Predicate-fronting and animacy in Burmese*

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1 Introduction

Burmese is SOV with scrambling. Normally, word order alone cannot tell us the height of arguments.

(1) **Canonical SOV word order:**[1]

Săya-ga   Mala-ko   c'icu-k'eh-deh.
teacher-NOM Mala-ACC praise-PAST-NFUT
'The teacher praised Mala.'

V(P)-focus triggers verb-doubling. Verb-doubling in turn feeds predicate-fronting.

(2) **Verb-doubling:**

Săya-ga   Mala-ko   **c'icu-daun c'icu-k'eh-deh**.
teacher-NOM Mala-ACC praise-even praise-PAST-NFUT
'The teacher praised Mala.'

(3) **Predicate-fronting:**

Mala-ko   c'icu-daun] săya-ga   c'icu-k'eh-deh.
Mala-ACC praise-even   teacher-NOM praise-PAST-NFUT
'The teacher praised Mala.'

The predicate-fronting construction exemplified in (3) is the object of study in this talk. It turns out that subject animacy has a curious effect on the availability of predicate-fronting.

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[1]Abbrieviations: ACC = accusative, FOC = focus, NFUT = non-future, NOM = nominative, PASS = passive, PAST = past. I follow the romanization for Burmese employed in Okell 1994, also discussed in Jenny & Hnin Tun 2016: 45–47.

(4)   **Subject animacy has an effect on predicate-fronting:**

Mala-ko   c'icu-daun **]** {✓ **săya/*rehpoq**}-ga   c'icu-k'éh-deh.
Mala-ACC praise-even {✓ teacher/*report}-NOM praise-PAST-NFUT
'The teacher/the report even praised Mala.'

➤ Observe that in (4), predicate-fronting is possible with an animate subject and impossible with an inanimate subject.

I argue that evidence from word order facts in **predicate-fronting constructions** show that animate and inanimate subjects are found at **different structural heights**.

This makes a contribution to the body of literature that propose different structural positions for nominal arguments (see Ritter & Wiltschko 2016; Kalin 2018; Massam 2011; Lyutikova & Pereltsvaig 2015; Danon 2006 among others.)

Today:

- I describe the effect of subject animacy on the availability of predicate-fronting.

  - Predicate-fronting across the subject is possible with animate subjects but impossible with inanimate subjects.
  - This pattern is consistent throughout intransitive, passive, transitive and ditransitive clauses.

- I propose that the apparent effect of animacy on the availability of predicate-fronting can be accounted for if:

  - Animate and inanimate subjects are associated with different structural positions in the grammar.
  - Predicate-fronting is uniformly vP-fronting in Burmese.
  - DO cannot scramble out of vP before vP-fronting.

Roadmap:

§2 Background

§3 Data

§4 Proposal

§5 Lessons

2 Background

2.1 Burmese clause structure

Burmese is SOV with scrambling. In a transitive clause (5), the direct object gets accusative case. In the ditransitive (6), the indirect object gets the accusative case and the direct object does not get overt case marking.

(5) **Transitive clause:**

Su-ga ngà-ko sà-k'éh-deh.
Su-NOM fish-ACC eat-PAST-NFUT
'Su ate fish.'

(6) **Ditransitive clause:**

Su-ga Aung-ko paiqs'an pè-k'éh-deh.
Su-NOM Aung-ACC money give-PAST-NFUT
'Su gave money to Aung/Su gave Aung money.'

2.2 Predicate-fronting

- Predicate-fronting[2] is a construction whereby the verb is displaced, with or without its arguments, if any, from its canonical position for purposes of focus, topicalisation, or contrast (see Hein 2018 for a comprehensive typological survey).

- In Burmese, predicate-fronting is fed by verb-doubling which is in turn triggered by verb focus.

- Verb-doubling constructions (7) involve the pronunciation of two copies of the lexical verb, one with a focus particle (focused verb, V-FOC), and one in the canonical clause-final position with tense suffix (tensed verb, V-T).

(7) **Verb-doubling:**

. . . (arguments) . . . V-FOC V-T

Su-ga ngà-ko sà-daun/beh/leh sà-k'éh-deh.
Su-NOM fish-ACC eat-even/only/also eat-PAST-NFUT
'Su even/only/also ate fish.'

