

# Long-distance relativization in Tibetan

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## Introduction

Relativization in Tibetan involves a process of “nominalization,” resulting in a verb form with a “nominalizer” ending (*-mkhan* in (2)).<sup>1</sup>

- |     |                                   |     |   |
|-----|-----------------------------------|-----|---|
| (1) | བཀྲ་ཤིས་ཀྱིས་དབ་འབྲི་གི་དུག།      | (2) | དབ་འབྲི་མཁན་མི་                                   |
|     | bkra.shis-kyis deb 'bri-gi.dug. → |     | [[ <sub>RC</sub> deb 'bri-mkhan] mi]              |
|     | Tashi-ERG book write-AUX          |     | book write-MKHAN person                           |
|     | 'Tashi is writing a book.'        |     | 'person who wrote/writes/is writing a book/books' |

These “nominalizations” lack the auxiliaries of finite verbal complexes (1).

Modern spoken Tibetan is known for having a complex inventory of “nominalizers.” The choice of nominalizer depends on the choice of pivot and aspect (Mazaudon 1978, Kim 1996, DeLancey 1999, Denwood 1999, Tournadre and Sangda Dorje 2003).

- (3) **Nominalizers by choice of pivot:**
- |        |      |   |
|--------|------|---|
| -mkhan | མཁན་ | transitive subjects                             |
| -sa    | ས་   | locative arguments                              |
| -yag   | ཡག་  | instrumental arguments and imperfective objects |
| -pa    | པ་   | perfective objects                              |

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<sup>1</sup>Abbreviations: AUX = auxiliary/ies, DEM = demonstrative, ERG = ergative, GEN = genitive. I use the standard Wylie transliteration scheme for the Tibetan script.

## Today

- I describe strategies for **long-distance relativization** in Tibetan, which informs the analysis of the “nominalizer” morphemes.
  - *-pa* fundamentally differs in function from the other “nominalizers” in (roughly) marking the edge of the relative clause, whereas *-mkhan/-sa/-yag* reflects the presence of a marked, local gap.
  - Verbs with “nominalizer” endings are in fact, in some sense, full finite clauses.
- I present a proof-of-concept analysis for *-mkhan/-sa/-yag* as reflecting **marked derivations** which **bleed nominal licensing**.
  - This explains a restriction on head-internal relatives.
- Relativization in Tibetan cannot synchronically be reduced to nominalization.

§1 Background §2 New data §3 Analysis §4 A bit more new data §5 Lessons

## 1 Background

Tibetan is SOV with scrambling. The case marker *-gis/kyis/gyis/s* is glossed as *ERG*, but its distribution is more complex; see e.g. DeLancey 2011b, Famularo et al. 2015. Objects are always unmarked (“absolutive”).

- |                                     |  |
|-------------------------------------|--|
| (4) བཏུ་ཤིས་ཀྱིས་མོག་མོག་བཟས་སོང།   | (5) བཏུ་ཤིས་ཉལ་བསྐྱད་བཞག།                    |
| bkra.shis-(kyis) mog.mog bzas-song. | bkra.shis-( <i>*kyis</i> ) nyal-bsdad-bzhag. |
| Tashi-ERG momo eat-AUX              | Tashi-( <i>*ERG</i> ) sleep-stay-AUX         |
| ‘Tashi ate momo (dumplings).’       | ‘Tashi is sleeping.’                         |

Auxiliaries in the verbal complex — grouped together as *AUX* here — together express tense/aspect/modal/evidential specifications (Tournadre and Jiatso 2001, Vokurková 2008).

## 1.1 Relativization and nominalization

Relativization in Tibeto-Burman languages has been studied almost exclusively under the umbrella of *nominalization*, a major topic of study in T-B linguistics; see e.g. Matisoff 1972, Herring 1991, Noonan 1997, Bickel 1999, DeLancey 2002, Noonan 2008, Genetti et al. 2008, Genetti 2011, DeLancey 2011a.

- (6) **-pa event nominalization:** (Tournadre and Sangda Dorje 2003:282)

བོད་སྐད་ཤེས་པ་དེ་གལ་ཆེན་པོ་རེད།

[[bod.skad shes-**pa**] de] gal chen.po red.

