OBJECT LICENSING IN SAN JUAN ATITÁN MAM

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Introduction

Tessa

6th year PhD student in linguistics

I started working with Henry on Mam in 2017. In 2019 I started teaching Mam classes with Henry in Oakland.

We continue to work together now, teaching classes, traveling to Guatemala, building and supporting projects that support Mam language and culture.

Henry

I am descendent of K'aib'il B'alam, made from corn. I am proud to be Maya Mam.

I have been living in the US for more than 10 years. I speak Mam, Spanish, and English, I work at a Newcomer Highschool, I am a student at SF State.

I am and advocate for the Mam culture and language

This work

Tessa: This research is a part of my dissertation which also analyzes other syntax and morphology puzzles in Mam as well as discusses the Mam classes.

This is research in progress and your feedback is very welcome!

San Juan Atitán Mam

Mam is spoken in many municipalities in Huehuetenango, San Marcos, and Quetzaltenango in Guatemala and also in some parts of Mexico. Mam is also spoken throughout the US, including Oakland.

We will be analyzing Mam that is spoken in San Juan Atitán, which is a municipality in Huehuetenango.

The population is approximately 25,000. (Instituto Nacional de Estadística Guatemela https://www.ine.gob.gt/ine/proyecciones/)

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Overview

Object marking in Mam

high set B

Most documentation of Mam shows that objects trigger **high set B** (appearing after aspectual marking).

(1) *Cajolá Mam (Pérez Vaíl 2014, 142)*
Ma **chi** kub' t-tzyu-'n=a.
PROX **B2/3PL** DIR A2/3SG-grab-DS=ENC
'You grabbed **them**.'

(2) *Ixtahuacán Mam (England 1983a, 62)*
Ma **qo** ok t-tzeeq'a-n.
PROX **B1PL** DIR A2/3SG-grab-DS=ENC
'He/she/it hit **us (incl)**.'

Object marking in San Juan Atitán Mam

default set B

Objects consistently trigger **'default'** Set B marking and full pronominal objects in final position.

San Juan Atitán Mam

⬛ H S (3)　Ma　**ø**　　　kub'　　　n-qes-n=i　　　　a qa.
　　　　　　PROX**B2/3SG**　DIR　　　A2/3SG-grab-DS=ENC　　a PL
　　　　　　'I cut them down.'

⬛ H S (4)　Ma　**tz'**-ok　　　t-ke'y-an　　　Lucrecia qo'=y
　　　　　　PROX**B2/3SG**-DIR　A2/3SG-see-DS　Lucrecia 1PL.PRO=ENC
　　　　　　'Lucrecia saw us (exclusive).'

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Set B asymmetry in San Juan Atitán Mam

high set B

However, intransitive subjects consistently control **high Set B marking.**

H S

(5) Ma **chin** b'et=i.
 PROX **B1SG** walk=ENC
 'I walked.'

default set B

(6) Ma **tz'**-ok t-ke'y-an Lucrecia qin=i.
 PROX **B2/3SG**-DIR A2/3SG-see-DS Lucrecia 1SG.PRO=ENC
 'Lucrecia saw me.'

Default Set B marking raises questions:

▷ What makes intransitive subjects different from transitive objects in SJA Mam?

▷ Are objects licensed by Infl even though they don't show agreement?

▷ If objects are not licensed by Infl, are they licensed by Voice?

▷ SJA Mam shows that the ergative extraction constrain is in effect, but that is predicted only for languages where the object is licensed by Infl (Coon et al 2014, Coon et al 2021). What does SJA Mam say about this correlation?
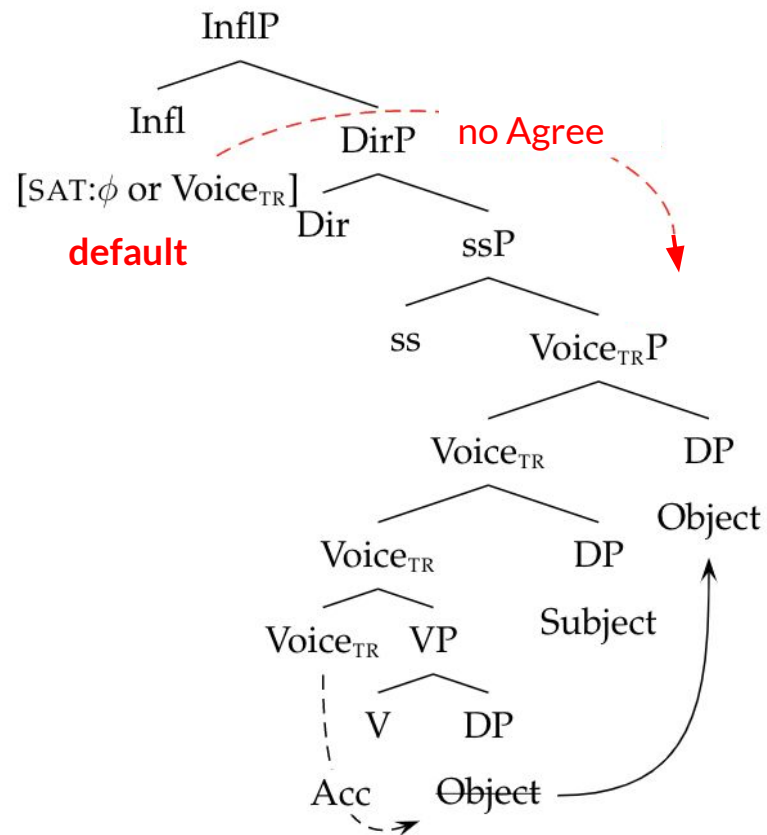
Our analysis

