

Title: Topographical deixis in Tani and beyond¹

1. Topographical deixis

Deixis:

The ways in which languages encode...features of the context of utterance. (Levinson 1983:54)

When we communicate, we communicate in a certain context, and this context shapes our utterances. (Senft 1997a:2)

*The way in which the **reference** of [certain types of form] is determined **in relation to a specific speaker and addressee and a specific time and place of utterance** [i.e., the “**deictic centre**” (MP)].* (Matthews 1997:89-90)

Spatial deixis:

*Deictic categories of a language which **locate a referent vis-à-vis a shifting reference point** in terms of **physical space**.*

Topographical deixis:

*A variety of spatial deixis making reference to the **topography** of a construed **spatial environment** (generally, higher, lower, or on the same level)*

Languages which exhibit some form of topographical deixis (whether as primary or secondary basis underlying some system for spatial reference) are common in Papua New Guinea and Oceania (Senft 1997b; Senft 2004), and seem to occur in some form in Uto-Aztecan and in Dyirbal (see discussion in Dixon 2003).

¹ I acknowledge the assistance of my primary Lare Galo consultants *igó rɪbàa* and *miilɪ̃ podù* and my primary Pagro Mising consultant *ain dolee*, and also acknowledge advice from Jugen Pegu. That said, I take sole responsibility for whatever misrepresentations of their languages occur here. All Tani language data are given in IPA, except as *c* = [tɕ] and *z* = [dʒ]. Underlying lexical tones in Galo are $\hat{\ }_$ High/Plain and $\grave{\ }_$ Low/Tense. A Rising-Falling tone $\hat{\ }_$ occurs underlyingly in some pragmatically-marked categories (such as emphatics) and in sandhi contexts at the level of the (surface) phonological word. Phonological and grammatical words are often quite mismatched in Galo; in numbered Galo examples herein, the first line gives (surface) phonological words, while the second line gives (underlying) grammatical words. Spaces demarcate both types of boundary.

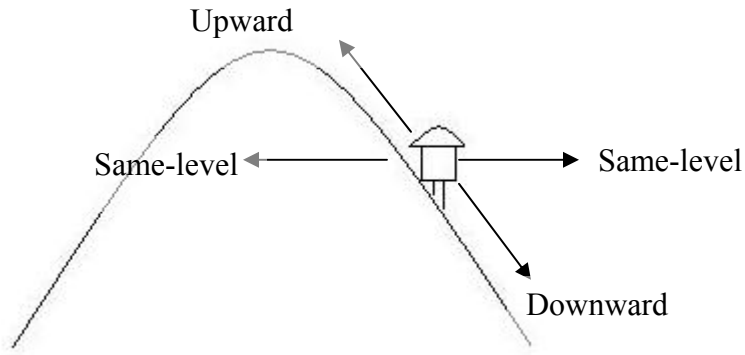


Figure 1 – Environmental source of topographical deixis

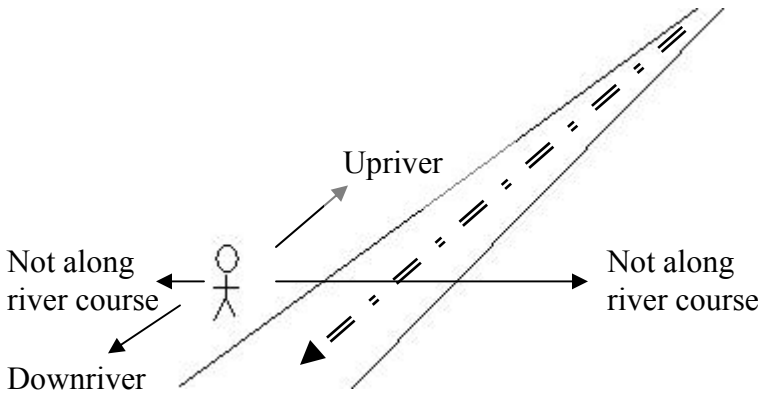


Figure 2 – Environmental concomitants of topographical deixis 1: riverine orientation