Tibetan language know-PA DEM importance great COP.AUX

‘Knowing Tibetan is very important.’

From this perspective, nominalizations as in (7) simply represent another use of these nominalizations, as *verbal argument nominalizations*.

- (7) **-pa patient nominal:** (8) **-pa object relative:**

པད་མས་བཟོས་པ་དེ་

pad.ma-s bzos-**pa** de

Pema-ERG make-PA DEM

‘what Pema made’

པད་མས་བཟོས་པའི་མོག་མོག་དེ་

[pad.ma-s bzos-**pa**]-i mog.mog de

Pema-ERG make-PA-GEN momo DEM

‘the momo that Pema made’ -pa’i > -pe

DeLancey 1999:231: “In Tibetan, relativization is simply one function of nominalization, that is, *relative clauses are simply dependent or appositive NPs*.”<sup>2</sup>

- (9) **Relativization = argument nominalization modifier + NP:**

argument nominalization<sub>i</sub> (=GEN)<sup>3</sup> + NP<sub>i</sub> (based on Noonan 1997:383)

Semantically, we could cash out this intuition with intersective modificational semantics:  $[(9)] = [\text{argument nominalization}] \cap [\text{NP}]$

<sup>2</sup>See also Matisoff 1972 for a similar claim for Lahu. DeLancey 2002 and Noonan 2008 claim that this view extends to most or all of the Bodic language family.

But to be fair, DeLancey 1999 also states (p. 232): “TB languages do, of course, have relative clauses in the usual linguist’s sense of a clausal modifier of a noun, where *clause* means a verb carrying its full array of arguments, and they are far from alone in adopting the nominalization strategy for accomplishing this function.”

<sup>3</sup>The genitive marker is strongly preferred for all pre-nominal non-subject relatives. In subject relatives, after *-mkhan*, DeLancey 1999 reports that the genitive marker is never used, but some of my speakers volunteered pre-nominal subject relatives with *-mkhan* followed by a genitive. Similar data with *-mkhan*-GEN is found in Seth Cable’s field notes.

Historical evidence supports the view that the non-*pa* nominalizers originated as various nominal endings, with their function later extended to productive relative clauses (DeLancey 2002).

- In Classical Tibetan, *-mkhan* had only one use, as a derivational suffix for trades and professions: *shing-mkhan* = wood-MKHAN ‘carpenter’
- The locative nominalizer *-sa* derives from the root *sa* ‘place.’

Instead, Classical Tibetan used *-pa* for all relative clauses.

- ▶ But a question remains: **Are “relative clauses” synchronically adjoined argument nominalizations (9)?** (Spoiler: No.)

## 1.2 The “nominalizers”

### (10) Nominalizers by choice of pivot: (=3)

<i>-mkhan</i> མཁན་	transitive subjects
<i>-sa</i> ས་	locative arguments
<i>-yag</i> ཡག་	instrumental arguments and imperfective objects
<i>-pa</i> པ་	perfective objects

- For intransitive subjects, there is variation and apparent optionality between *-mkhan* and *-pa*; see e.g. DeLancey 1999:237–238. I set them aside today.
- I also set aside the interaction with aspect in object relatives, but you can ask me about it.

### (11) *-mkhan* subject relative:

མོག་མོག་བཟོ་མཁན་མི་དེ་

[<sub>RC</sub> \_\_\_ mog.mog bzo-**mkhan**] mi de  
 momo make-MKHAN person DEM

‘the person that made/makes momo’

As DeLancey 1999:239–242 notes, the use of *-mkhan* (roughly) correlates with the availability of ergative (*-gis*) for the gap position, but *-mkhan* is also used for relativization over dative (*-la*) possessor subjects of verbs of possession.

(12) **-sa locative relative:**

པད་མས་མོག་མོག་བཟོ་སའི་ས་ཆ་དེ་

[<sub>RC</sub> pad.ma-s \_\_\_ mog.mog bzo-sa]-’i sa.cha de  
Pema-ERG momo make-SA-GEN place DEM

‘the place that Pema made/makes momo’

-sa’i > -pe

-sa reflects a locative (-la) or ablative (-nas) gap.