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[2]aka verbal fronting, V(P)-fronting, VP-topicalization, predicate cleft(ing), verb focus.

(8) **Predicate-fronting:**

> ...(arguments) ... V-FOC **]** ...(stranded arguments) ... V-T

> ngà-ko sà-daun/beh/leh **]** Su-ga sà-k'éh-deh.
> fish-ACC eat-even/only/also Su-NOM eat-PAST-NFUT
> 'Su even/only/also ate fish.'

- In this work, predicate-fronting will descriptively be diagnosed by the presence of arguments between V-FOC and V-T (8). I refer to arguments found in this position as *stranded* arguments.

- Ozerov & Daudey 2017 discuss verb-doubling structures in Burmese in terms of pragmatic and discourse information structures, but predicate-fronting constructions are not described in there or elsewhere in the literature.

2.3 Other constraints on predicate-fronting

Independent of subject animacy, predicate-fronting is subject to a constraint: **the direct object cannot be stranded in predicate-fronting.**

(9) **DO cannot be stranded in transitive predicate-fronting:**

> * Sà-daun **]** Su-ga **ngà-ko** sà-k'éh-deh.
> eat-even Su-NOM fish-ACC eat-PAST-NFUT
> Intended: 'Su even ate fish.'

Similarly, the direct object in the ditransitive cannot be stranded. This is unlike the indirect object which can be stranded.

(10) a. **Baseline ditransitive verb-doubling:**

> Su-ga Aung-ko paiqs'an pè-daun pè-keh-deh.
> Su-NOM Aung-ACC money give-even give-PAST-NFUT

b. **Predicate-fronting stranding S:**   IO DO V-FOC] S V-T

> Aung-ko paiqs'an pèi-daun **]** **Su-ga** pè-k'eh-deh.
> Aung-ACC money give-even Su-NOM give-PAST-NFUT

c. **Stranding S and IO:**   DO V-FOC] S IO V-T

> Paiqs'an pè-daun **]** **Su-ga** **Aung-ko** pè-k'eh-deh.
> money give-even Su-NOM Aung-ACC give-PAST-NFUT

d. **Stranding S and DO:**   * IO V-FOC] S DO V-T

> * Aung-ko pè-daun **]** **Su-ga** **paiqs'an** pè-k'éh-deh.
> Aung-ACC give-even Su-NOM money give-PAST-NFUT

e. **Stranding S, IO, and DO:**   * V-FOC] S IO DO V-T

> * pè-daun **]** **Su-ga** **Aung-ko** **paiqs'an** pè-k'éh-deh.
> give-even Su-NOM Aung-ACC money give-PAST-NFUT
> 'Su even gave Aung money.'

3 The effect of animacy on predicate-fronting

Notice that the examples given so far all involve animate subjects. It turns out that the subject animacy has an effect on the availability of predicate-fronting.

➤ Specifically, we will see that predicate-fronting across the subject is possible with animate subjects but impossible with inanimate subjects.

Intransitives:

(11) a. **Baseline unergative:**

{✓Hlahla/✓sehqmouq}-ga so-daun   so-deh.
{✓Hlahla/✓robot}-NOM   sing-even sing-NFUT

b. **Animacy effect with unergative:**

So-daun **]** {✓Hlahla/*sehqmouq}-ga so-deh.
sing-even {✓Hlahla/*robot}-NOM   sing-NFUT
'Hlahla/the robot even sings.'

(12) a. **Baseline unaccusative:**

{✓Aung/✓hle}-ga   myouq-daun myouq-k'éh-deh.
{✓Aung/✓ship}-NOM sink-even   sink-PAST-NFUT

b. **Animacy effect with unaccusative:**

Myouq-daun **]** {✓Aung/*hle}-ga   myouq-k'éh-deh.
sink-even   {✓Aung/*ship}-NOM sink-PAST-NFUT
'Aung/the ship even sank.'

➤ With both unergative (11) and unaccusative verbs (12), predicate-fronting is **possible with animate subjects**, but **impossible with inanimate subjects**.

Passives

(13) a. **Baseline passive:**

{✓Săya/✓keq}-ga   c'icu-daun c'icu-k'èh-k'anyá-deh.
{✓teacher/✓cake}-NOM praise-even praise-PAST-PASS-NFUT

b. **Animacy effect with passive:**

C'icu-daun {✓săya/*keq}-ga   c'icu-k'èh-k'anyá-deh.
praise-even {✓teacher/*cake}-NOM praise-PAST-PASS-NFUT
'{The teacher/*the cake} was even praised.'