Infl fails to reach objects specifically because the probe is restricted from probing into Voice$_{TR}$P.
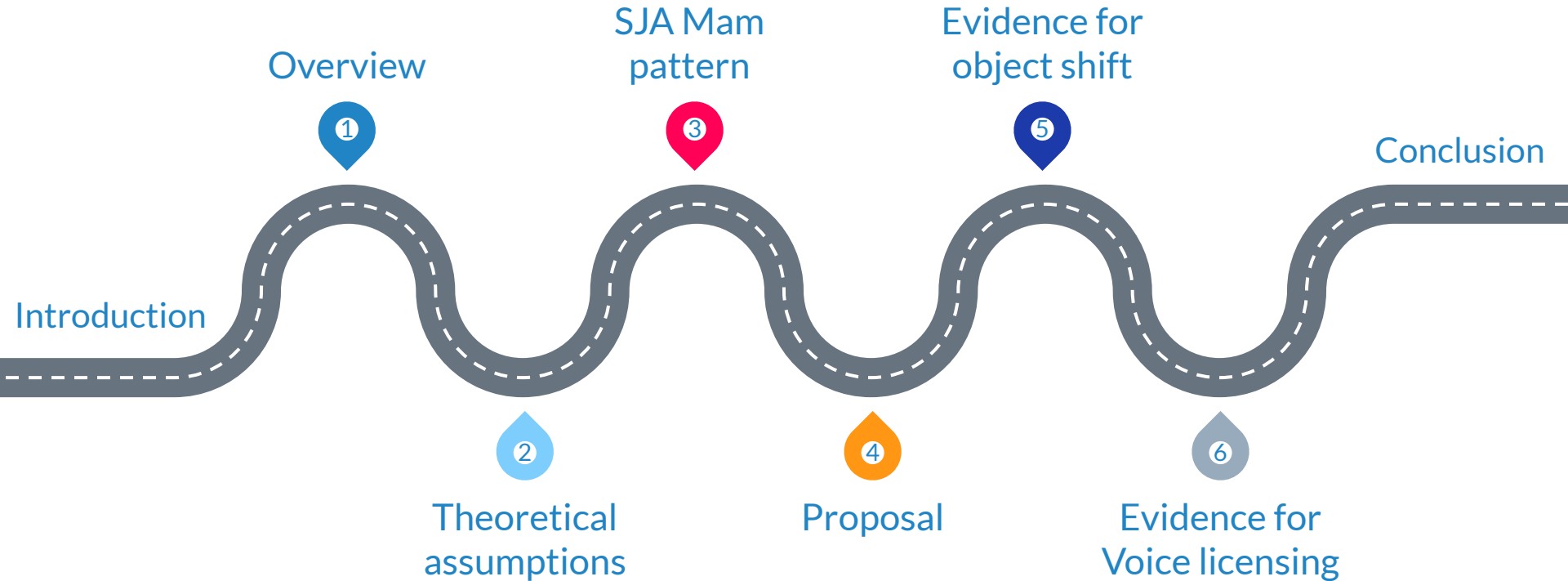
Objects are licensed by transitive Voice.

Objects obligatorily move to a position above the subject which restricts subject extraction

SJA Mam transitive clause

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Roadmap

Overview

SJA Mam pattern

Evidence for object shift

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Conclusion

Introduction

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Theoretical assumptions

Proposal

Evidence for Voice licensing

Theoretical background

Case licensing, agreement, clause structure, word order

Set A: ergative and genitive (possessive)

Voice

Coon (2017) argues that ergative is assigned low in the clause. We adopt the bundled *v*/Voice analysis (Clemens and Coon 2018) and use the **Voice** label for simplicity.
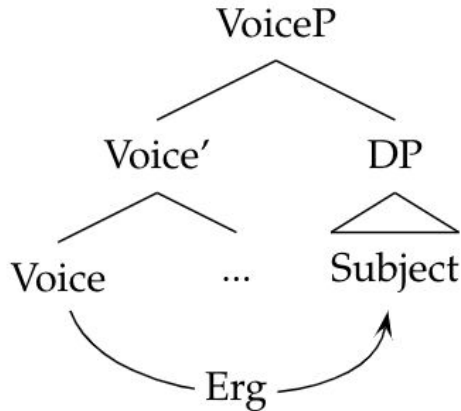
We adopt the rightward specifier analysis of Mayan word order in Little 2020.

