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Notes on verb agreement prefixes in Tibeto-Burman

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ABSTRACT

Research on comparative Tibeto-Burman verbal morphology has achieved preliminary reconstructions of the hierarchical patterns and position classes of the agreement system. The status of the prefixes which are part of the system in some branches remains problematic. Only one true personal agreement prefix, 2nd person #*te-*, appears to be as ancient as the suffixal agreement series. Others are language-specific innovations more recent than PTB. One clue to the origin of these secondary prefixes, as David Watters and Sun Hongkai have suggested, is their resemblance to possessive pronominal prefixes. The 2nd person *k-* prefix which several scholars reconstruct is a secondary intrusion of a 2nd person possessive prefix into the verb paradigm. The “marked scenario” prefix found in some Nung and Kiranti languages is likewise a secondary innovation in which original #*te-* was replaced by 2nd person #*na-* or #*i-*, the latter originally a 1pl Inclusive index.

KEYWORDS

Tibeto-Burman, Kiranti, rGyalrong, Nung, Kuki-Chin, Meyor, Jinghpaw, verb agreement, morphology, prefixes, possessive prefixes

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Notes on verb agreement prefixes in Tibeto-Burman

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1 The problem: Agreement prefixes in the PTB paradigm

There is broad agreement on the form and pattern of verb agreement in Proto-Tibeto-Burman (Bauman 1975, Sun 1983, DeLancey 1989, van Driem 1993a, Watters 2002), but many details remain unclear. One issue which remains open is the origin, age, and historical significance of the prefixes which are part of the agreement paradigm in Nung,¹ rGyalrong, Eastern Kiranti,² Kham-Magar, and Kuki-Chin. Archaic verb agreement systems in Tibeto-Burman involve prefixes as well as suffixes, in a pattern concentrating on second person. While the oldest agreement suffixes include 1st and 2nd person forms #-*ŋ(a)* and #-*na* which are transparently similar to the reconstructed pronominal roots **ŋa* and **na(ŋ)*, and uncannily similar across the entire family (Sun 1983, DeLancey 2010), the prefixes are not easily relatable to independent pronominal forms, and do not correspond well across the smaller set of languages where they occur. In some Tibeto-Burman languages verb agreement is completely suffixal, as in Western Himalayan, most of Western Kiranti, Dolakha Newar, Chepang, Konyak, and Miju. But the apparently most conservative verb paradigms in Tibeto-Burman, such as those in the rGyalrong, Eastern Kiranti, and Nung languages, as well as the more innovative Kham-Magar and Kuki-Chin branches, incorporate both prefixal and suffixal person-number indices. Scholars have generally reconstructed the PTB paradigm as a mixed system involving both series (Bauman 1975, DeLancey 1981, 1989, van Driem 1993, 2001, Sun 1995, Watters 2002). In this paper I revisit the question of the agreement prefixes, and will suggest that fewer of these should be reconstructed for PTB than previous work has suggested.

It is clear that the prefixal and suffixal elements of the PTB paradigm have different origins. The personal suffixes are strikingly similar to the reconstructed pronominal roots **ŋa* ‘1st’ and **na(ŋ)* ‘2nd’ (Matisoff 2003) even in languages where the independent pronouns do not (or do not directly) reflect these roots (DeLancey 2010). Sun (1984, 1995) and Watters (2002) point out the evident connections between the category of agreement prefixes and the possessive prefix

¹ There is no generally agreed-upon system for naming genetic units at various levels in Tibeto-Burman. I will use terms like Nung and rGyalrong in place of formulations such as “Nungish” and “rGyalrongic”.

² I will use the term “Eastern Kiranti” for the larger unit which includes both the Eastern languages per se and van Driem’s (2001) Central unit. “South-Central” will refer to the Camling-Puma-Bantawa languages which belong to the southern branch of Central.

category found in many TB languages, which we will return to in Section 3. Section 2 will present the evidence that one prefix, 2nd person *#te-*, is reconstructable to PTB. Section 4 will argue that two other prefixes which have been attributed to the PTB paradigm are originally possessive prefixes, and as agreement forms are secondary developments. Two other prefixes of PTB provenance, inverse *#wu-* (see Jacques in press) and 3pl *#mV-*, are not dealt with in this paper.

1.1 *The suffixal paradigm*

The main work of argument indexation in the reconstructed PTB verb is done with suffixes. The PTB verb suffixed 1st *#-ŋa*, 2nd *#-na* to the intransitive verb; suffixed indices in the transitive paradigm occurred roughly as follows (Bauman 1975: 237, DeLancey 1989: 321):

		1			2			3		
		s	d	p	s	d	p			
1	s				-na	-na-ši	-na-i	-ŋa(-u)		
	d							-ši		(-u)-ši
	p							-na-i		-i
2	s	-ŋa	-ši	-i				-na ~ -u		
	d	-ŋa-ši						-ši(-u)		
	p	-ŋa-ni						-ni		
3	s				-na	-na-ši	-na-i	-- ~ -u		
	d							-ŋa	-ši -u	
	p								-mi	

Table 1: The Proto-Tibeto-Burman suffixal paradigm

Note the hierarchical agreement pattern, with 1st person indexed in both 1→3 and 3→1, and 2nd in both 2→3 and 3→2 forms.

There may have been more variation in the paradigm than is implied by this chart. The languages differ as to which argument is indexed in certain slots: while virtually all the relevant languages have a 1st person index in both the 1→3 and 3→1 forms³, 1→2 has 2nd person *#-n* or no suffix at all in rGyalrong and Kiranti languages (where the suffix sometimes occurs with, and sometimes is replaced by, a 2nd person prefix), but 1st person *#-aŋ* in Qiang and Nung. 2→3 likewise shows 2nd person *#-na* in some languages, and 3sgPAT *#-u* in others. 2→1 usually has 1st person *#-aŋ*, but we find 2nd person *#-na* in Qiang, and as an alternate possibility in Jinghpaw. It may be that these differences represent later restructuring of the paradigm in some languages, but it is more likely that these represent original alternations, and that in the proto-language, as still to some extent in Jinghpaw, some Tangsa languages, and Chepang, agreement was part of the information management system and could be used to mark one or the other argument as more topical.

The 1→2 slot and its marking pose several comparative problems. Both Bauman (1975: 237) and DeLancey (1989: 321) reconstruct a paradigm with the ordinary 2nd person suffix *#-n* in the 1→2 slot, although as noted some languages have 1st *#-ŋa* there. Others have a fronted vowel

³ Some languages have developed distinct forms in these two slots, e.g. Sunwar 1→3 *-ŋa*, 3→1 *-yi* < *-ŋa-i*.

uniquely in this slot (e.g. Limbu *-nɛ*), and on these grounds van Driem reconstructs a distinct “1s. → 2 portmanteau suffix” **<-nya>* here (1993: 321). Since this phenomenon is confined to Kiranti, I am inclined to regard it as a secondary elaboration. The most likely origin for the fronted vowel forms, as Bauman suggested long ago, is *#-na-i* with the 1pl Inclusive suffix; the 1plII as 1→2 index occurs also in Nocte (DeLancey 1981, 2011a).

1.2 *The prefixes*

There is general agreement that the PTB paradigm included a few prefixal indices (DeLancey 1981, 1988, 1999, Ebert 1990, van Driem 1993, Watters 2002, Jacques 2010, in press). As is evident from the data in Section 1, the agreement suffixes form a regular, motivated, complete paradigm. The prefixes show a strong and somewhat odd association with 2nd person, even when they do not seem to be cognate; aside from this they appear as an unsystematic grab-bag of leftovers:

Whatever the source, a rather untidy and arbitrary arrangement of prefixal morphemes exists in many Tibeto-Burman languages. The arbitrariness of the series is one of its distinctive features. It appears that as some of the languages began investing more in suffixal morphology, the once distinctive prefixes began to collapse and merge. The prefixes disappeared altogether in most Tibeto-Burman languages, and if they survived at all, they did so in arbitrary patterns coexisting with an enriched system of suffixes. (Watters 2002: 405)

DeLancey (1989) proposes that the prefixes which we find in the archaic modern languages reflect a PTB “clitic paradigm”, on the grounds that reflexes of one member, *#te*, occur postverbally in Jinghpaw and Northern Chin, and as a moveable clitic in Chepang. Bauman (1975: 96-8) similarly considers it an open question whether *#te-* was a prefix or suffix. We can now offer explanations for all of these data which make them secondary developments, and reconstruct *#te-* as a prefix (Sections 2.2-3). As we will see, it appears that this is the only personal agreement prefix which can be reconstructed for PTB, and that, as Watters has suggested, 2nd person *#te-* was the model by analogy to which other possessive pronominal prefixes were recruited into the verb agreement paradigm in various daughter branches.

