Ergative extraction marking as participant exponence *

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Today's talk

- Jê verbs: long and short forms
- Case marking alignment
- Main and dependent clauses in Panará
- Extraction asymmetries

1 Panará

- In South America, the Jê language family is found from central Brazil to southeastern Brazil
- Panará belongs to the Northern Jê branch. It is spoken by 500-600 people in southern
 Pará and northern Mato Grosso



Location of the Panará Indigenous Land. Source: Instituto Socioambiental.

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- Panará is an atypical Jê language:
 - A polysynthetic language in a broadly analytic family
 - A uniformly ergative case-marking language in a broadly accusative/ergative family
 - A free constituent order language in a strongly verb-final family

2 Clause type and case alignment

- In Jê languages, the case marking alignment is accusative in clauses with a short form of the verb
- Ergative case alignment is present exclusively in nominal environments, marked with a long form of the verb

(Bardagil 2018; Nonato 2014; Salanova 2007; Urban 1985)

Dependent clauses obligatorily take a long-form verb, and therefore the case alignment is ergative.

Mẽbêngôkre

- (1) a. *[**Ba** tep krẽ] kêt. 1SG.NOM fish eat.SH NEG 'I didn't eat fish.'
 - b. *[**Ije** tep krẽ] kêt. 1SG.ERG fish eat.SH NEG 'I didn't eat fish.'
 - c. [**Ije** (/***B**a) tep krẽn] kết. 1SG.ERG /1SG.NOM fish eat.LG NEG 'I didn't eat fish.'

Unlike every other Jê language, the case marking of arguments in Panará in dependent clauses is identical to that of main clauses.

- Exemplified with a relative clause (Panará has IHRCs):
- (2) Joopy hẽ ti= Ø= krẽ swasĩrã. Panará jaguar ERG 3SG.ERG 3SG.ABS eat w.l.peccary
 'The jaguar ate a white-lipped peccary.'
- (3) [Patty hē ti= Ø= pĩra swasĩra] rê= Ø=
 Patty ERG 3SG.ERG 3SG.ABS kill peccary 1SG.ERG 3SG.ABS
 ku= krẽ.
 chew eat
 'I ate the peccary that Patty killed.'

3 Syntactic ergativity

In some languages, a clear asymmetry exists between the syntactic properties of the two arguments of a transitive predicate.

- One argument in transitive clauses has a prominence in constituency, access to syntactic operations, and coreference regulations
- Such prominence makes this argument similar to the single argument of the intransitive clause

When such asymmetry follows an ergative pattern we talk about **syntactic ergativity**. Syntactic ergativity is sometimes manifested as an extraction asymmetry. *Typically one that restricts the ergative argument*.

- ERG + ABS_{*INTR*} vs. ABS_{*TR*} \rightarrow Syntactic accusativity
- ERG vs. $ABS_{INTR} \& ABS_{TR} \rightarrow Syntactic ergativity$

Limitations on argument extraction that are typically observed cross-linguistically in ergative systems are focalization, wh-fronting, or relativization (Deal 2015; Queixalós 2013).

E.g.: West Greenlandic relativization exhibits syntactic ergativity (Bittner 1994):

(4)	miiqqa-t [ABS sila-mi pinnguar-tu-t]	ABS _{INTR}
	child-pl.abs _ outdoors-loc play-rel.intr-pl	
	'The children who are playing outdoors.'	
(5)	miiqqa-t [Juuna-p paari-sa-i] child-pl.Abs Juuna-erg look.after-rel.tr-3sg.pl	ABS _{TR}
	'The children that Juuna is looking after.'	
(6)	*angut [Rg aallaat tigu-sima-sa-a]	ERG
	man.ABS _ gun.ABS take-prF-rel.Tr-3SG.SG	

Intended: 'The man who took the gun.'

