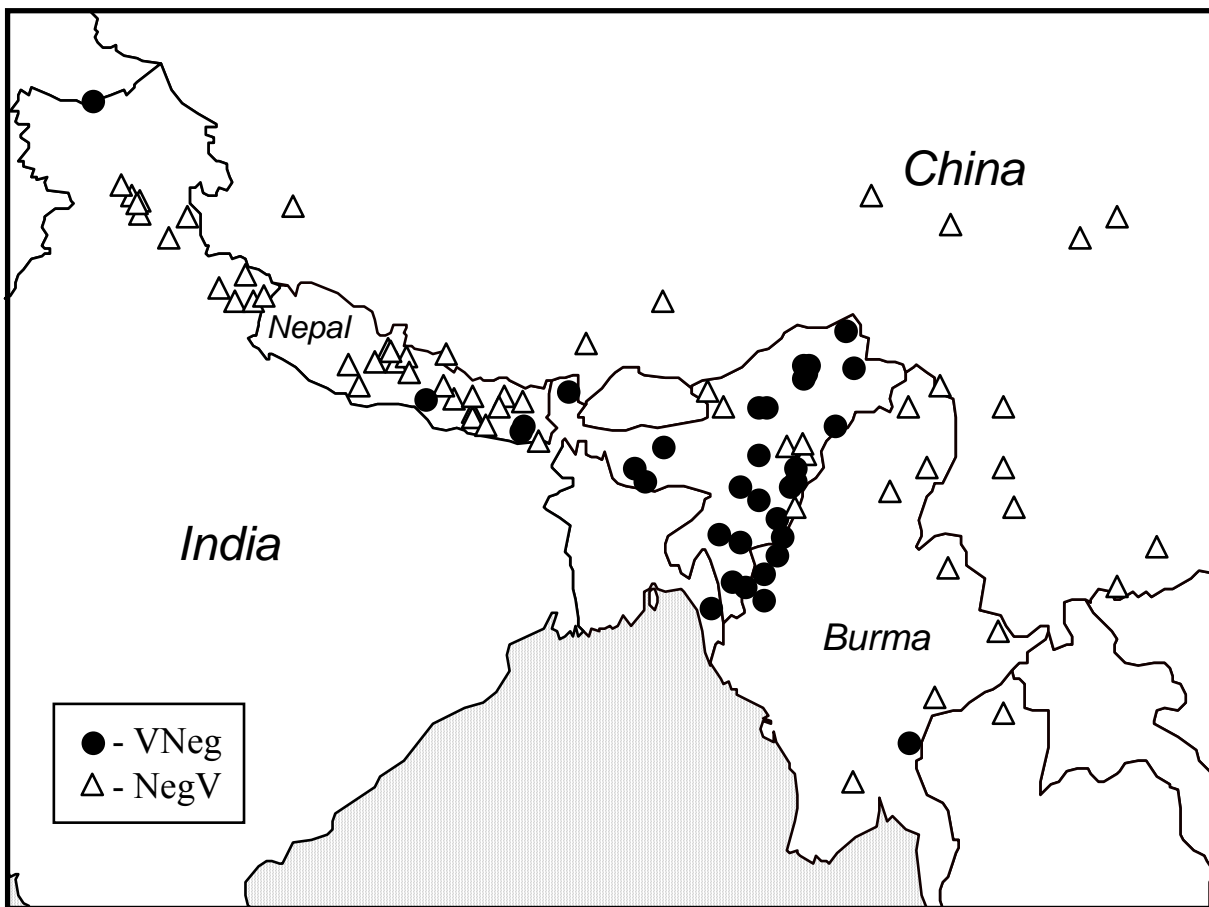
Map 10. Order of negative and verb

The overall pattern of the position of negative morphemes in Tibeto-Burman can be summarized as follows. VNeg order is dominant in an area corresponding roughly to the section of India east and northeast of Bangladesh, including most Bodo-Garo, Tani, and Kuki-Chin languages, while NegV order is dominant in two areas, one to the west, in Bodic, and one to the east, including Nungish, Jinghpo, Northeast Tibeto-Burman, and Burmese-Lolo languages.

Despite this overall pattern, we find different positions of the negative within single subgroups. Within Bodic, NegV order is dominant, though some languages are VNeg. The example in (99) illustrates NegV order in Hayu.

(99) Hayu
    ma jẽ·kuŋ
    NEG see.1SG.3SG
    'I did not see him' (Michailovsky 1989: 161)

At the geographical extremes of Bodic, we find VNeg order, in Purki, to the west, as illustrated in (100a), and in Sikkimese, to the east, as in (100b).

(100) a. Purki
        kʰoŋ ŋi   kʰaŋma yoŋ-ča:-men
        3PL   1SG.POSS house come-FUT-NEG
        'they will not come to my house' (Rangan 1979: 94)

      b. Sikkimese
        kho so tap mi   ong
        3SG bite   NEG.NONPAST   FUT
        'he will not bite' (Sandberg 1888: 48)

In Kuki-Chin, the dominant order is VNeg, as illustrated in (101) from Meithei.

(101) Meithei
      mənipur-də un   ta-d-e
      Manipur-LOC snow fall-NEG-ASSERTIVE
      'it hasn't snowed in Manipur' (Chelliah 1997: 228)

A minority of Kuki-Chin languages are NegV, all of the Southern Naga languages, as in (102) from Ao.