The prefixes occur as such in rGyalrong, Nung, and Eastern Kiranti; we will see that the *#te-* prefix shows up in other positions in some languages. Several scholars, including the present author, have suggested that a few relict prefixes in Kuki-Chin may represent inheritance from the original paradigm, but it is clear that the KC prefixal paradigm as a whole represents Proto-KC level innovation (DeLancey 2010, 2011c, and see Section 3.3.3). Outside of KC we find prefixal agreement predominantly in forms with a 2nd person argument; in Nung and several Kiranti languages there is also a prefix in the 3→1 form. Table 2 presents a sample of the evidence, which is laid out more extensively in DeLancey 1988, 1989, Ebert 1990, van Driem 1993, Watters 2002, and Jacques 2010, in press. I have also included 3→3 inverse forms, which we will not discuss at length; these are better analyzed as inverse markers rather than personal indices (DeLancey 1981, Ebert 1990, 1997a, Jacques in press):

	2IN	1→2	2→1	3→1	3→3	3→2	2→3
Situ	tə-	ta-	kə-w-	wə-	wə-	tə-	
Japhug	tu-	ta-	ku-	ɣu-	ɣu-	tu-wɣ	tu-
Limbu	kɛ-		kɛ-			kɛ-	kɛ-
Camling	ta-		ta-	pa-	pa-	ta-	ta-
Bantawa	ti-		ti-	i-	(i-)	ti-	ni-
Khaling	i-		i-	i-		i-	i-
Dumi	a-		a-	a-		a-	a-
Rawang	e-		e-	e-		e-	e-
Trung	nu-		nu-	nu-		nu-	nu-

Table 2: Agreement prefixes in rGyalrong, Kiranti and Nung⁴

As noted, this paper will not discuss the *#wu-* prefix or the plural *#mV* (which does not appear in the above table). The former is generally agreed to have had an inverse function already in PTB (DeLancey 1981, Ebert 1990, Jacques 2010, in press). A full understanding of the latter would certainly contribute to the present study, but it is a unique problem which requires a separate study of its own, due to its restricted occurrence through the family (see DeLancey 2010) and relatively unrestricted paradigmatic patterning. (In many Kiranti languages it occurs as a suffix as well as a prefix, sometimes in the same verb form, while in Western Kiranti languages, which for the most part lack agreement prefixes, it occurs only as a suffix).

2 Evidence for *#te-*

It is obvious from the data above that there has been substantial innovation of new prefixal forms in various languages. Of course it is also possible that a form preserved only in one language might still be ancient, but there would be no way to fit all of the apparently distinct forms in the above data into one coherent paradigm. In Section 4 I will suggest that almost all of these forms are secondary, including the 2nd person *#k-* element which has previously been advocated by several scholars, the present author included. In keeping with suggestions of Watters (2002) and Jacques (in press), I will argue here that we have solid evidence for reconstructing only one agreement prefix, 2nd person *#te-*. In this section we will see the evidence for this prefix; in Section 4 we will consider arguments against the antiquity of any of the others.

As Bauman and others since have noted, besides its occurrence as a prefix in Kiranti and rGyalrong, *#te-* is attested in Chepang, Jinghpaw, and Northern Chin, thus establishing its PTB provenience. In each of these latter languages the *#te*, reflex by position and behavior, is something other than a prefix on the main verb, and this has impeded our understanding of its place in, and

⁴ Situ and Japhug (Jacques 2004, 2010), Limbu (van Driem 1987), Camling (Ebert 1997), Bantawa (Doornenbal 2009), Rawang (Barnard 1934), Tarong (Sun 1982).

the nature of, the archaic prefixal paradigm (see Bauman 1975: 96-8, DeLancey 1989). Bauman (1975: 203-6) points out the comparability of the Suomo rGyalrong 2nd person *tə-* prefix with similar 2nd person suffixes; he cites Chepang *-teʔ*, Tiddim *-tɛʔ*, and the Jinghpaw *nd-* which occurs as a 2nd person index prefixed to the declarative final particle *ai* (DeLancey 2010, 2011a). Bauman also recognizes the same morpheme or series in Rawang *ɛ*, and in the Limbu 2nd person prefix *k-*, which he takes to represent analogical replacement of "some other element akin to the *#te* morpheme" by the Limbu 2nd person pronominal form (1975:204). On the basis of this distribution he proposes reconstructing this form for PTB.

2.1 *#te-* as a prefix

In the languages we have considered, the *#te-* 2nd person prefix is the most obvious candidate for reconstruction at the PTB level. In Table 3 are shown those languages from Table 2 which retain the *#te-* etymon, along with Limbu, which will figure in this discussion as well:

	2IN	1→2	2→1	3→1	3→3	3→2	2→3
Situ	tə-	ta-	kə-w-	wə-	wə-	tə-	tə-
Japhug	tuw-	ta-	kuw-	ɣu-	ɣu-	tuw-wy-	tuw-
Camling	ta-		ta-	pa-	pa-	ta-	ta-
Bantawa	ti-		ti-	i-	(i-)	ti-	ni-
Limbu	kɛ-		kɛ-			kɛ-	kɛ-

Table 3: *#te-* and other agreement prefixes in rGyalrong and Kiranti

The languages where *#te-* occurs agree almost completely in its distribution: all forms with 2nd person involved as either subject or object, except for one of the "local" configurations (i.e. those involving both 1st and 2nd person arguments). In these forms, rGyalrong has *#te-* in the 1→2 form, but has a different prefix in 2→1, while the Kiranti languages have *#te-* in 2→1 and no prefix at all in 1→2. The obvious question is whether one or the other of these attested distributions is the original, or whether each represents some kind of secondary reorganization of a more complex original paradigm (see Jacques in press for additional discussion of this question). We will see that evidence from Chepang shows that the Camling-Bantawa situation is original, and the more elaborate rGyalrong paradigm is secondary.

The Bantawa⁵ data are worth looking at in more detail, as recent developments in Bantawa point the way to an explanation for the apparently anomalous behavior of *#te-* reflexes in the languages which we will consider below. In the negative paradigm a past tense suffix *-D-* occurs:

⁵ The data given here are from unpublished notes of the late Alfons Weidert on the Wana dialect. Doornenbal (2009) presents a similar analysis of Hatuvā Bantawa.

- (1) *tu-uŋ*
beat-1
'I beat him (non-past/past)'
- (2) *ə-tup-nə-ŋ*
NEG-beat-NEG-1
'I don't beat him'
- (3) *man-tup-D-əŋ*
NEG-beat-PAST-1
'I didn't beat him'

In the negative past, the agreement prefixes which otherwise are prefixed to the verb stem follow it, and precede the past morpheme:

- (4) *tə-tu-aŋ*
2-beat-1
'you beat me (past)'
- (5) *man-tup-tə-D-aŋ*
NEG-beat-2-PAST-1
'you didn't beat me'

As Doornenbal (2009) demonstrates, the *-D-* represents a morphologized verb which originally had a full conjugation, including both the prefixed and suffixed indices. The origin of a form like (5) is *man-tup tə-D-aŋ*, with an inflected auxiliary. As we will see in Section 2.3, just such a construction is the origin of constructions involving *#te-* in Jinghpaw, Meyor, and Northern Chin.

2.2 *#te-* in Chepang

The *#te-* etymon is reflected in Chepang *teʔ*, the principal index in the verb of 2nd person. It is obligatory in the verb if there is a 2nd person argument, except in the 1→2 form, where it does not occur (Caughley 1982: 84-6). Thus we see again the same exceptionality of 1→2 which we found in the Kiranti languages. We can assume that Chepang and Kiranti have a common ancestor more recent than their common ancestor with rGyalrong, so their agreement on this point does not compel us to reconstruct PTB in their image. But the supporting evidence of Chepang makes more implausible the idea of reconstructing the rGyalrong prefix to that slot in PTB; if the 1→2 form had the *#te-* prefix in the original paradigm, then it must have mysteriously disappeared from just that form in the other languages, which otherwise still retain *#te-*.

Unlike the prefixes in rGyalrong and Southern Kiranti, however, Chepang *teʔ* is not necessarily affixed to the verb, but can occur enclitic to any constituent of the clause (Caughley 1982:89):

- (6) *amb bəyʔ-ne-wʔ*
 food give-NONPAST-AGENT.FOCUS
 ‘He gives food.’
- (7) *ʔamb beyʔ-teʔ-ne-wʔ*
 food give-2-NONPAST-AGENT.FOCUS
 ‘You give food.’
- (8) *ʔamb-teʔ beyʔ-ne-wʔ*
 food-2 give- NONPAST-AGENT.FOCUS
 ‘You give *food*.’

Moreover, *teʔ* can occur more than once in a single clause:

- (9) *doh hay-ti-teʔ nan-teʔ greŋ-ti-teʔ ʔal-teʔ-ʔa*
 what do-3NF-2 you-2 thin-3NF-2 go-2-PAST
 ‘Why have you got so thin?’

Neither of these behaviors is compatible with the idea that *teʔ* is a direct reflex of a PTB prefix. For this reason the Chepang data have posed a problem for the reconstruction of the PTB prefixes. Jacques (in press) proposes a convincing solution to this problem, along similar lines to the account of Kuki-Chin and Jinghpaw to be given in the next section. Jacques proposes that the attested Chepang form *teʔ* originated as a copula *leʔ* conjugated with *#te-*, i.e. an inferred **t-leʔ*. The *leʔ* copula still exists in the language as a “focalizer”, and indeed synchronically the *teʔ* form is essentially a focalizer specialized for 2nd person. Thus **t-leʔ* has grammaticalized into the unique “information flow” morpheme described by Caughley (1982), who argues that the primary function of Chepang *teʔ* is not 2nd person indexation, but marking of information source. Bauman suggests on the basis of the Chepang data that something like this, rather than person agreement per se, may have been the original function of *#te-* (cf. DeLancey 1989), but outside of Chepang there is no evidence for such an interpretation, and Jacques’ explanation for the anomalous form and distribution of the form also makes room for the anomalous function, so we can now treat the “information flow” function of *teʔ* as a Chepang-internal development.

2.3 *#te-* in the North East India branch

We find *#te-* securely attested in two of the three most morphologically archaic language groups, rGyalrong and Kiranti. But it is conspicuously absent in the otherwise very conservative Nungish paradigm, where it has been replaced by secondary 2nd person prefixes (see Section 4.2). Thus from a comparative point of view it is important to find evidence for the *#te-* prefix in languages which belong neither to the Western or Bodic branch with Kiranti nor to the Eastern branch with rGyalrong and Qiang, but to the one or more major branches represented in the languages of Northeast India and northern Burma. The form has previously been noted in Northern Chin and Jinghpaw, where however the reflexes of *#te-* follow the verb rather than preceding it. We will see here that Meyer provides additional evidence for the same configuration.