4 Panará syntactic ergativity

Panará does not exhibit ergative-absolutive (or nominative-accusative) asymmetries in most operations, with one exception:

- Demonstratives
- Wh-extraction
- Relativization
- Extraction from embedded clauses \leftarrow

4.1 Demonstratives

• In Panará, all arguments can be specified with a demonstrative determiner, or realized as a demonstrative pronoun:

(7)	a.	Mãja jy= pôôAlthis INTR arrive'This one here arrived.'	BS _{INTR}
	b.	Kupêri hẽti=s=anpunmãja.Kupêri ERG3SG.ERG3SG.ABSseethis'Kupêri saw this one here.'	ABS _{TR}
	c.	Mãja hẽ ti= s= anpun Kupêri. this ERG 3SG.ERG 3SG.ABS see Kupêri 'This one here saw Kupêri.'	ERG

4.2 Syntactic ergativity: Ā-movement

- Wh-extraction is available to all absolutives, as well as the ergative:
- (8) a. Inpy jy= sõti man INTR sleep 'The man slept.'
 - b. Prē jy= sõti? who INTR sleep 'Who slept?'
- (9) a. Inpy hẽ ti= s= anpun inkjêê. man ERG 3SG.ERG 3SG.ABS see woman
 'The man saw the woman.'
 - b.Prēhẽti=s=anpun inkjêê?ERGwhoERG3SG.ERG3SG.ABSseewoman'Who saw the woman?'

ABS_{INTR}

- c. $Pr\tilde{e}$ inpy he ti = s = anpun? ABS_{TR} who man ERG 3SG.ERG 3SG.ABS see 'Who did the man see?'
- Relativization is also available to all argument types:
- (10) $Jy = \emptyset = s \tilde{o} ti$ [inkjêê j $y = \emptyset = p \hat{o} \hat{o}$]. ABS_{INTR} INTR 3SG.ABS sleep woman INTR 3SG.ABS come 'The woman that arrived is sleeping.'

- (11) [Toopatũ hẽ ti= pĩri swasĩra] inkjẽ junpjâ hẽ. ERG old-man ERG 3SG.ERG kill peccary 1SG.ERG father ERG
 'The old man that killed a peccary is my father.'
- (12) [Ka hẽ ka= pĩri swasĩra ka sipjâ mã] nãsisi inpe. ABS_{TR}
 2SG ERG 2SG.ERG kill peccary 2SG wife DAT sweet real
 'The peccary you killed for your wife was really tasty.'

4.2.1 Syntactic ergativity: Embedded extraction

Panará does present an Ā-looking phenomenon that exhibits an ergative-absolutive asymmetry. There is a construction with a topic participant in a main clause that corresponds to an argument of a dependent clause. Although it is quite clearly an Ā operation, it is yet inconclusive whether the relation is movement or prolepsis.

- Intransitive absolutive arguments can be extracted from an embedded clause like a complement clause:
- (13) Ti= s= anpun Perankô hẽ [joopy jy= tẽ]. ABS_{INTR}
 3SG.ERG 3SG.ABS see Perankô ERG jaguar INTR leave
 'Perankô saw the jaguar that fled (the jaguar flee).'
- (14) Joopy ti= s= anpun Perankô hẽ [_ jy= tẽ].
 jaguar 3SG.ERG 3SG.ABS see Perankô ERG INTR leave
 'Perankô saw *the jaguar* that fled (the jaguar flee).'
 - This is also available to transitive absolutives:
- (15) Rê= s= anpun [joopy hẽ ti= pĩri kôôtita].
 1SG.ERG 3SG.ABS see jaguar ERG 3SG.ERG kill chicken
 'I saw the jaguar killing a chicken.'
- (16) Kôôtita rê= s= anpũ [joopy hẽ ti= pĩri]. ABS_{TR} chicken 1SG.ERG 3SG.ABS see jaguar ERG 3SG.ERG kill 'I saw *the chicken* that the jaguar killed.'
 - However, ergatives cannot undergo the same operation straight off:
- (17) Rê= s= anpun [joopy hẽ ti= pĩri kôôtita]. ERG
 1SG.ERG 3SG.ABS see jaguar ERG 3SG.ERG kill chicken
 'I saw the jaguar killing a chicken.'

- (18) * Joopy rê= s= anpun [_ ti= pĩri kôôtita].
 jaguar 1SG.ERG 3SG.ABS see 3SG.ERG kill chicken
 Intended: 'I saw *the jaguar* that killed the chicken.'
- (19) * Joopy hẽ rê= s= anpun [_ ti= pĩri kôôtita].
 jaguar ERG 1SG.ERG 3SG.ABS see 3SG.ERG kill chicken
 Intended: 'I saw *the jaguar* that killed the chicken.'

