

The language, culture, environment and origins of Proto-Tani speakers: What is knowable, and what is not (yet)

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1. The Tani languages/cultures today

Fairly typical Mainland South-East Asian hill tribal culture(s); traditional animism/shamanism, hunting and gathering, slash-and-burn agriculture (rice, corn, millet, tubers, chilies...), animal husbandry (fowl, pigs, dogs, mithun...), raised bamboo house construction, etc. Culturally/linguistically distinct from both Tibetic groups to the North and West and Indic and plains tribal groups to the South.



Galo houses, West Siang District



Galo nyibo priest and boo acolyte atop altar



Galo man in hunting garb



Galo bride



Galo woman with rice beer

Spoken throughout a more-or-less continuous area from the high plateaus of South-Eastern Tibet (Bokar, Na (Bangni)), throughout all of mountainous, sub-alpine and rainforested Central Arunachal Pradesh (Tagin, Apatani, Galo, Minyong...), down to the Brahmaputra floodplain of Upper Assam (Mising) (Sun 1993; Post 2007).

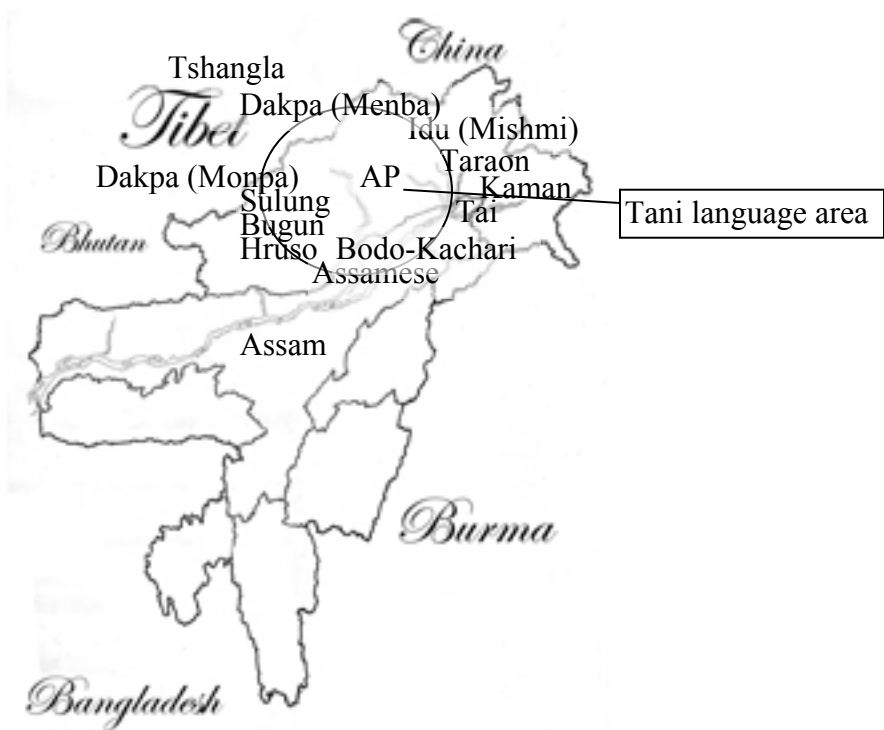


Figure 1 – The cultural-geographical context of the Tani languages today

Sun (1993) has demonstrated the Tani languages' coherence as a (seemingly) distinct branch of Tibeto-Burman, commonly-descended from a single ancestor. As TB subgroups go, the Tani languages are fairly homogeneous – in many areas, they constitute a dialect chain. The main internal division – possibly reflecting an early population divergence, potentially also representing different contact conditions and/or substrate incorporations – is between “Western” and “Eastern”.

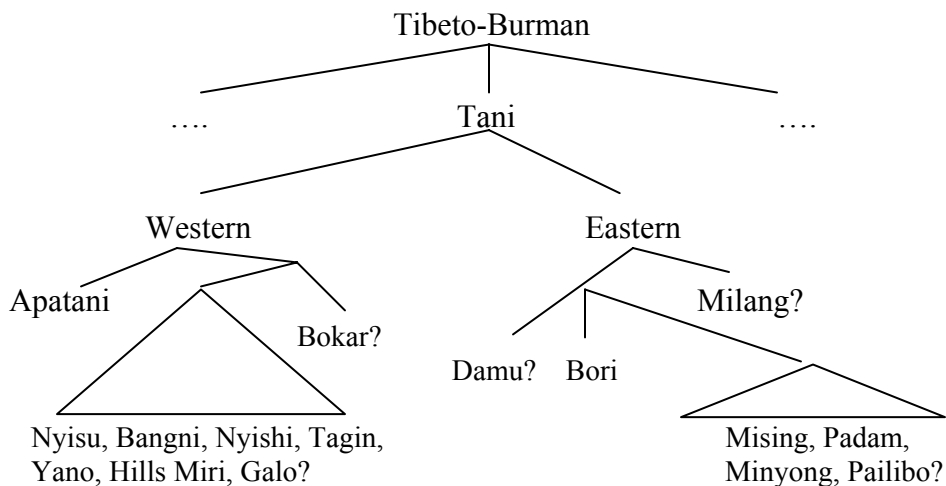


Figure 2 – Provisional Tani stammbaum, based on Sun (1993:272)