(102) Ao
      pá   ma-ʒu
      3SG.MASC NEG-come
      'he did not come' (Gurubasave Gowda 1975: 69)

The majority of Northeastern India [Sal] languages are VNeg, as is the Bodo example in (103a), but Chang is NegV, as in (103b).

(103) a. Bodo
        ^{2}aŋ-^{1}ō ^{2}ga^{2}mi-^{3}aw ^{1}thaŋ-^{0}a
        1SG-SUBJ.DEF   village-LOC   go-NEG.NONPAST
        'I do not go to the village' (Bhattacharya 1977: 191)

      b. Chang
        nge   kā-to   ta-ngam-po
        1SG.ERG 2SG-ACC NEG-strike-FUT
        'I will not strike you' (Hutton 1987: 41)

6. SUMMARY

The overall tendency for prenominal modification to occur more often as one moves west within Tibeto-Burman and the way in which this fits into a pattern that includes non-Tibeto-Burman languages to the east and to the west can be seen in Map 11, in which we can see a gradual progression as we move from east to west (cf. also Masica 1976). The black circles on the map, in an area centered in Burma and to the northeast and northwest of Burma, represent languages which are OV&GenN&NAdj&NNum, i.e. OV languages with the genitive preceding the noun and the adjective and numeral following the noun. The languages of this sort include languages in all of the higher-level subgroups of Tibeto-Burman assumed in this paper other than Karen. To the southeast of this area are the Karen languages in southern Burma, represented on the map by white diamonds; they differ from the preceding type only in being VO rather than OV. To the east of these are VO&NGen&NAdj&NNum Tai-Kadai and Mon-Khmer languages in Thailand, Laos and Cambodia, which differ from Karen in being NGen; these are represented on the map by black diamonds. To the east of this, in Vietnam, are VO&NGen&NAdj&NumN Tai-Kadai and Mon-Khmer languages represented on the map by white squares, which differ from the preceding type in being NumN. (This type is also found in Austronesian languages to the east of Vietnam, in Taiwan, the Philippines, and the northern part of the island of Borneo.)

Looking now in the opposite direction, to the west of Burma, the type that differs in one respect from the OV&GenN&NAdj&NNum type dominant in and to the north of Burma are languages which are NumN. This type is represented by a small number of languages on the map by white triangles in the extreme northeast part of India and some languages in Nepal; they do not represent a well-defined geographical area since they are located in areas where other types are common. But to the west of this are the OV&GenN&AdjN&NumN languages, represented on the map by white circles. These differ from the preceding type in being AdjN. This type is the dominant type of most of India and Pakistan, represented by Indo-European, Dravidian, Munda and many of the more western Bodic languages. It is also the type to the north of Chinese, shown on the map for Mongolic, Tungus, Korean, Japanese, and Ainu.[21]

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[21] Note that there are four other types of VO languages that are not distinguished on this map, which are all represented by an 'X', namely VO&GenN&AdjN&NNum (Bai), VO&GenN&AdjN&NumN (Chinese languages), VO&GenN&NAdj&NumN (Hmong-Mien languages), VO&NGen&AdjN&NumN (some Austronesian languages, plus Car Nicobarese). There are also two other types of OV languages which are not shown on the map and which are not close to Tibeto-Burman languages, namely OV&NGen&NAdj&NumN (Tajik), and OV&GN&NAdj&NumN (Orok). The other logical possibilities are not found in languages in the area shown on the map.
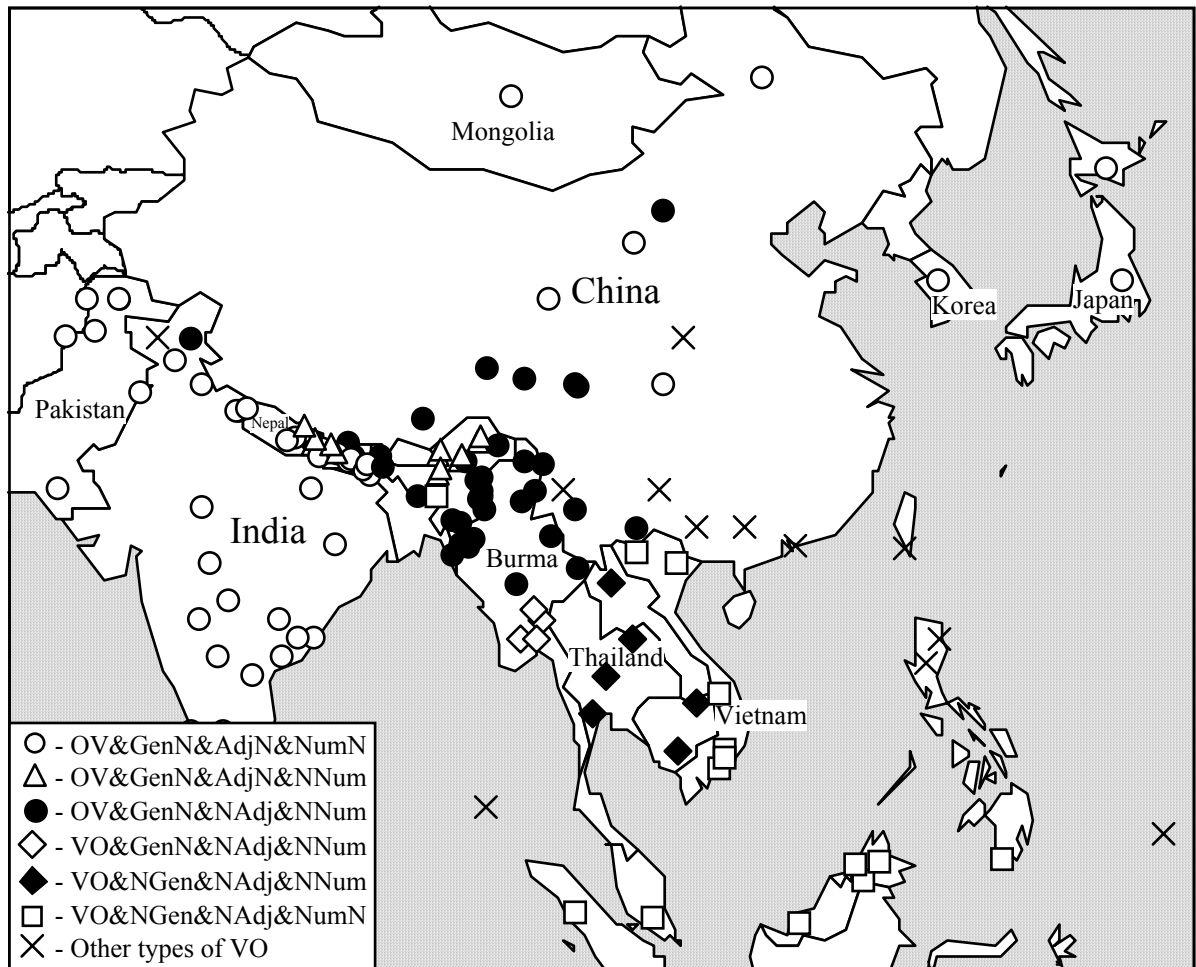
Map 11. A continuum of types in Tibeto-Burman and surrounding languages

