# Second person verb forms in Tibeto-Burman

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Since the beginning of research on Tibeto-Burman verb agreement, 2<sup>nd</sup> person marking has posed a persistent problem. Every scholar who has dealt with the problem reconstructs a set of person/number suffixes including 2sg #-n(a). But there is also strong evidence for a #t- prefix which also indexes 2<sup>nd</sup> person. My purpose in this paper is to summarize the results of a number of descriptions and analyses which have appeared over the last decade or so, which provide new evidence concerning the #t- prefix, and resolve some of the problems which had previously impeded our understanding of this form. I will show that there were two distinct verb forms used for 2<sup>nd</sup> person reference in Proto-Tibeto-Burman. In the final section of the paper I will speculate about the implications of this fact.

### 1 The suffixal paradigm

The Proto-Tibeto-Burman suffixal agreement paradigm has been securely reconstructed for a generation (Bauman 1975, DeLancey 1989, van Driem 1993, Watters 2002: 374-391, see also Sun 1983, 1995). The hierarchical nature of PTB agreement, and the associated inverse construction, are well-established (DeLancey 1981, 1989, Watters 2002, Jacques 2010). Transitivity and inverse marking are peripheral to our present concerns, so in this paper we will illustrate the system using only intransitive paradigms.

#### 1.1 The agreement suffixes

The basic person/number indices in the PTB verb were (Bauman 1975, van Driem 1993: 320, cp. LaPolla 2003a):<sup>1,2</sup>

	Singular	Plural	
1	-*ŋ(a)	*-i	INC
		*-ka	EXC
2	*-n(a)	*-ni	

**Table 1: PTB intransitive agreement suffixes** 

All of these except 1EXC \*-ka are widely attested across many branches of the family. (Exclusive -ka is well-established in Kiranti; elsewhere the only clear evidence for it as a verbal index is in Jinghpaw). More importantly, we find these preserved as corresponding paradigms across the major branches of the family. But the individual suffixes are not equally well preserved. 1SG #- $\eta$  is certainly the most widely attested, found in languages

<sup>&</sup>lt;sup>1</sup> Two other suffixes, dual #- $si \sim$  #-tsi and direct/30BJ #-u, will not be discussed here.

<sup>&</sup>lt;sup>2</sup> Hereafter I will refer to the 1st and 2nd person suffixes simply as  $\#-\eta$  and #-n.

where no other agreement morphology occurs. In contrast,  $2^{nd}$  person #-n shows a much more scattered pattern of retention, and is often replaced by something else.

Consider the following examples of intransitive agreement indices from across the family. While the forms listed above can be securely reconstructed for the respective branches, I list forms from individual languages so as to highlight the difference between 2sG and the other forms in how much variability it shows, even within genetic units:<sup>3</sup>

		1sg	$1PL^4$	2sg	2 <sub>PL</sub>
Vario	us Himalayan				
	Thangmi	-ŋa	-i	-na	-ni
	Chepang	-ŋa	-i	-naŋ	-i
Weste	rn Himalayan				
	Rangpo	-ŋ	-ni	-n	-ni
Kiran	ti				
	Thulung	-ŋu	(-i)	-na	-ni
	Bahing	-ŋa	-ja	-e	-ni
	Hayu	-ŋo	-ke		-ne
	Khaling	-ŋ <b>ʌ</b>	-ki	?i-Σ	?i-Σ-ni
	Camling	-unga	-i	ta-	ta-Σ-i
	Bantawa	-ŋa	-in	tI-	$tI$ - $\Sigma$ -in
rGyal	rongic				
	Zbu	-aŋ	-jə	tə-Σ	tə-Σ-ŋə
	Situ	-ŋ	-i	tə-Σ-n	tə-Σ-ɲ
	Lavrung	-ŋ	-j	-n	-n
Nung	_	J			-
_	Rawang	-ŋ	-i	e-	e-Σ-niŋ
	Trung	-ŋ	-i	n-	n-Σ-niŋ
Bodo-	Konyak-Jingh	paw			J
	Nocte	<b>-</b> ŋ	i	Sc	an
	Jinghpaw	-ŋ	ga	-n d-	ma-

Table 2: Agreement indices across the family

The 1sG form is the most consistently preserved, and is found in many languages which have lost the others and thus do not appear on this list. The various plural forms are all well-attested. Languages which have abandoned the inclusive-exclusive distinction tend to retain the old Inclusive #-i, the only exception being Jinghpaw, which keeps the Exclusive instead. In Camling and Chepang this suffix has also moved into the 2PL slot.

But the 2sG forms show substantial variation. There are several 2<sup>nd</sup> person forms in languages not shown here which represent language-specific developments, usually involving plural inclusive forms or possessive proclitics (see DeLancey 2011a). In Table

<sup>4</sup> The Kiranti forms are inclusive; other languages do not distinguish inclusive/exclusive.

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<sup>&</sup>lt;sup>3</sup> Sources for data in the tables are listed at the end of the paper.

2 we see several different verb affixes occurring as  $2^{nd}$  person indices: a suffix #-n, which is paradigmatically consistent with the rest of the paradigm, suffix -e in Bahing, a prefix in t- in rGyalrong and Southern Central Kiranti (SCK), a vocalic prefix in some Kiranti languages and Rawang, prefix n- in Trung, and postverbal  $\partial P$  in Nocte. Jacques 2012a and DeLancey 2011a discuss the origins of some of these; here I will deal primarily with the #t- prefix, and briefly (Section 4.2) with the back vowel forms of Nocte-Tangsa .

### 1.2 The provenance and age of the suffixal paradigm

The data in Table 2 are presented mostly for framing, to set the stage for discussion of the #t- prefix. I will not rehash here the full case for the PTB paradigm, which would require examination of complex transitive paradigms. But note that even in the simple intransitive forms we have a two-dimensional paradigm replicated more-or-less whole in rGyalrongic, Qiangic, Nung, Jinghpaw-Nocte, Kiranti, Thangmi-Newar, and Western Himalayan. "Whole", that is, except for 2sg, which is the topic of this paper.

The paradigmaticity of the forms being compared is important. Referring to some fairly uncontroversial claims of Nichols (1996), LaPolla argues for the importance of paradigmatic organization in comparanda:

... there is very little likelihood of the entire paradigm appearing in different unrelated languages purely by chance, and so that paradigm can be said to have developed only once, and therefore any languages that share that paradigm must have developed out of the single language in which that paradigm developed.

It is paradigmaticity in particular that helps us reach the individual-identifying threshold, as the probability for the set as a whole is determined by multiplying the probabilities of the individual forms and categories by each other. (LaPolla 2012: 122)

In arguments elsewhere for the "Rung" subgroup, LaPolla misunderstands the point of Nichols' paper, which is concerned with establishing deep relationship, not subgrouping languages already assumed to be related. But here the same essential logic applies: we are still calculating the odds that the paradigms being compared reflect a single ancestral paradigm. If it is implausible to suppose that the same paradigm arose independently half-a-dozen times in different branches of the family, then given this degree of consonance we reconstruct the paradigm to the common ancestor of the languages where we find it. We will return to this point when we discuss the historical status of #t-.