The differences between Western and Eastern branch languages include things like differential lexicalizations/grammaticalizations of proto-variation, as well as sound retentions and innovations:

Western	Form	Eastern	Form
Apatani	<i>ɲɿ-i</i>	Bori	<i>ə-ŋo</i>
Bengni	<i>ɲu-i</i>	Bokar	<i>o-ŋoo</i>
Galo	<i>ŋo-i</i>	Damu	<i>a(a)-ŋo</i>
Hills Miri	<i>ɲu-i</i>	Milang	<i>a-ɲu</i>
Nishing	<i>ɲu-i</i>	Mising	<i>o-(ŋ)ŋo</i>
Nyisu	<i>ŋo-i</i>	Padam	<i>ə-ŋo</i>
Tagin	<i>ɲu-i</i>		
Yano	<i>ɲa-i</i>		

Table 1 – Modern reflexes of Proto-Tani **ŋo* ‘fish’, from Sun (1993:241)

However, some cross-branch innovations also suggest ongoing contact and exchange:

Branch Language	Western		Galo: Transitional?		Eastern	
	Bengni	Apatani	Lare Galo	Pugo Galo	Bokar	Mising
PT * <i>a-rjek</i> ‘pig’	<i>ə-rjik</i>	<i>a-lji?</i>	<i>ə-rək</i>	<i>e-(j)ek</i>	<i>ə-jək</i>	<i>e-(j)ek</i>
PT * <i>laŋ</i> ‘take’	<i>laa-</i>	<i>la-</i>	<i>laa-</i>	<i>laa-</i>	<i>loŋ-</i>	<i>laŋ-</i>

Table 2 – Cross-branch innovations, contact and the genetic position of Galo

Relative homogeneity within a subgroup usually indicates relatively shallow time-depth. However, evidence suggests Proto-Tani to in fact be fairly deep within Tibeto-Burman:

- no obvious post-PTB, pre-PT ancestor (Sun 1993:353-357).
- well-entrenched morphology has deep TB provenance (Genitive *ka, Locative *lo, Noun prefixes *a-, *ta-, Article/nominalizer *na)
- less-well-entrenched morphology usually has transparent Tani-internal origins (Galo Imperfective -dùu < PT *duŋ ‘sit; stay; be (somewhere)’, Galo Irrealis -rǎ/-jé < PT *rjé ‘live/exist’...)

It may be that Tani homogeneity is not due to relatively shallow time-depth, but rather to a long period of relative stability, low-intensity non-Tani neighbour contact and high-intensity Tani-internal contact and population exchange.¹

¹ Jacquesson (2007) argues the Tani and Naga areas to be perfectly opposed in terms of language diversity (Tani low, Naga high), despite not being obviously opposed in relative time-depth within TB. He explains this in part in terms of the relatively peaceful relations traditionally found among most Tani groups, leading to frequent population exchange and the emergence of a broad overall stability. This is contrasted to the relatively hostile relations traditionally found among Naga groups, which led to the formation of insular communities and sharp linguistic differentiation. Burling (in press) offers a somewhat different (though potentially compatible) account of linguistic homogenization within certain TB branches in terms of a hypothesized earlier status as (partially creolized) lingua francas.

2. How did it come to be this way?

2.1. The views of (many) Tani people

Many if not most Tani people believe their ancestors to have come to their present area from “up there” or from “the north” (presumably in modern-day Tibet?). This is reflected in migration legends... (cf. also Blackburn (2003/2004))

(1) *ɲunûk deesə cainà tə. (...)*

ɲunù-kə dees = əə caina tə
 1.PL-GEN nation(<Hin)=TOP China(<Eng) DST.UP
 ‘Our homeland is up in China.’ (...)

(2) *tokkə iiləə là iiləə là iiləə là,*

tokə = əə ìi-ləə-là(a) ìi-ləə-là(a) ìi-ləə-là(a)
 DST.ABL.UP=TOP descend-GRAD-NF descend-GRAD-NF descend-GRAD-NF

hogò iidûu naanà.

hogò ìi-dûu-nà = əə na
 SPRX.LOC descend-IPFV-NZR:SUB=COP.IPFV DECL
 ‘From up there (we) came down, down, down, and (we’ve) come down to here [close to the Assam border area].’ (Spoken by Tumar Basar, *dipə* village headman, W. Siang AP)

...as well as in popular beliefs and hunches concerning the contemporary state of things and the extent to which it is likely to closely reflect history:

(3) *əgə, korûm gə dooní bonó namməg^ə nà. (...)*

əgə korûm = gə dooní bó-nó-nam = əgə na
 ANAP.DST ancients=GEN sun invite-APPL:INST-NZR:RLS=DST.IND DECL
 ‘That’s the ancients’ (story of how) the sun was lured with (the gift of a child).’

(4) *əgə...məənəmá...cainá arâa tól eepì.*

əgə məə-nam = əə caina arâa tolò ee = jii
 ANAP.IND think-NZR:RLS=TOP China(<Eng) inside DST.LOC.UP COP.PFV=DISC
 ‘So that...if you think about it...seems like it would have been up in China.’