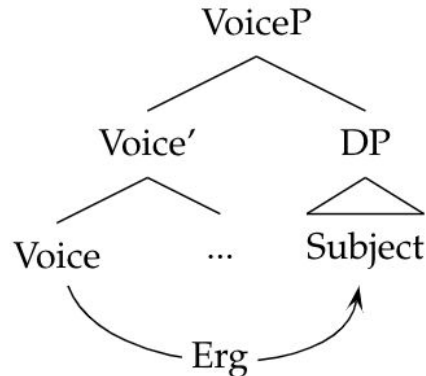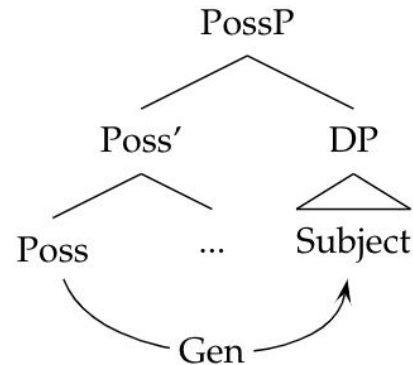# Set A: ergative and genitive (possessive)

Set A Set A morphemes reference transitive subjects as well as possessors. They prefix to verbs and nouns respectively.

San Juan Atitán Mam

H S (7) Ma **w**-il=i Lucrecia.

PROX **A1SG**-see=ENC Lucrecia.

'I saw Lucrecia.'

VoiceP
Voice' — DP
Voice … Subject
Erg

H S (8) **w**-u'j=i
A1SG-book=ENC
'my book'

PossP
Poss' — DP
Poss … Subject
Gen

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Set B: Varying position

high vs. low

Across Mayan languages, the absolutive (Set B) marker appears varies between a 'high' and 'low' position (Bricker 1977).

HIGH-ABS	ASPECT	**ABS**	ERG	ROOT	(DERIV.)	SUFFIX	
LOW-ABS	ASPECT		ERG	ROOT	(DERIV.)	SUFFIX	**ABS**

Coon et al. (2014) label these high-abs and low-abs languages.

Tada's generalization

✅ In the Mayan languages that mark Set B 'high' (high-abs languages),

❌ generally cannot A-bar extract ergative arguments

Tada (1993,106)

Tad'as generalization example

✓ Pre-stem Set B marking "high-abs"

Q'anjob'al (Coon et al. 2014, 190, 193)
(9) a.   Max-**ach**   oq'-i.
           ASP-**B2**   cry-ITV
           '**You** cried.'

    b.   Max-**ach**   y-il-a'.
           ASP-**B2**   A3-see-TV
           'She saw **you.**'

Tad'as generalization example

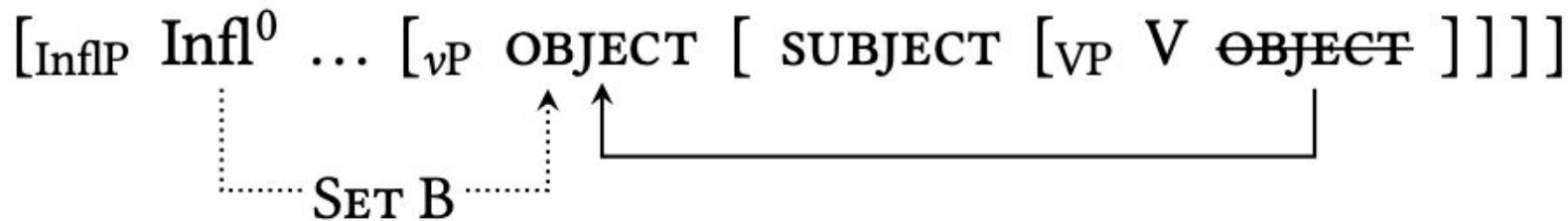❌ Ergative extraction constraint (named EEC by Aissen 2017)

Q'anjob'al (Coon et al. 2014, 193)

(10) *Maktxel$_1$ max-Ø   y-il[-a']   ___$_1$ ix   ix?
     who   ASP-3ABS 3ERG-see-TV   CLF   woman
     intended: 'Who saw the woman?'
     (grammatical as: 'Who did the woman see?')

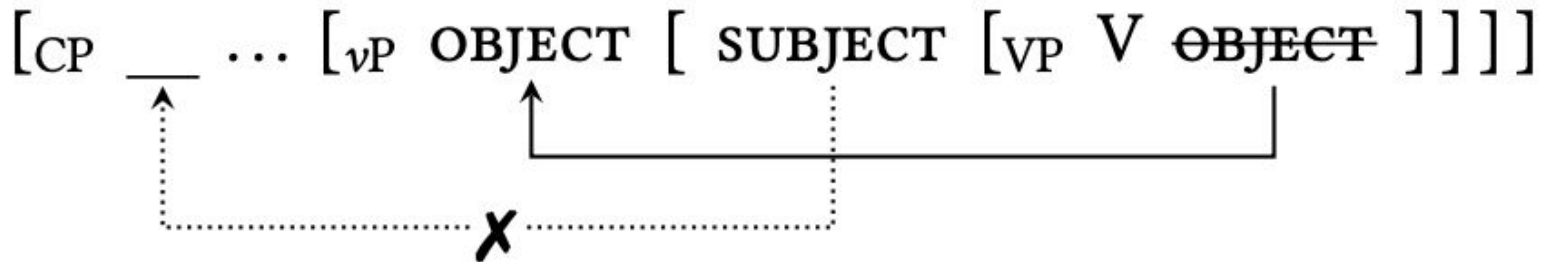# Coon et al.'s explanation

✓ High-abs languages license transitive objects via Infl^0

➔ Objects must move above subjects

$[_{\text{InflP}} \; \text{Infl}^0 \; \ldots \; [_{v\text{P}} \; \text{OBJECT} \; [\; \text{SUBJECT} \; [_{\text{VP}} \; \text{V} \; \cancel{\text{OBJECT}} \;]]]]$

SET B

Coon et al. (20140, Coon et al. (2021)

Coon et al's explanation

❌ The position of the object traps the ergative subject from undergoing A-bar extraction

$$[_{CP}\ \underline{\quad}\ \ldots\ [_{vP}\ \text{OBJECT}\ [\ \text{SUBJECT}\ [_{VP}\ V\ \cancel{\text{OBJECT}}\ ]]]]$$

Coon et al. (2014), Coon et al. (2021)

Set B: Transitive objects

vary

<u>**Mayan absolutive parameter:**</u>

"The surface position of absolutive correlates with the head responsible for licensing absolutive arguments in transitive clauses" (Coon et al. 2014, 194).