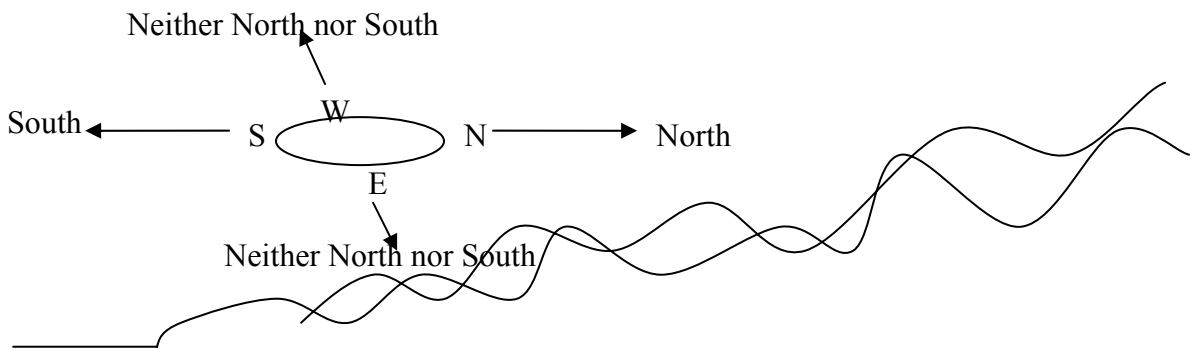


Figure 3 – Environmental concomitants of topographical deixis 2: compass orientation

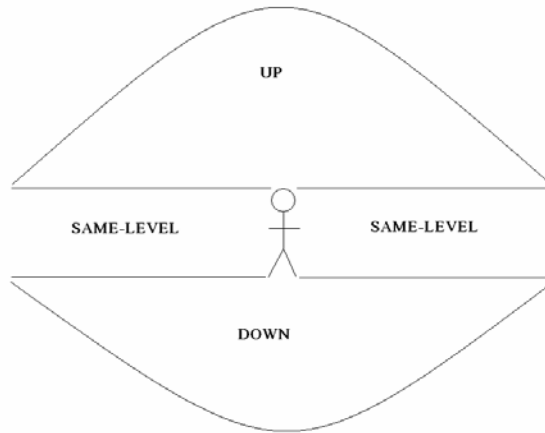


Figure 4 – Simplified orientational perspective underlying “everyday use” of topographical deixis (note: human figure here denotes a shifting deictic centre, which may or may not be construed in terms of an actual human body in a given use!)

2. Tani languages in areal, genetic and environmental perspective

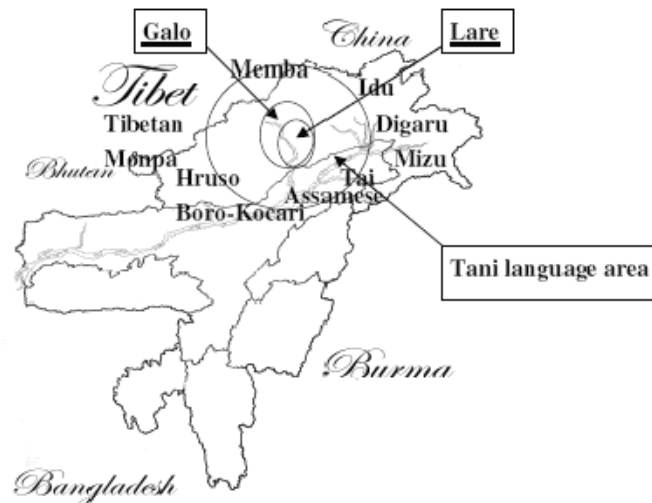


Figure 5 – The Tani languages in areal perspective, with focus on the Lare dialect of Galo