For purposes of establishing deep relationships, Nichols argues, as LaPolla puts it, that not only must the set of forms being compared be paradigmatically structured, but "the entire set has to be attested in each language" (2012: 122). Again, Nichols' concern is establishing deep relationships among languages not previously shown to be related; of course it is not, and never has been, a requirement for reconstructing a paradigm for a group of languages already assumed to be related, that every form from the original paradigm be preserved in every daughter language. If it were, the deficient verb agreement paradigms of English and Swedish would prevent reconstructing a fuller

paradigm for Proto-Germanic. Still, this issue is presumably the reason why LaPolla ignores the 2<sup>nd</sup> person suffix when he reconstructs \*- $\eta$ , \*-i and \*-ni for Proto-"Rung" (LaPolla 2003a). But although the  $2^{nd}$  person suffix #-n has been lost or replaced in many languages, it is reconstructed for Western Himalayan (Saxena 1997), Kham (Watters 2002: 401), Kiranti (van Driem 1991), and Oiangic (LaPolla 2003b: 141-2), and securely attested in rGyalrongic (Gong to appear, Huang 2007), Newar-Thangmi (Genetti 1994, Turin 2012), and Jinghpaw. This is the form which fits the others in syntagmatic position, and like 1sG \*-n transparently reflects the Proto-Sino-Tibetan pronominal root. Several authors have pointed out that the transparency of this paradigm suggests that it is very young (Caughley 1982, Nishi 1995, LaPolla 1992, 2012). We should note that, while the reconstructed 1SG and 2SG suffixes are unmistakably related to securely reconstructed independent pronominal roots, the same case has not been made for the plural forms, and it is not clear that there is a similarly obvious case to be made. In any case, the case for these forms as part of an ancient paradigm, which also includes several less transparent forms, is well-established. The fundamental evidence, just as LaPolla demands, is the cooccurrence of most of the original paradigm as a set across so many branches and languages (including some where the original pronominal roots have long since been lost from the independent pronominal system), as we see in Table 2.

But it is clear that, given only the data in Table 2, we need a further story for the 2sG category. We obviously reconstruct #- $\eta$ , #-i and #-ni for the system ancestral to these branches, and there is a strong case for #-n as well, since it occurs in at least one language in each of the branches. But the case for #-n is less overwhelming than for the others, and in that respect weakens the case for the paradigm. Our purpose is to explain the vagaries of  $2^{nd}$  person marking in a way that accounts for the inconsistent attestation of #-n.

#### 1.3 The problem of prefixes

The place of prefixes in the PTB paradigm has been a problem since the first attempts at reconstructing PTB agreement (Bauman 1974). Recent work (Jacques 2012a, DeLancey 2011a) shows that we can make do with considerably fewer prefixes in the PTB agreement paradigm than some earlier work (e.g. DeLancey 1989) had suggested. The only true agreement indices which in my opinion can be reconstructed to PTB are 2<sup>nd</sup> person #t- and probably plural #ma-. (Inverse #u- is not strictly speaking an agreement index). The long-standing puzzles of the various 2<sup>nd</sup> person indices in t- in several different branches of the family have now been largely solved. The remaining problem is the place of this prefix in the original system. Sections 2 and 3 will be devoted to reviewing the comparative evidence which establishes the provenance of #t-, and Section 5 to reconstruction and speculation about its origin.

# 2 Primary evidence for #t-

The evidence for a  $2^{nd}$  person index #t- $^5$  was laid out first by Bauman (1975), and pursued by DeLancey (1989) and, more cautiously, van Driem (1993). Until recently our

<sup>5</sup> Again I will use #*t*- as a cover representation for this prefix; we will discuss the formal reconstruction in Section 5.

understanding of this form was impeded by the peculiar behaviors of resemblant forms in Chepang and Northern Chin, which we will discuss in Section 3. We begin the inquiry with the rGyalrong and Southern Central Kiranti (SCK) languages, where the identity of the prefix has not been obscured by later developments. The distribution of this prefix and other agreement indices in the transitive paradigms of the various languages has been explored elsewhere (Ebert 1990, DeLancey 2011a, Jacques 2012). Here we will look only at intransitive forms; specifically, we are looking for the paradigmatic configuration 1sG  $\Sigma$ - $\eta$ , 2sG t- $\Sigma$ . As I will argue below, this configuration is sufficiently unlikely that whenever we find it we can assume that we are looking at a cognate system.

### 2.1 The paradigm in rGyalrongic and Southern Central Kiranti

While we will see submerged evidence for #-ŋ / #t- in other branches, this is the primary agreement paradigm in only two groups, rGyalrong and SCK:

	rGyalrong			SCK	
	Situ	Tshobdun	Zbu	Bantawa	Camling
1sg	Σ-η	Σ-aŋ	Σ-aŋ	Σ-ηа	Σ-и-ŋа
2sg	tə-Σ-n	tə-Σ	tə-Σ	ti-Σ	ta-Σ

Table 3: Singular agreement in rGyalrong and SCK

Situ (Eastern) rGyalrong is unique in attaching both 2<sup>nd</sup> person indices to a single verb stem (see Section 5.1). The other rGyalrong languages have only *tə*-. In the closely-related Lavrung the only 2<sup>nd</sup> person index is -n. Likewise in Kiranti we find the *t*- prefix only in the SCK subbranch. The most obvious argument for the antiquity of this prefix in the two groups is the close match between them in the form and syntagmatic inconsistency of the 1<sup>st</sup> and 2<sup>nd</sup> person forms. If the rGyalrong and SCK paradigms are not cognate, this unlikely paradigm must have arisen independently twice. If they are cognate, then they must predate Proto-Kiranti and Proto-rGyalrongic, and #*t*- must have subsequently been lost elsewhere in Kiranti and in Lavrung.

But in both branches there is also internal evidence that the #t- prefix is not a recent development. First, we note simply that in neither branch is there any plausible internal source for the prefix. Unlike the 1sG suffix, it does not resemble any independent or possessive pronominal root. We find other prefixal agreement indices in both rGyalrong and Kiranti languages, but almost all can be explained as secondary developments with identifiable sources; only #t- cannot be so explained (DeLancey 2011a, Jacques 2012a). Jacques notes, as evidence for the antiquity of the prefix within rGyalrongic, its irregular behavior in the affirmative and negative locative/existential copulas (Jacques 2012a: 91), where it occurs as an infix rather than a prefix: yrzu 'have, be there', 2sG yr-tr-zu, mane 'not have, not be there', 2sG ma-ta-ye.

A possible argument against the antiquity of #t- in SCK is its variable position in certain verb constructions in some varieties of Bantawa. But properly understood the

nature of this variation gives further support to the reconstruction. Consider the following forms from the Wana dialect (from unpublished notes of the late Alfons Weidert):

- 1) tu-uŋ
  beat-1sg.Ag
  'I beat him (past / non-past)'
- 2) man-tup-D-əŋ
  NEG-beat-PAST-1SG
  'I didn't beat him'
- 3) tw-tu-aŋ
  2-beat-1sg
  'you beat me (past)'
- 4) man-tup-tuu-D-aŋ NEG-beat-2-PAST-1SG 'you didn't beat me'

In (1-2) we see that the past is formed by a -D- suffixed to the stem, preceding the 1sG suffix. In (3) we see  $2^{nd}$  person tu- prefixed to the verb stem, but in (4) it occurs between the stem and the past tense suffix. This appears to parallel a constraint in Camling, where a verb can have only one prefix at a time, so that in a given verb form only one out of the  $2^{nd}$  person, inverse, and negative prefixes can occur. Thus in a negated  $2^{nd}$  person verb,  $2^{nd}$  person and negation cannot both be marked by prefixes. At first this might appear to be what is happening in the Wana paradigm, and this might be taken as evidence that the tu- prefix is not fixed in a specific morphological slot, that in turn implying that perhaps it is not fully morphologized. But Doornenbal's (2009) analysis of forms in Hatuvā Bantawa shows us the correct story. Across Bantawa there are three possible morpheme orders for a 2sG negated past tense verb. The negative man- always precedes the verb stem (here  $k^h at$  'go'), and the past tense -da is always the last in the string, but  $2^{nd}$  person ti- can occupy any position consistent with these two constraints (Doornenbal 2009: 171):

- 5a) ti-man- $k^h$ at-da
- b)  $man-ti-k^hat-da$
- c)  $man-k^hat-ti-da$

'You did not go'

According to Doornenbal, the first is considered odd-sounding in Hatuvā, but the second and third are both common. (Rai (1985: 113) mentions the (a) and (b) forms, but not the more conservative (c), as occurring in Rabi). However, there is a phonological word break in the third: the form is  $man-k^hat\ ti-da$ . Doornenbal shows that the past tense suffix is a morphologized secondary or auxiliary verb. Originally it was the finite verb, and carried agreement; the  $man-ti-k^hat-da$  order is a secondary reconstitution of the form with the erstwhile auxiliary reanalyzed as a verb suffix, forcing inflection onto the new finite

stem. Similarly, the origin of a Wana form like (4) is *man-tup tə-D-aŋ*, with an inflected auxiliarly showing the same biactancial agreement as the non-negated verb in (3).