Some details of these systems provide support for the hypothesis that the branches involved all belong to a higher-level Central or NE India branch, but that argument will not be pursued here. In all of these languages it is part of a system of “sentence-final words” (Dai and Diehl 2003) which represent old auxiliary verbs (DeLancey 2010, 2011a), so that its anomalous position is the result of a historical development similar to what we have seen in Bantawa and Chepang.

2.3.1 *Kuki-Chin*

The Kuki-Chin languages all have an innovative prefixal agreement system to which we will return below (Section 3.3.3). The Northern Chin languages also retain a remnant of the PTB suffixal paradigm (Henderson 1957, Bauman 1975, DeLancey 2010, 2011b). The agreement indices are 1st #*iŋ*, 2nd #*tɛʔ*, palatalized in some languages to *-cə*, and plural #*uʔ*. Examples (10-11) and (14-15) illustrate the paradigm with Tiddim (Tedim) examples from Henderson (1965: 109-11). These forms may be attached to a grammatical particle of *C-* or *CV-* form to create a syllable which is then the final word of the sentence:

(10) *pàì ní-ŋ*
go FUTURE-1SG
'I will go.'

(11) *pàì ní tɛʔ*
go FUTURE 2SG
'You will go.'

In the brief reports available there seems to be considerable variation across the various Northern Chin languages in which verb forms utilize the suffixal rather than the prefixal paradigm, but they seem to be always used in the negative paradigm, as in Koireng (Ch. Singh 2010:113):

(12) *kəy bu cə-mək-iŋ*
1sg rice eat-NEG-1SG
'I'm not eating.'

(13) *nəŋ bu cə-mək-ci*
2sg rice eat- NEG-2SG
'You're not eating.'

In the future or unrealized negative construction in Koireng (Singh 2010:114-5) and Moyon (Kongkham 2010:231), we find the original paradigm, with #*tɛ-* occurring with a different copula:

	Singular	Plural
1	maʔ-niŋ	maʔ-nuŋ
2	maʔ-tə-nə	maʔ-tə-no
3	maʔ-na	maʔ-nae

Table 4: Moyon Future Negative Paradigm

Here we see *#te* prefixed to a consonant-initial root, and thus in its original form, rather than the palatalized form which we see elsewhere in the Koireng and Moyon paradigms. These palatalized forms represent the fusion of *#te* with an erstwhile copula which is now reflected only in the vowel which occurs when the agreement suffixes occur with no apparent particle or auxiliary (examples from Tedim):

(14) *pài iŋ*
go 1SG
'I go.'

(15) *pài tɛʔ*
go 2SG
'you sg. go'

In this form they can serve in many NC languages as equational copulas⁶ (Tarao data from Singh 2002: 49):

(16) *kəy dəkətər əŋ*
I doctor 1SG
'I am a doctor.'

(17) *nəŋ dəkətər ce*
You.sg doctor 2SG
'You sg. are a doctor.'

The forms are quite consistent across Northern Chin, except for varying degrees of palatalization of *#te-*.⁷

⁶ We do not yet have a complete grammar of any of the Northern Chin languages, so to illustrate the various functions of the postverbal particles we need to cite data from different languages. It is not clear from available accounts how much divergence there may be among the various languages in the use and distribution of the postverbal agreement forms.

⁷ Monsang from Bareh 2009, other sources as previously noted.

	1SG	1PL	2SG	2PL	3SG	3PL
Tedim	ìŋ	ùŋ	tɛʔ	úʔ tɛʔ	--	uʔ
Tarao	ij	uŋ	ce	cew	--	əy
Moyon	ij	uŋ	cə	co	ə	əe
Koireng	ij	uŋ	si	siŋ	--	u
Monsang	ŋ	nuu	sə	suu	--	hɛ

Table 5: Postverbal agreement forms in Northern Chin languages

From these forms we can abstract **ij* 1st, **tɛʔ* 2nd, **uʔ* ‘plural’, and perhaps optionally **ə* 3sg.

In spite of the limited distribution of the suffixal forms in KC, since *(V)ŋ* and *tɛʔ* have evident cognates outside of KC, and are not grammaticalizations of the KC pronouns, we must interpret them as ancient inheritance (DeLancey 2010). But while the 1st person form seems to be attested only in Northern Chin, we do find a vestigial form of *#te-* elsewhere in the branch. As we have noted, in most of the “Old Kuki” languages of Manipur *#te* has palatalized to *ce*, and in this form we find the etymon elsewhere in KC, in the form of a 2nd person object suffix found in Mizo and elsewhere (Chhange 1993: 91-2):

		Subject		
Object		1	2	3
	1		ka-V-cê	ka-V
	2	mi-V		i-V
	3	mi-V	ka-V-cê	a-V

Table 6: Agreement indices with singular arguments in Mizo (Lushai)

The 2nd person suffix is always the final element of the verb, following other suffixes, which is inexplicable if we imagine it to have been a verb prefix in Proto-KC, but makes perfect sense if *-cê* reflects, not the original prefix, but a grammaticalized copula inflected with *#te-*, as in Northern Chin. Further evidence for this interpretation is the fact that, unlike other agreement affixes, *-cê* is outside the phonological scope of continuative reduplication:

- (18) *mî-sik* *mî̃-sik*
 1OBJ-pinch 1OBJ-pinch
 ‘[S/he] pinches me again and again.’

- (19) *â-sik* *â-sik-cê* *mòð*
 3SG-pinch 3SG-pinch-2OBJ INTERROGATIVE
 ‘Does [s/he] pinch you again and again?’

Finally, while *-cê* is used productively only as an index of 2nd person object, in a few archaic constructions it indexes subjects, as in a polite request to a superior:

- (20) *mín-rhê-reŋ-áŋ-cé*
 1OBJ-know-always-FUTURE-2
 ‘Please remember me!’

The occurrence of these agreement morphemes as equational copulas provides us with a clue to the history of the postverbal forms. If these forms simply represent the PTB agreement indices, then the vowel of the 1st person *iŋ* is inexplicable, and the positional behavior of **tɛʔ* likewise makes no sense. But if these postverbal syllables are originally conjugated copulas, which would be a very natural thing to find in a Tibeto-Burman finite clause construction, this would explain their form, their phonological independence, and their various uses all at once. The forms which we can infer, *#i-iŋ*, *#te-Vʔ*, are very similar to those attested in Trung: 1sg *iŋ*, 2sg *nu-è*, (Sun 1982: 91). The evidence from both the 1st and 2nd person forms, as well as more distantly from the Trung resemblants, tells us that this copula had a front vowel with no consonantal onset, thus explaining the recurrent palatalization of the form in the “Old Kuki” languages and in Mizo.

2.3.2 *Meyor-Zakhring*

The small and barely documented Meyor language of the Tibetan borderland in Anjaw District, Arunachal Pradesh, has a rather similar verbal system (Landi 2005, additional forms from the author’s notes), which retains the *#te* prefix in a few 2nd person forms which are obviously comparable to what we have seen in Northern Chin. Meyor has a complex and not entirely systematic system of sentence-final words, inflected with archaic Tibeto-Burman personal indices which do not match the synchronic independent pronouns:⁸

- (21) *ko mayor kiŋ*
 1SG Meyor COPULA.1SG
 ‘I am Meyor’
- (22) *no meyor e*
 2SG Meyor 2
 ‘You sg. are Meyor’

Landi (2005:66) gives the following past tense paradigm:

⁸ These forms were collected from Mrs. Chinjao Meyor on the campus of Ranjiv Gandhi University in Arunachal Pradesh in March 2011. I am grateful to Mrs. Meyor for her time and assistance, and to Lisa Lomdak of the Arunachal Institute for Tribal Studies at RGU for arranging our meeting.

	Singular	Plural
1 st	ang	up
2 nd	ch-ik	--
3 rd	yik	yik-ko

Table 8: Past tense forms in Meyor from Landi 2005

In the contrast of 3rd person *yik*, 2nd *ch-ik*, we can immediately recognize the #*te-* prefix once again. The same prefix occurs in imperative forms, which have originated from the re-interpretation of original 2nd person indicatives:

(23) *e-lik* *chi-kbuk*
 here-LOC 2-come
 ‘Come here!’

(24) *u-vik* *chi-phi*
 3SG-OBJ 2-give
 ‘Give him!’

We may note here that there is no apparent trace of any 2nd person prefix in Keman/Miju “Mishmi” (Das Gupta 1977, Sun et. al. 1980, Li 2002), to which, on the basis of both lexical evidence (Landi 2005) and resemblant paradigmatic forms, Meyor seems to be reasonably closely related.

More widely, Keman/Miju has been associated with the Jinghpaw nucleus (Sun 1988) and with Nungish (Bradley 1997). Both Sun and Matisoff (1996) see Jinghpaw and Nungish as a natural grouping. Based purely on the verbal system, Meyor seems most similar to the Konyak or Northern Naga languages, and after that more similar to Northern Chin than to Jinghpaw. The Keman/Miju paradigm seems to have undergone further analogical leveling which renders its similarities to other systems less precise.

2.3.3 #*te* in Jinghpaw

Nocte and some of the other Konyak or Northern Naga languages have a very similar construction to Northern Chin and Meyor, with a series relatable to the PTB agreement suffixes occurring either as phonologically independent post-verbal syllables or suffixed to grammatical particles which were originally independent auxiliaries (DeLancey 2010, 2011a, Morey 2011). So far no identifiable trace of #*te-* has shown up in any of these paradigms. But in Jinghpaw, a fairly close relative of Konyak, we find a more elaborate system in which #*te-* is present (Dai and Xu 1992, DeLancey 2011a).