(5) *hogò, ək kaamaé jì.*

hogò ək káa-máa = ee jii
 SPRX.LOC ANAP.SEMB have/exist-NEG=COP.PFV DISC
 ‘That kind of thing doesn’t seem like it would have happened around here.’
 (Spoken by Tumar Basar, *dipə* Village, W. Siang AP)

In some cases, North-South migrations are a matter of recent historical memory:

(6) *korûm...tolokə...daarɿ tokkə...ŋûn hôg iilà.*

korûm tolokə daarɿ tokkə = əə ŋunù hogò ìi-là(a)
ancients DST.LOC.ABL.UP PLACE DST.ABL.UP=TOP 1.PL SPRX.LOC descend-NF
'Long ago...we came down to here from up there...from up in Daring.'
(Nyamo Riba, resident of Sili village near Assam border, recalling his group's
1962 migration from Daring village, about 60 km to the north)

2.2. Evidence from toponyms (place-names)

Toponyms, including mountain and especially river names often endure long after local languages/populations are displaced (Mississippi, Yarra...). In Tibeto-Burman, toponyms often follow transparently meaning-based compound patterns such as water-x, land-y or mountain-z, and are thus subject to regular patterns of linguistic change.

*In the Tani area, many toponyms begin with di-, likely reflecting PTB *ti 'water' (Dibang, Dihang, Dipa, Dihɿ, Dimu, Dikari...). The Proto-Tani root for 'water' is *si – which is cognate with, but not identical to di-, as reflected in other toponyms (Siang, Suban-Siri, Siyom, Siji, Sipu...). This means at least one of two things:*

- 1) pre-Proto-Tani had a *di reflex of PTB *ti 'water', which later shifted to *si. The archaic place names were retained (perhaps unlikely)
- 2) non-Tani Tibeto-Burman language(s) once occurred in the region, but were eclipsed by Tani languages (more plausible; see Phukan (2001) for a description of archaic toponyms retained in areas of Assam)

2.3. “Origins” of the Tani: some competing hypotheses

- A) a northern origin, presumably somewhere on the Tibetan side of the Himalayan crest. According to this view, the (pre-)Proto-Tani would have presumably descended via the Siang and/or Subansiri River valley(s)
- B) a (south)western origin, presumably somewhere in northern Burma. According to this view, the (pre-)Proto-Tani would have presumably “entered” the area via Pangsau Pass, and eventually made it up to present-day Arunachal, where they spread and dispersed
- C) an “internal” origin, somewhere within present-day Arunachal (though not with the same range), at the earliest potentially-reconstructible stage

3. The environment of the Proto-Tani

3.1. Evidence from topographical deixis

Topographical deixis is a means of grammatically and/or lexically encoding the orientation of a referent vis-à-vis a deictic (shifting) centre – usually, the place of speaking – in terms of one of (at least) three possible planes: upward, downward, and on the same (or an unknown) level .

Common in Tibeto-Burman, though not universally-attested (Ebert 1999; Noonan 2006; Post 2008). Rich in Tani languages in four linguistic domains: 1) motion verbs 2) directional suffixes 3) distal demonstratives and 4) demonstrative postpositions:

	Motion verbs	Directionals	Distal dem.	Locative dem./ postposition
UP/NORTH/UPRIVER	<i>càa-</i>	<i>-càa</i>	<i>tə</i>	<i>tolò</i>
DOWN/SOUTH/DOWNRIVER	<i>ìi-</i>	<i>-lòo</i>	<i>bə</i>	<i>bolò</i>
S-U.LEV/E-W/NON-RIVER	<i>áa-</i>	<i>-áa</i>	<i>áa</i>	<i>aló</i>

Table 3 – Representative set of terms employing topographical deixis in Lare Galo

(7) *təə jəkkəə là?*

tə jə(ə)-kə = əə laa

DST.UP who-GEN=COP.IPFV CQ

‘Whose is **that (thing) up there?**’

Language	Up	Down	Slev
Proto Tani	*ta/ə	*ba/ə	*aa
Apatani (Simon 1972; Abraham 1985)	–	–	–
Nishi (Tayeng 1990)	tə	bə	ə
Nyishi (Abraham 2005)	te	be	alo
Tagin (Das Gupta 1983)	tə-	bə-	a-
Hill Miri (Simon 1976)	tə	bə	ə
Galo (Post 2007)	tə	bə	áa
Tangam (Badu 2004)	te-	me-	e-
Ramo (Badu 2004)	tolo	bolo	alo
Aashing (Megu 2003)	tə	bə	a
Karko (Megu 1993)	tə-	bə-	ə-
Bori (Megu 1988)	taa	bə (?)	aa
Paadam (Tayeng 1983)	tə	bə	ə
Mising (Post field notes)	tolo	bolo	olo
Milang (Tayeng 1976)	ta-	mo-	u- (?)