#### 2.2 #*t*- in Magar

In Magar (Central Himalayan) we find frozen strings of suffixes which unmistakably reflect the same process of auxiliary fusion as in Bantawa. The relevant structure and its origin were first noted by Angdembe (1999); the relation of one of the suffixes to the #t-prefix is discussed by Grunow-Hårsta (2008: 197-201). The Jhadewa Magar forms are:

	Future	Present	Preterite
1sg	a-Σ-nə	Σ-l-aŋ	ηα-Σ-аη
1PL	a-Σ-iŋ	Σ-li-iŋ	ka-Σ-a-s
2sg	<i>ә-tә-Σ-е</i>	Σ-də-l	na-Σ-a
2PL	$\partial$ -t $\partial$ - $\Sigma$ -nis <sup>6</sup>	Σ-də-nis	na-Σ-a-s
3sg	<i>a-Σ-e</i>	Σ-le	Σ-a
3PL	a-Σ-ko	Σ-le-ko	<b>Σ-</b> a

Table 4: Jhadewa Magar verb conjugation

The Preterite has prefixal agreement for both  $1^{st}$  and  $2^{nd}$  person. These are cognate with forms found in Kham, where they derive from possessive prefixes, though the possessive prefix series has been lost in Magar (Grunow-Hårsta 2008). The adoption of these prefixes into the paradigm is a shared Kham-Magar innovation (Watters 2002: 398). No prefixes occur in the Present . In the Future there is a prefix for  $2^{nd}$  person, but it is not the same as the  $2^{nd}$  person prefix in the Preterite, and has no evident pronominal source.

Comparing the 1<sup>st</sup> and 2<sup>nd</sup> person Present forms, we see that the 1<sup>st</sup> person index follows the tense suffix, while the 2<sup>nd</sup> person index – which is very similar in form to the 2<sup>nd</sup> person prefix in the Future – precedes it: 1sG  $\Sigma$ -l-a $\eta$ , 2sG  $\Sigma$ -d $\sigma$ -l. Angdembe (1999) shows that the Present tense formation is derived by suffixation of conjugated forms of the existential copula \*le. Thus historically this conjugation did have a prefixal 2<sup>nd</sup> person index as well. The erstwhile prefix is now a suffix, because what was originally a conjugated auxiliary is now a series of suffixes following the verb stem.

This is easy to see if we compare the endings of the Present conjugation with the conjugation of *le* as an independent copula:

<sup>&</sup>lt;sup>6</sup> Omitting honorific forms, which are identical to 2PL without the final -s. Probably these rather than the forms with -s represent the original 2PL forms.

<sup>&</sup>lt;sup>7</sup> Note that #- $\eta$  1sG is retained in this paradigm. There is no evident trace of #-n in Magar.

	Present suffixes	<i>le</i> Future	<i>le</i> Present	<i>le</i> Preterite
1sg	-le-aŋ	a-le-nə	le-nə	ŋa-li-aŋ
1 <sub>PL</sub>	-le-iŋ	a-li-iŋ	li-iŋ	ka-li-a-s
2sg	-də-le	ə-tə-le	na-le	na-li-a
2PL	-də-nis	ə-tə-le-nis	na-l-nis	na-li-a-s
3sg	-le	a-le-I	le	li-a
3PL	-le-ko	a-le-ko	le-ko	li-a

Table 5: Conjugation of *le* and present tense suffixes

Note that, unlike the ordinary Present tense, there is no 2<sup>nd</sup> person prefix in the Present tense forms of the copula, consistent with the idea that the lack of a 2<sup>nd</sup> person prefix in the Present is a secondary effect of the fusion of an erstwhile conjugated auxiliary with the non-conjugated stem. But there is a mismatch between the prefix which occurs with the finite copula in Present tense and what we find in the Present tense suffixal string. Like the ordinary Preterite, the Present prefix on *le* is *na*-, but unlike the ordinary Preterite and like the Future, there is a prefixal index only for 2<sup>nd</sup> person, not for 1<sup>st</sup>.

In the Present and Preterite conjugations we have the innovative  $2^{nd}$  person prefix na-, which must represent an old possessive prefix, as in Kham (Watters 2002), But in the future paradigm and the grammaticalized present formation, we find -ta- or -da-, forms with no evident source in Magar or its near relations. Clearly the relict da- prefix in the Present conjugation is the older form, and the na-le Present tense form postdates the incorporation of the le paradigm into the Present tense verb.

Angdembe has a different interpretation, where the  $-d\partial$ - of the Present tense conjugation is an irregular development of regular  $2^{nd}$  person na-. The necessary shift of /n/ to /d/ is explained having first occurred in the 2PL form, where the original /n/ merged with the /l/ of the copula to form /d/, which then was analogically copied into the singular form. This can be rejected, in the first place, because the /n/ and /l/ would not have been contiguous: Angdembe's change,  $-d\partial < -na$ -l is not plausible. Moreover this solution ignores the obvious connection with the Future form (Grunow-Hårsta 2008: 200).

### 2.3 A fossilized paradigm in Old Kuki

The Kuki-Chin languages are known for an innovative preverbal agreement paradigm. Most of the indices are possessive proclitics, apparently introduced into the verbal system through the finitization of an originally nominalized construction (DeLancey 2010, 2011b). In Northern Chin, Old Kuki, and Southern Chin there is also a distinct set of postverbal agreement forms, which retain older material from the PTB paradigm (Peterson 2003, DeLancey 2013a, b). Typically in the postverbal agreement paradigm the agreement morpheme, alone or fused with a morpheme expressing tense/aspect, negation, or other verbal categories, is a full syllable, and phonologically independent of the verb.

although for some languages they have been recorded as suffixes. In all languages the postverbal paradigm is used with negated verbs. We will return to these forms in the next section; here we will look at a newly-discovered relict paradigm which provides the link between the Northern Chin forms and the ancient paradigm surveyed in Section 1.

The 1<sup>st</sup> person postverbal indices obviously are based on the PTB 1<sup>st</sup> person suffix #-ŋ. The 2<sup>nd</sup> person forms have long been suspected of being reflexes of #t-, and we will see in Section 2.2.2 that they are. Here we will look at a recently-discovered subparadigm in certain Old Kuki languages where the origin of the personal indices is transparent. The crucial data come from Koireng (C. Y. Singh 2010:114-5), and Moyon (Kongkham 2010) and the closely-related Monsang. These languages have a conservative set of agreement indices in the unrealized or future negative paradigm:

	Realized negative	Unrealized negative
1s <sub>G</sub>	$\Sigma$ -mək-iŋ	Σ-no-ni-ŋ
1 <sub>PL</sub>	$\Sigma$ -mək-uŋ	Σ-no-mə-ni
2sg	Σ-mək-ci	$\Sigma$ -no-ti-ni $^{8}$
2 <sub>PL</sub>	Σ-mək-ci-u	Σ-no-ti-ni-u
3sg	$\Sigma$ -mək-e	Σ-no-ni
3 <sub>PL</sub>	$\Sigma$ -mək-u	Σ-no-ni-u

**Table 6: Koireng negative paradigms** 

Clearly -mək- and -no- are the realized and unrealized negative morphemes. Realized negative -mək- is followed directly by the personal indices -iŋ 1SG, -uŋ 1PL, ci 2, and -u PL, all of which are found throughout Northern Chin and Old Kuki.