The most salient overall generalization about word order within Tibeto-Burman is that where one finds differences among languages, the different languages tend to be more similar in word order to adjacent non-Tibeto-Burman languages. I have pointed out the resemblances of western and southern Bodic languages to Indic and the fact that the more eastern Tibeto-Burman languages more closely resemble Tai-Kadai and Mon-Khmer languages to the east. We see this latter pattern in its strongest form with the Karen languages, which are VO, like languages to the east. We also see it in the overall tendency for postmodifying order for various sorts of modifiers to be more common towards the east of Tibeto-Burman, in Loloish, Qiang, Bai, and Prinmi. However, even towards the east, we find GenN order everywhere, even in Karen, as well as RelN order, except in Karen.

On the other hand, except in the case of Bai, we do not find much evidence of Tibeto-Burman languages geographically closer to Chinese resembling Chinese more than languages further from Chinese. In fact, the greater tendency to have postnominal modifiers as one moves eastward in Tibeto-Burman means that, if anything, the Tibeto-Burman languages geographically closer to Chinese tend to be more different from Chinese, since modifers of nouns in Chinese are consistently prenominal. While the more southern of the eastern Tibeto-Burman languages are further from Chinese, the most northeastern Tibeto-Burman

languages, Qiang, Cogtse Gyarong, and Prinmi, follow the tendency for more eastern Tibeto-Burman languages to have postnominal modifiers, at least with respect to adjectives and numerals. Furthermore, Tibetan and the Bodic languages most closely related to it are arguably geographically closer to Chinese than other Bodic languages, yet these also tend to have postnominal modifiers more than other Bodic languages.

Although we can discern overall geographical patterns, the details are much more complex than these overall patterns might suggest. We have seen that for a number of modifiers, such as adjectives modifying nouns, there is considerable diversity, even within subgroups of Tibeto-Burman. In addition, Tibetan, and the Bodic languages closest to it, do not fit the overall east-west pattern within Tibeto-Burman, since they are towards the west, yet they tend to place modifiers after the noun.

Nor, surely, should all the geographical patterns be understood in terms of non-Tibeto-Burman languages influencing Tibeto-Burman languages rather than the other way round. It is precisely because we find such variation within Tibeto-Burman, compared to most adjacent families, that it is possible to see how the variation within Tibeto-Burman can be understood in terms of languages within Tibeto-Burman resembling adjacent groups of languages. In some cases, it may be that the direction of influence may have gone from Tibeto-Burman to non-Tibeto-Burman, but where that might be the case is not clear.

REFERENCES

Sources on Tibeto-Burman Languages

Abbey, Walter Bulmer Tate. 1899. Manual of the Maru language, including a vocabulary of over 1000 words. Rangoon: American Baptist Mission Press.

Abraham, P. T. 1985. Apatani Grammar. Manasagangotri, Mysore: Central Institute of Indian Languages.

Acharya, K. P. 1983. Lotha Grammar. Mysore: Central Institute of Indian Languages.

Allen, N. J. 1975. Sketch of Thulung Grammar. New York: Cornell University China-Japan Program.

Andvik, Erik. 2003. Tshangla. In Thurgood and LaPolla (2003), 439-455. London: Routledge.

Arokianathan, S. 1987. Tangkhul Naga Grammar. Mysore: Central Institute of Indian Languages.

Barnard, Joseph, T. O. 1934. A Handbook of the Rawang Dialect of the Nung Language. Rangoon: Government Printing and Stationery.

Bhattacharya, Pramod Chandra. 1977. A Descriptive Analysis of the Boro language. Gauhati: Dept. of Publication, Gauhati University.

Bickel, Balthasar. 2003. Belhare. In Thurgood and LaPolla (2003), 546-570. London: Routledge.

Björverud, Susanna. 1998. A Grammar of Lalo. Lund, Sweden.