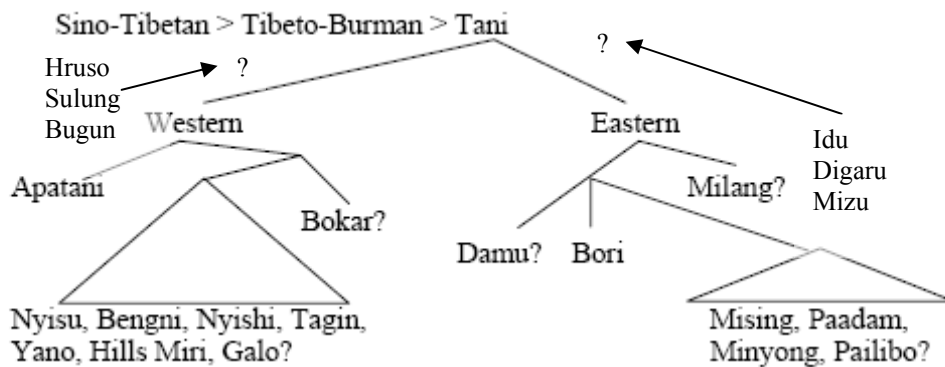


Figure 6 – The Tani languages in genetic perspective, following Sun (1993)



Figure 3 – View of *Daarî* village, heart of the *Larèè Galòò* area/Bori Riba, resident of *Daarî* village

3. Topographical deixis in Galo

3.1. Associated categories

- motion verbs (§3.1.1)
- directional applicatives (§3.1.2)
- demonstratives and demonstrative postpositions (§3.1.3)

3.1.1. Motion verbs

Value	Form	Gloss
Upward/northward of centre	<i>càa-</i>	‘ascend’
Downward/southward of centre	<i>ìi-</i>	‘descend’
Same-or-unknown level/east-or-westward of centre	<i>áa-</i>	‘come; enter’

Table 1 – Lare Galo motion verbs exhibiting topographical deixis

(1) *doonó caadûu kú.*

dooní = əə **càa**-dùu-kú
 sun=TOP **ascend**-IPFV-CMPL
 ‘The sun is **rising**.’ (RmR/GS, 15:97)

(2) *ŋó bîik namló caarè.*

ŋó bîi-kè namó = lo **càa**-ró
 1.SG 3.SG-GEN house=LOC **ascend**-IRR
 ‘I’m **going up** to his house.’ (MN, B2:75)

3.1.2. Directional applicatives

Value	Form	Gloss
Upward/northward of centre	<i>-càa</i>	‘SLOPE UPWARD TO (ADDED) GOAL’
Downward/southward of centre	<i>-lòo</i>	‘SLOPE DOWNWARD TO (ADDED) GOAL’
Same-or-unknown level/east-or-westward of centre	<i>-áa</i>	‘MOVE LATERALLY TO (ADDED) GOAL’

Table 2 – Lare Galo directional applicatives exhibiting topographical deixis

(3) *jñíñí, nó m appigó zilòo totú ři?*

jñíñí **nó-m** appíi = go zí-lòo-tó = tu ?əî
 mat.aunt’s.daugh. **2.SG-ACC** bit=IND give-**DOWN.TO.GOAL**-PFV=AREV ETAG
 ‘Cousin, we naturally sent a few (fish) **down to you**, right?’ (Lare Galo: RmR, CC 109)

(4) *əgəm óg taajòo paacáa toké.*

əgə-m **ogò** **taajòo** pàa-càa-tó = kée
 APRX.IND-ACC **APRX.LOC top** stack.vol.-**UP.TO.GOAL**-IPTV.ODIR=HORT.POL
 ‘Put that (stone) **on top of it**.’ (Lare Galo: IR, MPO 020)

3.1.3. Demonstratives and demonstrative postpositions

All Galo demonstratives can function both pronominally and as modifiers; as modifiers, they may occur pre-head, post-head (statistically most common) or both pre-head and post-head simultaneously. Postpositions occur post-head only, and do not function pronominally. Demonstrative postpositions historically derive from *fusions* of demonstratives + postpositions, as *tə* ‘DST.UP’ + *lo* ‘LOC’ → *tolò* ‘DST.LOC.UP’. In modern Galo, demonstrative postpositions retain the semantic values of both demonstratives and postpositions, but syntactically pattern primarily like demonstratives.