A Jinghpaw sentence typically ends with the final particle *ai*, which, like other declarative final particles, we can interpret as an old copula (DeLancey 2010, 2011c). 1st and 2nd person

arguments are indexed by prefixes attached to this particle: 1sg *ŋ-ŋai*, 2sg *n-dai*. Jinghpaw also has grammatical particles, like those of Northern Chin and Nocte, which take the old agreement suffixes:

- (25) *nang dung ni-n d-ai*
 you sit ASPECT-2 2-FINAL
 ‘You are sitting’

Here we can see the original status of the *d-* as a prefix on an originally copular *ai*. An apparent problem with this history is that it requires that in the source construction both the finite verb and the final copula were inflected for person. But we do find such constructions in the family, for example in Nungish (Trung examples from Sun 1982):

- (26) *ŋa-i saŋ-ŋa di-ŋ*
 I-TOPIC know-1 PERF-1
 ‘I know.’

- (27) *ŋa kai-ia di-ŋ*
 I eat-1 PERF-1
 ‘I’ve eaten.’

The Jinghpaw construction in (25) seems to reflect an exactly parallel construction, involving both PTB 2nd person indices; the *ni* aspect marker is probably the very widespread copula *#na*, which has grammaticalized into an aspect marker everywhere from West Himalayan to Burmese.

The Jinghpaw agreement suffixes occur in voiced and voiceless forms: 1st *-ing / -i?* (*-?* regularly *< *-k*), 2nd *-in / -it*; this alternation occurs also in Nocte and Tangsa, and is thus of some age. In the available Nocte and Tangsa data, and in Dai and Xu 1992, the distribution of the nasal or stop forms is determined by the initial grammatical particle to which it is affixed, but in Jinghpaw data collected from LaRaw Maran in the 1970’s the two sets are occasionally in contrast, with some kind of aspectual significance. Thus we can find forms which appear to have the *#te* repeated, but this is illusory:

- (28) *na-a manang wa grai pyaw l-it d-ai*
 you-GEN friend go very happy EP-2 2-FINAL
 ‘Your friend is very happy.’

In spite of the superficial resemblance, the final of *l-it* ‘external possessor-2nd person’ is a reflex of the 2nd person suffix *#-n*, not the prefix *#te-*, through whatever devoicing process produced the Jinghpaw-Konyak alternation. (Presumably this was a perfective suffix *-s*, *-t* or *-?*). We see the same thing in a 1st person form:

- (29) *shi nye-a baw-hpe adup ya l-i? ai*
 He my-GEN head-OBJ hit give EP-1 FINAL
 ‘He hit me on the head.’

2.3.4 *The Central/NE India evidence*

We see in the languages considered here a consistent pattern of # VERB *te*-COPULA resulting in postverbal agreement words. (The parallel to Jacques' reconstruction of Chepang is noteworthy):

Northern Chin	VERB	te-i?
Meyor	VERB	chi-ki (< ti-ki < te-ki)
Jinghpaw	VERB AUX-n	d-ai

The final agreement word pattern is shared by other branches, Keman/Miju and Konyak, which have other features linking them to the languages discussed above, but seem to have lost all trace of #*te*-. Other connections not discussed here may suggest closer genetic connections among these languages than is assumed in most classifications of the family. In that case, we have ample attestation of the #*te*- etymon in all three of the major branches of the family. If not, which is to say if the current agnosticism about higher-order grouping of the central languages is correct, then we here have evidence of #*te*- in a considerable range of lower-level units. In either case, added to the evidence from rGyalrong, Kiranti, and Chepang, the evidence presented in this section gives us ample evidence that #*te*- is a pan-TB and PTB form. For purposes of the argument to be developed in Section 4, it is worth noting that we see nothing in any of these languages that looks like a 2nd person velar prefix.

3 Possessive and Agreement Prefixes

Sun (1984, 1995) demonstrates that possessive pronominal prefixes, while not found in all branches of the family, are very widespread, and makes a strong case for the archaism of possessive prefixes in many of the languages which have such a category, and the likelihood of its existence in PTB. He further points out the likely relationship between these and the agreement prefixes of rGyalrong and Nung, a point which was also noted by Watters (2002). Outside of the work of Sun this category in Tibeto-Burman has not received much comparative study, and we cannot give a thorough comparative treatment of the problem. This section will outline the comparative status of the category and some of its exponents. In Section 4 we will see that most of the attested agreement prefixes can be identified with possessive prefixes, and argue on this basis that they are secondary post-PTB developments.

3.1 *Possessive prefixes in Tibeto-Burman*

Sun's survey shows apparently cognate 1st and 2nd person forms across several languages from different branches of the family:

	Trung	Nu	Ersu	Taruang	Jiarong
1	ɑ ³¹	ʔɑ ⁵⁵	ɑ ⁵⁵	ɑ ³¹	ŋə ~ ŋa
2	nɯ ³¹	ŋo ³¹	ŋa ⁵⁵	na ⁵⁵	nə ~ na
3	aŋ ³¹	ʔŋo ³¹	teha ⁵⁵	--	wə ~ wa

Table 9: Possessive prefixes in Nung and Qiangic (from Sun 1984: 80)

Similar forms occur in Jinghpaw, and as a relict paradigm preserved only on kin terms in Bodo-Garo. I also include here forms from Konyak (Northern Naga):

	PBG	Konyak	Jinghpaw
1	*a	ə	ɑ ³³
2	*na	naŋ	niŋ ⁵⁵
3	*bV	i	kã ³¹

Table 10: Possessive prefixes in Bodo-Konyak-Jinghpaw

In Kuki-Chin-Naga we find some variation; besides the 1st #a- / 2nd na(ŋ)- forms, we have a some 1st person forms in a velar stop, and in Mizo a 2nd person i-:

	Angami	Rengma	Tiddim	Mizo	Meithei
1	a	à	ka	ka	i
2	n	n	na	i	nə
3	po	á	a	a	mə

Table 11: Possessive prefixes in Kuki-Chin-Naga

Since Kiranti seems to be a major area of prefix innovation, we are particularly interested in the possessive prefixes attested there:

	Limbu	Camling	Athpare	Bantawa	Dumi	Sunwar	Thulung
1	a-	a-	a-	ɨŋ-	o:-	ã-	a-
2	kɛ-	kap-	ka-	am-	a-	i-	i-
3	ku-	m-	u-	i-	i-	a-	u-

Table 12: Kiranti possessive prefixes⁹

For 1st person we once again have consistent forms across the branch, suggesting a common $\#a(\eta)$. This is a match for most of the 1st person forms on the previous tables, and gives us reason to postulate a common ancestry for many of them. The prima facie case for the cognacy of these forms is methodologically weak, since [a] is a likely endpoint for many possible courses of phonological reduction from many imaginable sources. (For example, on Sagart’s (1993) hypothesis of a distinct PTB uvular series, the “velar” 1st person form would have actually been uvular, as the Qiangic evidence (see below) shows, and thus on Sagart’s account prone to disappear). But whatever their morphophonological history, the consistency across all of these languages is unlikely to be simply coincidental.

For 2nd person the case is quite different. Except for Mizo, all of the languages in Tables 9-11 have forms which appear to be reduced (or in a few cases unreduced) forms of the PTB independent nominative root. Since most of these languages retain both $*\eta a$ and $*na\eta$ as independent pronouns, the 2nd person forms on this list give no compelling reason to reconstruct the category very far back. The 1st person forms do, however; even if the $\#a(\eta)$ can be interpreted as a form of $\#\eta a$, the most economical interpretation of the comparative data is that that reduction had already occurred in the common ancestor of all of the languages on all four lists, which would have to be PTB.

The Kiranti 2nd person forms give quite a different picture, with three different roots attested in just these five languages. The Limbu velar prefix is of interest because it occurs also as a 2nd person agreement prefix in the verb, suggesting comparison with 2nd person velar forms in rGyalrong. The 2nd person $i-$ in Western Kiranti resembles the Mizo form, and in the present context it bears comparison with the “marked scenario” prefixes Rawang $e-$ and Khaling $i-$, both of which mark all 2nd person-involved forms except for $1 \rightarrow 2$ plus $3 \rightarrow 1$. All of these, as well as the Meithei 1st person prefix, reflect an original $\#i$ 1pl Inclusive (see Section 4.2). The Bantawa form does not seem relevant to our concerns, though it has a few resemblants elsewhere (in Nocte, for example).

The disparity in the 2nd person forms on the lists is significant. We have one etymon on the first three lists, which comprise considerable genetic diversity, but three different forms in Kiranti alone. If we are correct in inferring from the apparently reconstructible 1st person prefix that in the common ancestor of all of these languages there must also have been a 2nd person form, and correct in assuming on general principles that in a highly grammaticalized closed class there cannot have

⁹ Limbu (van Driem 1987), Camling (Ebert 1997a), Athpare (Ebert 1997b), Bantawa (Doornenbal 2009), Dumi (van Driem 1993b), Thulung (Lahaussais 2003).

been very many,¹⁰ then some of the four forms in these data must be secondary. Bauman identifies the *i-* prefix as originating in the #-*i* 1pl Inclusive; we will return to this form in Section 4.2. Bantawa *am-* is isolated and can't be old. The *k-* and *n-* forms, however, both have good pedigrees, as we will establish in the next section.