Bradley, David. 1994. Tibeto-Burman. Atlas of the World's Languages, ed. by Christopher Moseley and R. E. Asher, 168-182. London: Routledge.

_____. 1997. Tibeto-Burman languages and classification. Tibeto-Burman Languages of the Himalayas, ed. by David Bradley, 1-72. Papers in Southeast Asian Linguistics, No. 14. Pacific Linguistics, Series A, No. 86. Canberra: Australian National University.

_____. 2003. Lisu. In Thurgood and LaPolla (2003), 222-235. London: Routledge.

Brown, William Barclay. 1895. An Outline Grammar of the Deori Chutiya Language Spoken in Upper Assam, with an introduction, illustrative sentences, and short vocabulary. Shillong: Assam Secretariat Printing Office.

Burling, Robbins. 1961. A Garo Grammar. (Deccan College Monograph Series 25.) Poona: Deccan College Postgraduate and Research Institute.

_____. 2003. Garo. In Thurgood and LaPolla (2003), 385-400. London: Routledge.

Caughley, Ross Charles. 1982. The Syntax and Morphology of the Verb in Chepang. (Pacific Linguistics, Series B, No. 84.)

Chen Shilin, Bian Shiming, and Li Xiuqing. 1985. Yiyu Jianzhi. [A brief description of the Yi language] Beijing: Minzu Chubanshe.

Chelliah, Shobhana Lakshmi. 1997. A Grammar of Meithei. Berlin: Mouton de Gruyter.

Chhangte, Lalnunthangi. 1989. The grammar of simple clauses in Mizo. South-East Asian Syntax, ed. by David Bradley, 93-174. (Pacific Linguistics, Series A, No. 77. Papers in South-East Asian Linguistics, No. 11.)

Clark, E. W. 1893. Ao Naga Grammar with Illustrative Phrases and Vocabulary. Shillong: Assam Secretariat Printing Office.

Clerk, F. V. 1911. A Manual of the Lawngwaw or Maru Language: containing the grammatical principles of the language, glossaries of special terms, colloquial exercises, and Maru-English and English-Maru vocabularies. Rangoon: American Baptist Mission Press.

Cooper, Kathrin. 1999. Dhimal. Topics in Nepalese Linguistics, ed. by Yogendra P. Yadava and Warren W. Glover, 26-44. Kathmandu: Royal Nepal Academy.

Cornyn, William S., and D. Haigh Roop. 1968. Beginning Burmese. Yale University Press.

Dai Qingxia and Cui Zhichao. 1985. Achangyu Jianzhi. [Outline of Achang] Beijing: Minzu Chubanshe.

Das Gupta, Kamalesh. 1963. An Introduction to the Gallong language. Shillong: North-East Frontier Agency.

_____. 1968. An Introduction to Central Monpa. Shillong: North-East Frontier Agency Administration.

_____. 1971. An Introduction to the Nocte Language. Shillong: North-East Frontier Agency Admininstration.

DeLancey, Scott. 2003. Lhasa Tibetan. In Thurgood and LaPolla (2003), 270-288. London: Routledge.

Dellinger, David W. 1969. Akha: A Transformational Description. Australian National University Ph.D. Thesis.

Devi Prasada Sastry, G. 1984. Mishmi Grammar. Manasagangotri, Mysore: Central Institute of Indian Languages.

Ding, Sizhi. 1998. Fundamentals of Prinmi (Pumi): A Tibeto-Burman Language of Northwestern Yunnan, China. Australian National University Ph.D. Thesis.

Dondrup, Rinchin. 1990. Bugun Language Guide. Itanagar: Directorate of Research, Govt. of Arunachal Pradesh.

Driem, George van. 1987. A Grammar of Limbu. Berlin: Mouton de Gruyter.

_____. 1993. A Grammar of Dumi. Berlin: Mouton de Gruyter.

Dundas, W. C. M. 1908. An Outline Grammar and Dictionary of the Kachari (Dimasa) language. Shillong, Assam: Eastern Bengal and Assam Secretariat Press.

Dutta Baruah, P. N., and V. L. T. Bapui. 1996. Hmar Grammar. Mysore: Central Institute of Indian Languages.

Ebert, Karen H. 1997a. A Grammar of Athpare. Munich: LINCOM Europa.

_____. 1997b. Camling (Chamling). Munich: LINCOM Europa.

_____. 2003. Camling. In Thurgood and LaPolla (2003), 533-545. London: Routledge.

Endle, S. 1884. Outline Grammar of the Kachari (Bara) Language. Shillong: The Assam Secretariat Press.

Fitzgerald, Charles Patrick. 1941. The Tower of Five Glories; a Study of the Min Chia of Ta Li, Yunnan. London: Cresset Press.

Gai Xingzhi. 1986. Jinoyu Jianzhi [A brief description of the Jinuo language]. Beijing: Minzu Chubanshe.

Genetti, Carol. 1994. A Descriptive and Historical Account of the Dolakha Newari Dialect. Tokyo: Institute for the Study of Languages and Cultures of Asia and Africa.

_____. 2003. Dolakhā Newār. In Thurgood and LaPolla (2003), 353-370. London: Routledge.

Georg, Stefan. 1996. Marphatan Thakali: Untersuchungen zur Spracher des Dorfes Marpha in Oberen Kali-Gandaki-Tal, Nepal. Munchen: LINCOM Europa.

Giridhar, Puttushetra Puttuswamy. 1980. Angami Grammar. Manasagangotri, Mysore: Central Institute of Indian Languages.