In the unrealized paradigm there is an additional suffix -ni, a transparent grammaticalization of the copula ni, which is attested across the family, and throughout Kuki-Chin. In this fossilized paradigm we see it with 1<sup>st</sup> person suffixal agreement and the 2<sup>nd</sup> person #t- prefix, exactly parallel to what we have seen in rGyalrong, SCK, and Magar. Factoring out the common negative element leaves this paradigm:

	Singular	Plural
1	ni <b>-ŋ</b>	<b>mə-</b> ni
2	<b>ti-</b> ni	<b>ti-</b> ni-u
3	ni	ni-u

Table 7: Fossilized paradigm of ni in Old Kuki

Note, beside the personal indices  $1^{st}$  - $\eta$  and  $2^{nd}$  ti-, the ma- plural prefix, elsewhere found only in Kiranti and Jinghpaw (DeLancey 2011c). These three affixes represent inheritance from PTB into PKC; the plural u is a KC innovation.

The 1<sup>st</sup> and 2<sup>nd</sup> person indices in this paradigm match those in rGyalrong, SCK, and Magar, both in form and in inconsistent position relative to the inflected stem. It is

<sup>&</sup>lt;sup>8</sup> The *Koireng Grammar* has a misprint in example 24, p. 114: *-niti* should be *-tini*. The correct form is given in the text above on p. 114.

difficult to imagine this correlation arising through chance resemblance. The origin of the Koireng unrealized negative forms is the same as for similar constructions in Bantawa and Magar, where a new finite verb form is created from the fusion of an uninflected stem and a conjugated postverbal auxiliary.

### 2.4 Summary: Direct evidence and argument for #t-

In Section 3 we will see reflexes of the #t- morpheme in other branches, but these analyses depend on our prior recognition of an inherited #t- prefix. Let us review the evidence that we have seen so far. In four groups which have never been suggested as belonging to the same branch of the family, we find an agreement paradigm built around a 1<sup>st</sup> person suffix - $\eta$  and a 2<sup>nd</sup> person prefix t-. In rGyalrong and SCK this is the basic agreement paradigm and occurs freely with all verbs. In Magar we see it fossilized in a paradigm where it demonstrably represents an incorporated conjugated auxiliary. We find both affixes elsewhere in the Magar paradigm: 2<sup>nd</sup> person tə-, but not 1<sup>st</sup> - $\eta$ , occurs in the Future forms, 1<sup>st</sup> - $\eta$ , but not 2<sup>nd</sup> tə-, in the Preterite. In both tenses the non-corresponding form – 1sG - $\eta$  in the Future, and 2sG  $\eta$  in the Preterite – is a secondary innovation. Finally, in Old Kuki, we find the paradigm, as in Magar, as a fossilized tense paradigm:

	1sg	2sg
SCK	$\Sigma$ - $\eta(a)$	tw-Σ
rGyalrong	$\Sigma$ -(a) $\eta$	tə-Σ
Magar future	-Σ- $n\partial$ (cf. Preterite -Σ- $a\eta$ )	<i>-tə-</i> Σ <i>-e</i>
Present suffix	*le-aŋ	*tə-le
Old Kuki negative future	ni-ŋ	tə-ni

Table 8: Summary of -n/t- paradigms

In rGyalrong we find the *t*- prefix throughout the branch. In Kiranti, it is found in only a few languages. But the logic of the Comparative Method requires that we reconstruct this system for the common ancestor of the two branches. The 1<sup>st</sup> person velar nasal suffixes in rGyalrong could be interpreted as recent morphologization of the independent pronoun. This possibility is less evident in Kiranti, where independent 1<sup>st</sup> person pronominals are usually innovative forms in *k*-, but many languages retain the older nasal root as part of an innovative disyllabic stem, e.g. Camling *kaŋa*, Bantawa *uŋka* 'I'. There is, however, no evident pronominal or other source in either branch for the *t*- prefix, and thus no way to account for it as a recent grammaticalization.

The strongest argument for the cognacy of the two paradigms is the corresponding inconsistency in morphological position. It is difficult enough to imagine a scenario by which a language could end up with a  $2^{nd}$  person prefix in paradigmatic relation to a  $1^{st}$  person suffix, without having to imagine it happening independently more than once. While  $2^{nd}$  person #-n in the same paradigm as  $1^{st}$  person #-n is attested more widely than

#t-, the inconsistency of the # $-\eta$  / t- paradigm gives the comparison extra strength. The reason why grammatical forms, and especially morphological paradigms, are stronger evidence than lexical roots is because they correspond in more dimensions. For example, Thulung (Western Kiranti) mik- and Lavrung (rGyalrongic) mək<sup>55</sup> 'eye' correspond perfectly in function, and quite closely in form, since both consonants match. This comparison would not be enough to establish relationship between two languages, but given the hypothesis that both are Tibeto-Burman, we would be likely to take these as cognate, pending a demonstration of the appropriate sound correspondences. Now consider Thulung -na, Lavrung -n '2sG agreement index'. The functional correspondence is perfect, and the formal correspondence is as good as it could be, although that is only the correspondence of one segment, and a very common and unmarked one. By itself this is a less unlikely, thus less convincing, comparison then 'eye'. But it is not by itself. In both languages this is a suffix, so the forms correspond in syntagmatic position. And it both it alternates paradigmatically in one semantic dimension with Thulung  $-\eta u$ , Lavrung -n '1sg', and the other with Thulung -ni, Lavrung -n '2pl'. These syntagmatic and paradigmatic correspondences strengthen the comparison.

Of these criteria, syntagmatic correspondence trumps all others. We could not compare the Thulung and Lavrung suffixes with the n-  $2^{\rm nd}$  person prefixes in Trung or Magar, although they correspond beautifully in form, function, and paradigmatic position, because they fail to correspond syntagmatically. But usually in comparing paradigms, syntagmatic correspondence can be invoked only once. Of course the other members of the paradigm gain credibility in the same way as -na/-n: the comparison Thulung  $-\eta u$ , Lavrung  $-\eta$  '1sG' is strengthened by its membership in the paradigm as well. But when we are evaluating the overall strength of the evidence, we cannot count the syntagmatic correspondence independently for each member of the paradigm. What we have is one suffixal paradigm corresponding, member by member, with another, not a set of independent forms which by striking coincidence happen to have the same syntagmatic position. If we give the correspondence Thulung -na: Lavrung -n extra credence for being part of the same paradigm with  $-\eta u$ :  $-\eta$  and -ni:  $-\eta$ , then it doesn't gain even more credibility from the fact that both -na and -n are suffixes, as that is expected from the fact that all the forms belong to the same suffixal paradigm.

Now consider Bantawa (SCK) ti- and Zbu (rGyalrong) ta-. This has everything going for it that our -na: -n comparison had: perfect functional correspondence, good formal correspondence (though of only one segment), and paradigmatic alternation with Bantawa -na, Zbu -an '1sG'. But in this case the syntagmatic correspondence of the  $2^{nd}$  person prefixes does additionally strengthen the comparison, because it is not predictable from the position of the other members of the paradigm. In fact, the prefix is not in strict paradigmatic alternation with the agreement suffixes, since it co-occurs with the  $2^{pL}$  suffix in both languages: Bantawa tI- $\Sigma$ -in, Zbu ta- $\Sigma$ -na. This gives us a particularly strong comparison, since these forms contain each contain two corresponding morphemes, with their overall configuration in the construction also corresponding.