Function	Upward	Downward	Same/unknown level
DST	<i>tə</i>	<i>bə</i>	<i>áa</i>
DST.LOC/ALL	<i>tolò</i>	<i>bolò</i>	<i>aló</i>
DST.ABL	<i>to(lo)kə</i>	<i>bo(lo)kə</i>	<i>a(lo)kə</i>
DST.SEMB/GEN	<i>təkə</i>	<i>bəkə</i>	<i>akə</i>
DST.MAN	<i>təmbə</i>	<i>bəmbə</i>	<i>ambə</i>

Table 3 – Lare Galo demonstratives and demonstrative postpositions exhibiting topographical deixis

(5) *tə jəkkəə là?*

tə jə-kə = əə laa
DST.UP who-GEN=COP.IPFV CQ
 ‘Whose is **that (thing up there)?**’ (Lare Galo: TZ, OL11:21)

(6) *ŋók tokə ézi go láazi takè!*

ŋó-kə tokə ezə = go làa-zí-tà(a) = kée
 1.SG-GEN **DST.ABL.UP** clothing=IND take-BEN-MOT=HORT.POL
 ‘Go get my shawl **from up there!**’ (Lare Galo: LN, TG 002)

(7) *astralijá bəmbə kairəm, bupp̃i minərələm paarūu rə.*

astralijáa bəmbə kaí-rə = əəm bupp̃i minərəl = əəm pàa-rūu-rə
 PLACE **DST.MAN.DOWN** big-IRR=TSUB all mineral=ACC get-CERT-IRR
 ‘If Australia **down there** is **so** big, certainly you’ll find all (manner of) minerals.’
 (Lare Galo: IR, C1:25)

3.2. How do we know it’s all one (cognitively) unified system?

Usually, when topographical deixis in Tibeto-Burman has been discussed, it has been discussed *either* in terms of verb semantics *or* – more usually – in terms of nominal referential and/or relational marking. It has not (so far as I am aware) been discussed as a cognitively unified system. And in fact, there is little if any evidence that the systems are formally unified, either in terms of synchronic formative-sharing or diachronic feeding.² However, evidence from Tani languages suggests that there *is* an underlying cognitive unity: *when the system experiences a semantic shift due to shifting environmental circumstances, it shifts as a whole.*

Mising, the only Eastern Tani language to be spoken by a large population in a non-mountainous environment for any appreciable period of time (so far as we know), retains its native topographical-deictic terms. However, in Pagro Mising, the meanings are slightly changed.³

	Upward/East	Downward/West	Same-level/North or South
Motion verbs	<i>saa-</i>	<i>tok-</i>	<i>aa-</i>
Directionals	<i>-saa</i>	<i>-jii/-tok</i>	<i>-aa</i>
LOC/ALL postpositions	<i>tolo</i>	<i>bolo</i>	<i>olo</i>

Table 4 – Sample set of terms exhibiting “topographical deixis” in Pagro Mising

The compass axis has shifted in Pagro Mising from Up/North versus Down/South to *Up/East* versus *Down/West* – this would seem to correspond to an overall shift of the primary environmental anchor of the system from *Himalayan topography* to the *Brahmaputra River* – the overwhelmingly most salient feature of life in the Assam plains.