_____. 1994. Mao Naga grammar. Mysore: Central Institute of Indian Languages.

Glover, Warren W. 1974. Sememic and Grammatical Structures in Gurung (Nepal). Norman, Oklahoma: Summer Institute of Linguistics.

Goldstein, Melvyn, C. 1991. Essentials of Modern Literary Tibetan. Berkeley: University of California Press.

Goswami, Upendranath. 1994. An Introduction to the Deuri Language. Guwahati, Assam: Anundoram Borooah Institute of Language, Art and Culture, Assam.

Grᴜssner, Karl-Heinz. 1978. Arleng Alam: Die Sprache der Mikir. Wiesbaden: Franz Steiner Verlag.

Gurubasave Gowda, K. S. 1975. Ao Grammar. Mysore: Central Institute of Indian Languages.

Hale, Austin. 1981. Research on Tibeto-Burman Languages. The Hague: Mouton.

Haller, Felix. 2000. Dialekt und Erzählungen von Shigatse. Bonn: VGH Wissenschaftsverlag.

_____. 2004. Dialekt und Erzählungen von Themchen. Bonn: VGH Wissenschaftsverlag GmbH.

Hamilton, R. C. 1900. An Outline Grammar of the Dafla Language. Shillong: The Assam Secretariat Printing Office.

Hansson, Inga-Lill. 2003. Akha. In Thurgood and LaPolla (2003), 236-252. London: Routledge.

Hay-Neave, D. R. 1953. Lai-Chin grammar and exercises. Rangoon: Govt. Printing and Stationary, Burma.

He Jiren, and Jiang Zhuyi. 1985. Naxiyu Jianzhi. [A brief description of the Naxi language] Beijing: Minzu Chubanshe.

Henderson, EugÉnie J. A. 1965. Tiddim Chin. London Oriental Series, Vol. 15 London: Oxford University Press.

_____. 1997. Bwe Karen dictionary: with texts and English-Karen word list. Volume 2. London: School of Oriental and African Studies, University of London.

Hertz, H. F. 1917. Practical Handbook of the Kachin or Chingpaw Language. Rangoon: Government Printing and Stationery.

Hildebrandt, Kristine A. 2004. A grammar and glossary of the Manange language. Tibeto-Burman Languages of Nepal: Manange and Sherpa, ed. by Carol Genetti, 1-189. Pacific Linguistics. Canberra: Australian National University.

Honda, Isao. 2003. A sketch of Tangbe. Themes in Himalayan Languages and Linguistics, ed. by Tej Ratna Kansakar and Mark Turin, 49-64. Kathmandu: Tribhuvan University.

Hope, Edward Reginald. 1974. The Deep Syntax of Lisu Sentences. (Pacific Linguistics, Series B, No. 34.)

Hutton, J. H. 1929. Outline of Chang grammar. Journal of the Asiatic Society of Bengal, N.S. XXV.

_____. 1987. Chang Language: Grammar and Vocabulary of the Language of the Chang Naga Tribe. Delhi: Gian Publishing House. Revised and edited by Satkari Mukhopadhyay.

Jeyapaul, V. Y. 1987. Karbi Grammar. Mysore: Central Institute of Indian Languages.

Jones, Robert B. (Jr). 1961. Karen Linguistic Studies: Description, Comparison, and Texts. Berkeley: University of California Press.

Karapurkar, Pushpa. 1976. Kokborok Grammar. Central Institute of Indian Languages, Grammar Series 3.

Kato, Atsuhiko. 2003. Pwo Karen. In Thurgood and LaPolla (2003), 632-648. London: Routledge.

Koshal, Sanyukta. 1979. Ladakhi Grammar. Delhi: Motilal Banarsidass.

Kretschmar, Monika, ed. 1995. Erzählungen zur Grammatik des Südmustang-Dialekts, Vols. 1-4. Bonn: VGH Wissenschaftsverlag GmbH.

Krishan, Shree. 1980. Thadou, a Grammatical Sketch. Calcutta: Anthropological Survey of India, Govt. of India.

LaPolla, Randy J. 2003a. Dulong. In Graham Thurgood and Randy J. LaPolla, eds., 674-682. London: Routledge.

_____. 2003b. A Grammar of Qiang with Annotated Texts and Glossary. Berlin: Mouton.

_____. 2006. Nominalization in Rawang. Paper presented at 39th International Conference on Sino-Tibetan Languages and Linguistics, Seattle.

Lewis, Paul W., and Bai Bibo. 1996. Hani-English/English-Hani dictionary: Haqniqdoq-Yilyidoq, Doqlo-Soqdaoq. London: Kegan Paul International.

Li Yongsui. 1990. Haniyu Yufa. Beijing: Minzu Chubanshe.

Lin Xiangrong. 1993. Jiarongyu Yanjiu. Chengdu: Sichuan Minzu Chubanshe.

Lorrain, J. Herbert, and Fred W. Savidge. 1898. A Grammar and Dictionary of the Lushai Language (Dulien Dialect). Shillong: Assam Govt. Press. Reprinted 1976 by Firma KLM, Calcutta.

Lorrain, Reginald Arthur. 1951. Grammar and dictionary of the Lakher or Mara language. Gauhati: Dept. of Historical and Antiquarian Studies, Govt. of Assam.

Lu Shaozun. 1983. Pumiyu Jianzhi. [A brief description of the Pumi language] Beijing: Minzu Chubanshe.