(13) **-yag instrumental relative:**

པད་མས་མོག་མོག་བཟོ་ཡག་འི་མོག་ཟངས་དེ་

[<sub>RC</sub> pad.ma-s \_\_\_ mog.mog bzo-yag]-’i mog.zangs de  
Pema-ERG momo make-YAG-GEN steamer DEM

‘the steamer that Pema made/makes momo with’

-yag’i > -ye

-yag reflects an instrumental (-gis/kyis/gyis/s<sup>4</sup>) gap (or imperfective theme gap).

There are reasons to suspect that -pa somehow differs from the others:

1. Classical Tibetan used only -pa. Cognates of -pa are found across the Tibeto-Burman family (DeLancey 2002, Noonan 2008).
2. For verbs with distinct perfective and imperfective stems, -pa takes the perfective stem while all others take the imperfective stem.  
‘make’: PERF *bsos* /sö/; IMPF *bsö* /so/
3. DeLancey 1999:234: -pa is “unstressed and subject to drastic phonological reduction... while the other three show compound phonology; this is consistent with their derivational origin.”

## 2 Long-distance relativization

- ▶ “Long-distance” (LD) relative clauses relativize over an argument in an *embedded* clause. No previous work has described LD relativization in Tibetan — nor, to my knowledge, in any other Tibetic language.
- All uncredited data comes from fieldwork conducted in Dharamsala, India, with nine speakers.<sup>5</sup>

<sup>4</sup>Yes that’s homophonous/homographous with ergative.

<sup>5</sup>Most were born in Tibet and moved to India earlier in life; others were born in India. All grew up speaking Tibetan as their first language and attended Tibetan language medium schools.

(14) **Embedded clause under 'say':**

བཀྲ་ཤིས་ཀྱིས་པད་མས་མོག་མོག་བཟོས་སོང་ལཔ་སོང།

bkra.shis-kyis [CP pad.ma-s mog.mog bzos-song] lap-song.

Tashi-ERG Pema-ERG momo make-AUX say-AUX

'Tashi said [that Pema made momo].'

LD object relatives

(15) **LD object relative:**

བཀྲ་ཤིས་ཀྱིས་པད་མས་བཟོས་སོང་ལཔ་པའི་མོག་མོག་དེ་ཙྰ

[RC bkra.shis-kyis [CP pad.ma-s \_\_\_ bzos-song] lap-pa]-i mog.mog de-tso

Tashi-ERG Pema-ERG make-AUX say-PA-GEN momo DEM-PL

'those momo [that Tashi said [that Pema made \_\_\_]]'

- *-pa* only goes on the *outermost* verb of the relative clause. The embedded clause with a gap is a regular, finite clause.

(16) **Marking on the embedded verb is ungrammatical:**

བཀྲ་ཤིས་ཀྱིས་པད་མས་བཟོས་པ་ལཔ་པའི་མོག་མོག་དེ་ཙྰ

\*[RC bkra.shis-kyis [CP pad.ma-s \_\_\_ bzos-pa] lap-pa]-i mog.mog de-tso

Tashi-ERG Pema-ERG make-PA say-PA-GEN momo DEM-PL

Intended: 'those momo [that Tashi said [that Pema made \_\_\_]]' (=15)

LD subject relatives

(17) **LD subject relative:**

བཀྲ་ཤིས་ཀྱིས་མོག་མོག་བཟོ་མཁན་ལཔ་པའི་མི་དེ་

[RC bkra.shis-kyis [CP? \_\_\_ mog.mog bzo-mkhan] lap-pa]-i mi de

Tashi-ERG momo make-MKHAN say-PA-GEN person DEM

'the person [that Tashi said [\_\_\_ made/makes momo]]'

- For LD subject relatives, there is *subject extraction marking on the embedded verb*, then *-pa on the outermost clause!*

(18) **Embedded clause cannot be a regular finite clause:**

བཀྲ་ཤིས་ཀྱིས་མོག་མོག་བཟོས་སོང་ལཔ་པའི་མི་དེ་

\*[<sub>RC</sub> bkra.shis-kyis [<sub>CP</sub> \_\_\_ mog.mog bzos-**song**] lap-pa]-’i mi de  
Tashi-ERG momo make-AUX say-PA-GEN person DEM