<u>high-abs</u>

high licensing - Infl
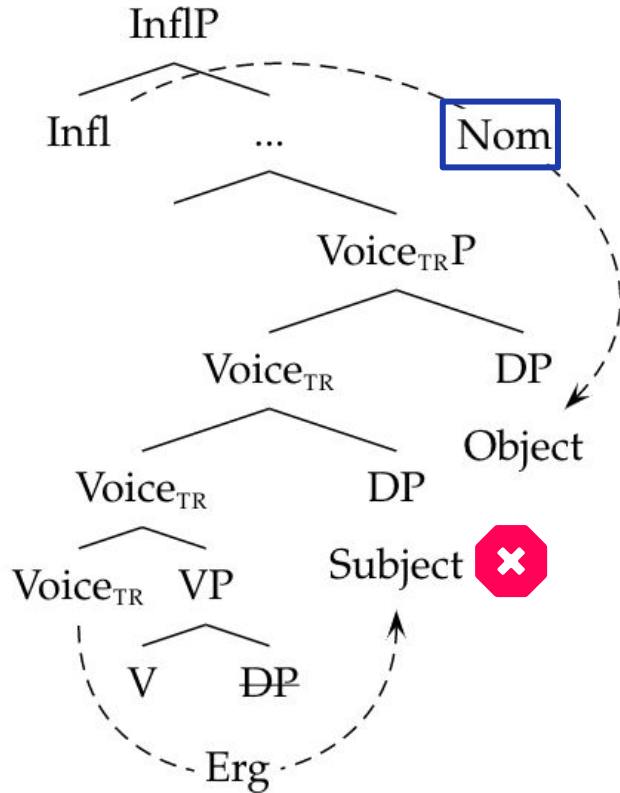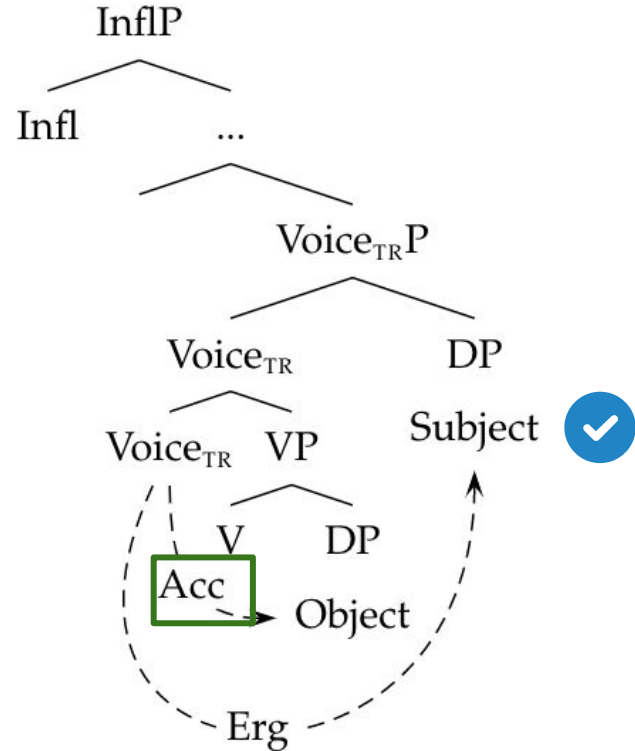
high surface position of set B

<u>low-abs</u>

low licensing - Voice

low surface position of set B

high-abs

low-abs

San Juan Atitán Mam

Object marking, EEC

Intransitive = full set B agreement

high set B

(11) a. Ma **chn**-u'l=i.

[H S] PROX **B1SG**-arrive=ENC.

'I arrived (here).'

b. Ma **chin** b'et=i.

PROX **B1SG** walk=ENC.

'I walked. '

[H S] 2sg	Ma	**tz**-ul=i.	2sg	Ma	**ø** b'et=i.
[H S] 3sg	Ma	**tz**-ul.	3sg	Ma	**ø** b'et.
[H S] 1pl.excl	Ma	**qw**-u'l=i.	1pl.excl	Ma	**qo** b'et=i.
[H S] 1pl.incl	Ma	**qw**-u'l.	1pl.incl	Ma	**qo** b'et.
[H S] 2pl	Ma	**chj**-u'l qi.	2pl	Ma	**chi** b'et qi.
[H S] 3pl	Ma	**chj**-u'l qa.	3pl	Ma	**chi** b'et qa.

Transitive = *default* set B agreement

default set B

default set B is overt

pronouns in object position

(12)   Ma **tz'-**ok   t-ke'yan   Lucrecia qin=i.