➤ Predicate-fronting also cares about the subject of the passive i.e. the promoted theme of the verb.

Transitives:

Recall: Direct objects cannot be stranded (as (14c) shows).

(14) a. **Baseline transitive:**

$\boxed{\{^{\checkmark}\text{Săya}/^{\checkmark}\text{rehpoq}\}}$-ga   Mala-ko c'icu-daun c'icu-k'éh-deh.
$\{^{\checkmark}\text{teacher}/^{\checkmark}\text{report}\}$-ɴᴏᴍ Mala-ᴀᴄᴄ praise-even praise-ᴘᴀꜱᴛ-ɴꜰᴜᴛ

b. **Animacy effect with transitive:**   DO V-ꜰᴏᴄ] S V-T

Mala-ko c'icu-daun **]** $\boxed{\{^{\checkmark}\text{săya}/\text{*rehpoq}\}}$-ga   c'icu-k'éh-deh.
Mala-ᴀᴄᴄ praise-even $\{^{\checkmark}\text{teacher}/\text{*report}\}$-ɴᴏᴍ praise-ᴘᴀꜱᴛ-ɴꜰᴜᴛ

c. **Stranding DO is bad regardless of subject animacy:**   * V-ꜰᴏᴄ] S DO V-T
  * C'icu-daun **]** {săya/rehpoq}-ga   Mala-ko c'icu-k'éh-deh.
  praise-even {teacher/report}-ɴᴏᴍ Mala-ᴀᴄᴄ praise-ᴘᴀꜱᴛ-ɴꜰᴜᴛ
  'The teacher/the report even praised Mala.'

➤ Likewise, predicate-fronting with transitive verbs is licit with an animate subject, and illicit with an inanimate subject.

Ditransitives:

Recall: Direct objects cannot be stranded.

(15) a. **Baseline ditransitive:**

$\boxed{\{^{\checkmark}\text{Su}/^{\checkmark}\text{sain}\}}$-ga Aung-ko   paiqs'an pè-daun pè-k'eh-deh.
$\{^{\checkmark}\text{Su}/^{\checkmark}\text{sain}\}$-ɴᴏᴍ Aung-ᴀᴄᴄ money   give-even give-ᴘᴀꜱᴛ-ɴꜰᴜᴛ

b. **Animacy effect, stranding S:**   IO DO V-ꜰᴏᴄ] S V-T

Aung-ko   paiqs'an pè-daun **]** $\boxed{\{^{\checkmark}\text{Su}/\text{*sain}\}}$-ga pè-k'éh-deh.
Aung-ᴀᴄᴄ money   give-even $\{^{\checkmark}\text{Su}/\text{*shop}\}$-ɴᴏᴍ give-ᴘᴀꜱᴛ-ɴꜰᴜᴛ

c. **Animacy effect, stranding S and IO:**   DO V-ꜰᴏᴄ] S IO V-T

paiqs'an pè-daun **]** $\boxed{\{^{\checkmark}\text{Su}/\text{*sain}\}}$-ga   Aung-ko pè-k'éh-deh.
money   give-even $\{^{\checkmark}\text{Su}/\text{*shop}\}$-ɴᴏᴍ Aung-ᴀᴄᴄ give-ᴘᴀꜱᴛ-ɴꜰᴜᴛ

d. **Cannot strand DO, regardless of subject animacy:**   * IO V-ꜰᴏᴄ] S DO V-T
  * Aung-ko   pè-daun **]** {Su/sain}-ga   paiqs'an pè-k'éh-deh.
  Aung-ᴀᴄᴄ give-even {Su/shop}-ɴᴏᴍ money   give-ᴘᴀꜱᴛ-ɴꜰᴜᴛ

e. **Cannot strand DO, regardless of subject animacy:**   * V-ꜰᴏᴄ] S IO DO V-T
  * pè-daun **]** {Su/sain}-ga   Aung-ko paiqs'an pè-k'éh-deh.
  give-eve {Su/shop}-ɴᴏᴍ Aung-ᴀᴄᴄ money   give-ᴘᴀꜱᴛ-ɴꜰᴜᴛ
  'Su/the shop even gave the pen to Aung.'