Intended: ‘the person [that Tashi said [\_\_\_ made/makes momo]]’

(19) **-mkhan cannot be on the outermost clause:**

བཀྲ་ཤིས་ཀྱིས་མོག་མོག་བཟོས་སོང་ལཔ་མཁན་མི་དེ་

\*[<sub>RC</sub> bkra.shis-kyis [<sub>CP</sub> \_\_\_ mog.mog bzos-**song**] lap-**mkhan**] mi de  
Tashi-ERG momo make-AUX say-MKHAN person DEM

Intended: ‘the person [that Tashi said [\_\_\_ made/makes momo]]’

LD locative relatives

(20) **LD locative relative:**

བཀྲ་ཤིས་ཀྱིས་པད་མས་མོག་མོག་བཟོས་ལཔ་པའི་ས་ཆ་དེ་

[<sub>RC</sub> bkra.shis-kyis [<sub>CP?</sub> pad.ma-s \_\_\_ mog.mog bzo-**sa**/\***song**]  
Tashi-ERG Pema-ERG momo make-SA/\*AUX  
lap-**pa**/\***sa**]-’i sa.cha de  
say-PA/\*SA-GEN place DEM

‘the place [that Tashi said [Pema made/makes momo \_\_\_]]’

LD instrumental relatives

(21) **LD instrumental relative:**

བཀྲ་ཤིས་ཀྱིས་པད་མས་མོག་མོག་བཟོས་ལཔ་པའི་མོག་ཟངས་དེ་

[<sub>RC</sub> bkra.shis-kyis [<sub>CP?</sub> pad.ma-s \_\_\_ mog.mog bzo-**yag**/\***song**]  
Tashi-ERG Pema-ERG momo make-YAG/\*AUX  
lap-**pa**/\***yag**]-’i mog.zangs de  
say-PA/\*YAG-GEN steamer DEM

‘the steamer [that Tashi said [Pema made/makes momo with \_\_\_]]’

Summary

-pa fundamentally differs in syntactic function from the other “nominalizers.”

- **-pa marks the edge of entire relative clauses** (to be revised), whereas **the other markers reflect a particular kind of local gap.**

### 3 Analysis

- Relativization involves building **full finite clauses**, followed by movement of the [REL] DP head to Spec,CP.
- This movement is triggered by [PROBE:REL] on C.
  - In intermediate clause edges, [PROBE:REL] may be an “edge feature,” introduced to move the [REL] target which would otherwise go unmoved. (See e.g. Heck and Müller 2001, 2003.)
- AUX spells out T. ***-pa/-mkhan/-sa/-yag* all reflect different spell-outs for T+C[REL], which override the pronunciation of T/AUX.**

#### -mkhan subject relatives

- Assume ergative subjects and dative subjects of verbs of possession move to Spec,TP, in order to be (Case) licensed.<sup>6</sup>
- Movement from Spec,TP to Spec,CP is disallowed. This may be due to:
  - Criterial freezing (Rizzi and Shlonsky 2007)
  - (Spec-to-spec) anti-locality (Bošković 2016, Erlewine 2016, Deal to appear; Branen two talks ago)

**So the subject must move directly to Spec,CP, skipping Spec,TP.**

- ▶ *-mkhan* ⇔ T+C[REL] when the subject skipped Spec,TP.

#### -sa and -yag relatives

- Treat instrumental and locative “cases” as postpositions.
- In attempting to Attract the [REL] postpositional object, **P is *incorporated into the verb*** (Baker 1988),<sup>7</sup> making movement of the [REL] postpositional object possible.
- ▶ *-sa* ⇔ T+C[REL]+P[LOC]  
▶ *-yag* ⇔ T+C[REL]+P[INSTR]

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<sup>6</sup>See e.g. the treatment of Icelandic non-nominative subjects in Cowper 1988 and Freidin and Sprouse 1991.

<sup>7</sup>On P-incorporation, see Baker 1988 on applicatives; also Guilfoyle et al. 1992 footnote 7 and Kroeger 1990 on Austronesian peripheral voices, and Van Urk 2015:74ff on Dinka oblique voice.