Mainwaring, Colonel G. B. 1876. A Grammar of the Rong (Lepcha) Language. Calcutta: Baptist Mission Press.

Malla, Kamal P. 1985. The Newari Language: A Working Outline. Tokyo: Institute for the Study of Languages and Cultures of Asia and Africa, Tokyo University of Foreign Studies.

Matisoff, James A. 1973. A Grammar of Lahu. University of California Publications in Linguistics 75. Berkeley: University of California Press.

_____. 1988. The Dictionary of Lahu. University of California Publications in Linguistics 111. Berkeley: University of California.

Mazaudon, Martine. 1976. Typological sketch of Tamang. Handout used in presentation at UCLA, Feb. 1976.

_____. 2003. Tamang. In Thurgood and LaPolla (2003), 291-314. London: Routledge.

Megu, Arak. 1988. Bori Phrase Book. Itanagar: Directorate of Research, Govt. of Arunachal Pradesh.

_____. 1990. Bokar Language Guide. Itanagar: Directorate of Research, Govt. of Arunachal Pradesh.

Michailovsky, Boyd. 1981. Grammaire de la Langue Hayu (Népal). University of California at Berkeley dissertation.

_____. 1989. La Langue Hayu. Paris: CNRS.

Mills, J. P. 1926. The Ao Nagas. London: Macmillan and Co. Ltd.

Naylor, L. B. 1925. A Practical Handbook of the Chin Language (Siyin Dialect): containing grammatical principles with numerous exercises and a vocabulary. Rangoon: Superintendent, Union Government Printing and Stationery.

Nishida, Tatsuo. 1973. A Preliminary Study of the Bisu Language - A Language of Northern Thailand, Recently Discovered by Us. Papers in South East Asian Lingusitics No. 3, Pacific Linguistics, Series A, No. 30. Canberra: Australian National University.

Noonan, Michael. 2003. Nar-Phu. In Thurgood and LaPolla (2003), 336-352. London: Routledge.

_____. 2003b. Chantyal. In Thurgood and LaPolla (2003), 315-335. London: Routledge.

Okell, John. 1969. A Reference Grammar of Colloquial Burmese, Part 1. London: Oxford University Press.

Opgenort, Jean Robert. 2004. A Grammar of Wambule. Leiden: Koninklijke Brill.

Pettigrew, William. 1918. Tangkhul Naga Grammar and Dictionary. Shillong: Assam Secretariat Printing Office. Republished 1979 by Tangkhul Naga Baptist Convention, Ukhrul, Manipur.

Plaisier, Heleen. 2003. Lepcha. In Thurgood and LaPolla (2003), 705-716. London: Routledge.

Prasad, Bal Ram. 1991. Mising Grammar. Mysore, India: Central Institute of Indian Languages.

Pulu, Jatan. 1978. Idu Phrase Book. Shillong: Director of Information and Public Relations, Arunachal Pradesh.

_____. 1991. A Phrase Book on Taraon Language. Itanagar: Directorate of Research, Govt. of Arunachal Pradesh.

Rangan, K. 1979. Purki Grammar. Manasagangotri, Mysore: Central Institute of Indian Languages.

Read, A. F. C. 1934. Balti Grammar. London: Royal Asiatic Society.

Reichle, Verena. 1981. Bawm Language and Lore. Bern: Peter Lang.

Rekhung, Winlang. 1988a. Jugli Language Guide. Itanagar: Directorate of Research, Govt. of Arunachal Pradesh.

_____. 1988b. Lungchang Language Guide. Itanagar: Directorate of Research, Govt. of Arunachal Pradesh.

Rutgers, Roland. 1998. Yamphu: Grammar, Texts, and Lexicon. Leiden: Research CNWS, School of Asian, African, and Amerindian Studies, University of Leiden.

Sandberg, Graham. 1888. Manual of the Sikkim-Bhutia Language, or De-jong Ke. Calcutta: Oxford Mission Press.

Savidge, Fred W. 1908. A Grammar and Dictionary of the Lakher Language. Allahabad: Pioneer Press.

Schottelndreyer, Burkhard, and Heiderose Schottelndreyer. 1973. Sherpa texts. Clause, Sentence, and Discourse Patterns in Selected Languages of Nepal Part III: Texts, ed. by Austin Hale, 53-176. Norman, Oklahoma: Summer Institute of Linguistics.

Shafer, Robert. 1955. Classification of Sino-Tibetan languages. Word 11.1.94-111.

Sharma, Devidatta. 1982. Studies in Tibeto-Himalayan Linguistics: a Descriptive Analysis of Pattani, a Dialect of Lahaul. Hoshiapur: Vishveshvaranand Vishva Bandhu Institute of Sanskrit and Indological Studies, Panjab University.

_____. 1988. A Descriptive Grammar of Kinnauri. Studies in Tibeto-Himalayan Languages 1. Delhi: Mittal Publications.

_____. 1989a. Tibeto-Himalayan Languages of Uttarakhand, Vol. 1. New Delhi: Mittal Publications.

_____. 1989b. Tibeto-Himalayan Languages of Uttarakhand, Vol. 2. New Delhi: Mittal Publications.

_____. 1989c. Tribal Languages of Himachal Pradesh, Part I. Studies in Tibeto-Himalayan Languages-II. Delhi: Mittal Publications.

_____. 1992. Tribal Languages of Himachal Pradesh, Part II. Studies in Tibeto-Himalayan Languages-II. Delhi: Mittal Publications.