A paradigm consisting entirely of grammaticalized pronominal roots presumably represents only a single innovation. But the #- $\eta$  / #t- paradigm cannot be so explained. Since the two indices occupy distinct syntagmatic positions, they cannot have the same origin. This inference is reinforced by the fact that the 1<sup>st</sup> person suffix is identifiable as a reflex of a pronominal root, while the 2<sup>nd</sup> person prefix is not. The #- $\eta$  / #t- paradigm is

typologically unusual, and diachronically must be the result of several distinct innovations. So it is unlikely to have arisen more than once; rather it must represent common inheritance in all of the languages where we find it. The common source for these four branches can only be PST; no suggested classification would put Kuki-Chin together with rGyalrong.

#### 3 Secondary evidence for #t-

Bauman (1975: 203-6) points out the resemblance of the rGyalrong  $t\bar{\sigma}$ - prefix to  $2^{nd}$  person indices in other languages: Tiddim postverbal  $t\bar{\epsilon}$ ?, the d- in Jinghpaw nd-ai, and Chepang = $t\bar{\epsilon}$ ?. However, he was not able to solve the problem posed by the incompatible morphological behavior and position of these various forms. DeLancey (1989) posited a "clitic series", but this proposal has not held up. Recent research shows that each of these forms does trace back partly to #t-, but through secondary developments such that internal reconstruction is necessary to uncover the original prefix.

### 3.1 The problem of Chepang

Chepang =te? indexes a 2<sup>nd</sup> person argument, and often occurs following the verb stem, but it can cliticize to any constituent of the clause – it is "attached to whichever constituent contains significantly new information" (Caughley 1982: 89):

- 7) *?amh bəy?-ne-w?* food give-NONPAST-AGENT.FOCUS 'He gives food.'
- 8) ?amh bey?-te?-ne-w? food give-2-NONPAST-AGENT.FOCUS 'You give food.'
- 9) ?amh-te? bey?-ne-w? food-2 give-NONPAST-AGENT.FOCUS 'You give food.'

The te? particle is always present in the clause if there is a  $2^{nd}$  person argument, except in the  $1 \rightarrow 2$  form, where instead we find -na. (The same gap, likewise filled by #-n, occurs in the distribution of t- in Kiranti, reinforcing the comparison). But in the languages which we have considered up until now the form is a prefix on the verb, so the behavior of the putative cognate te? in Chepang is anomalous. It can occur with NP's as well as verbs, and when it marks the verb, it is a suffix rather than a prefix. Its freedom of position suggests a barely-grammaticalized construction of recent origin. Thus it is difficult to equate it with the clearly ancient #t- which we have seen above.

The solution is provided by Jacques (2012a). Chepang has a contrastive focus particle *le?* which has the same syntactic distribution as *te?*, and a similar pragmatic function (Caughley 1982: 91-2):

- 10) na-ko? kim ?i-le? (khe?-na?)
  I-GEN house this-FOCUS (be-NONPAST)
  'My house is this one!'
- 11) *2ow-ko2 ri payh-le?-2a* that-GEN spirit return-FOCUS-PAST 'His spirit has *returned*.'

Both *te?* and *le?* have the same pragmatic force, differing only in the specific association of *te?* with 2<sup>nd</sup> person. Jacques proposes that *le?* was originally a copula, a normal source for contrastive focus marking. Then *te?* originated as an inflected 2<sup>nd</sup> person form \**t-le?* (Jacques 2012a: 102-106). Jacques' solution neatly accounts for both the formal and functional (2<sup>nd</sup> person) similarities and the syntagmatic and functional (focus marking) differences between Chepang *te?* and the 2<sup>nd</sup> person prefixes of rGyalrong and Kiranti. Recall that we have already seen the inferred form \**t-le?* in Magar in the fossilized 2<sup>nd</sup> person copula *tə-le*, providing external support for Jacques' proposal.

# 3.2 A problem in the morphology of Archaic Kuki-Chin

While the innovative prefixal paradigm in Kuki-Chin has been the topic of study since the beginning of Kuki-Chin studies (Konow 1902: 515-517), the existence of the archaic postverbal paradigm was not noted until Henderson (1957, 1965) and Stern (1963) encountered it in Northern Chin. The same paradigm is also found in many Old Kuki languages, including Koireng and Moyon-Monsang. This alternate paradigm occurs either as a stylistic alternative to the prefixal paradigm, as in Tedim, or in complementary distribution with it according to tense/aspect or other verbal categories, as appears to be the case in the Old Kuki languages. In this paradigm the agreement indices are not morphologically bound to the verb stem. Rather, with or without attached TAM or negative morphemes, they constitute phonologically independent AGREEMENT WORDS which follow the lexical verb. The complex agreement words which also contain tense/aspect and other types of information are transparently grammaticalized auxiliary verbs. The simple agreement words are old inflected copulas, as we will see.

Consider again the forms of the Koireng negative paradigms. Previously we were concerned with the transparent occurrence of the  $\#-\eta$  / #t- paradigm in the unrealized negative. Now let us consider the ordinary agreement forms, which we see in the realized negative (cp. Table 6):

	Realized negative	Unrealized negative
1s <sub>G</sub>	mək iŋ	no ni-ŋ
1 <sub>PL</sub>	mək uŋ	no mə-ni
2sg	mək ci	no ti-ni
2 <sub>PL</sub>	mək ci-u	no ti-ni-u
3sg	mək e	no ni
3 <sub>PL</sub>	mək u	no ni-u

Table 9: Agreement words in Koireng negative paradigms

The unrealized negative forms obviously represent conjugated forms of an auxiliary, ni, which is easily recognizable as a pan-Kuki-Chin copula. While the other forms are less transparent, we can still see the outlines of an auxiliary conjugated in the same way. This seems to be, or have been, a front vowel with no initial consonant, which might explain the palatalization of  $2^{nd}$  person t- to c-. We will return to this question later.

These forms are consistent across Northern Chin and Old Kuki:

	1sg	1pl	2sg	2pl	3sg	3pl
Tiddim	ìŋ	ùŋ	te?	ú? tε?		иР
Sizang	iŋ·	ûŋ <sup>·</sup>	te <sup>·</sup>	ù tè	(a)	
Moyon	iŋ	иŋ	сә	co	Э	әе
Monsang	iŋ	иŋ	tsr	tsu		hε
Koireng	iŋ	иŋ	ci	ci-u	e	и

Table 10: Postverbal agreement morphemes in Northern Chin and Old Kuki

The velar nasal in the  $1^{st}$  person forms obviously recalls the PTB suffix, but the vocalism needs to be explained. Similarly, the  $2^{nd}$  person forms, especially in Northern Chin, recall the #t- prefix, except that they are not prefixes, but postverbal independent words. Again, the vocalism needs explanation. Since the t- and c- forms correspond paradigmatically within Koireng and Moyon-Monsang, as well as between Old Kuki and Northern Chin, they must reflect the same form; we return to this issue in Section 5.2.

The clue to the original structure of this paradigm, and the essential link back to the original PTB 1<sup>st</sup> person suffix and 2<sup>nd</sup> person prefix, are found in the relict unrealized negative paradigm, as we saw in Section 2.3. The transparent history of the *ni* paradigm suggests an obvious historical interpretation of the more opaque forms found in the other paradigms. The important difference between the relict *ni* paradigm and the general NC-OK postverbal paradigm is that in all the other paradigms, the 2<sup>nd</sup> person index *te2* or *ce* is in the same position class as 1<sup>st</sup> person *iŋ*, both occurring in absolute final position, while in the Monsang-Moyon and Koireng negative future, 2<sup>nd</sup> person *tV*- precedes a tense marker which *-ŋ* follows. If we imagine the more general paradigm to also have originated as inflected forms of a copula functioning as an auxiliary, we can explain its position and phonological independence. Then the \**i* vowel in the 1sG forms, and the \**e* which we must reconstruct for the 2sG, are the remnants of this copula. In fact, the paradigm which we would reconstruct on the basis of the Northern Chin and Old Kuki forms is strikingly similar to the paradigm of the copula in Trung (Dulong), with plausible cognates even further afield:

	Bantawa	PKC	Trung
	copula	agreement	copula
1sg	yak-ŋa	*i-ŋ	ī-ŋ
2sg	tu-yak	*t-e?	nu-è
3sg	yak	*a?	é

Table 11: Agreement words and inflected copulas

Note that Proto-Kuki-Chin \*eŋ and \*iŋ rimes are preserved unchanged in these branches (VanBik 2009: 369-372), so the vocalic alternation between the 1sG and 2sG agreement words is inherited from PKC, and thus is legitimately comparable with the identical irregular variation in Trung. But regardless of the correctness of this etymology, the general origin of the Kuki-Chin postverbal agreement words in an old inflected copula is quite evident. Thus, as scholars have suspected all along, the postverbal agreement paradigm in Kuki-Chin does represent inheritance from PTB, and the te? 2<sup>nd</sup> person particle gives us evidence from one more branch for the PTB #t- prefix.