Table 4 – Topographical deixis in other Tani languages

The environmental source of topographical deixis: saliently uneven terrain

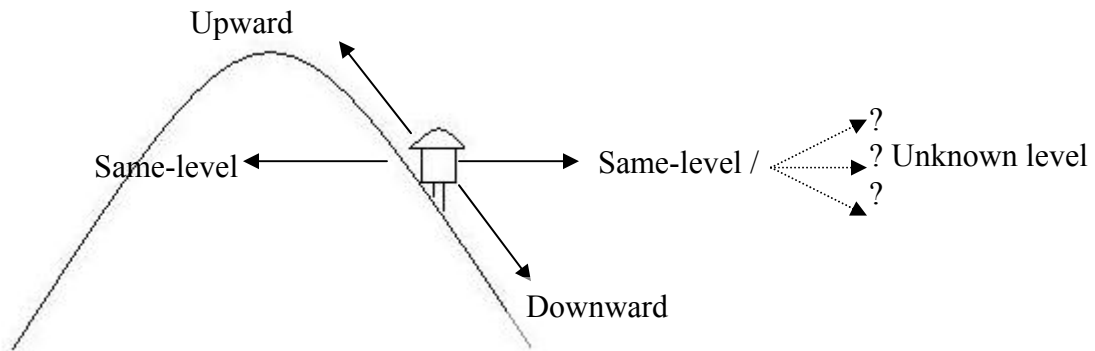


Figure 3 – Environmental source of topographical deixis

Environmental concomitants of topographical deixis: compass and riverine orientation:

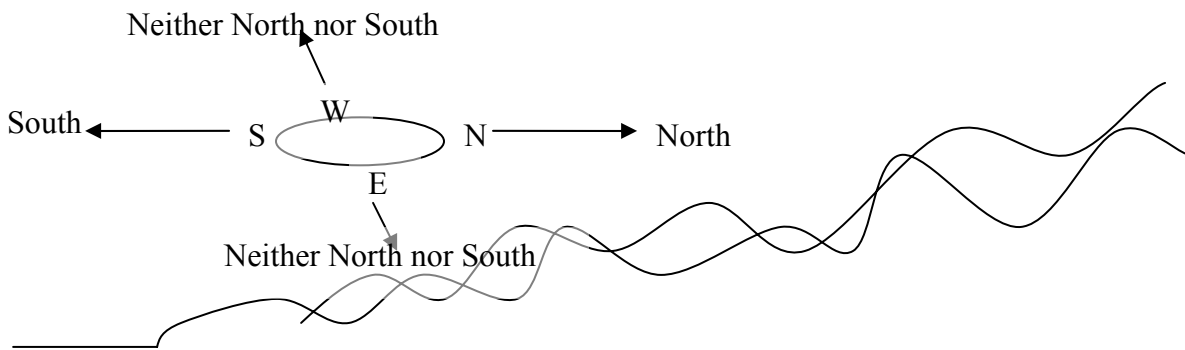


Figure 4 – Environmental concomitants of topographical deixis 1: compass orientation

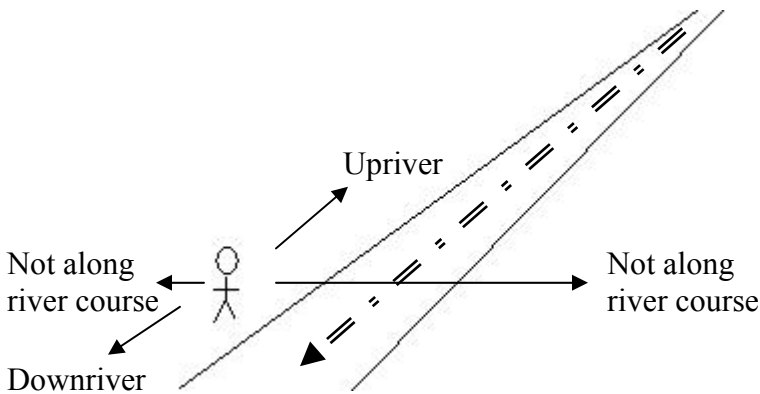


Figure 5 – Environmental concomitants of topographical deixis 2: riverine orientation

Language/branch	Source	Up	Down	Slev
Idu	(Pulu 1978)	atu	ama	ahi
Miji	(Simon 1979)	thaŋ-	phu-	phai-
Cogtse Gyalrong	(Nagano 2003)	to/ta-	no/na-	ko/ka- ²
Caodeng Gyalrong	(Sun 2003)	tə-	nɐ-	kə-/nə- ³
Pinmi	(Ding 2003)	tə-	nɜ-	?
Chantyal	(Noonan 2003)	tuŋ/tor ⁴	məŋ/mar	?
Jero	(Opgenort 2005)	tə-	ɣɔ-	nɔ-
Dhankute Tamang	(Poudel 2006)	Toza	maza	hoza/keza
Lepcha	(Plaisier 2007)	tá-	me-	pí-
Athpare	(Ebert 1997)	to-	ɣo-	ya-
Belhare (LOC)	(Bickel 2003)	-ttaŋ	-pmu	-ʔyá
Yakha	(Hansson 1997)	tuʔna	muʔna	yuʔna
Bantawa (LOC)	(Ebert 2003)	-du	-yu	-ya
Camling (LOC)	(Ebert 2003)	-d(h)i	-i	-ya
Thulung (LOC)	(Ebert 2003)	-la	-yu	-no
Khaling	(Ebert 2003)	-tü	-yü	-yo
Yamphu	(Ebert 2003)	-tu	-mu	-yu
Dzongkha	(van Driem 1998)	‘ayi/yêtshu	‘ami/mêtshu	‘aphidi/phêtshu
Lhasa Tibetan	(S. Delancey, p.c.)	ya	ma	pha?
Mizo	(T. Chhangte, p.c.)	khi-khi	khu-khu	so-so
Lahu	(Matisoff 1973)	nô	mô	(ô)
Lisu	(Bradley 2003)	nø ³³	dzø ³³	go ³³ /ko ⁵⁵
Kathmandu Newar	(Hargreaves 2003)	–	–	–
Dolokha Newar	(Genetti 2007)	– ⁵	–	–
Nar-phu	(Noonan 2003)	–	–	–
Qiang	(LaPolla and Huang 2003)	– ⁶	–	–
Ao	(Coupe 2007)	–	–	–
Meithei	(Chelliah 1997)	– ⁷	–	–
Jingpho	(Qingxia and Diehl 2003)	–	–	–
Singpho	(Stephen Morey, p.c.)	–	–	–
Hakha Lai	(Peterson 2003)	–	–	–
Pwo Karen	(Kato 2003)	–	–	–
Kayah Li	(Solnit 1997)	–	–	–
Akha	(Hansson 2003)	–	–	–