[H S] PROX **B2/3SG**-DIR   A2/3SG-see   Lucrecia 1SG.PRO=ENC

'Lucrecia Saw me.'

2sg	Ma	**tz'-**ok	t-ke'yan	Lucrecia	ay.
3sg	Ma	**tz'-**ok	t-ke'yan	Lucrecia	q'a (CLF).
1pl.ex.	Ma	**tz'-**ok	t-ke'yan	Lucrecia	qo'y.
1pl.in	Ma	**tz'-**ok	t-ke'yan	Lucrecia	qo.
2pl	Ma	**tz'-**ok	t-ke'yan	Lucrecia	qi.
3pl	Ma	**tz'-**ok	t-ke'yan	Lucrecia	qa.

➔ Default Set B agreement is not available in intransitive clauses

The status of expected full set B

default set B

(13)   Ma **chn**-ok   t-ke'yan   Lucrecia

H S   PROX **B1SG**-DIR   A2/3SG-see   Lucrecia

'Lucrecia saw me.'

This variation of the sentences is possible in San Juan Atitán and it represents
    the **standardized** form
    the **prescriptive** form

This is suggested based on the fact that people reflect that it is used in
    speeches
    formal settings

Where as the "default way to say it" is with the default Set B.

The status of expected full set B

default set B

(13)　　Ma **chn**-ok　　　t-ke'yan　　Lucrecia
　　　　PROX **B1SG**-DIR　　A2/3SG-see　　Lucrecia
　　　　'Lucrecia saw me.'

H S

Based on the fact that this is the pattern reported in literature on Mam in the 80s -10s (England 1983 a.o.), and that other Mayan languages mark objects this way, it might also represent
　　　　the **older** form

Default object marking is
　　　　an **innovation**

Proposal

Proposal:

The lack of agreement for objects reflects the following:

➔ A φ probe is always present on Infl.
➔ The probe comes specified with a restriction on accessing objects.
➔ The lack of φ features copies back to Infl results in default features being realized.
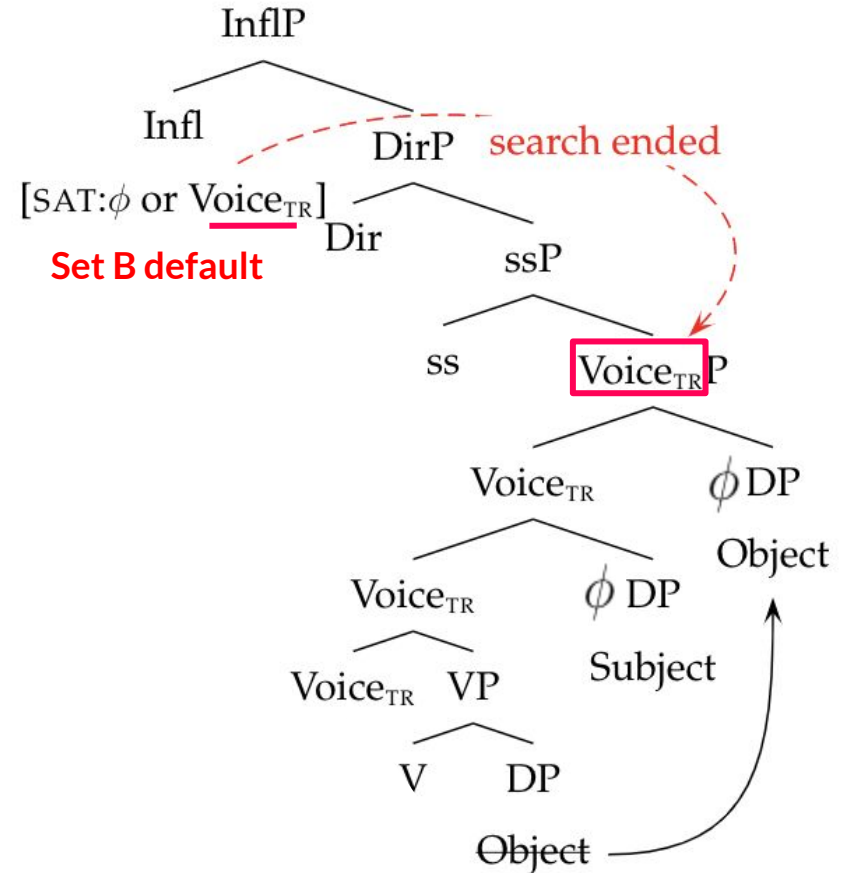
Probe restriction

When the probe reaches Voice$_{TR}$ it must **stop its search.**

=

Using an interaction/satisfaction model of Agree, we can model the behavior of the Infl probe with a disjunctive satisfaction condition (Deal 2015, 2021)

Probe on Infl:

[SAT: **φ** or Voice$_{TR}$]