Sharma, Suhnu Ram. 2000. Manchad word order. Paper given at the Sixth Himalayan Languages Symposium, University of Wisconsin at Milwaukee.

Shepherd, Gary, and Barbara Shepherd. 1973. Magar texts. Clause, Sentence, and Discourse Patterns in Selected Languages of Nepal Part III, Texts, ed. by Austin Hale, 301-434. Norman: Summer Institute of Linguistics.

Singh, Chunghkham Yashawanta. 2002. Tarao Grammar. New Delhi: Akansha.

Solnit, David B. 1986. A Grammatical Sketch of Eastern Kayah. University of California at Berkeley dissertation.

_____. 1997. Eastern Kayah Li: Grammar, Texts, Glossary. Honolulu: University of Hawaii Press.

Soppitt, C. A. 1885. A Short Account of the Kachcha Naga (Empeo) Tribe in the North Cachar Hills: with an outline grammar, vocabulary and illustrative sentences. Shillong: Assam Secretariat Press.

Sreedhar, M. V. 1980. Sema Grammar. Manasagangotri, Mysore: Central Institute of Indian Languages.

Stewart, J. A. 1955. Manual of Colloquial Burmese. London: Luzac and Company.

Subbarao, K. V., Th. Sarju Devi, and Rose Mary Achumi. 2000. Word order in Himalayan languages. Paper delivered at Sixth Himalayan Languages Symposium, University of Wisconsin at Milwaukee.

Sun Hongkai. 1981. Qiangyu Jianzhi. [A brief description of the Qiang language] Beijing: Minzu Chubanshe.

_____. 1982. Dulongyu Jianzhi. [A brief description of the Trung language] Beijing: Minzu Chubanshe.

_____. 1988. Notes on a new language: Anong. Linguistics of the Tibeto-Burman Area 11: 1: 27-63.

Sun Hongkai and Liu Lu. 1986. Nuzu Yuyan Jianzhi (Nusuyu) [A brief description of the language of the Nu nationality (Nusu language)]. Beijing: Minzu Chubanshe.

Sun, Jackson T.-S. 2003. Caodeng rGyalrong. In Thurgood and LaPolla (2003), 490-502. London: Routledge.

Tayeng, Aduk. 1976. Milang Phrase-Book. Shillong: Director of Information and Public Relations, Arunachal Pradesh.

_____. 1990. Nishi Phrase Book. Itanagar: Directorate of Research, Govt. of Arunachal Pradesh.

Taylor, Doreen. 1973. Clause Patterns in Tamang. Clause, Sentence, and Discourse Patterns in Selected Languages of Nepal, ed. by Austin Hale and David Watters, 82-174. Norman, Oklahoma: Summer Institute of Linguistics.

Thurgood, Graham. 2003. A subgrouping of the Sino-Tibetan languages: the interaction between language contact, change, and inheritance. In Thurgood and LaPolla (2003), pp. 1-21.

Thurgood, Graham, and Randy J. LaPolla (eds.) 2003. The Sino-Tibetan Languages. London: Routledge.

Toba, Sueyoshi. 1984. Khaling. (Asian and African Grammatical Manual No. 13d.) Tokyo: Institute fo the Study of Languages and Cultures of Asia and Africa, Tokyo University of Foreign Studies.

Tolsma, Gerard. 1999. A Grammar of Kulung. University of Leiden dissertation.

Trivedi, G. M. 1991. Descriptive Grammar of the Byansi-Bhotiya Language. Calcutta: Anthropological Survey of Africa.

Vesalainen, O., and M. Vesalainen. 1980. Clause Patterns in Lhomi. (Pacific linguistics, Series B, No. 53.)

Watters, David E. 1973. Clause patterns in Kham. In Austin Hale, ed., Clause, Sentence and Discourse Patterns in Selected Languages of Nepal, Part I, General Approach, ed. by Austin Hale, 39-202. Norman, Oklahoma: Summer Institute of Linguistics.

_____. 1998. The Kham Language of West-Central Nepal (Takale Dialect). University of Oregon dissertation.

_____. 2002. A Grammar of Kham. Cambridge: Cambridge University Press.

Weidert, A., and B. Subba. 1985. Concise Limbu Grammar and Dictionary. Amsterdam: Lobster Publications.

Wheatley, Julian K. 1982. Burmese: A Grammatical Sketch. University of California at Berkeley dissertation.

Wiersma, Grace. 2003. Yunnan Bai. In Thurgood and LaPolla (2003), 651-673. London: Routledge.

Xu Lin and Zhao Yansun. 1984. Baiyu Jianzhi. [A brief description of the Bai language] Beijing: Minzu Chubanshe.

Zoller, Claus Peter. 1983. Die Sprache der Rang Pas von Garhwal. Wiesbaden: Otto Harrassowitz.

Other Sources

Anthony, Edward M., Deborah P. French, and Udom Warotamasikkhadit. 1968. Foundations of Thai, Part 1. Ann Arbor: University of Michigan Press.

Bauer, Christian Hartmut Richard. 1982. Morphology and Syntax of Spoken Mon. University of London dissertation.

Costello, Nancy A. 1969. The Katu noun phrase. In Mon-Khmer Studies 3.21-35. (Publication No. 4 of the Linguistics Circle of Saigon.) Summer Institute of Linguistics.

Court, Christopher. 1985. Fundamentals of Iu Mien (Yao) Grammar. University of California at Berkeley dissertation.

Dryer, Matthew S. 1988. Object-verb order and adjective-noun order: dispelling a myth. Lingua 74.77-109.