-pa

- ▶ -pa spells out T+C at the edge of the relative clause (to be revised).  
-pa ⇔ T+C[REL(final/non-edge-feature)]  
...in a theory that featurally distinguishes “final” steps of movement; see e.g. Georgi 2017.

### Long-distance relativization

- The first movement takes place due to the intermediate C[PROBE:REL].
  - If this involves the subject skipping Spec,TP or P-incorporation, T+C is spelled out as *-mkhan/-sa/-yag*.
  - Otherwise T spells out AUX according to its normal tense/aspect/evidential specifications; C is null.
- At the edge of the relative clause — corresponding to the final landing site of movement — T+C is spelled out as *-pa*.

### Two features of this analysis

1. “Nominalized” verbs in rel. clauses are underlyingly **full, finite verbs**.
  - Embedding verbs such as ‘say’ — which otherwise take full finite CP complements — **take complement clauses marked by -mkhan/-sa/-yag** when a marked local extraction has taken place (17, 20, 21).
    - ▶ This is most straightforwardly analyzed if the *-mkhan/-sa/-yag* embedded clause is **still a full finite clause**.
2. *-mkhan/-sa/-yag* reflect **marked derivations**, instead of e.g. straightforwardly moving the head DP, followed by *wh*/case-agreement (Chung 1994, Pearson 2001, Rackowski and Richards 2005).
  - ▶ This derives a generalization regarding **head-internal relative clauses**:

(22) The internal head of a Tibetan head-internal relative clause must be *unmarked* (absolute).<sup>8</sup>

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<sup>8</sup>To my knowledge this generalization has not been stated in the literature. But interestingly, Seth Cable’s 2005 field notes on Tibetan (via p.c.) notes this generalization.

Tibetan also has head-internal relative clauses (HIRC):<sup>9</sup>

(23) **Head-internal object relative:**

པད་མས་མོག་མོག་བཟོས་པ་དེ་

[pad.ma-s mog.mog bzos-pa] de  
Pema-ERG momo make-PA DEM  
'the momo that Pema made' (=8)

However, **HIRCs are limited to unmarked/absolute heads.**

(24) **-mkhan subject relative:**

མི་ཅིག་གིས་མོག་མོག་བཟོ་མཁན་དེ་ / ...བཟོས་པ་དེ་

\*[mi-(cig)-(gis) mog.mog bzo-**mkhan**/bzos-pa] de  
person-one-ERG momo make-MKHAN/make-PA DEM  
Intended: 'the person that made/makes momo'

The same can be shown for instrumental and locative heads.<sup>10</sup>

Analysis: head-internal relatives

- Suppose relativization always involves movement of the head noun to Spec,CP, but **HIRCs reflect pronunciation of a lower copy of the head.**
- Further assume that DP must be Case-licensed *by their pronounced position* (or lower) (see e.g. Takahashi and Hulsey 2009).
  - In object relatives, that lower position is already a Case licensing position, so the head can be safely pronounced there.
  - If the head was a subject, **it skipped Spec,TP**, foregoing licensing. There is no lower copy to pronounce in a licensed position.
  - If the head was a postpositional object, **the postposition was incorporated into the verb.** Even if the head DP could be pronounced in its lower position, it will no longer be licensed.

► Therefore HIRCs are limited to unmarked head nouns.<sup>11</sup>

<sup>9</sup>There are also “doubly-headed” relatives: literally, ‘the momos that Pema made momos.’

DeLancey 1999 also discusses “post-nominal” head-external relative clauses, but at this point I am sympathetic to Mazaudon’s (1978) description (p. 402) that apparent “post-nominal” relatives are simply HIRCs with internal scrambling of the head to clause-initial position.

<sup>10</sup>DeLancey 1999 gives a few examples (his (57–60)) which at first glance look like HIRCs with postpositional head nouns, but they are suspiciously all doubly headed relatives (footnote 9); i.e. the head noun is repeated outside of the clause. This may indicate that DHRCs do not involve movement, for those speakers that accept such examples. (The speakers that I consulted did not accept examples such as DeLancey’s (57–60).)