² The resemblance between *áa* ‘DST.SLEV’ and *áa-* ‘come; enter; move on same/unknown level’ is probably coincidental, seemingly reflecting PT **aa* (cf. Bengni *ɦ*, a regular reflex of **aa*) and PT **vaŋ* (cf. Bengni *vaa*, a regular reflex of **vaŋ*) respectively (Sun 1993:105, 150).

³ Some Mising dialects appear to conserve the basic Tani system, as described here for Galo (Jugen Pegu, p.c.); further investigation will be required to determine how widespread and uniform this change is among Mising dialects.

- (8) *olo-pə* *gə-lik-to-k!*
 LOC.SLEV/N/S-DAT throw/carry-APPL:INTO.GOAL-IPTV-HORT
 ‘Throw it **over/along a north/south axis!**’ (Pagro Mising: AD, 2:65)
- (9) *bolo-pə* *gə-lik-to-k!*
 LOC.DOWN/WEST-DAT throw/carry-APPL:INTO.GOAL-IPTV-HORT
 ‘Throw it **down/to the west!**’ (Pagro Mising: AD, 2:65)
- (10) *tolo-pə* *gə-lik-to-k!*
 LOC.UP/EAST-DAT throw/carry-APPL:INTO.GOAL-IPTV-HORT
 ‘Throw it **upward/to the east!**’ (Pagro Mising: AD, 2:65)

4. Topographical deixis in other Tani languages

It seems almost certain that topographical deixis reconstructs to Proto-Tani, although if this is so, it has seemingly been lost in Apatani (arguably, a “plateau language” rather than a “hill language per se”). However, it is not yet safe to generalize very far about the semantics/functionality of the Proto-Tani system – more and better data is sorely needed!

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 2004b)	te-	me-	e-
Ramo (Badu 2004a)	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 5 – Topographical deixis in other Tani languages

5. Topographical deixis elsewhere in Tibeto-Burman

Based on a very cursory survey, topographical deixis seems mainly to be attested in “Indospheric” TB languages of the high Himalaya, especially Kiranti – mainly in nominal relational marking, described as “altitudinal case markers” (Ebert 2003) or “vertical case” (Noonan 2006). Less “full-blown” systems are found in “Sinospheric” hill languages to the east such as Lahu and Lisu (Bradley 2003a). Topographical deixis is not generally found in Central Bodish (Tibetic) languages, Boro-Garo, Naga or Karen-area languages.

Language/branch	Source	Up	Down	Slev
Idu (Mishmi)	(Pulu 1978)	atu	ama	ahi
Miji/Dhammai (Hrusish)	(Simon 1979)	thaŋ-	phu-	phai-
Cogtse Gyalrong	(Nagano 2003)	to/ta-	<i>no/na-</i>	ko/ka- ⁴
Caodeng Gyalrong	(Sun 2003)	tə-	<i>nɐ-</i>	kə-/nə- ⁵
Pinmi (directional pref.)	(Ding 2003)	tɜ-	<i>nɜ-</i>	?
Chantyal	(Noonan 2003a)	tuŋ/tor⁶	məŋ/mar	?
Dolokha Newar	(Genetti 2007)	thābi/thāta⁷	kobi/kota	?
Jero	(Oppenort 2005)	tə-	<u>yɔ-</u>	nɔ-
Dhankute Tamang	(Poudel 2006)	toza	maza	hoza/keza
Lepcha	(Plaisier 2007)	tá-	me-	pí-
Athpare	(Ebert 1997)	to-	<u>yo-</u>	ya-
Belhare (LOC)	(Bickel 2003)	-ttaŋ	-pmu	-ʔyá
Yakha	(Hansson 1997)	tuʔna	muʔna	yuʔna
Bantawa (LOC)	(Ebert 2003)	-du	<u>-yu</u>	-ya

⁴ Actually means ‘upstream’

⁵ Actually means ‘eastward/westward’

⁶ Forms seem to be Locative/Goal marking postpositions respectively, and may reflect demonstrative-locative/allative fusions.