➤ In the ditransitive, predicate-fronting is possible with an animate subject but impossible with an inanimate subject.

Q: What happens if predicate-fronting does not cross over the subject?
A: No animacy effect is observed if predicate-fronting does not cross the subject.

(16) a. **No animacy effect if only stranding IO:**   S DO V-FOC] IO V-T

     $\boxed{\{^\checkmark\text{Su}/^\checkmark\text{sain}\}\text{-ga}}$ paiqs'an pei-daun **] Aung-ko** pè-k'éh-deh.
     $\{^\checkmark\text{Su}/^\checkmark\text{shop}\}$-NOM money   give-even Aung-ACC give-PAST-NFUT

     b. **Cannot strand DO:**   * S IO V-FOC] DO V-T

     * {Su/sain}-ga   Aung-ko   pei-daun **] paiqs'an** pè-k'éh-deh.
     {Su/shop}-NOM Aung-ACC give-even money   give-PAST-NFUT

     c. **Cannot strand DO:**

     * {Su/shop}-ga   pei-daun **]** Aung-ko   paiqs'an pè-k'éh-deh.
     {Su/shop}-NOM give-even Aung-ACC money   give-PAST-NFUT
     'Su/the shop even gave money to Aung.'

➤ It is not that predicate-fronting is absolutely impossible with inanimate objects —
predicate-fronting is fine if it does not cross the inanimate subject.
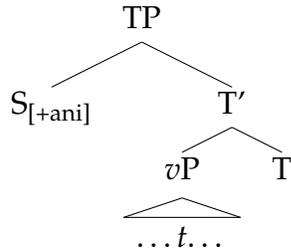

4 Proposal

To capture the effect of animacy on the availability of predicate-fronting, I argue that
animate and inanimate subjects are associated with different structural positions in the
Burmese grammar.

(17) **Working assumptions:**

a. Lexical verb is base-generated in V and undergoes head-movement V→v→T.
   Normally, lower copies of head movement will be unpronounced, resulting
   in the entire verbal complex in T.

b. With focus on vP, the verb must be pronounced in v to host the focus particle,
   as well as in T to host the tense suffixes.[3]

c. The highest DP in the vP gets nominative case by Agree with T, whether or
   not it remains in that position in the final derivation. The other arguments
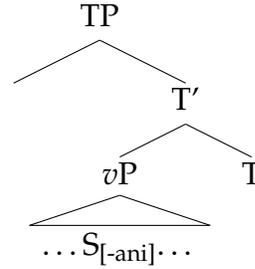   get accusative or oblique case (overtly marked or not).

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[3]This follows Landau's (2006) and Hein's (2018) proposals for similar predicate-fronting
constructions in Hebrew and Yiddish.

(18) **Proposal for the effect of animacy on Burmese predicate-fronting:**
   a. Animate subjects raise out of the vP to spec,TP while inanimate subjects do not move out of vP.
   b. Burmese predicate-fronting is uniformly fronting of vP.

<div align="center">

Animate subjects:

```
           TP
          /  \
   S[+ani]    T′
             /  \
           vP     T
           /\
         …t…
```

Inanimate subjects:

```
           TP
          /  \
              T′
             /  \
           vP     T
           /\
       …S[-ani]…
```

</div>

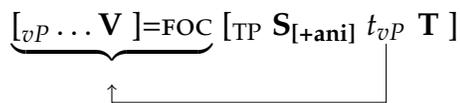➤ Therefore, predicate-fronting that strands the inanimate subject is underivable.
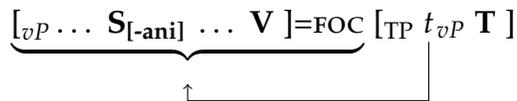
4.1 Intransitives and passives

(19)   Schematic Summary of data:

				Animate S	Inanimate S
a.	S	V-FOC	V-T	✓	✓
b.	V-FOC]	S	V-T	✓	*

(20)   **Fronting vP in intransitive/passive with $S_{[+ani]}$ (moves out of vP to spec,TP):**

$$[_{vP} \ldots \mathbf{V}]=\text{FOC} \; [_{TP} \; \mathbf{S_{[+ani]}} \; t_{vP} \; \mathbf{T} \;]$$

(21)   **Fronting vP in intransitve/passive with $S_{[-ani]}$ (remains in vP):**

$$[_{vP} \ldots \mathbf{S_{[-ani]}} \ldots \mathbf{V}]=\text{FOC} \; [_{TP} \; t_{vP} \; \mathbf{T} \;]$$
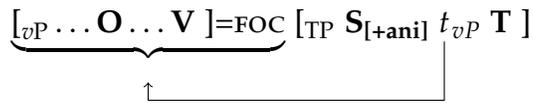
➤ Hence stranding the inanimate subject in an intransitive or a passive is not possible (19b).