Table 5 – Languages seemingly with and without topographical-deictic demonstratives or cognate (?) formatives in a (almost random) selection of TB languages

² Actually means ‘upstream’

³ Actually means ‘eastward/westward’

⁴ Forms are Locative/Goal marking postpositions, and may reflect demonstrative-locative/allative fusion.

⁵ Has a set of locational adverbs which do not form a set of topographical deictics, but may include a cognate formative *thāt-* as in *thāta* ‘upward’.

⁶ Has class of locational nouns encoding ‘upward’ and ‘downward’ directions on a variety of dimensions, including mountains, river valleys, buildings and space. Seemingly not identical to topographical deixis and not employing cognate formatives, but may be ultimately relatable.

⁷ Seems to have non-cognate directional verb suffixes, but not demonstratives.

Post (2008) suggests that:

- 1) topographical deixis is maintained in hill languages which are not in intense contact with more cosmopolitan plains languages (e.g. Tani, Idu)
- 2) the semantic values of a system of topographical deixis can be altered together with the environment of a population (e.g. Mising, Mizo)
- 3) topographical deixis decays or is lost in hill languages which become plains/plateau languages (e.g. Bodo-Garo, Apatani)
- 4) topographical deixis decays or is lost in hill languages in intense contact with cosmopolitan/non-TB languages (e.g. Newari, some Kiranti)

3.2. Lexicon

Some particularly rich areas of the Galo lexicon include...

...irreducible (= non-derived, non-borrowed, non-composite) lemma for spp. of indigenous bamboo and cane and their products.

əzò ‘Bambusa tulda’, ənɿ ‘Dendrocalamus hamiltonii’, əbùm ‘Dendrocalamus giganteus?’ əsò ‘var. of very thin bamboo’, tabó ‘var. of bamboo, 3cm in diameter’, rocɿ ‘var. of thorny cane’, zəjɿ ‘var. of cane’, takək ‘var. of giant cane’, tacɿn ‘var. of long cane’, tarə ‘var. of thornless cane’...

... irreducible lemma for spp. of indigenous highland flora, megafauna and avifauna.

hocɿk ‘Asian pangolin’, hodùm ‘barking deer (muntjac)’, hokək ‘wolverine bear’, hobó ‘mithun’, hoɿn ‘civet’, horák ‘rhinoceros’, holár ‘sheep’, purùu ‘whitecrested laughing thrush (Garrulax leucolophus), pəgáa ‘great pied hornbill (Buceros bicornis), piɿhɿk ‘rufousnecked hornbill (Aceros nipalensis)’, piɿmùu ‘whitecheeked hill partridge (Arborophila atrogularis)’...

...irreducible lemma for mountain topography and hillside cultivation.

mooɿi ‘already-cultivated mountain’, moorə ‘virgin/uncultivated mountain’...

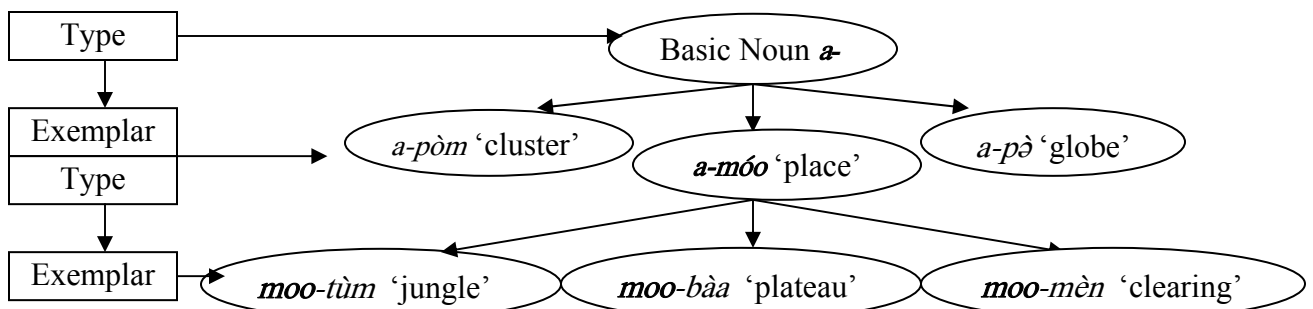


Figure 6 – Taxonomic structure in the Tani lexicon

4. Population contact, language mixing and typological change

4.1. Mystery strata

Tani languages exhibit a number of basic vocabulary items which are scarce or unattested elsewhere in TB. Potentially, such forms could reflect the assimilation of non-TB groups as Proto-Tani coalesced and/or as Tani groups expanded their range.