⁷ Locational adverbs; uncertain cognacy.

Language/branch	Source	Up	Down	Slev
Camling (LOC)	(Ebert 2003)	-d(h)i	<u>-i</u>	-ya
Thulung (LOC)	(Ebert 2003)	-la	<u>-yu</u>	-no
Khaling	(Ebert 2003)	-tü	<u>-yü</u>	-yo
Yamphu	(Ebert 2003)	-tu	-mu	-yu
Dzongkha	(van Driem 1998)	‘ayi/yêtshu	‘ami/mêtshu	‘aphidi/phêtshu
Mizo	Thangi Chhangte, p.c.	khi-khi ⁸	khu-khu	so-so
Lahu	(Matisoff 1973)	nô	mô	(ô)
Lisu	(Bradley 2003b)	nø³³	dzø³³	go ³³ /ko ⁵⁵
Kathmandu Newar	(Hargreaves 2003)	–	–	–
Jingpho	(Qingxia and Diehl 2003)	–	–	–
Kayah Li	(Solnit 1997)	–	–	–
Nar-phu	(Noonan 2003b)	–	–	–
Tibetan	(DeLancey 2003a; 2003b)	–	–	–
Tshangla	(Andvik 1999)	–	–	–
Hayu	(Michailovsky 1988)	–	–	–
Kham	(Watters 2002)	–	–	–
Qiang	(LaPolla and Huang 2003)	–	–	–
Ao	(Coupe 2007)	–	–	–
Meithei ⁹	(Chelliah 1997)	–	–	–
Hakha Lai	(Peterson 2003)	–	–	–
Pwo Karen	(Kato 2003)	–	–	–
Akha	(Hansson 2003)	–	–	–

Table 6 – Languages (seemingly) with and (possibly) without topographical deixis in a (nearly random) selection of TB languages

⁸ Mizo exhibits the same Up-East, Down-West correspondence as does Mising (Thangi Chhangte, p.c.), although *possibly* for a different reason. In the Mizo area, terrain generally declines in altitude from East to West. By contrast, most rivers seem to flow along N/S axes.

⁹ Seems to have directional verb suffixes, but not demonstratives.

6. Conclusions

Topographical deixis is probably a unified cognitive structure underlying the grammars of Tani languages, and is formally represented in some form in many Tibeto-Burman languages (whether or not it is a cognitively unified structure in the sense described here for Tani). Strong representation of topographical deixis in a language would seem to closely reflect the shaping of its grammar by speaker interaction with a particular type of environment, in this case mountainous terrain. Environmental concomitants of topographical deixis include riverine and compass orientation; however, these may be less robust “anchors” of the system as such, than is topography.

Topographical deixis almost certainly reconstructs in some form to Proto-Tani, and very likely reconstructs in some form quite deeply within Tibeto-Burman. Languages which (continue to) robustly exhibit topographical deixis are, very broadly speaking 1) spoken by hill tribal populations which 2) do not have a clear history of prolonged contact with plains languages and 3) do not have a clear history of prolonged presence outside of a hill area. Languages which have lost (or which may never have had) topographical deixis are, in general, 1) spoken by plains tribal and/or non-tribal populations, or 2) were spoken at one time by populations living outside hill areas, or 3) are or were spoken by populations with a history of prolonged contact with plains languages.

The presence or absence of topographical deixis in a given TB language can probably be taken as good evidence for or against a particular theory of the migration/contact history of a particular TB group. However, it probably does not make a good subgrouping criterion.