InflP
Infl   DirP   search ended
[SAT:ϕ or Voice$_{TR}$]
Set B default   Dir   ssP
ss   Voice$_{TR}$P
Voice$_{TR}$ ϕ DP
Voice$_{TR}$ ϕ DP   Object
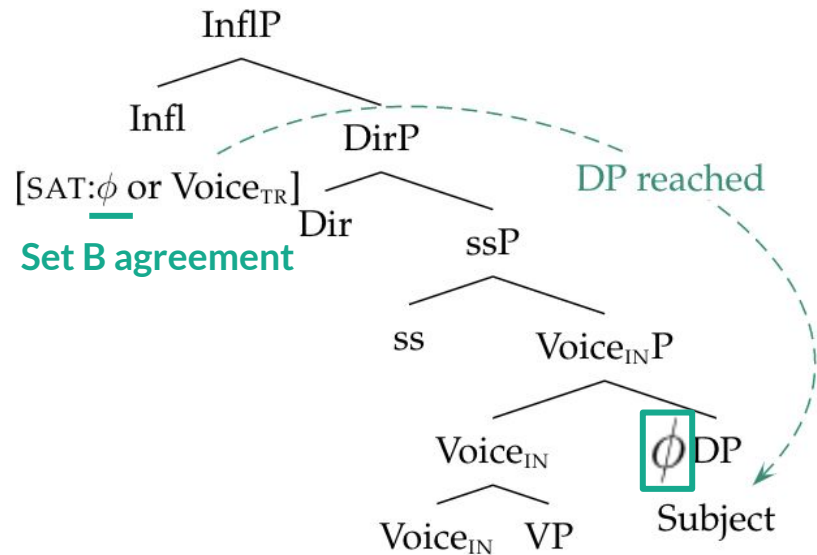Voice$_{TR}$ VP   Subject
V   DP
~~Object~~

Probe restriction

When the probe reaches Voice$_{IN}$ it keeps searching, and **finds the subject.**

Using an interaction/satisfaction model of Agree, we can model the behavior of the Infl probe with a disjunctive satisfaction condition (Deal 2015, 2021)

Probe on Infl:

[SAT: **𝜑** or Voice$_{TR}$]

InflP
Infl   DirP
[SAT:ϕ or Voice$_{TR}$]   Dir   ssP   **DP reached**
Set B agreement
ss   Voice$_{IN}$P
Voice$_{IN}$ ϕDP
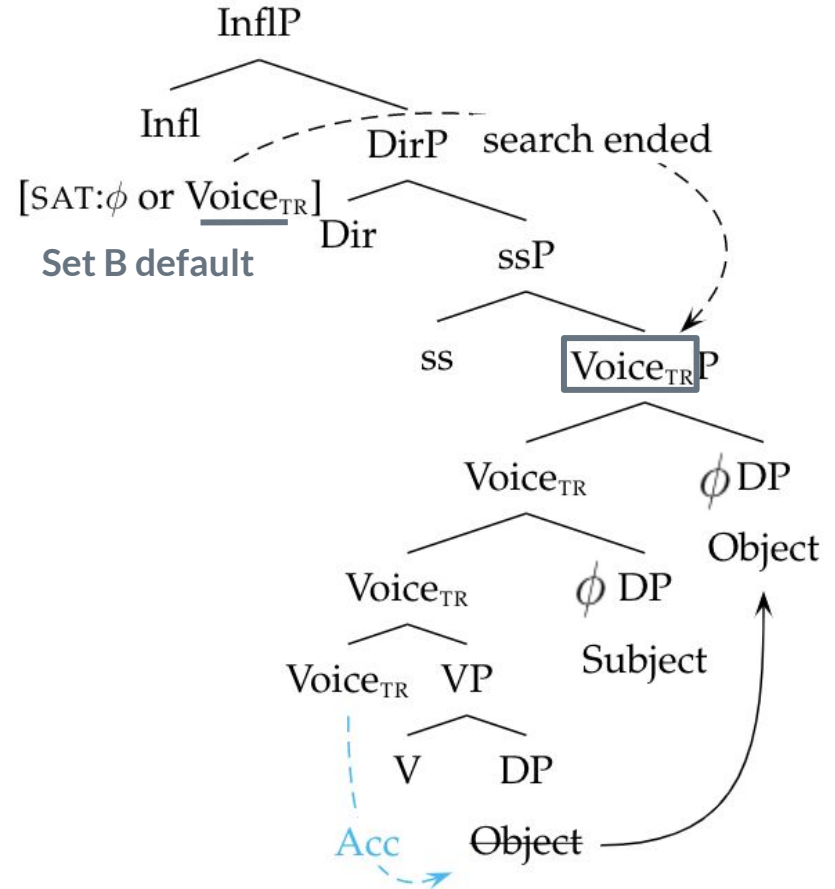Voice$_{IN}$ VP   Subject

Voice licensing

Assuming arguments must be case licensed, and assuming that is done through Agree,
what licensed objects?

Like in Ch'ol, and other low-abs Mayan languages (Coon et al. 2014),

We propose objects in San Juan Atitán Mam are licensed via Voice.

Evidence for the analysis

★ Evidence that the object moves above the subject
- ○ Ergative Extraction Constraint in effect in SJA Mam

★ Evidence that the object is licensed by Voice
- ○ Objects of the Infl-less clauses with *tzqin* 'know' are licensed

Evidence of object shift

Ergative extraction constraint

★ Termed the EEC (Aissen 2017), this is a constraint against A-bar extracting the ergative argument from a typical transitive clause.
  ○ This constraint is a part of the typological family of constraints within "syntactic ergativity"

★ A-bar operations sensitive to this restriction are:
  ○ Wh- movement
  ○ Relativization
  ○ Focus movement

The EEC in San Juan Atitán Mam

Wh- Q

The ergative wh- element cannot extract from the transitive clause:

(14) a. *A'l   ma   tz'-ok   t-b'yo'n   __ qin=i?

        who PROX B2/3SG-DIR   A2/3SG-hit __ 1SGPRO=ENC

Instead, a non-ergative clause is used:

    b.   A'l   ma   tz'-ok   b'yon-ta qin=i?

        who PROX B2/3SG-DIR   hit-ta   1SGPRO=ENC

        | H S |

        Who hit me?