# 3.4 Jinghpaw

Jinghpaw, like Kuki-Chin, has an agreement word construction (Dai and Diehl's (2003) "sentence-final words", see DeLancey 2011c). Again we find unmistakable reflexes of #t-. An obvious candidate is the form  $deP(/teP^{3l}/)$  which indexes a  $2^{nd}$  person object when the subject is  $1^{st}$  person, or a  $1^{st}$  person subject is urging a  $2^{nd}$  person to perform some action (Dài and Xú 1992: 287, 294):

	State	Event
$1 \rightarrow 2sg$	de? ai	si-n de? ai
1 → 2pl	mă-de? ai	mă-si-n de? ai
1 → 3sg	we?ai	sé? ai
1 → 3pl	mă-we?ai	mă-sé? ai

**Table 12: Object indexation in Jinghpaw** 

Like the identical form in Northern Chin, this cannot be a direct reflex of #t-, but must represent an inflected copula. (As does the  $1\rightarrow 3$  form, where the final -2 < \*-k, which is in an aspect-based alternation with  $1 \text{SG} - \eta$ , see DeLancey 2011c).

Bauman and others note intimations of #t- in other Jinghpaw agreement words:

	Unmarked	Perfective
1sg	ŋ-ŋ-аі	sa-ŋ-ai
1PL	ga? ai	sa-ga? ai
2sg	n-d-ai	si-n-d-ai
2 <sub>PL</sub>	ma-d-ai	ma-si-n-d-ai
3sg	ai	s-ai
3PL	ma? ai	ma-s-ai

Table 13: Simple agreement words in Jinghpaw

Both the n- and the d- elements in the  $2^{nd}$  person forms resemble our #-n and #-t-forms. As with in Kuki-Chin, the problem has always been the inexplicable syntagmatic position of the d- morpheme. The Jinghpaw paradigm appears to be explained in the same way: the ai sentence-final particle to which it attaches was originally a grammaticalized copula (Thurgood 1982, Matisoff 1985), on which d- was an agreement prefix.

This analysis requires an earlier construction with both the lexical verb and the auxiliary conjugated for person: \* $\Sigma$ -n t-AUX. Such constructions occur in Tibeto-Burman, as in Kulung (Tolsma 2006: 95)

12) bolu tho-n pi-yan
wall build-2SG.PAT BEN-1SG→2.NPT
'I'll build a wall for you.'

Close to our formula for the source construction for the Jinghpaw sequence of #-n t- is the Bantawa construction (Doornenbal 2009: 199; glosses slightly adapted):

13) *ti-khar-a-nin-?o ti-yuŋ-in-y-in* 2-go-PAST-2PL-NMZ 2-be-2PL-PROG-2PL 'You.pl had gone'

# 4 You are truly special: Evidence for the marked behavior of 2<sup>nd</sup> person forms

The evidence we have seen implies that #-n and #t- can both be reconstructed for PTB, but as distinct verb forms; we will address this question in Section 5. But if there were two distinct 2<sup>nd</sup> person verb forms in PTB, they must have had different origins, and different original functions. In this section we will look at two Tibeto-Burman examples that suggest different ways in which such a situation might have come about.

The idea that 2<sup>nd</sup> person has a special status for sociolinguistic reasons is selfevident, and examples are not far to seek anywhere in the world that one might look. Many of the morphological manifestations of this tendency in Tibeto-Burman are found in the transitive paradigms of languages with hierarchical agreement such as Kiranti, rGyalrong, Nung, and Nocte-Tangsa; in many languages particularly complex patterns are found in transitive forms involving both 2<sup>nd</sup> and 1<sup>st</sup> person (King 2002). We will see a hint of this in the composite Central Chin paradigm in 4.1, where we trace the further development of old #*t*-inflected forms.

But the #t- / #-n alternation is a different phenomenon. We find both in both intransitive and transitive paradigms. What we have is not linguistic dancing around the awkward problem of talking about your and my interactions with each other, but the more general awkwardness of talking to someone else about their own actions. In 4.2 we will briefly look at a possible source for another  $2^{nd}$  person index, as an illustration of the kind of explanation which we will have to seek for the origin of  $2^{nd}$  person #t-.

# 4.1 The special status of 2<sup>nd</sup> person I: Tertiary reanalysis in Central Chin

We see the final reanalysis of #t- in relict  $2^{nd}$  person forms in the Central Chin languages Mara (Lakher) and Mizo (Lushai). Central Chin has abandoned the postverbal paradigm, and has only the innovative pan-Kuki-Chin prefixal paradigm, originally a nominalized verb construction inflected with possessive proclitics (DeLancey 2010, 2011b, c). But in the transitive paradigm both Mizo and Mara also have a  $2^{nd}$  person index similar in form to the  $2^{nd}$  person postverbal #ce in Old Kuki. In Mizo this still occurs postverbally, and, as in Old Kuki and Northern Chin, it is still phonologically independent of the verb. In contemporary Mizo, it indexes  $2^{nd}$  person object, but in an older construction preserved in folktales and formulaic requests it also occurs in the  $2 \rightarrow 1$  form (Chhangte 1993: 91-2):

Object Subject	1sg	2sg	3sg
1sg		<i>ka-</i> Σ <i>cê</i>	ka-Σ
2sg	$mi$ - $\Sigma$ $(c\hat{e})$		i-Σ
3sg	mi-Σ	<i>a</i> -Σ <i>cê</i>	α-Σ

Table 14: Agreement indices with singular arguments in Mizo (Lushai)

Evidently cognate forms occur in Mara<sup>9</sup>, with the same distribution, except that in the 20BJ forms the morpheme has shifted to preverbal position:

<sup>&</sup>lt;sup>9</sup> The discussion of the Mizo and Mara paradigms in DeLancey 2013b suggests that both derive from an innovation shared between the Central and Maraic subbranches. I now have data showing the same construction in Old Kuki (Tarao *ki-mu ce* 1-see 2 'I see you'; thanks to L. Morre Tarao for this information). Thus the use of 2nd person *ce* with a verb with the 1st person prefix must predate the separation of these three branches, which probably pushes it back to Proto-Kuki-Chin.

Object Subject	1sg	2sG	3sg
1sg		ei <b>cha</b> Σ	ei Σ
2sg	ei na Σ <b>chi</b>		na Σ
3sg	ei na Σ	a <b>cha</b> Σ	α Σ

Table 15: Mara person agreement (after Arden 2010)

The Mara  $2 \rightarrow 1$  postverbal *chi* corresponds in position and function to Mizo  $c\hat{e}$ , while the preverbal *cha* in the 20BJ forms corresponds perfectly in distribution, but not in position, to Mizo  $c\hat{e}$  in the equivalent 20BJ forms. The difference in syntagmatic position would be problematic if these were affixes, but they are not: Mizo  $c\hat{e}$  and Mara *cha* and *chi* are all phonologically independent of the verb stem.