3.2 *Pronouns and possessive prefixes*

A number of TB languages have independent pronouns which are not direct reflexes of the **ɲa* and **naŋ* roots (Bauman 1975, Thurgood 1985). 1st person forms other than **ɲa* usually have a velar stop (Sunwar *go*, Lohorong *ka*, Miju *ki*, etc.). 2nd person forms are less likely to show a different root, and those that do are less consistent than with 1st person, but the largest number of such forms again have a velar stop (Sunwar *ga*, Kanauri *ka'*, etc.). Significantly, in languages in which both the 1st and 2nd person pronouns have a velar stop, they do not always agree in manner (Rodong 1st *kanga*, 2nd *khana*, Lohorong 1st *ka*, 2nd *hana*, Kanauri 1st *gö*, 2nd *ka'*, etc.). A third pattern, common in Kiranti and inferable as a predecessor to synchronic forms in Western Himalayan and Bodo-Garo, involves disyllabic forms for one or both persons, almost always including a recognizable pronominal root (Rodong 1st *kanga*, 2nd *khana*, Limbu 1st *anga*, 2nd *khene*, etc.). Irregular monosyllabic forms such as Bodo-Garo 1st *aŋ*, Hayu 2nd *gon*, are apparently reductions of earlier disyllabic forms of this type.

3.2.1 *Nasal- and stop- initial pronouns*

Bauman (1975:172) argues that the nasal forms are earlier than the stop forms on the grounds that only the nasal forms occur as agreement suffixes, and that when there are distinct nominative and genitive or singular and plural stems, the unmarked nominative/singular form is particularly associated with the nasal. That is, if the singular nominative forms are nasal, the genitives or plurals may be either, but if the nominatives have stops the genitives or plurals will be innovative. This does not, however, automatically imply that the stop-initial pronominal roots must be more recent innovations, only that they must be new in their nominative function. The facts are equally explicable by any hypothesis which makes the nasal forms the unmarked and the stops the marked members of the pair. It is likely that such markedness values reflect an ultimate chronological priority of the nasal over the stop forms, but this could well be at some point far before PTB.

There is strong evidence that PTB had distinct nominative and oblique (perhaps specifically genitive) independent pronouns, and that 1st person *#ka* originally belonged to the genitive series. The association of *#ɲa* with nominative and *#ka* with genitive function has been widely noted, but usually in the form of a hypothesis that *#ka* represents some kind of coalescence of *#ɲa* with a genitive or topicalizing particle (Bauman 1975, Thurgood 1985, Benedict 1991). The hypothesis of a topic-marking *#ka* worming its way into the pronominal system is not broadly implausible in principle, but doesn't account for the actual facts. One obvious problem is that in all Tibeto-Burman languages topic-marking particles follow the NP which they topicalize; but Thurgood's interpretation of disyllabic Kiranti pronouns like Lohorong *kanga* as deriving from the

¹⁰ Although there could have been alternations to mark honorific status, for example.

old pronoun combined with the topicalizer requires them to occur in the opposite order. The same objection applies to Bauman’s (1975) suggestion that the stop forms arise from a coalescence of the nasal pronominal stems with a genitive particle *#kya*. All three scholars seem to begin with the assumption that one set of roots must be primary, the other late or even post-PTB, and therefore are forced to imaginative scenarios to explain the origin of the secondary stop-initial forms. While I will suggest below a rather intricate succession of forms through the independent and prefixal possessive pronominal slots in the daughter languages, we will avoid a lot of problems by reconstructing to PTB three different sets of pronominals, including distinct independent and prefixed or proclitic possessive forms.

Thurgood identifies a TOPIC/ERGATIVE marker” **ka* in the first element of Kiranti disyllabic pronouns such as Rodong¹¹ 1st *kanga*, 2nd *khana*, and in other stop-initial forms such as Hayu 1st *gu*, 2nd *gon*. An objection to this hypothesis is that in Rodong and a number of other Kiranti languages the 1st and 2nd person forms do not begin with the same stop: note the unaspirated stop in the Rodong 1st person in contrast to the aspirated stop in the 2nd (and compare Lohorong 1st *ka*, 2nd *hana*). On this basis Bauman reconstructs distinct forms, 1st *#ga* and 2nd *#ka* (1975:114).

We are on much safer ground with Jacques’ (2007) demonstration of distinct nominative and oblique (or specifically genitive) pronominal roots at the PTB stage, as we find in some modern Qiangic and Konyak languages (Southern Qiang from Sun 1981: 78, Chang from Hutton 1929):

		Nominative	Possessive
So. Qiang	1	ŋaɭ	qaɭ
	2	noɭ	kuəɭ
Chang	1	ngo	ka- / kü
	2	nô	kā-

Table 13: Nominative and possessive pronouns in Southern Qiang and Chang

Jacques shows neatly that the paired pronominal roots in these two groups are shared inheritance. Since these groups are not closely related within TB, this shows that the alternation between nominative nasal- and genitive stop-initial roots is ancient. When we find stop-initial pronominals used as subject forms, we are usually seeing the result of reanalysis of a nominalized construction in which some arguments were coded as possessors (Konow 1909, DeLancey 2010, 2011c). In the next section we take up the problem of the disyllabic pronouns.

3.2.2 *Disyllabic pronouns*

Disyllabic independent pronouns are common only in Kiranti, though on the account which I will give here, some forms in West Himalayan and Bodo-Garo must have originated as

¹¹ In this discussion of Thurgood’s argument, all data are taken directly from his paper, in the form in which they appear there.

disyllables. The importance of this to our present enterprise is that once we understand the structure of the disyllabic pronouns, we can get a better picture of the set of pronominal elements which might have been available for further grammaticalization in PTB and early post-PTB. We will return to this question in Section 4. I will not repeat here the tables of pronouns given in Thurgood (1985), which unless otherwise stated is the source for the data in this section.

Some disyllabic pronouns can be analyzed as a combination of a possessive prefix and a pronominal root. This is the most obvious analysis of the Limbu forms *anga* (cp. the 1st possessive *a-*) and *kbene?* (2nd possessive *ke-*). Other forms are more opaque; Bantawa 1st *ijka* is obviously the 1st possessive *ij-* plus the stop-initial *#ka* root, but while the second syllable of 2nd *khana* is the nasal *#na(ŋ)* root, the form does not contain the synchronic 2nd possessive *am-*. On the other hand we have seen that *am-* must be a recent secondary development in Bantawa, and the first syllable of *khana* seems to be the stop-initial 2nd person form which we find elsewhere.

In general it appears that disyllabic pronouns are formed by either prefixation of a possessive prefix to a nasal- or stop-initial pronominal root (*an-ga*, *ij-ka*), or by compounding of a stop- with a nasal-initial form (*kbe-ne?*, *kha-na*). Other secondary forms have the same origins: Bodo-Garo *aŋ* < *#a-ŋa*, Hayu *gon* < *#go-na*. When the form is a compound of two pronominal roots, the stop-initial, which we have seen is originally the possessive, is first and the nasal second. Thus there is functionally only one formation: a nominative pronoun with a prefixed possessive.

Bauman reconstructs disyllabic 1st *#gaŋa* and 2nd *#kana* for Proto-Eastern Himalayish, but considers forms like *ij-ka* as “permutations” of *#gaŋa* (1975:128). Instead, I suggest that these are distinct forms, respectively the possessive prefix attached to the stop-initial root *#aŋ-ga* and the stop-initial root compounded with the nasal *#ga-ŋa*. (This is why we get “permutation” only for 1st, not 2nd person). Thurgood (1985:387ff) reconstructs essentially the same forms, but does not offer an explanation for the *#aŋ-ga* type.

3.3 *Possessive prefixes as agreement prefixes*

I will not argue at length for the claim that possessive prefixes have historically been pressed into service as verb agreement indices, an idea of great antiquity in our field (see Watters 2002 for a recent suggestion), but we do need to devote a few paragraphs to understanding the processes which we are inferring in our reconstructions. We know that nominalized clausal constructions are a productive source of new finite verb constructions in Tibeto-Burman (Noonan 1997, 2008, Bickel 1999, Watters 2008, Genetti et. al. 2008, DeLancey 2010, 2011c). We can deduce from this plus the existence of possessive prefixes that some languages will likely develop finite verb forms which originated as nominalizations, with agreement prefixes which were originally possessors of those nominalizations. Watters (2002) describes in detail how exactly this happened in the historical development of the Kham verb, resulting in a new prefixal agreement paradigm. In this section we will review some other data illustrating how this process can and does happen.

3.3.1 *Possessed nominalizations*

In a language which has possessive prefixes, these can attach to nominalized verbs as indices of subjects or objects. For example, in Sunwar (Western Kiranti) a verb stem with the nominalizing

suffix *-šo* and with a possessive prefix agreeing with the subject can function as a headless or modifying relative clause:¹²

- (30) *ā-tup-šo*
 1SG-hit-NOMZ
 ‘the one who I hit’
- (31) *i-tup-šo* *?al*
 2SG-hit-NOMZ child
 ‘the child who you hit’

In a Tibeto-Burman language this is all you need to create a new finite verb, with a new agreement paradigm (DeLancey 2010, 2011c). Synchronically Sunwar lacks agreement prefixes in the finite verb, so we can consider these data as illustrating a source construction from which prefixal agreement might develop.

3.3.2 *Innovative prefixes in Kham-Magar*

Watters describes this process in Kham, where the old 2nd person prefix was replaced by a new transparent one. In Kham and Magar, this then serves as the model for analogical innovation of a 1st person prefix, as we can see in these forms from Syangja Magar (Grunow-Hårsta 2008: 192, 266):

	Pronoun	Agreement (past realis)
1sg	ŋa	ŋa-V-aŋ
1pl	kanko	ka-V-as
2sg	naŋ	na-
2pl	naŋko	na-V-as

Table 14: Pronouns and agreement affixes in Syangja Magar

Most TB languages do not have a 1st person prefix, except when a prefix with some other original function gets reanalyzed in the transitive paradigm into a 1st patient marker. There is no reason to reconstruct one for PTB. Since Syangja *ŋa-* has comparative support only in Kham, its nearest cousin, and has an obvious local source, it must be secondary.