What's clear about these clauses:

➔   *A suffix is added to the verb (-ta or -t)*

➔   *Ergative agreement disappears*

The EEC in San Juan Atitán Mam

Wh- Q

The ergative wh- element cannot extract from the transitive clause:

(14) a. *A'l   ma   tz'-ok   t-b'yo'n   __ qin=i?

who PROX B2/3SG-DIR   A2/3SG-hit __ 1SGPRO=ENC

Instead, a non-ergative clause is used:

b.   A'l   ma   tz'-ok   b'yon-ta qin=i?

who PROX B2/3SG-DIR   hit-ta   1SGPRO=ENC

[H S] Who hit me?

What's not so clear about these clauses:

➔ *Object: demoted to a relational noun phrase (oblique)?*
➔ *The subject often receives default set b marking*

The EEC in San Juan Atitán Mam

Wh- Q

The ergative wh- element cannot extract from the transitive clause:

(14) a. *A'l   ma   tz'-ok   t-b'yo'n   __ qin=i?

who PROX B2/3SG-DIR   A2/3SG-hit __ 1SGPRO=ENC

Instead, a non-ergative clause is used:

b.   A'l   ma   tz'-ok   b'yon-ta qin=i?

who PROX B2/3SG-DIR   hit-ta   1SGPRO=ENC

H S

Who hit me?

What's important about these facts

➔   *There is a problem with extracting the ergative subject*
➔   *This suggests that the object moves above the subject*

The EEC in San Juan Atitán Mam

(15a) ?Aj   xjal   [ma   tz'-ok   t-b'yon   qini   ] tz-ul.
       REL   person   [PROX B2/3SG-DIR   A2/3SG-hit 1SGPRO=ENC] B2/3SG-arrive

(15b) Aj   xjal   [ma   tz'-ok   b'yon-ta qini   ] tz-ul.
        REL person   [PROX B2/3SG-DIR   hit-ta   1SGPRO=ENC]   B2/3SG-arrive
       'The person who hit me will come. '

The EEC in San Juan Atitán Mam

(16) ?A   Jse   ma   tz'-ok   t-b'yon   ay.
     FOC   Jose   PROX   B2/3SG-DIR   A2/3SG-hit   2SG.PRO.ENC

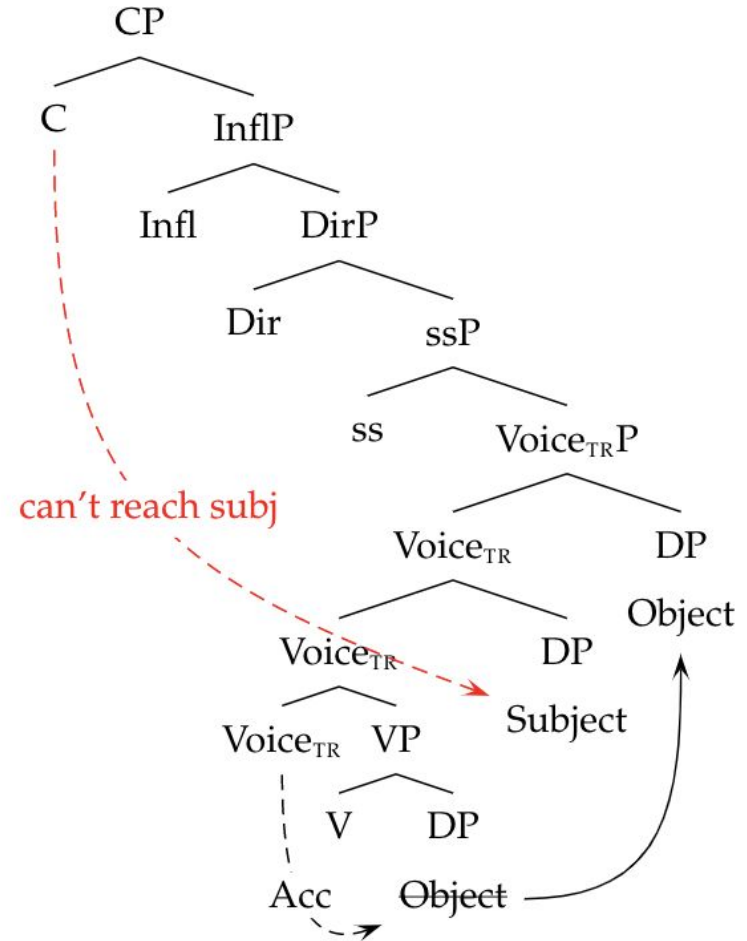(17) A   Jse   ma   tz'-ok   b'yon-ta   ay
     FOC   Jose   PROX   B2/3SG-DIR   hit-ta   2SG.PRO.ENC

     'JOSE hit you.'

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Ergative extraction constraint

★ Adopting the view that EEC effects point towards a high structural position of the object,

★ We can conclude from this data that objects in SJA Mam move above subjects.