We see here that "agreement" is not simply a matter of referential management. If verb agreement were solely serving some syntactic purpose such as keeping track of grammatical relations or the arguments of the verb, the innovative  $2^{nd}$  person indices – na in Mara, i in Mizo – would be sufficient to the purpose. Speakers of Proto-Central Chin, when they ceased to use the postverbal paradigm, nevertheless attached sufficient importance to one element of it to retain that element and attach it to new verb forms. It is important to note that Central Chin did not retain #ce instead of adopting a new proclitic  $2^{nd}$  person form, but in addition. Both languages have a perfectly good new  $2^{nd}$  person index, which is part of the same paradigm as the 1 and 3 person indices. So there must be some particular reason for the retention of #ce, and that reason has to do with the special sociolinguistic status of  $2^{nd}$  person.

# 4.2 The special status of 2<sup>nd</sup> person II: #-o in Nocte-Tangsa

The last 2sG form which I will discuss is the form represented by Nocte  $\mathfrak{I}$ , Hakhun  $o \sim u$ , etc. The Konyak or Northern Naga languages divide into two groups (Marrison 1967). One, including Konyak, Chang, and Phom, shows little inherited morphology. The other, including Nocte, Wancho, and the diverse Tangsa group, retains an agreement word paradigm demonstrably cognate with that of Jinghpaw (DeLancey 2010, 2011c), which preserves all of the PTB 1sG, 1PL, and 2PL forms discussed in Section 1. A unique feature of the Nocte-Tangsa paradigms is the 2sG form. While Jinghpaw retains reflexes of both #-n and #t-, there is no trace of either in Nocte-Tangsa, which has  $-u \sim -o \sim -\mathfrak{I}$ :

	1sg	1 <sub>PL</sub>	2sg	2 <sub>PL</sub>
Nocte	ΛŊ	i	5c	an
Cholim	aŋ	i	u	iŋ
Hakhun	γ	i	o ~ u	an
	(< -aŋ)			

Table 16: Agreement morphemes in Nocte-Tangsa

But even assuming the idea of PTB \*-o imperative, an imperative construction does not seem to be a very likely source for a declarative 2<sup>nd</sup> person form. The use of a 2<sup>nd</sup> person form as an imperative is common, but the reverse shift of imperative to 2<sup>nd</sup> person is not. However, work by Zeisler (2002, 2004: 849-862) shows that the original function of the Imperative stem of the Written Tibetan verb was neither 2<sup>nd</sup> person declarative nor imperative, but an irrealis form which she calls potentialis. This function is retained in certain constructions in Old Tibetan, as well as in modern Themchen Amdo.

Themchen retains a large inventory of verbs which still distinguish three stem forms, which Haller (2004) calls Imperfective, Perfective, and Modus. The last of these corresponds to the Written Tibetan Imperative stem, and when used alone it has that function in Themchen as well. But in a negative or an interrogative construction (both marked by prefixes on the verb stem), the Modus stem indicates potentiality or ability. (I follow Haller in glossing his Modus stem as IMP for Imperative):

14) stamdzən-yə glox pta-t<sup>h</sup>a-ra,
Tamdrin-ERG lamp light.PFV-NVOL.EVID-CONC

ma-t<sup>h</sup>u-t<sup>h</sup>a
NEG-light.IMP-NVOL.EVID

'Tamdrin [tried to] light the lamp, but [it] didn't light.' (Haller 2004: 99)

15)  $te^ho$   $k^heri$  ləç  $ə-s^hol$ 2SG alone:ERG sheep VOL.EVID.INT-kill.IMP 'Can you kill a sheep alone?' (Haller 2004: 84)

Zeisler presents examples showing the same potentialis function of the Imperative stem in Old Tibetan, both under negation, as in Themchen, and in the affirmative:

16) rigs [=ri dags] bśor-na sod game pursue.PRES-IF kill.IMP 'If [you] pursue game [you] will be able to kill it.' (Zeisler 2002: 447; segmentation and glosses slightly altered)

### Zeisler hypothesizes that:

[T]he potentialis function is most often found with negation. This makes it quite plausible that the imperative function is a secondary development, derived from the positive statement of ability and then generalised to the extent that the original meaning of the stem form is fully preserved only in negation. (Zeisler 2002: 449)

Assuming, for the sake of argument, Shafer's hypothesis that the vocalism of the Tibetan Imperative stem derives from an \*-o suffix with broader TB roots, and Zeisler's suggestion of an original potentialis function of which the imperative is a secondary reinterpretation, we have a plausible source for the Nocte-Tangsa 2<sup>nd</sup> person form. We infer for PTB a potentialis construction which could be used as a polite way of indirectly alluding to potential action on the part of a 2<sup>nd</sup> person. In many languages this locution eventually took on the role of a true imperative. The Nocte-Tangsa data, however, suggest that this shift was not completed in PTB, so that Nocte-Tangsa inherited the construction with a vague enough function that it could still be reinterpreted as a 2<sup>nd</sup> person indicative form. Note that in these languages Nocte and Moklum the imperative is also -o, plural -an. In synchronic terms this simply means that the 2<sup>nd</sup> person forms are used for the imperative, as in many languages. But in this context we can also interpret the situation as the old potentialis moving into all 2<sup>nd</sup> person functions.

# 5 Reconstructing #t-

As summarized in Section 2.4, the primary evidence from rGyalrong, SCK, Magar and Old Kuki establishes the existence of a 2<sup>nd</sup> person verb form marked by a #t- prefix in their common ancestor, which can only be PTB. In this section we will look more closely at some of the details of this construction in PTB and in the branches.

# 5.1 Distribution of 2<sup>nd</sup> person affixes

The overall distribution of the two affixes makes it difficult to avoid reconstructing both for PTB. Counting only languages where 1sG #-ŋ is also found, #-n is attested in Kiranti, Kham-Chepang-Magar, Western Himalayan, Jinghpaw, Qiangic and rGyalrongic (also possibly in Keman). The prefix #t- is found in Kiranti, Kham-Chepang-Magar, Jinghpaw, Kuki-Chin, and rGyalrong. Thus each is robustly attested in three out of Bradley's (1997) four major branches of Tibeto-Burman (Western, NE India, and Eastern, but not in his Central branch). According to Matisoff's (1996) classification, which has seven primary branches, #-n is attested in three (Himalayish, Jinghpaw-Nungish, and Tangut-Qiang) and #t- in four (all those plus Kamarupan). Even in the controversial Thurgood-LaPolla

classification (Thurgood 2003, LaPolla 2003), although its sole purpose is to place all the languages with archaic verb agreement systems into a single branch, we have #-n in two of their five branches (Rung and Bodo-Konyak-Jinghpaw) and #t- in three (those plus Kuki-Chin-Naga). The only branches in the "Rung" system which show no evidence of either 2<sup>nd</sup> person index are the very cohesive, low-level Bodic and Lolo-Burmese.

From the attested distribution of #t- and #-n reflexes we can see that these represented distinct verb forms, i.e. that in PTB a verb could be inflected with one or the other, but not both at the same time. As far as I have found, only in Situ rGyalrong do we find verb forms with reflexes of both #t- and #-n attached to the same stem. In most of the languages with inherited verb agreement we find only one or the other. In only a handful of languages there are reflexes of both #t- and #-n. SCK and Chepang preserve -na only in the marked  $1 \rightarrow 2$  transitive slot (Ebert 1997: 18), and aside from that always use #t- to index  $2^{nd}$  person. The other rGyalrong languages have only #t-, while Lavrung has only #-n. In Jinghpaw they both occur in the same construction, but attached to two different stems. All other languages, and most branches, have only one or the other. There is no trace of #-na in Kuki-Chin, and none of #t- in Western Himalayan. So we have to reconstruct two  $2^{nd}$  person forms, one with the prefix and one with the suffix, rather than one doubly-marked form.