_____. 1991. SVO languages and the OV: VO typology. Journal of Linguistics 27.443-482.

_____. 1992a. The Greenbergian word order correlations. Language 68.81-138.

_____. 1992b. Adverbial subordinators and word order asymmetries. In Performance Principles of Word Order, ed. by John A. Hawkins and Anna Siewierska, 50-67. EUROTYP Working Papers, European Science Foundation.

_____. 2001. Mon-Khmer word order from a crosslinguistic perspective. In Papers from the 1996 meeting of the South East Asian Linguistics Society.

_____. 2003. Word order in Sino-Tibetan languages from a typological and geographical perspective. Sino-Tibetan Languages, ed. by Graham Thurgood and Randy LaPolla, 43-55. Richmond: Curzon Press.

_____. 2005a. Order of adposition and noun phrase. World Atlas of Language Structures, ed. by Martin Haspelmath, Matthew S. Dryer, David Gil, and Bernard Comrie, 346-349. Oxford University Press.

_____. 2005b. Order of adjective and noun. World Atlas of Language Structure, ed. by Martin Haspelmath, Matthew S. Dryer, David Gil, and Bernard Comries, 354-357. Oxford University Press.

_____. 2005c. Order of demonstrative and noun. World Atlas of Language Structures, ed. by Martin Haspelmath, Matthew S. Dryer, David Gil, and Bernard Comrie, 358-361. Oxford University Press.

_____. 2005d. Order of numeral and noun. World Atlas of Language Structures, ed. by Martin Haspelmath, Matthew S. Dryer, David Gil, and Bernard Comrie, 362-365. Oxford University Press.

_____. 2005e. Order of relative clause and noun. World Atlas of Language Structures, ed. by Martin Haspelmath, Matthew S. Dryer, David Gil, and Bernard Comrie, 366-369. Oxford University Press.

_____. 2005f. Order of degree word and adjective. World Atlas of Language Structures, ed. by Martin Haspelmath, Matthew S. Dryer, David Gil, and Bernard Comrie, 370-373. Oxford University Press.

_____. 2005g. Relationship between order of object and verb and order of relative clause and noun. World Atlas of Language Structures, ed. by Martin Haspelmath, Matthew S. Dryer, David Gil, and Bernard Comrie, 390-393. Oxford University Press.

_____. 2005h. Relationship between order of object and verb and order of adjective and noun. World Atlas of Language Structures, ed. by Martin Haspelmath, Matthew S. Dryer, David Gil, and Bernard Comrie, 394-397. Oxford University Press.

_____. 2005i. Negative morphemes. World Atlas of Language Structures, ed. by Martin Haspelmath, Matthew S. Dryer, David Gil, and Bernard Comrie, pp.454-457. Oxford University Press.

_____. 2005j. Order of object and verb. World Atlas of Language Structures, ed. by Martin Haspelmath, Matthew S. Dryer, David Gil, and Bernard Comrie, pp. 338-341. Oxford University Press.

_____. 2005k. Order of genitive and noun. World Atlas of Language Structures, ed. by Martin Haspelmath, Matthew S. Dryer, David Gil, and Bernard Comrie, pp. 350-353. Oxford University Press.

_____. 2005l. Genealogical language list. World Atlas of Language Structures, ed. by Martin Haspelmath, Matthew S. Dryer, David Gil, and Bernard Comrie, pp. 584-644. Oxford University Press.

_____. 2007. Noun phrase structure. Complex Constructions, Vol. 2 of Language Typology and Syntactic Description, Second Edition, ed. by Timothy Shopen, pp. 151-205. Cambridge University Press.

Gil, David. 2005. Numeral classifiers. World Atlas of Language Structures, ed. by Martin Haspelmath, Matthew S. Dryer, David Gil, and Bernard Comrie, pp. 226-229. Oxford University Press.

Greenberg, Joseph H. 1963. Some universals of grammar with particular reference to the order of meaningful elements. Universals of Language, ed. by Joseph Greenberg, 73-113. Cambridge, Mass: MIT Press.

Harriehausen, Bettina. 1990. Hmong Njua. Tübingen: Max Niemeyer Verlag.

Haspelmath, Martin , Matthew S. Dryer, David Gil, and Bernard Comrie, eds. 2005. World Atlas of Language Structures. Oxford University Press.

Hawkins, John A. 1983. Word Order Universals. New York: Academic Press.

_____. 1991. A parsing theory of word order universals. Linguistic Inquiry 21: 223-261.

Honda, Isao. 1994. Negation: A Crosslinguistic Study. University at Buffalo dissertation.

Hudak, Thomas John. 1991. William J. Gedney's The Yay Language: Glossary, Texts, and Translations. (Michigan Papers on South and Southeast Asia, No. 38.) Ann Arbor: Center for South and Southeast Asian Studies, University of Michigan.

Keenan, Edward L. 1985. Relative clauses. Language Typology and Syntactic Description, Volume 2: Complex Constructions, ed. by Timothy Shopen, 141-170. Cambridge University Press.

Masica, Colin P. 1976. On Defining a Linguistic Area. Chicago: University of Chicago Press.

Saul, Janice E., and Nancy Freiberger Wilson. 1980. Nung Grammar. Summer Institute of Linguistics and University of Texas at Arlington.

Smalley, William A. 1961. Outline of Khmuʔ Structure. New Haven, Conn.: American Oriental Society.

Thomas, David D. 1971. Chrau Grammar. Honolulu: University of Hawaii Press.