The case is not so clear for the 2nd person form, since *na-* has a comparator in Trung *nu-*, as well as in Kuki-Chin, as we will see in the next section. But still these seem to be secondary innovations. When we have various etyma in the same slot, we take the most opaque and the most widely attested to be the oldest. Of the various 2nd person or “marked scenario” prefixes, *#te-* is the most opaque and the most widespread; *#na-* the most transparent and the most restricted in its

¹² Elicited forms from my own notes, collected from Tankaraj Sunawar in Eugene in the early 1990’s; see also Borchers 2008.

distribution. We can assume in general that when we find a 2nd person agreement prefix which seems to reflect #*na-*, that it is a secondary replacement of #*te-*, or perhaps of some intermediate form which itself previously replaced #*te-*.

3.3.3 *The origins of the Kuki-Chin paradigm*

Exactly this process is the evident origin of the innovative common Kuki-Chin prefixal paradigm (DeLancey 2010, 2011c), though there may be bits of old material in some of the paradigms (DeLancey 1988, 1989, van Driem 1993, Watters 2002). The KC personal prefixes are identical with the possessive prefixes on nouns, which are not the archaic possessive prefixes, but a secondary morphologization of the independent pronouns, with the velar 1st person form but the nasal 2nd. The common KC prefixes are 1st #*ka-*, 2nd #*na-*, 3rd #*a-*; on the verb these mark agreement with subject. (Mizo has 2nd person *i-*, matching its possessive prefix).

This paradigm is in complementary distribution in Northern Chin with the archaic postverbal conjugation described in Section 2.3. Certain verbal categories, usually including negation and often future, are marked by morphemes which require the agreement suffixes. Henderson (1965) reports that in Tiddim the prefixes are characteristic of a more formal, public style of speech, and the postverbal conjugation is a feature of colloquial style. In Sizang and Tiddim verbs conjugated with the prefixes obligatorily occur with a sentence-final particle *hi:*, which is identical to the copula. The final particle cannot occur with the postverbal agreement construction. The combination of possessive prefixes on the verb and a final copula tells us clearly that this finite clause construction originated as a nominalized clause with finite copula (DeLancey 2010, 2011c).

The basic #*ka-* / #*na-* / #*a-* paradigm is characteristic of KC languages, and matches the innovative pronouns (Thurgood 1985), thus these must date back to Proto-KC. However, the archaic postverbal conjugation must be older than that, since it consists of demonstrably archaic elements which were already grammaticalized long before PKC (DeLancey 2010). Thus PKC must have had two competing finite verb constructions: a set of auxiliary verbs, including a copula, conjugated with the ancient suffixes, and a nominalized construction with an impersonal copula, with the lexical verb conjugated for subject by means of possessive pronominal prefixes.

4 Other prefixes

As we saw in Table 2, there are several other prefixes besides #*te* in the various archaic languages. Many previous proposals incorporate some of these in the reconstructed PTB paradigm. In this section I will argue that these proposals (including my own) are mistaken, and that the only prefix from that set¹³ which we have to reconstruct to the PTB finite paradigm is #*te*, the only agreement prefix with no evident connection to any of the pronominal roots which we surveyed in Section 3. It is also the one with the widest attestation across the family, including at least two separate instances of grammaticalization into novel grammatical constructions. All the others seem to be secondary developments, either analogical spread of or replacement of #*te-* and #*wu-*. The reason why the modern prefixal paradigms look so opaque and irregular is not because they are the

¹³ Remember that we are not discussing #*wu-* or #*me-* here, both of probable PTB provenance.

eroded leftovers of ancient regularity, but because they are innovation on the hoof. When they coalesce into a coherent paradigm, as in KC, then we see a more regular system.

In DeLancey 1989 I reconstructed a PTB paradigm including #*t-* and #*k-*, both connected with 2nd person, and a vocalic prefix ancestral to those in Rawang and Dumi. I also suggested that the *nu-* prefix of Trung may reflect another PTB prefix, but also that, on the basis of the unsystematicity of what is there called the “clitic” paradigm, the prefixes represent an older morphological stratum than the suffixes. The ultimate point of the argument was that at some deep pre-PTB stage there was a complete prefixal paradigm “more complex than any of its attested reflexes” (1989: 331). Van Driem (1993: 326-8) more conservatively reconstructs only four prefixes: 2nd person *<*kɛ-*>, “marked scenario” *<*ta- ~ na-*>, 1st person *<*a-*>, and plural agent *<*me-*>, the last of which, along with #*te-*, remains a good candidate for PTB. In the remainder of this section I will argue that we do not need even this much.

4.1 #*k-*

As argued in Section 2, the occurrence of a *tV-* prefix in all and almost only 2nd intransitive, 3→2, and 2→3 throughout rGyalrong and Eastern Kiranti (except for Limbu, which we will explain directly) suggests that these represent shared inheritance, and this is supported by data from several other branches of the family. The two branches disagree in the treatment of the local categories 2→1 and 1→2: rGyalrong has a different prefix, *kV-*, in the former, and Kiranti has no prefix in the latter. DeLancey (1988, 1989) argues for the cognacy of the rGyalrong *kV-* with the general 2nd person *kɛ-* in Limbu. Van Driem (1993) comes to the same conclusion, but perceptively notes that the occurrence in Yakkha of a possible cognate as a suffix casts some doubt on its age as a prefix:

The data of languages beyond the Kirant suggest that prefixation may be an ancient Tibeto-Burman morphological process, and that agreement prefixes in Limbu, Dumi and Khaling could represent the retention of an archaic trait. Yet the reservation expressed on the basis of the Yakkha material above concerning the antiquity of the second person proto-morpheme *<*kɛ-*> may be interpreted as indicating that prefixation itself is a more recent process than suffixation in the development of Tibeto-Burman agreement systems. (van Driem 1993:327)

The possibility that Limbu *kɛ-* is a recent development does not automatically imply that the prefixal system as a whole is more recent than the suffixes unless we assume that *kɛ-* is part of the original prefixal paradigm. But the case for #*kV-* is weaker than that for #*te-*: since the rGyalrong form is restricted to the 2→1 configuration while the Limbu prefix occurs in all 2nd person-involved configurations except 1→2, the case for the cognacy of these forms does not have the same paradigmatic support as that for #*te-*, and must rest only on the facts that both have a velar stop, marked prefixal position, and some connection to 2nd person. The case for the antiquity of #*kV-* is further weakened by the fact that outside of rGyalrong it is attested in only one language, Limbu, while, as we have seen, #*te-* is much more securely attested.

It is very plausible that the rGyalrong and Limbu forms could ultimately be cognate, and that their shared association with 2nd person is not coincidental, but the evidence in favor of

reconstructing an agreement prefix for their common ancestor is thin and unconvincing. However, it is likely that we can in some sense both have our cake and eat it. If we associate these two prefixes with the more widely-attested 2nd person genitive pronoun root *#ka* discussed in section 3, we can explain both the formal and semantic resemblance, while explaining the lack of paradigmatic correspondence by assuming that the verbal prefixes in rGyalrong and Limbu represent independent intrusions of the 2nd person possessive into an older 2nd person paradigm. Thus we are reconstructing *#kV* to PTB, but not yet as a verb prefix.

We have seen that there is ample evidence to postulate an independent 2nd person pronominal root *#ka*. This root is not widely attested as a possessive prefix, but the Qiang and Konyak evidence for its antiquity and its solid attestation in disyllabic pronouns are sufficient to establish it as potentially relevant to our inquiry at the PTB level. The similarity of the 1st and 2nd person genitive roots was likely the motivation for the widespread loss of *#ka* and its replacement with *#na*. Still *#ka* must have held on long enough to be the source for the possessive prefixes in Limbu, and thence the 2nd person agreement prefix in the Limbu verb. It is probably best to see the adoption of *#ka-* into the verb systems of Limbu and rGyalrong as two independent events. In rGyalrong it seems that *#te-* first spread into the 1→2 slot, thus to every 2nd person form in the paradigm. Then the innovation of *#ka-* in the 2→1 form may have served to re-distinguish the two local forms, whose sociolinguistic status is quite different. The Limbu shift is much more recent, since it is not shared with other languages, even at the Eastern Kiranti level, and simply amounts to replacement of the opaque 2nd person *#te-* with a new transparent form, the synchronic 2nd person possessive prefix.

4.2 The “marked scenario”

Nung and the Western Kiranti languages Khaling and Dumi all have a single prefix in the configuration which van Driem (1993b) refers to as “marked scenario” and LaPolla (in press) as “non-first person actor”: every 2nd person-involved configuration except 1→2, plus 3→1:

	Subject			
Object	1	2	3	Intr
1				
2	è-V		è-V	è-V
3	è-V	è-V		

Table 15: The “marked scenario”: è- in Rawang

This is the distribution of *#te-*, which I reconstruct as occurring in every form involving a 2nd person argument except 1→2, plus the 3→1 form. We need to explain two things about this pattern: the prefixes, which do not appear to be reflexes of *#te-*, and the distribution, which can no longer be described exclusively in terms of 2nd person.