There is however a strategy that allows extraction of the ergative constituent: a morpheme *tân* on the main clause's verb.

- (20) a. *Joopy rê= s= anpũ ti= pĩri kôôtita. jaguar 1SG.ERG 3SG.ABS see 3SG.ERG kill chicken
 'I saw the jaguar that killed the chicken.'
 - b. *Joopy hẽ rê= s= anpũ ti= pĩri kôôtita.
 jaguar ERG 1SG.ERG 3SG.ABS see 3SG.ERG kill chicken
 'I saw the jaguar that killed the chicken.'
 - c. Joopy rê= tân = s= anpũ ti= pĩri kôôtita. jaguar 1SG.ERG ?? 3SG.ABS see 3SG.ERG kill chicken 'I saw the jaguar that killed the chicken.'
- (21) a. Ippẽ ka= tân= pĩri ti= sipyri Pakrekaka. stranger 2sG.ERG ?? kill 3sG.ERG kidnap Pakrekaka
 'You killed the Kayapo that had kidnapped Pakrekaka.'
 - b. *Panprĩ rê= tân= sanpun ti= sipyri ippẽ hẽ.
 child 1sG.ERG ?? see 3sG.ERG kidnap stranger ERG
 'The child that I saw was kidnapped by the Kayapo.'
 - c. Panprĩ rê= sanpun ti= sipyri ippẽ hẽ.
 child 1sG.ERG see 3sG.ERG kidnap stranger ERG
 'The child that I saw was kidnapped by the Kayapo.'
 - These are not juxtaposed clauses, where the morpheme *tân* would be unnecessary—even ungrammatical:
- (22) [Joopy he rê= s= anpun] [ti= pîri kôôtita].
 jaguar ERG 1SG.ERG 3SG.ABS see 3SG.ERG kill chicken
 'I saw a jaguar, it killed the chicken.'
- (23) *Joopy hẽ rê= s= anpun [_ ti= pĩri kôôtita].
 jaguar ERG 1SG.ERG 3SG.ABS see 3SG.ERG kill chicken
 'I saw the jaguar that killed the chicken.'

5 Discussion

Panará "embedded extraction" exhibits a syntactically ergative asymmetry:

ERG VS. $ABS_{INTR} \& ABS_{TR} \rightarrow Syntactic ergativity$

Although reminiscent of antipassive constructions, the Panará construction with *tân* is crucially different.

- An **antipassive** allows the ergative argument to access the properties restricted to the absolutive (focus, relativization, etc.)
- (24) a. *Angut [aallaat tigu- sima- sa- a]. man gun.ABS take PRF REL.TR 3SG.SG "The man who took the gun."
 - b. Angut [aallaam-mik tigu- **si** sima- su- a]. man gun-INS take AP PRF REL.INTR SG "The man who took the gun."
 - Panará *tân* is also unlike Mayan agent focus (Erlewine 2016)

The Panará *tân* morpheme is homophonous with a specialized comitative adposition that has an "at your place" semantics.

- (25) $R\hat{e}=$ a= $t\hat{a}n=$ $\emptyset=$ kuri tepi. 1SG.ERG 2SG.ABS COM 3SG.ABS eat fish 'I ate fish at your house (with you).
 - However, locative-comitative *tân* behaves like a transitive postposition, and when incorporated obligatorily takes an absolutive clitic that matches the postposition's object.

In the inherent case literature (Aldridge 2012; Assmann et al. 2015; Coon, Mateo Pedro & Preminger 2014), syntactic ergativity is often derived by movement of the absolutive constituent to a position higher than the ergative,^{*} where the latter is blocked from extracting:



- However, partial syntactic ergativity such as in Panará cannot be captured by this approach.
 - The ergative DP is not blocked in any other Ā movement (wh, relatives)
 - This suggests that in Panará "embedded extraction" the ergative is not blocked either

^{*}Motivated by e.g. the need to be assigned absolutive case from T at the *v*P edge. See (Deal 2015: ch.2) for a discussion.