PTB	PT	Gloss	PTB	PTS	Gloss
*k-r(j)aŋ/dat	*tur	‘alive’	*nja/sja	*din	‘meat/flesh’
*da/dzaan/la/tal	*puk	‘arrow’	*mruk/mjuk/ruk/woy/yuk	*bee	‘monkey’
*tak	*caŋ	‘ascend’	*dan/dik/t(j)ak/t(j)ik/?it	*kon	‘one’
*bja/daw/dow/wa/ŋak	*taŋ	‘bird’	*ka	*rjap	‘door’

Table 6 – Selection of Tani forms with scarce or unattested PTB cognates (based on Sun (1993: Appendix 3); PTB reconstructions based on Matisoff (2003))

Milang contains a large number of rare or elsewhere-unattested roots, many of which are also not found elsewhere in Tani.

PTB	PT	Galo	Milang	Gloss
?	*ko	kò-	ru-	‘request’
*gwap/krap	*g(j)am	gàm-	ŋot-	‘bite’
*lay/ləy/reŋ	*rəð	rɛ-	zak-	‘buy’
*liŋ/low/ram	*rik	rɪkə	apu	‘field’
*grip/krep/rwak	*taruk/tarup	tarùk	paŋker	‘ant’
*rak	*pVrok	porók	cu	‘fowl’

Table 7 – Milang forms with scarce or non-occurring TB/Tani cognates (based on Sun (1993:§3.4.2))

4.2. Contacts with “major” languages

“Sinospheric” and “Indospheric” TB languages: contact and typological convergence (Matisoff 1991)

Sinospheric languages

shorter words
simple morphology
weak finiteness distinction
cluster onsets
strongly tonal
under Sinitic “influence”

Indospheric languages

longer words
complex morphology
strong finiteness distinction
simple onsets
mildly tonal or non-tonal
under Indic “influence”

Post (2006; 2007) argues that Proto-Tani (or a near ancestor) had a relatively “Sinospheric” typological profile. However, modern Tani languages exhibit a more “Indospheric” profile. How might such changes have come about?

4.3. The nature of early Indic contacts

4.3.1. Lexical evidence

When languages are in high direct contact, bilingualism and borrowing almost always occur (Thomason and Kaufman 1991 [1988]). Yet, almost all well-assimilated Indic loanwords in Galo depict items or processes which are relatively recently-introduced. Many plausibly pre-date Proto-Galo; almost none plausibly date to Proto-Tani.

Galo	Gloss	Source	Form	Gloss
<i>lagí</i>	‘want/need’	Asm	<i>lag-</i> + <i>-i</i>	‘want/need; attach + NF’
<i>porì</i>	‘study; read’	Asm	<i>porh-</i> + <i>-i</i>	‘study; read + NF’
<i>azár</i>	‘thousand’	Asm	<i>hezar</i>	‘thousand’
<i>pohàa</i>	‘money’	Asm	<i>poisa</i>	‘money’
<i>gám</i>	‘village headman’	Asm	<i>gaō</i>	‘village’
<i>nahór</i>	‘Ceylon ironwood tree’	Asm	<i>nañhor</i>	‘Ceylon ironwood tree’
<i>umtráa</i>	‘orange (citrus fruit)’	Asm	<i>sumtra</i>	‘orange’
<i>rəbáp</i>	‘pomelo (grapefruit)’	Asm	<i>rəbəp</i>	‘pomelo’
<i>kurìi</i>	‘cat’	Asm	<i>mekuri</i>	‘cat’
<i>tamúr</i>	‘betelnut’	Asm	<i>tamul</i>	‘betelnut’
<i>tíkə</i>	‘contract’	Asm	<i>tika</i>	‘contract’
<i>potáa</i>	‘paper; letter’	Asm	<i>pətrə</i>	‘paper’
<i>potə</i>	‘license’	Asm	<i>pətrə</i>	‘paper’
<i>gurée</i>	‘horse’	Asm	<i>gfiora</i>	‘horse’
<i>hàa</i>	‘tea’	Asm	<i>sa</i>	‘tea’

Table 8 – Well-assimilated Indic loanwords in Lare Galo

This situation may be strongly contrasted with that of Karbi-Anglong (K-A) Mising:

Gloss	Proto-Tani	Lare Galo	K-A Mising	Assamese
‘cloud’	* <i>doŋmít</i>	<i>doomə</i>	<i>daor</i>	<i>da(w)ɔr</i>
‘tongue’	* <i>arjo</i>	<i>aró</i>	<i>diba</i>	<i>ziḅa</i>
‘finger’	* <i>lakkeŋ</i>	<i>lakcəə</i>	<i>aŋoli</i>	<i>aŋuli</i>
‘bean’	* <i>peeren?</i>	<i>peerén</i>	<i>mətər</i>	<i>mətər</i>
‘mountain’	* <i>mroŋdi</i>	<i>moodi</i>	<i>pahar</i>	<i>pahar</i>
‘cow’	* <i>sa-???</i>	<i>hoə</i>	<i>goru</i>	<i>goru</i>
‘field’	* <i>rik</i>	<i>rikə</i>	<i>pətar</i>	<i>pə^har</i>
‘stick’	* <i>siŋ-???</i>	<i>hiidàa</i>	<i>lakoti</i>	<i>lak^huti</i>
‘sky’	* <i>taləŋ</i>	<i>taləə</i>	<i>akak</i>	<i>akəh</i>