4.2 Transitives

(22)   Schematic summary of transitive data:

					Animate S	Inanimate S
a.	O	V-FOC **]** S	V-T		✓	*
b.	V-FOC **]** O		S V-T		*	*

(23)   **Fronting vP in a transitive with S$_{[+ani]}$ (moves out of vP to spec,TP):**

$$[_{vP} \ldots \text{O} \ldots \text{V}]\text{=FOC} \; [_{TP} \; \text{S}_{[+ani]} \; t_{vP} \; \text{T} \;]$$

(24)   **Fronting vP in a transitive with S$_{[-ani]}$ (remains in vP):**

$$[_{vP} \ldots \text{S}_{[-ani]} \ldots \text{O} \ldots \text{V}]\text{=FOC} \; [_{TP} \; t_{vP} \; \text{T} \;]$$
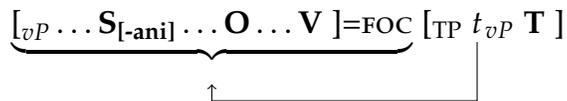
➤ Notice also that in (23-24), it is impossible to front the verb alone and strand the DO, under the proposal that no constituent smaller than the vP can be the target of movement in predicate-fronting. This explains the ungrammaticality of (22b) regardless of subject animacy.

4.3 Ditransitives

(25)   Schematic summary of ditransitive data:

							Animate S	Inanimate S
a.	IO	DO	V-FOC **]** S		V-T		✓	*
b.	DO	V-FOC **]** S		IO	V-T		✓	*
c.	IO	V-FOC **]** S		DO	V-T		*	*
d.	S	DO	V-FOC **]** IO		V-T		✓	✓

(26) **Fronting vP in a ditransitive with $S_{[+ani]}$ (moves out of vP to spec,TP):**

$[_{vP} \ldots \textbf{IO} \ldots \textbf{DO} \ldots \textbf{V} \,]$=FOC $[_{TP} \ \textbf{S}_{[+ani]} \ t_{vP} \ \textbf{T} \,]$
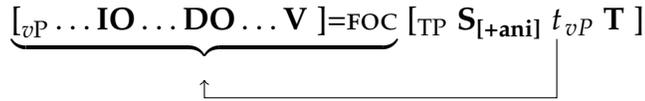
(27) **Fronting vP in a ditransitive with $S_{[-ani]}$ (remains in vP):**

$[_{vP} \ldots \textbf{S}_{[-ani]} \ldots \textbf{IO} \ldots \textbf{DO} \ldots \textbf{V} \,]$=FOC $[_{TP} \ t_{vP} \ \textbf{T} \,]$
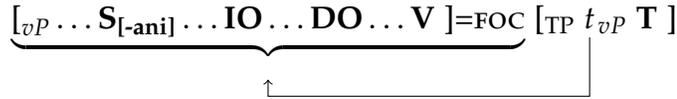
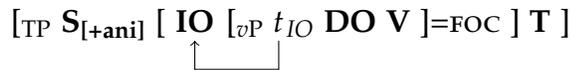➤ (26) vs (27) accounts for the animacy effect in (25a).

To explain (25b), we need to stipulate the following:

(28) **The IO-DO asymmetry:**
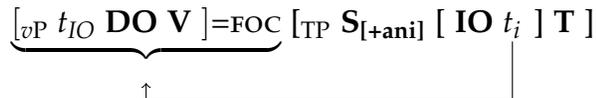The indirect object can scramble out of vP before vP fronting, but the direct object cannot.