7. References

- Abraham, P. T. (1985). *Apatani Grammar*. Mysore, Central Institute of Indian Languages.
- (2005). *A Grammar of Nyishi Language*. Delhi, Farsight Publishers and Distributors.
- Andvik, E. (1999). *Tshangla Grammar*. PhD Dissertation. Department of Linguistics. Eugene, University of Oregon.
- Badu, T. (2004a). *Ramo Language Guide*. Itanagar, Director of Research, Government of Arunachal Pradesh.
- (2004b). *Tangam Language Guide*. Itanagar, Director of Research, Government of Arunachal Pradesh.
- Bickel, B. (2003). “Belhare.” In G. Thurgood and R. J. LaPolla, Eds. *The Sino-Tibetan Languages*. London, Routledge: 546-570.
- Bradley, D. (2003a). “Deictic patterns in Lisu and Southeastern Tibeto-Burman.” In D. Bradley, R. J. LaPolla, B. Michailovsky and G. Thurgood, Eds. *Language Variation: Papers on Variation and Change in the Sinosphere and in the Indosphere in Honour of James A. Matisoff*. Canberra, Pacific Linguistics: 219-236.
- (2003b). “Lisu.” In G. Thurgood and R. J. LaPolla, Eds. *The Sino-Tibetan Languages*. London, Routledge: 222-235.
- Chelliah, S. L. (1997). *Meithei*. Berlin, Mouton de Gruyter.
- Coupe, A. (2007). *A Grammar of Mongsen Ao*. Berlin, Mouton de Gruyter.
- Das Gupta, S. K. (1983). *An Outline on Tagin Language*. Shillong, Directorate of Research, Government of Arunachal Pradesh.

- DeLancey, S. (2003a). "Classical Tibetan." In G. Thurgood and R. J. LaPolla, Eds. *The Sino-Tibetan Languages*. London, Routledge: 255-269.
- (2003b). "Lhasa Tibetan." In G. Thurgood and R. J. LaPolla, Eds. *The Sino-Tibetan Languages*. London Routledge: 270-288.
- Ding, P. S. (2003). "Prinmi: A sketch of Niuwozi." In G. Thurgood and R. J. LaPolla, Eds. *The Sino-Tibetan Languages*. London, Routledge: 588-601.
- Dixon, R. M. W. (2003). "Demonstratives: A Cross-Linguistic Typology." *Studies in Language* 27(1): 61-112.
- Ebert, K. (1997). *A Grammar of Athpare*. Munich, Lincom Europa.
- (2003). "Kiranti languages: An overview." In G. Thurgood and R. J. LaPolla, Eds. *The Sino-Tibetan Languages*. London, Routledge: 505-517.
- Genetti, C. (2007). *A Grammar of Dolokha Newar*. Berlin, Mouton de Gruyter.
- Hansson, G., Ed. (1997). *A Synoptic Glossary of Athpare, Belhare, and Yakkha, with Further Contributions: Findings of the Linguistic Survey of Nepal*. München, Lincom Europa.
- Hansson, I.-L. (2003). "Akha." In G. Thurgood and R. J. LaPolla, Eds. *The Sino-Tibetan Languages*. London, Routledge: 236-252.
- Hargreaves, D. (2003). "Kathmandu Newar (Nepal Bhasa)." In G. Thurgood and R. J. LaPolla, Eds. *The Sino-Tibetan Languages*. London, Routledge: 371-384.
- Kato, A. (2003). "Pwo Karen." In G. Thurgood and R. J. LaPolla, Eds. *The Sino-Tibetan Languages*. London, Routledge: 633-648.
- LaPolla, R. J. and C. Huang (2003). *A Grammar of Qiang: With Annotated Texts and Glossary*. Berlin/New York, Mouton de Gruyter.
- Levinson, S. C. (1983). *Pragmatics*. Cambridge, Cambridge University Press.
- Matisoff, J. A. (1973). *The Grammar of Lahu*. Berkeley, University of California Press.
- Matthews, P. (1997). *The Oxford Concise Dictionary of Linguistics*. Oxford, Oxford University Press.
- Megu, A. (1988). *Bori Phrase Book*. Itanagar, Directorate of Research, Government of Arunachal Pradesh.
- (1993). *The Karkos and Their Language*. Itanagar, Directorate of Research, Government of Arunachal Pradesh.
- (2003). *Aashing Language Guide*. Itanagar, Directorate of Research, Government of Arunachal Pradesh.
- Michailovsky, B. (1988). *La Langue Hayu*. Paris, Editions du Centre National de la Recherche Scientifique.
- Nagano, Y. (2003). "Cogtse Gyarong." In G. Thurgood and R. J. LaPolla, Eds. *The Sino-Tibetan Languages*. London, Routledge: 469-489.
- Noonan, M. (2003a). "Chantyal." In G. Thurgood and R. J. LaPolla, Eds. *The Sino-Tibetan Languages*. London, Routledge: 315-335.
- (2003b). "Nar-Phu." In G. Thurgood and R. J. LaPolla, Eds. *The Sino-Tibetan Languages*. London, Routledge: 336-352.
- (2006). Contact-induced change in the Himalayas: the case of the Tamangic languages. *International Colloquium on Language Contact and Contact Languages*. University of Hamburg.
- Opgenort, J. R. (2005). *A grammar of Jero: With a historical comparative study of the Kiranti languages*. Leiden/Boston, Brill.