5.1 The proposal

The question that the data examined above is the following:

• Why cannot the ergative in a lowe clause that topicalizes in the upper clause with unmarked (absolutive) case be cross-referenced with an absolutive clitic (or no clitic)?

My working hypothesis is that Panará $t\hat{a}n$ is back-up morphological exponence for an out-of-place ergative constituent

- In some cases, a DP with absolutive case in a clause inherits ergative features from another clause
 - By being Ā-extracted from a relative clause in which it's ergative
 - By being co-indexed with an ergative DP in a relative clause
- (27) Joopy rê= tân= sanpũ [〈joopy hẽ〉 ti= pĩri kôôtita].
 jaguar 1SG.ERG see jaguar ERG 3SG.ERG kill chicken
 'I saw *the jaguar* that killed the chicken.'
 - Regardless of the relation between the high and low elements, neither the ergative nor the absolutive clitic can cross-reference this [ABS, ERG] DP, either because of a feature mismatch or a templatic restriction

(28) $\begin{bmatrix} \text{MAIN} & \text{DP} \xrightarrow{\text{cliticize}} \text{INFL} & \dots & \begin{bmatrix} \text{Dependent} & \dots & \langle \text{DP} \rangle \end{bmatrix} \end{bmatrix}$

- Absence of a clitic for this participant is equivalent to indexing it with 3sg.Abs {∅}, which would create a mitmatch
- The locative-comitative morpheme *tãn* doubles as a rescue pronominal clitic

6 Conclusion

To conclude, I have presented novel data on partial syntactic ergativity in Panará.

- Ergative constituents require an extra piece of morphology on the verb to be extracted (or co-indexed)
- I proposed that the constraint on Ā extraction of ergative DPs from a relative clause boils down to a morphological restriction
- In this view, neither an ergative nor an absolutive clitic are possible exponents for the [ERG|ABS] feature specification of the DP
- Instead, a more underspecified morpheme (locative-comitative $t\hat{a}n$) is inserted to achieve cross-reference of the constituent

The following abbreviations are used in the glosses: 1 = first person, 2 = second person, 3 = third person, ABS = absolutive, AP = antipassive, COM = comitative, DAT = dative, ERG = ergative, INS = instrumental, INTR = intransitive, LG = long form, NEG = negative, NOM = nominativ PRF = perfect, REL = relative, SG = singular, SH = short form, TR = transitive.

References

- Aldridge, Edith. 2012. Antipassive and ergativity in Tagalog. *Lingua* 122(3). 192–203.
- Assmann, Anke, Doreen Georgi, Fabian Heck, Gereon Müller & Philipp Weisser. 2015. Er-
- gatives move too early: on an instance of opacity in syntax. Syntax 12(4). 343-387.
- Bardagil-Mas, Bernat. 2018. *Case and agreement in Panará*. University of Groningen PhD thesis.
- Bittner, Maria. 1994. Case, scope and binding. Dordrecht: Kluwer.
- Coon, Jessica, Pedro Mateo Pedro & Omer Preminger. 2014. The role of case in A-bar extraction asymmetries: evidence from Mayan. *Linguistic Variation* 14(2). 179–242. 10.1075/lv.14.2.01c
- Deal, Amy Rose. 2015. Ergativity. In Artemis Alexiadou & Tibor Kiss (eds.), *Syntax Theory and analysis. An international handbook*, 654–708. Berlin: Mouton de Gruyter.
- Erlewine, Michael Y. 2016. Anti-locality and optimality in Kaqchikel Agent Focus. *Natural Language and Linguistic Theory* 34. 429–479.
- Nonato, Rafael. 2014. *Clause-chaining, switch-reference and coordination*. Cambridge, MA: Massachusetts Institute of Technology PhD thesis.
- Queixalós, Francesc. 2013. L'ergativité est-elle un oiseau bleu?, vol. 26 (LSLT). Munich: Lincom.
- Salanova, Andrés. 2007. *Nominalizations and aspect*. Cambridge, MA: Massachusetts Institute of Technology PhD thesis.
- Urban, Greg. 1985. Ergativity and Accusativity in Shokleng (Gê). International Journal of American Linguistics (16). 164–187.