Table 9 – Assamese loanwords in K-A Mising

*Core vocabularies in K-A Mising have been re-shaped through intense contact with Assamese, despite that this level of contact is probably relatively recent. The speed at which such changes can evidently occur, together with the more general **lack** of such phenomena in Tani languages, suggests a historical paucity of Indic-Tani contact.*

4.4. Grammatical evidence

The Galo modal of necessity/obligation – also found elsewhere in Tani – strongly resembles an Indic modal of necessity, even making use of an Indic verb lag- ‘want/need’.

(8) *bhî ñóm kâapə lagí dù.*

bhî ñóm kâa-pə lagí-dùu
 s/he me see-COMPLEMENTIZER **must**-IMPERFECTIVE
 ‘She has to see me.’

(9) *tai muk sabɔ lage*

tai muk sa-bɔ lag-e
 she me see-COMPLEMENTIZER **must**-3.PRESENT
 ‘She has to see me.’

*Normally, calquing of a neighbour’s grammar is evidence of bilingualism/strong contact (Aikhenvald 2007). But is strong contact necessarily evidenced in this case? Let’s look a little further: in Galo, the concept of ‘want/need (something)’ cannot be expressed as such using native grammar and lexicon. Instead, one must want/need **to do** something:*

(10) *ñó ïs tîlî dù.*

ñó ïs tî-lî-dùu
 I water imbibe-WANT/NEED-IMPERFECTIVE
 ‘I **want to** drink water.’

(11) **ñó ïs lîdù.*

ñó ïs lî-dùu
 I water WANT/NEED-IMPERFECTIVE
 * ‘I **want** water.’

To trade, it is necessary to express the notion “I want/need x”. Possibly because this formation did not exist, the Assamese verb lag- ‘want; need’ was borrowed in its non-final (≅ participial) form lag-i (whether directly from Assamese or from an intermediary, and whether into Galo or into an ancestor):

(12) *ñó ïs’gò lagí dù.*

ñó ïs’gò lagí-dùu
 I water=INDEFINITE **want/need**-IMPERFECTIVE
 ‘I **want/need** some water.’

Once this construction was in place, the modal of necessity would have evolved by substituting a nominalized verb form in place of the noun object – a common development which is also exhibit in English and dozens of other languages:

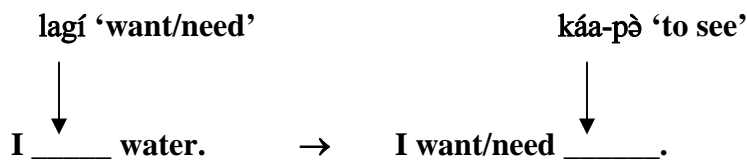


Figure 7 – Development of Galo modal of necessity via language-internal means following borrowing of an Indic lexical verb meaning ‘want/need’ (note that Galo *-pə̀* reflects PTB **pa* ‘Nominalizer’)

The modal of necessity may not have been calqued from Assamese as such, but rather arose language-internally following assimilation of an Assamese lexical verb meaning ‘want’ – and **this** may have entered Galo and/or an ancestor language in the context of trade. This may tell us something about the **nature** of early Tani-Indic contacts.

4.5. An alternative explanation for the “Indospheric” profile

Prosody is far more readily diffusible (potentially over long distances) than is lexicon or grammar, since it requires only imitation, not comprehension (Epps 2007:272).

Languages developing **falling** rhythm also develop suffixes/postpositions, synthetic/agglutinating structures, a (C)V(C) syllables, geminate clusters, monophthongal vowels, harmonic prosodies, and register not contour tones (Donegan and Stampe 1983; 2004). Languages developing rising rhythm exhibit the opposite set of changes.

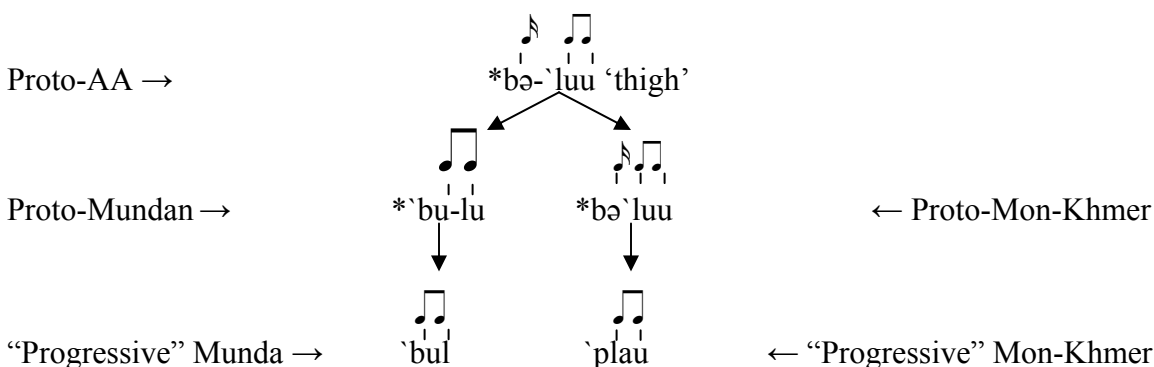


Figure 8 – Rhythm and the opposite typological drifts of Munda and Mon-Khmer (adapted from Donegan and Stampe (1983:346))