(29) **IO scrambling is compatible with vP-fronting:**
  a. Scramble IO out of vP:
  $[_{TP} \ \textbf{S}_{[+ani]} \ [\ \textbf{IO} \ [_{vP} \ t_{IO} \ \textbf{DO} \ \textbf{V} \,]$=FOC $] \ \textbf{T} \,]$

  b. Front vP constituent:
  $[_{vP} \ t_{IO} \ \textbf{DO} \ \textbf{V} \,]$=FOC $[_{TP} \ \textbf{S}_{[+ani]} \ [\ \textbf{IO} \ t_i \ ] \ \textbf{T} \,]$

(30) **DO scrambling is incompatible with vP-fronting:**
  a. Animate subject:
  * $[_{TP} \ \textbf{S} \ [\ \textbf{DO} \ [_{vP} \ \textbf{IO} \ t_{DO} \ \textbf{V} \,]$=FOC $] \ \textbf{T} \,]$

  b. Inanimate subject:
  * $[_{TP} \ [\ \textbf{DO} \ [_{vP} \ \textbf{S} \ \textbf{IO} \ t_{DO} \ \textbf{V} \,]$=FOC $] \ \textbf{T} \,]$

The word order in (25c) is possible whether the animate subject remains in the vP, like the inanimate subject, or if it moves out.

(31) **Derivation for (25d) with S[+ani] (moves out of vP to spec,TP):**

    a.   <u>Scramble IO out of vP:</u>

        [$_{TP}$ **S[+ani]** [**IO** [$_{vP}$ …t_{subj}…t_{IO}…**DO**…**V**]=FOC] **T**]

    b.   <u>Front vP:</u>

        [$_{vP}$ … t_{subj} …t_{IO}…**DO**…**V**]=FOC [$_{TP}$ **S[+ani]** [**IO** t_{vP}] **T**]

    c.   <u>Scramble subject higher:</u>

        S[+ani] [$_{vP}$…t_{subj} …t_{IO} …**DO** …**V**]=FOC [$_{TP}$ t_{subj} [**IO** t_{vP}] **T**]

(32) **Derivation for (25c) with S[-ani] (stays in vP):**

    a.   <u>Scramble IO out of vP:</u>

        [$_{TP}$ [**IO** [$_{vP}$ …**S[-ani]**…t_{IO} …**DO**…**V**]=FOC] **T**]

    b.   <u>Front vP:</u>

        [$_{vP}$…**S[-ani]**…t_{IO}… **DO** …**V**]=FOC [$_{TP}$ [**IO** t_{vP}] **T**]

5 Summary

I have made the novel observation of the effect of subject animacy on Burmese predicate-fronting.

- Predicate-fronting across the subject is possible when the subject is animate, but impossible when the subject is inanimate.

<u>Analysis:</u>

- **Animate and inanimate subjects are associated with different structural positions.**

  - Animate subjects raise out of vP to spec,TP
  - Inanimate subjects remain in vP

- **Burmese predicate-fronting is uniformly vP-fronting**

11

References

Danon, Gabi. 2006. Caseless Nominals and the Projection of DP. *Natural Language and Linguistic Theory* 24.977–1008.

Hein, Johannes, 2018. *Verbal Fronting: Typology and Theory*. Leipzig: Universität Leipzig dissertation.

Jenny, Mathias, & San San Hnin Tun. 2016. *Burmese: A Reference Grammar*. Routledge.

Kalin, Laura. 2018. Licensing and Differential Object Marking. *Syntax* 21.112–159.

Landau, Idan. 2006. Chain Resolution in Hebrew V(P)-fronting. *Syntax* 9.32–66.

Lyutikova, Ekaterina, & Asya Pereltsvaig. 2015. The Tatar DP. *Canadian Journal of Linguistics* 60.289–325.

Massam, Diane. 2011. Pseudo Noun Incorporation in Niuean. *Natural Language and Linguistic Theory* 19.153–197.

Okell, John. 1994. *Burmese: An introduction to the spoken language*. Northern Illinois University, Center of Southeast Asian Studies.

Ozerov, Pavel, & Henriëtte Daudey. 2017. Copy-verb constructions in Tibeto-Burman and beyond. *Linguistic Typology* 21.53–99.

Ritter, Elizabeth, & Martina Wiltschko. 2016. Humanness as an alternative to Case-licensing. In *Proceedings of the 2016 Annual Conference of the Canadian Linguistic Association*, ed. by Lindsay Hracs.