Trung has *nu*³¹-, which is identical to its 2nd person possessive prefix, in this distribution, while the other languages have a vowel:

	2IN	1→2	2→1	3→1	3→3	3→2	2→3
Bantawa	ti-	--	ti-	i-	(i-)	ti-	ni-
Khaling	i-	--	i-	i-		i-	i-
Dumi	a-	--	a-	a-		a-	a-
Rawang	e-	--	e-	e-		e-	e-
Trung	nu-	--	nu-	nu-		nu-	nu-

Table 16: “Marked scenario” paradigms in Kiranti and Nung

Since the “marked scenario” prefixes have almost the same distribution as *#te-*, previous work has tended to treat them as somehow belonging to “the *#te-* series”. In the same spirit van Driem reconstructs *#te-* as **<ta- ~ na->* to allow room for the Trung prefix. But, as we will see, the Trung prefix is the 2nd person possessive prefix, and can thus be regarded as a late regularization of an older, opaque 2nd person prefix *#te-*. Something similar could be true of the Khaling form, which we could perhaps identify with the *i-* 2nd person possessive found in Sunwar and Thulung (Section 3.1). The Rawang form, on the other hand, cannot be so easily explained, since the Nung 2nd person possessive is *nu-*, not *i-*. In any case, we need to explain how the prefix has moved into the 3→1 slot.

In DeLancey 1989 the “marked scenario” pattern is treated as unmotivated, probably reflecting a secondary merger of two original prefixes. One of these would have been *#te-*, the other a mysterious, perhaps vocalic, prefix occurring in the 3→1 slot. The weaknesses of this hypothesis are 1) that there is no coherent formal evidence of such a prefix and 2) that a morphological mark specific to a 3→1 verb form is typologically odd, so that the proposed solution to the problem of the unmotivated distribution of the “marked scenario” requires similar kind of unmotivated distribution of a form.

Van Driem hints at something similar, but with more detail as to the original form and function of the mystery prefix:

It appears that the agreement prefixes observed in the Tibeto-Burman languages under investigation reflect diverse proto-affixes which have undergone varying re-analyses. The Rāwang and Dumi marked scenario prefix, the Lakher and Limbu first person prefixes and the Khaling 2→1/3→1/3→2 scenario marker may reflect a first person prefix **<a->*. (van Driem 1993a: 328)

But while it is not inconceivable that a 1st person possessive might be used to mark the 3→1 category, that does not seem to be what happened here. The Limbu 1st person prefix is *a-*; this is also the possessive prefix, and it is likely that both that and the 2nd person *kɛ-* are recent, Limbu-internal interpolations into the paradigm. Thus Limbu 1st person indexation in *a-* does not directly correspond to the vocalic prefixes even in Khaling and Dumi, much less Rawang. And, as we saw in Section 3.1, 1st possessive *#a(ŋ)-* probably reconstructs in that form to PTB, so the hypothesis that the front vowel prefixes in Khaling (*i-*) and Rawang (*è-*) derive from that source cannot stand without some explanation for the vocalism. For the same reason we cannot equate the mysterious 3→1 prefix with the inverse *#wu-*.

Van Driem (1993b) and LaPolla (in press) both treat the “marked scenario” pattern as motivated (LaPolla calls it the “non-first person actor” category). I find both interpretations unconvincing, but if van Driem or LaPolla are correct in interpreting “marked scenario” or “non-first person actor” as legitimate functional categories, then we can interpret the extension of the prefix into the 3→1 form as a sort of regularization of the paradigm, since the original *#te-* distribution, while not without motivation, is still sufficiently marked to have inspired reorganization in rGyalrong as will.

In this case the only mystery about the Rawang and Khaling-Dumi prefixes is their form. But Trung *nu-* is hardly mysterious, it is the 2nd person possessive prefix, which must have been recruited to replace the original *#te-*. Since we have seen a widespread 2nd person prefix *#i-*, this would seem to be the explanation for the vocalic prefixes as well. The problem then is that we are attributing two different 2nd possessive prefixes, *#na-* and *#i-*, to the Nung nucleus. But Bauman long ago explained the origin of 2nd person *#i* as a reinterpretation of the solidly established 1pl Inclusive *#i* (van Driem 1993, LaPolla 2003) and this seems to be the source of our non-*#te-* “te-series” prefix. Thus the “marked scenario” prefixes are either *#i-* 2nd possessive < 1pl Inc or *#na-* 2nd possessive, and we can consider them both secondary renewals of the opaque 2nd person *#te-*.

These prefixes then are more instances of the widely scattered but “shared” innovation of *#i* 1pl Inc > 2 which we see in the possessive prefixes, agreement prefixes, or both in Nung, Khaling-Dumi within Western Kiranti, and a minority of KC languages. There is no plausible genetic node which would unite the languages where this has occurred, so in a formal sense it has occurred independently several times. Probably the best way to think of this is that at the PTB level the use of 1pl Inc for 2nd person reference already existed as a marked, probably polite, locution, as it does in many familiar languages (consider locutions like “as **we** will see in the next section”). The independent innovation in the various languages is not the semantic shift from 1pl Inc to 2, but a markedness shift in which the formerly polite locution becomes the ordinary unmarked construction, and the formerly ordinary construction becomes a mark of particularly colloquial or vulgar register, and eventually disappears. In fact in the Sinwal dialect of Rawang we find both forms in phonologically-determined complementary distribution, with *è-* before consonants and *nā-* before /a/¹⁴ (Sarep 1996). We can infer that both prefixes occurred in Proto-Nung.

¹⁴ This is Sarep’s statement of the distribution. It is not clear whether /a/ is the only vowel which can be the initial segment of a verb.

5 The PTB prefix

Thus we can eliminate from the PTB paradigm every widespread prefixal agreement index in the various branches except for the ubiquitous *#te-*, which shows up in various morphological guises across the family, solidly attested in the Western, Eastern, and Central/North East India groups. Therefore, as implied by some of Watters' discussion (2002: 395), we can reconstruct this and only this agreement prefix for the proto-language, and interpret everything else as either secondary replacement of or secondary analogical construction based on this form. It then occupies the same prefixal slot as the inverse *#u-*, although rGyalrong evidence suggests that these two prefixes could co-occur in the order *#te-u-* (DeLancey 1981). The origin of the *#te-* prefix is not evident, in contrast to the suffixal indices which show unmistakable resemblance to the independent pronominal roots. Of course this raises the possibility that *#te-* might be the last vestige of an earlier prefixal agreement paradigm, but there are certainly other possible hypotheses. (For example, the prefixed 2nd person form might have originated as a nominalization, which for sociolinguistic reasons replaced a regular finite 2nd person form). But at this point we can abandon earlier suggestions by the present author and others that the other prefixal agreement material in the attested languages are traces of a full-fledged prefixal agreement paradigm; with the exception of *#te-* the other forms are better interpreted as later, secondary innovations, in many cases on the analogical model of the 2nd person *#te-* forms. It does appear, however, that PTB had a full set of possessive proclitics or prefixes, and that, as Sun, Watters, and others have suggested, this nominal paradigm is the ultimate source for the innovative verb prefixes which show up in some of the branches.

REFERENCES

- Bareh, Curiously. 2009. Verbal agreement in Monsang. Paper presented at the 4th Conference of the North East India Linguistic Society, Shillong, Meghalaya, India.
- Barnard Joseph T. O. 1934. *A handbook of the Rawang dialect of the Nung language*. Rangoon: Supt. of Government Printing and Stationery.
- Bauman, James. 1975. *Pronouns and pronominal morphology in Tibeto-Burman*. Ph.D. diss, University of California, Berkeley.
- Benedict, Paul. 1991. "A note on PST-level morphosyntax". *Linguistics of the Tibeto-Burman Area* 14.1: 137–142.
- Benedict, Paul. 1995. "Proto-Tibeto-Burman/Proto-Sino-Tibetan **-i* suffix". In: Nishi, Yoshio; Matisoff, James; and Nagano, Yasuhiko (eds.), *New horizons in Tibeto-Burman morphosyntax*, 31–4. Osaka: National Museum of Ethnology [Senri Ethnological Studies 41].
- Bickel, Balthasar. 1999. "Nominalization and focus in some Kiranti languages". In: Yadava, Yogendra and Glover, Warren (eds.), *Studies in Nepalese linguistics*, 271–296. Kathmandu Royal Nepal Academy.
- Borchers, Dörte. 2008. *A grammar of Sunwar: descriptive grammar, paradigms, texts and glossary*. Leiden: Brill.
- Caughley, Ross. 1982. *The syntax and morphology of the verb in Chepang*. Canberra: Department of Linguistics, Australian National University [Pacific Linguistics Series B, no. 84].