- Peterson, D. A. (2003). "Hakha Lai." In G. Thurgood and R. J. LaPolla, Eds. *The Sino-Tibetan Languages*. London, Routledge: 409-426.
- Plaisier, H. (2007). *A Grammar of Lepcha*. Leiden/Boston, Brill.
- Post, M. (2007). *A Grammar of Galo*. PhD Thesis. Research Centre for Linguistic Typology. Melbourne, La Trobe University.
- Poudel, K. P. (2006). *Dhankute Tamang Grammar*. München, Lincom Europa.
- Pulu, J. (1978). *Idu Phrase-Book*. Shillong, Director of Information and Public Relations, Government of Arunachal Pradesh.
- Qingxia, D. and L. Diehl (2003). "Jingpho." In G. Thurgood and R. J. LaPolla, Eds. *The Sino-Tibetan Languages*. London, Routledge: 401-408.
- Senft, G. (1997a). "Introduction." In G. Senft, Ed. *Referring to Space: Studies in Austronesian and Papuan Languages*. Oxford, Oxford University Press: 1-38.
- , Ed. (1997b). *Referring to Space: Studies in Austronesian and Papuan Languages*. Oxford, Oxford University Press.
- , Ed. (2004). *Deixis and Demonstratives in Oceanic Languages*. Canberra, Pacific Linguistics.
- Simon, I. M. (1972). *An Introduction to Apatani*. Gangtok, Sikkim, Government of India Press.
- (1976). *Hill Miri Language Guide*. Shillong, Government of Arunachal Pradesh.
- (1979). *Miji Language Guide*. Shillong, Philological Section, Directorate of Research, Government of Arunachal Pradesh.
- Solnit, D. B. (1997). *Eastern Kayah Li: Grammar, Texts, Glossary*. Honolulu, University of Hawai'i Press.
- Sun, T.-S. J. (1993). *A Historical-Comparative Study of the Tani Branch of Tibeto-Burman*. PhD Dissertation. Department of Linguistics. Berkeley, University of California.
- (2003). "Caodeng rGyalrong." In G. Thurgood and R. J. LaPolla, Eds. *The Sino-Tibetan Languages*. London, Routledge: 490-502.
- Tayeng, A. (1976). *Milang Phrasebook*. Shillong, The Director of Information and Public Relations of Arunachal Pradesh.
- (1983). *A Phrase Book in Padam*. Shillong, Director of Research (Philology), Government of Arunachal Pradesh.
- (1990). *Nishi Phrase Book*. Itanagar, Director of Research, Government of Arunachal Pradesh.
- van Driem, G. (1998). *Dzongkha*. Leiden, Leiden University Research School CNWS.
- Watters, D. E. (2002). *A Grammar of Kham*. Cambridge, Cambridge University Press.