<sup>11</sup>Notice that transitive subjects can sometimes be unmarked, even if they could be ergative

## 4 Another word order and the nature of *-pa*

Long-distance relativization can also take another form:

(25) **Another LD subject relative:**

བཀྲ་ཤིས་ཀྱིས་ལཔ་པའི་མོག་མོག་བཟོ་མཁན་མི་དེ་

[<sub>CP</sub> bkra.shis-kyis lap-**pa**]-’i [<sub>CP</sub> mog.mog bzo-**mkhan**] mi de  
 Tashi-ERG say-PA-GEN momo make-MKHAN person DEM

‘the person [that Tashi said [\_\_\_ made/makes momo]]’ (=17)

► This word order appears to involve **optional clausal pied-piping**:

- The head moves to the edge of the embedded clause, then the entire embedded clause moves; i.e. what Heck (2008, 2009) calls “pied-piping with secondary fronting” (but all to the right); *or*
- Probing for [REL] from the higher clause edge first moves the entire embedded CP, after which it can extract the head noun from it; see e.g. Van Urk and Richards 2015.

Now consider this option for LD object relativization:

(26) **Another LD object relative:**

བཀྲ་ཤིས་ཀྱིས་ལཔ་པའི་པད་མས་བཟོས་པའི་མོག་མོག་དེ་ཙྨོ་

[<sub>CP</sub> bkra.shis-kyis lap-**pa**]-’i [<sub>CP</sub> pad.ma-s bzos-**pa**]-’i mog.mogde-tso  
 Tashi-ERG say-PA-GEN Pema-ERG make-PA-GEN momo DEM-PL

‘those momo [that Tashi said [that Pema made \_\_\_]]’ (=15)

► **Now both clauses get *-pa* marking!**

It then *cannot* be that *-pa* marks the (logical) edge of the entire relative clause.

- The contrast between (26) and (15) above teaches us that *-pa* is a **marker of a final step of movement** (Georgi 2017), and the movements of the head noun and the embedded CP each count as their own chain.

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marked, as in (4). Example (24) shows that the subject HIRC is ungrammatical even if lacks overt ergative case-marking.

- ▶ We also learn that **each V-*pa*-GEN cannot be a pre-built argument nominalization which intersectively modifies the NP:**

$$\begin{aligned} \llbracket (26) \rrbracket &= \llbracket \text{those momo that Tashi said that Pema made} \rrbracket \\ &\neq \text{THOSE}(\llbracket \text{what Tashi said} \rrbracket \cap \llbracket \text{what Pema made} \rrbracket) \cap \llbracket \text{momo} \rrbracket \end{aligned}$$

## 5 Conclusion and consequences

Relativization in Tibetan involves “nominalized” verbs, which appear to be reduced/non-finite.

**Today:** New data from long-distance relativization helps us better understand the nature of such “nominalizations.”

- ▶ **Relativization in Tibetan cannot be synchronically reduced to argument nominalizations**, contra DeLancey 2002, Noonan 2008, a.o.
  - LD relatives with embedded clauses in-situ (§2) show that “...V-*mkhan*/*-sa*/*-yag*” can in fact be full finite CPs.
  - Other LD relatives (§4) show that “...V-*pa*” cannot always be a pre-built argument nominalization, used as an intersective modifier.
- ▶ **LD relativization shows that *-mkhan*/*-sa*/*-yag* are markers of marked, local gaps**, whereas *-pa* is a marker of final movement in relative clauses.
  - This is reminiscent of patterns of LD extraction in other language families with extraction marking morphology that distinguishes subject/non-subject/locative/instrumental/... targets; see e.g. “voice” morphology in Austronesian (Chung 1998, Rackowski and Richards 2005, a.o.) and Dinka (Nilotic; Van Urk 2015), also Halkomelem Salish (Hukari 2010).
- Further descriptions of LD extraction — in Tibetan but also in other languages with similarly rich but distinct extraction marking systems — has the potential to significantly inform our understanding of the nature of  $\bar{A}$ -movement processes and their morphosyntactic reflexes.

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On the web: <https://mitcho.com/research/talk-lsa2019.html>

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