

# 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)).

(1) བཀྲ་ཤིས་ཀྱིས་དབ་འབྲི་གི་དུག།  
bkra.shis-kyis deb 'bri-gi.dug.  
Tashi-ERG book write-AUX  
'Tashi is writing a book.'

(2) དབ་འབྲི་མཁན་མི།  
[[<sub>RC</sub> deb 'bri-mkhan]mi]  
bookwrite-MKHAN person  
'person who wrote/writes/is  
writing a book/books'

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

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- bkra.shis-kyis deb 'bri-gi.dug. → [[<sub>RC</sub> deb 'bri-mkhan]mi]
- Tashi-ERG      book write-AUX                      bookwrite-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:**

- <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

- 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.

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  - 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.
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§1 Background

§2 New data

§3 Analysis

§4 A bit more new data

§5 Lessons

# §1 Background

## 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 2011, Famularo et al. 2015. Objects are always unmarked (“absolute”).

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| (4) | བཀྲ་ཤིས་ཀྱིས་མོག་མོག་བཟས་སོང།       | (5) | བཀྲ་ཤིས་ཉལ་བསྐྱད་བཞག།               |
|     | bkra.shis-(kyis) mog.mog bzas-song. |     | bkra.shis-(*kyis) nyal-bsdad-bzhag. |
|     | Tashi-ERG momo eat-AUX              |     | Tashi-(*ERG) 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).

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Relativization in Tibeto-Burman languages has been studied almost exclusively under the umbrella of *nominalization*, a major topic of study in Tibeto-Burman linguistics.

- (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.’

## Relativization and nominalization

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

(7) **-pa nominalization as patient nominal:**

པད་མས་བཟོས་པ་དེ་

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

Pema-ERG make-PA DEM

‘what Pema made’



## Relativization and nominalization

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

(8) **Relativization = argument nominalization modifier + NP:**

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

(9) **-pa object relative:**

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

Semantically, we could cash out this intuition with intersective

modification semantics:  $\llbracket (8) \rrbracket = \llbracket \text{argument nominalization} \rrbracket \cap \llbracket \text{NP} \rrbracket$

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## Diachronic evidence

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* (8)? (Spoiler: No.)

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# The “nominalizers”

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

*-mkhan* མཁན་ transitive subjects

*-sa* ས་ locative arguments

*-yag* ཡག་ instrumental arguments and imperfective objects

*-pa* 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.

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## The “nominalizers”

(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.

## The “nominalizers”

(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.

## The “nominalizers”

(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) 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.”

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## §2 Long-distance relativization

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- ▶ “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.



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(14) **Embedded clause under ‘say’:**

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

bkra.shis-kyis [<sub>CP</sub> pad.ma-s mog.mog bzos-song] lap-song.

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

‘Tashi said [that Pema made momo].’

(15) **LD object relative:**

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

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‘those momo [that Tashi said [that Pema made \_\_\_]]’

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- ▶ **-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:**

བགྲ་ཤིས་ཀྱིས་པད་མས་བཟོས་པ་ལཔ་པའི་མོག་མོག་དེ་ཙོ་

- \*[<sub>RC</sub> bkra.shis-kyis [<sub>CP</sub> 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)

(17) **LD subject relative:**

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

[<sub>RC</sub> bkra.shis-kyis [<sub>CP?</sub> \_\_ 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!*

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

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

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

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Tashi-ERG momo make-AUX say-MKHAN person DEM

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



(20) **LD locative relative:**

བགྲ་ཤིས་ཀྱིས་པད་མས་མོག་མོག་བཟོ་ས་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 \_\_\_\_]]'

(20) **LD locative relative:**

བགྲ་ཤིས་ཀྱིས་པད་མས་མོག་མོག་བཟོ་ས་ལཔ་པའི་ས་ཆ་དེ་

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say-PA/\*SA-GEN place DEM

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

(21) **LD instrumental relative:**

བཀྲ་ཤིས་ཀྱིས་པད་མས་མོག་མོག་བཟོ་ཡག་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 \_\_\_]]’

*-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.
- AUX spells out T. *-pa/-mkhan/-sa/-yag* all reflect different spell-outs for T+C[REL], which *override the pronunciation of T/AUX*.

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## Analysis: *-mkhan* subject relatives

- Assume ergative subjects and dative subjects of verbs of possession move to Spec,TP, in order to be (Case) licensed.
- 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; Branan two talks ago)

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- Treat instrumental and locative “cases” as postpositions.
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- 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*.
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(22) The internal head of a Tibetan head-internal relative clause must be *unmarked* (absolute).

## Head-internal relative clauses

Tibetan also has head-internal relative clauses (HIRC):

(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’ (=9)

## Head-internal relative clauses

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

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

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

\*[mi-(ciɡ)-(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.

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## 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.
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## **§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་

bkra.shis-kyis lap-**pa**-’i mog.mog bzo-**mkhan** mi de

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- ▶ 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.

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Now consider this option for LD object relativization:

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[<sub>CP</sub> bkra.shis-kyis lap-**pa**]-i [<sub>CP</sub> pad.ma-s bzos-**pa**]-i mog.mog de-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!

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► **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.



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

[[ (26) ] ] = [[ those momo that Tashi said that Pema made ] ]

≠ THOSE( [[ what Tashi said ] ] ∩ [[ what Pema made ] ] ∩ [[ momo ] ] )

## **§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.”

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- ▶ **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.

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## Conclusion

- ▶ **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 Halkomalem 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.



## Conclusion

- ▶ **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 Halkomalem 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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<https://mitcho.com/research/talk-lsa2019.html>

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