Therefore, when we compare Kiranti languages, where #t- occurs in only one subbranch, and #-n in the rest, or rGyalrongic, with #t- in rGyalrong proper and #-n in Lavrung, these substantial differences in the paradigmatically corresponding verb forms do not represent restructuring of original verb forms. Rather, the ancestral language must have had both forms, and the daughters have simply retained one and abandoned the other.

#### 5.2 The form of the prefix

What I have written as #t- could as well be represented with an unspecified vowel slot #tV-. In earlier work I inferred an \*e vowel based on the testimony of Chepang and Northern Chin. But everywhere we find the original prefix it either has the epenthetic vowel or copies the stem vowel. The simplest reconstruction, as suggested by Jacques, is that in PTB likewise the prefix did not have a specified vowel.

Except for the palatalized forms in Kuki-Chin, the consonant is everywhere /t/. Initial \*t- is generally regular across the family. But Jacques (2012a), citing Michailovsky (1994), points out that the regular reflex of \*t- in SCK is /d/, so that if the tV- prefix is cognate to its resemblants in rGyalrong, the correspondence is irregular. Jacques suggests that this can be explained by a general constraint in Tibeto-Burman (and beyond) that highly-grammaticalized prefixes have only the least-marked stop series, so that we would always expect /t/ for this form. This is a plausible explanation, but the problem deserves some further examination, which should extend to an examination of the distribution of voiced and voiceless forms of two other grammatical prefixes which show irregularities in voicing: the nominalizer #gV-  $\sim kV$ - (Konnerth 2012) and the prohibitive #ta-  $\sim$  #da-. (Given that a prohibitive is intrinsically a form of  $2^{nd}$  person reference, and my suggestion below that #t- might have originated as a nominalizer, either of these could turn out to have more direct relevance to the history of #t-).

Our last problem is the mysteriously palatalized forms which we see in Kuki-Chin. To begin with, we equate the palatal forms in Old Kuki with the /t/ forms in Northern Chin based on their perfect paradigmatic and syntagmatic match: #ce in Old Kuki occurs in the exact same place in the verbal string, and the exact same place in the paradigm, as Northern Chin #te. All other elements of the paradigm, and many of the elements of the verbal syntagm, match very closely in form. But this is not a regular correspondence; in general PKC \*t- is retained unchanged throughout the branch. Moreover, the distribution of the two forms is unpredictable even within the same language. Mizo and Mara both have an imperative morpheme te(?), which can only be a reflex of the postverbal 2<sup>nd</sup> person index still preserved in Northern Chin, but have the palatalized form in the agreement paradigm. Koireng and Monsang-Moyon have /t/ in the unrealized negative paradigm, /c/ or /ts/ elsewhere. In Southern Chin, Hyow has /t/ in the 2sg form, and /c/ in 2pl (Peterson 2003). There is no apparent phonological conditioning for these alternations. VanBik (2009: 27-30) notes some unexplained alternation between /t/ and /ts/ in Tedim, and Matisoff (2003: 139) notes the sporadic affrication of a "prefix" \*d- to tś- in some Kuki-Chin languages, so perhaps we could think of this as something that KC languages are prone to, but that is still not an explanation.

I suspect that a partial explanation lies in the form of the copula which was the basis for the KC agreement words. In the KC forms this seems to have been simply a vowel nucleus, but if we infer an initial palatal glide, that could provide some phonological incentive for palatalization (note the Bantawa forms in Table 11). This neatly explains the distribution of /t/ and /c/ forms in the Old Kuki languages. However, all of the other reflexes in the branch, whichever initial they have, appear to reflect the same original inflected copula, so the palatalization is still irregular. The Old Kuki facts suggest that my hypothetical \*j- copula was a necessary condition for palatalization, but it cannot be sufficient, for the agreement words in Northern Chin, the imperatives in Central Chin, and the singular agreement words in Southern Chin all must reflect the same \*t-j. I have proposed that the missing conditioning factor is not phonological or morphological, but sociolinguistic; there is some reason to think that the contrast between the two forms may have originally marked an affective distinction between more intimate, informal and more distant, formal address (see DeLancey 2013b).

# 5.3 2<sup>nd</sup> person reference in PTB: Imagining a story for #t-

So we must reconstruct two different  $2^{nd}$  person verb forms which coexisted in Proto-Tibeto-Burman. (And perhaps as well as a nascent  $2^{nd}$  person-associated use of a potentialis form). The ultimate origin of #-n in the pronominal root has always been obvious, and since it fits neatly into the paradigm which we reconstruct for other persons, it was presumably the regular  $2^{nd}$  person verb form. Thus the #-t-form must have a different origin. It is possible that #-t-could represent a relict retention from an older paradigm, analogous to #-t-t-form to me to be the most likely explanation. More likely #-t-t-like #-t-t-t-form to me to be the most likely explanation. More likely #-t-t-fixed #-t-t-form to me to be the most likely explanation. More likely #-t-fixed #-fixed #-t-fixed #-t-fixed #-fixed #-

In our present state of knowledge we can only speculate about what the earlier function of #t- might have been. Its prefixal position may be one clue. We cannot

confidently reconstruct much in the way of PTB tense/aspect/modality marking, but such possibilities as have been suggested (e.g. a perfective \*-s, or the potentialis #-o discussed above) are generally suffixal, as, indeed, is almost all the TAM morphology in the family, except where a finite form derives from a nominalization. So perhaps #t-, unlike #-o, did not originate as a finite form. Given the notorious predilection of Tibeto-Burman languages for nominalization constructions of various kinds, a possible initial hypothesis is that the #t- form was a nominalization. (See Matisoff 2003: 142-3 for evidence bearing on the possibility of a noun-deriving \*d- prefix). Nominalization is intrinsically indirective, and thus appropriate for polite 2<sup>nd</sup> person reference. Moreover nominalizers can express aspectual, modal, or evidential meanings (Gerner 2012), and often do in Tibeto-Burman. An irrealis nominalization could be ideal for an impersonal 2<sup>nd</sup> person use: 'One might speak' rather than 'you will speak'.

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#### **Abbreviations:**

AG Agent, CONC concessive, ERG ergative, EVID evidential, GEN genitive, IMP imperative, NEG negative, NMZ nominalizer, NVOL non-volitional, PFV perfective, PL plural, PROG progressive, SG singular

Sources for language data in tables: Bahing, Michailovsky 1975; Bantawa (Hantuva), Doornenbal 2009; Bantawa (Rabi), Rai 1985; Camling, Ebert 1997; Chepang, Caughley 1982; Cholim, Morey 2011; Dhankute Tamang, Poudel 2006; Hakhun, Boro 2012; Hayu, Michailovsky 1988; Jhadewa Magar, Angdembe 1999; Jinghpaw, Dài and Xú 1992 and author's fieldnotes; Khaling, Jacques et. al. 2012; Kinnauri, D. D. Sharma 1988; Koireng, C. Y. Singh 2010; Kulung, Tolsma 2006; Lavrung, Huang 2007; Magar (Jhadewa), Angdembe 1999; Marphatan Thakali, Georg 1996; Meithei, Chelliah 1997; Meyor, Landi 2005 and author's fieldnotes; Moyon, Kongkham 2010; Nocte, unpublished fieldnotes of A. Weidert, see DeLancey 2011c; Pattani, D. Sharma 1989; Rangpo, Zoller 1983; Rawang, Barnard 1934; rGyalrong, Gong to appear; Sizang, Stern 1963; Sunwar, Borchers 2008; Tangut, Kepping 1994; Thangmi, Turin 2012; Thulung, Lahaussois 2003; Tiddim (Tedim), Henderson 1965; Tinani, D. Sharma 1989; Trung (Dulong), Sun 1982.

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