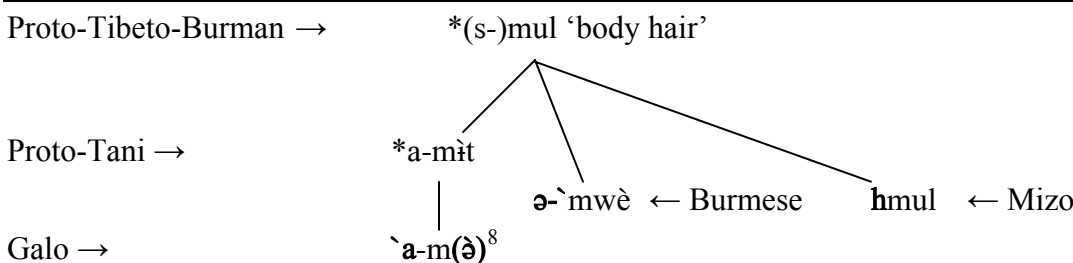


Figure 9 – Rhythm and typological drift in Tibeto-Burman (PTB reconstruction by Matisoff (2003))

⁸ Root-harmonization are also found in Tani, as in Galo *ihhì* ‘wood’ < PTs **a-* ‘PFX’ + **siŋ* ‘wood’).

*Tani languages exhibit the expected set of changes assuming a prosodic shift to falling rhythm. More southeasterly languages often exhibit the opposite set of changes, consistent with their primarily rising rhythmic profile. These facts would be consistent with a view that Tani languages came under the prosodic influence of a trochaic area (such as the greater Indo-Aryan sprachbund), experienced a prosodic shift, and came to later exhibit associated changes in morphological typology. Importantly, this would **not** have required extensive direct contact with Indic languages.*

5. Summary

Evidence reviewed in this paper suggests that the following very general characterizations can be made:

- a) there was a language (or closely-related set of languages) “Proto-Tani” (PT)
- b) PT was probably spoken in a hilly environment much like Arunachal Pradesh of today, just like most of its descendant languages
- c) PT was probably not in high contact with plains/cosmopolitan languages such as Indic and Tai, and possibly not even Tibetic and Bodo-Garo, nor were most of its descendants
- d) PT was probably not spoken throughout its current area of distribution, but rather was spoken in a subset of or outside of this area
- e) PT may well have been in strong contact with other area languages, probably also hill tribal languages (but whose precise identities cannot currently be specified)
- f) the post-PT era was largely characterized by relative stability, possibly over a very long period of time, as intra-Tani contacts stayed strong and extra-Tani contacts were weaker
- g) diversification of the Tani languages can probably be accounted-for in terms of historical population splits, possibly also involving incorporations of neighbouring populations (whether Tani or non-Tani)
- h) typological change in the history of the Tani languages can probably best be accounted-for not in terms of contact with “major” languages, but rather in terms of a steady increase in proximity to the Indic sprachbund (possibly part-and-parcel with progressively southward/westward migrations), acquisition of a characteristically “Indospheric” rhythmic profile, and associated sets of language-internal morphological changes. In a few cases, this eventually led to high, direct Indic contacts and a correspondingly high rate/extent of change

6. Looking ahead

How can we further test and develop these hypotheses?

More data – we need more and better large-scale linguistic and ethnographic descriptions of both the Tani languages/populations and other languages/populations of the area. We're working with a pale fraction of what we should have at hand.

Cross-disciplinary interaction – no single field is going to “solve” the problem of proto-historical reconstruction, since all of us see only part of the story. Rather, we need to develop means of correlating evidence and interpreting it in relation to an open-ended, complex, and evolving set of hypotheses.

A linguist's wish list:

- 1) Legends/folktales (as approximate historical records (Blackburn 2003/2004) and as “vertically-transmitted” structures (Blackburn 2007))
- 2) Material culture (house construction, crafts, agriculture, tools...)
- 3) Spiritual traditions (specific animist/shamanist practices, “Donyi-Poloism”...)
- 4) Other cultural systems/practices (festivals, kin systems...)
- 5) Archaeology (Ita Fort, Bhismanagar...)
- 6) Population genetics (retentions, mutations...)
- 7) Geography (mountain barriers, river corridors...)
- 8) Trade/migration routes (existing/confirmed and/or previous and plausible)

...while we still can!

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Abbreviations:

ABL	Abative
ANAP	Anaphoric
APPL	Applicative
COP	Copula
CQ	Content question
DECL	Declarative
DISC	Discovery
DST	Distal
GEN	Genitive
GRAD	Gradual

Hin	Hindi
IND	Individuative
INST	Instrumental
IPFV	Imperfective
LOC	Locative
NEG	Negative
NF	Non-final
NOM	Nominative
NZR	Nominalizer
PFV	Perfective

PL	Plural
PT	Proto-Tani
PTB	Proto-Tibeto-Burman
RLS	Realis
SEMB	Semblative
SPRX	Speaker-proximate
SUB	Subject
TOP	Topic

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