- Chhangte, Lalnungthangi. 1993. *Mizo syntax*. Ph.D. diss, University of Oregon.
- Chelliah, Shobhana. 1997. *A grammar of Meithei*. Berlin; New York: Mouton de Gruyter.
- Dai, Qingxia; and Diehl, Lon. 2003. "Jinghpö". In: Thurgood, Graham; and LaPolla, Randy (eds.), *The Sino-Tibetan languages*, 401–408. London; New York: Routledge.
- Dai, Qingxia 戴庆厦 and Xu, Xijian 徐悉艰. 1992. *Jingpo yu yufa* 景颇语语法. Beijing: Minzu Chubanshe.
- Das Gupta, Kamalesh. 1977. *A phrase book in Miju*. Shillong: North East Frontier Agency.
- DeLancey, Scott. 1981. "The category of direction in Tibeto-Burman". *Linguistics of the Tibeto-Burman Area* 6.1: 83–102.
- DeLancey, Scott. 1983. "Tangut and Tibeto-Burman morphology". *Linguistics of the Tibeto-Burman Area* 7.2: 100–108.
- DeLancey, Scott. 1988. "On the evolution of the Kham agreement paradigm". *Linguistics of the Tibeto-Burman Area* 11.2: 51–61.
- DeLancey, Scott. 1989. "Verb agreement in Proto-Tibeto-Burman". *Bulletin of the School of Oriental and African Studies* 52.2: 315–33.
- DeLancey, Scott. 2010. "Towards a history of verb agreement in Tibeto-Burman". *Himalayan Linguistics* 9.1: 1–38.
- DeLancey, Scott. 2011a. "Nocte and Jinghpaw: Morphological correspondences". In: Hyslop, Gwendolyn; Morey, Stephen; and Post, Mark (ed.), *North East Indian Linguistics III*, 61–75. New Delhi: Foundation/Cambridge University Press India.
- DeLancey, Scott. 2011b. Postverbal agreement in Mizo-Kuki-Chin. Paper presented at the 6th Conference of the North East India Linguistics Society, Tezpur, Assam, February 2011.
- DeLancey, Scott. 2011c. "Finite structures from clausal nominalization in Tibeto-Burman". In: Yap, Foongha, Grunow-Härsta, Karen, and Wrona, Janick (ed.), *Nominalization in Asian languages: Diachronic and typological perspectives*. Amsterdam; Philadelphia: Benjamins.
- Doornenbal, Marius. 2009. *A grammar of Bantawa*. PhD thesis, Leiden University.
- Driem, George van. 1987. *A grammar of Limbu*. Berlin, New York: Mouton de Gruyter.
- Driem, George van. 1990. "An exploration of Proto-Kiranti verbal morphology", *Acta Linguistica Hafniensia* 22: 27–48.
- Driem, George van. 1991. "Bahing and the Proto-Kiranti verb". *Bulletin of the School of Oriental and African Studies* 54.2: 336–356.
- Driem, George van. 1993a. "The Proto-Tibeto-Burman verbal agreement system". *Bulletin of the School of Oriental and African Studies* 56.2: 292–334.
- Driem, George van. 1993b. *A grammar of Dumi*. Berlin, New York: Mouton de Gruyter.
- Driem, George van. 2001. *Languages of the Himalayas*. Leiden: Brill.
- Ebert, Karen. 1990. "On the evidence for the relationship Kiranti-Rung". *Linguistics of the Tibeto-Burman Area* 13.1: 57–78.
- Ebert, Karen. 1991. "Inverse and pseudoinverse prefixes in Kiranti languages: evidence from Belhare, Athpare, and Dungmali". *Linguistics of the Tibeto-Burman Area* 14.1: 73–92.
- Ebert, Karen. 1997a. *Camling (Chamling)*. München: Lincom Europa.
- Ebert, Karen. 1997b. *A grammar of Athpare*. München: Lincom Europa.
- Genetti, Carol; Coupe, A; Bartee, Ellen; Hidebrandt, Kristine; and Lin, You-Jing. 2008. "Syntactic aspects of nominalization in five Tibeto-Burman languages of the Himalayan area". *Linguistics of the Tibeto-Burman Area* 31.2: 97–143.

- Grunow-Härsta, Karen. 2008. *A descriptive grammar of two Magar dialects of Nepal: Tanabu and Syangja Magar*. Ph.D. diss, University of Wisconsin – Milwaukee.
- Henderson, Eugénie J. A. 1957. “Colloquial Chin as a pronominalized language”. *Bulletin of the School of Oriental and African Studies* 20: 323–327.
- Henderson, Eugénie J. A. 1965. *Tiddim Chin: A descriptive analysis of two texts*. London: Oxford University Press.
- Hutton, John. H. 1929. “Outline of Chang grammar”. *Journal of the Asiatic Society of Bengal* 25: 1–101. [Reprint: *Chang Language: Grammar and Vocabulary of the Language of the Chang Naga Tribe*. Delhi: Gian, 1987].
- Jacques, Guillaume. 2004. *Phonologie et morphologie du japhug (Rgyalrong)*. Ph.D. thesis, Université Paris VII - Denis Diderot.
- Jacques, Guillaume. 2007. “A shared suppletive pattern in the pronominal systems of Chang Naga and Southern Qiang”. *Cahiers de linguistique Asie Orientale*, 36.1: 61–78.
- Jacques, Guillaume. 2010. “The inverse in Japhug Rgyalrong”. *Language and Linguistics* 11.1: 127–157.
- Jacques, Guillaume. In press. “Agreement morphology: the case of Rgyalrong and Kiranti”. to appear in *Languages and Linguistics* 13.1.
- Kongkham, Hemabati. 2010. *A descriptive grammar of Moyon*. Ph.D. diss, Department of Linguistics, Manipur University.
- Konow, Sten. 1909. “The Tibeto-Burman family”. In: Grierson, George.A. (ed.), *Linguistic Survey of India, Vol. III, Part 1, 1–13*. Calcutta: Office of the Superintendent of Government Printing. [Reprint: Delhi: Motilal Banarsidas, 1967].
- Lahaussais, Aimée. 2003. “Thulung Rai”. *Himalayan Linguistics Archive* 1.1–25.
- Landi, Victor. 2005. *The Meyors and their language*. Itanagar: Government of Arunachal Pradesh.
- LaPolla, Randy. 2003. *A grammar of Qiang, with annotated texts and glossary*. Berlin; New York: Mouton de Gruyter.
- LaPolla, Randy. In press. “Hierarchical person marking in Rawang”. To appear in *Forty Years of Sino-Tibetan Language Studies: Proceedings of ICSTLL-40*. Heilongjiang University Press.
- Li, Daqin 李大勤. 2002. *Geman yu yanjiu 格曼语研究*. Beijing: Minzu Chubanshe
- Matisoff, James. 1996. “A pragmatic subgrouping of Tibeto-Burman languages”. In: Matisoff, James, *Languages and dialects of Tibeto-Burman*, 177–178. Berkeley: Center for Southeast Asia Studies [STEDT Monograph Series 2].
- Matisoff, James. 2003. *Handbook of Tibeto-Burman: System and philosophy of Sino-Tibetan reconstruction*. Berkeley; Los Angeles: University of California Press [University of California Publications in Linguistics 135].
- Noonan, Michael. 1997. “Versatile nominalizations”. In: Bybee, Joan; Haiman, John; and Sandra A. Thompson (eds.), *Essays on language function and language type. In honor of T. Givón*, 373–394. Amsterdam/Philadelphia: John Benjamins.
- Noonan, Michael. 2008. “Nominalizations in Bodic languages”. In: López-Couso, Maria. J.; and Seoane Elena (eds.), *Rethinking grammaticalization: New perspectives*, 219–237. Amsterdam, Philadelphia: John Benjamins.
- Sagart, Laurent. 2006. “Review: Handbook of Proto-Tibeto-Burman: System and philosophy of Sino-Tibeto-Burman reconstruction. By James A. Matisoff”. *Diachronica* 23.1: 206–223.
- Sarep, Hpung. 1996. “A study of the morphology of verbs and nouns in the Sinwal dialect of the Rawang language”. *Linguistics of the Tibeto-Burman Area* 19.2: 93–184.

- Singh, Chungkham Yashawanta. 2002. *Tarao grammar*. New Delhi: Akansha.
- Singh, Chungkham Yashawanta. 2010. *Koireng grammar*. New Delhi: Akansha.
- Sun, Hongkai 孙宏开. 1981. *Qiang yu jianzhi* 羌语简志. Beijing: Minzu Chubanshe 民族出版社.
- Sun, Hongkai 孙宏开. 1982. *Dulong yu jianzhi* 独龙语简志. Beijing: Minzu Chubanshe 民族出版社.
- Sun, Hongkai 孙宏开. 1983. “Woguo ZangMianyu dongci de rencheng fanchou 我国藏缅语动词的人称范畴.” *Minzu Yuyan* 民族语文 1983.2:17–29.
- Sun, Hongkai 孙宏开. 1984. “Woguo bufen ZangMianyu zhong mingci de rencheng lingshu fanchou 我国部分藏缅语中名词的人称领书范畴.” *Zhongyang Minzu Xuebao* 中央民族学院学报 1984.1: 78–84.
- Sun, Hongkai 孙宏开. 1988. “Shilun woguo jingnei Zang-Mianyude puxi fenlei 试论我国境内藏缅语的谱系分类” (A classification of Tibeto-Burman languages in China). In: Nishida, Tatsuo Nishida; and Eguchi, Paul Kazuhisa (ed.), *Languages and history in East Asia: festschrift for Tatsuo Nishida on the occasion of his 60th birthday*, 61–73. Kyoto: Shokado.
- Sun, Hongkai. 1995. “A further discussion on verb agreement in Tibeto-Burman languages”. In: Nishi, Yoshio; Matisoff, James; and Nagano, Yasuhiko (eds.), *New horizons in Tibeto-Burman morphosyntax*, 17–29. Osaka: National Museum of Ethnology [Senri Ethnological Studies 41].
- Sun, Hongkai 孙宏开, et al. 1980. *Menba, Luoba, Dengren de yuyan* 门巴，珞巴，僜人的语言. Beijing: Zhongguo Shehui Kexue Chubanshe.
- Thurgood, Graham. 1982. “The Sino-Tibetan copula *wəy⁽⁰⁾”. *Cahiers de linguistique – Asie Orientale* 11.1: 65–81.
- Thurgood, Graham. 1985. “Pronouns, verb agreement systems, and the subgrouping of Tibeto-Burman”. In: Thurgood, Graham; Matisoff, James; and Bradley, David (eds.), *Linguistics of the Sino-Tibetan area: The state of the art*, 376–400. Canberra: Department of Linguistics, Australian National University [Pacific Linguistics Series C, no. 87].
- Thurgood, Graham. 2003. “A subgrouping of Sino-Tibetan languages: the interaction between language contact, change, and inheritance”. In: Thurgood, Graham; and LaPolla, Randy (eds.), *The Sino-Tibetan languages*, 3–21. London; New York: Routledge.
- Watters, David. 2002. *A grammar of Kham*. Cambridge: Cambridge University Press.
- Watters, David. 2008. “Nominalization in the Kiranti and Central Himalayish languages of Nepal”. *Linguistics of the Tibeto-Burman Area* 32.1: 1–45.

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