Regardless of whether Infl reaches the object, it is "in the way".

Why does the object move?

The Mam data suggest that we adopt the analysis of syntactic ergativity in Austronesian languages by Aldridge (2004, 2008, 2012):

Syntactic ergativity is characterized by the inversion of the object over the subject

➔ This movement is driven by an EPP feature

In other words,
➔ If the object needs case from infl, it must move to get there
➔ But, the object could also move after getting case as well

Objects licensed via Voice

Evidence from low-abs languages

The diagnostic used in both Legate (2008) and Coon et al. (2014) for distinguishing Infl from Voice licensing for transitive objects: **nonfinite clauses.**

- non-finite clauses **contain** transitive VoiceP
- non-finite clauses **lack** InflP

➔ In Low abs languages, objects are still licensed

➔ In High abs languages, objects need special licensing
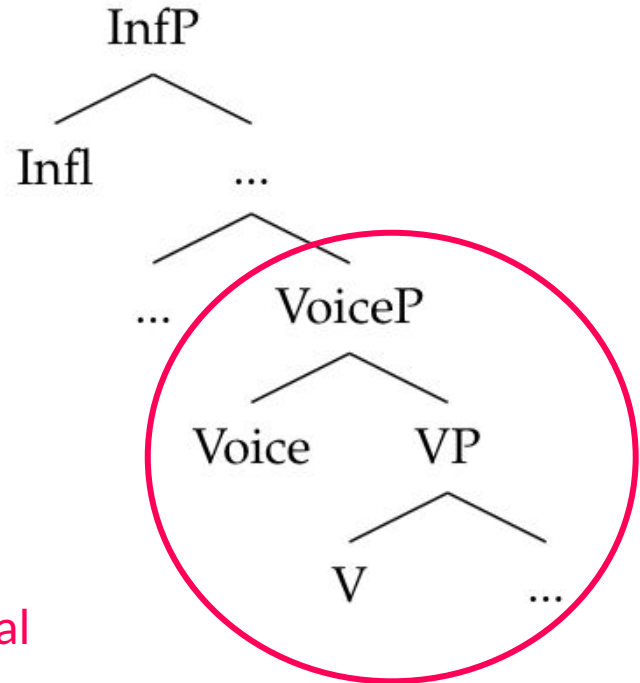
This diagnostic in Mam

Mam has many types of less-than-fully-finite clauses (England 2013).

Finding a clause that clearly has VoiceP but lacks InflP is not straightforward.

Non-finite clauses:

➔ **No VoiceP at all to license objects or subjects**

(18) *Ixtahuacan Mam (England 2013, 286)*

| o | chi | e'x | xjaal | [**laq'oo-l** | (t-ee)] |
| CMPL | B2/3PL | go | person | [**buy-NF** | (A2/3SG-RN)] |

`The people went to buy (it). '

'Se fue la gente a comprarlo.'

Non-finite clauses:

➜ Contain InflP

(19) *Ixtahuacan Mam (England 2013, 300)*

ø-w-aj(b'el)=a   [**chin**   aq'naan=a   nchi'j/ja'la/*ew] .
B2/3SG-A1SG-want=ENC   [**B1SG**   work=ENC   (tomorrow/today/*yesterday)
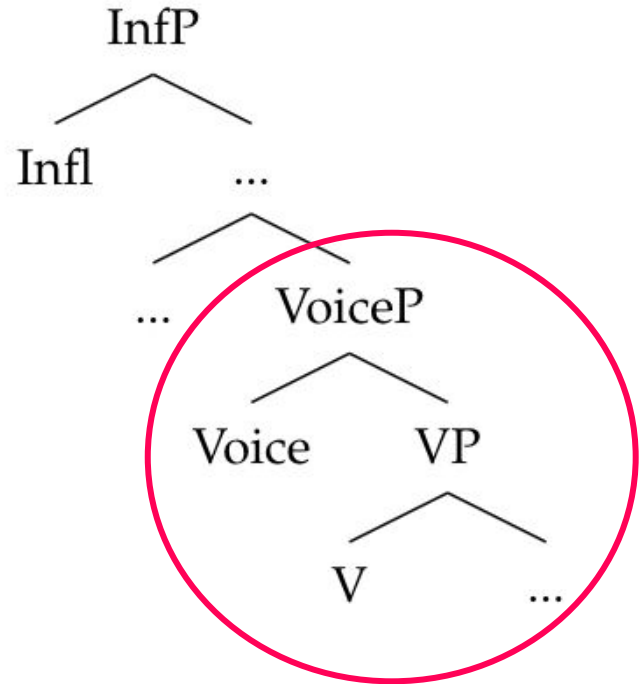I want to work (tomorrow/today/*yesterday).

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Finding a lonely VoiceP in SJA Mam

Many clause types do not clearly show us a VoiceP which lacks a high licenser on Infl.

We propose here that the verb *tzqin* does provide this clause type.

(20)   T-tzqin   Jse   qin=i.
         A2/3SG-know Jose   1SG.PRO

[H S]

         'Jose knows me.'

High abs marking never allowed

In *tzqin* clauses, the alternation with the prescriptive, fulling agreeing Set B marking is unavailable.

(21)   T-tzqin   Jse   **qin=i.**
            A2/3SG-know Jose   **1SG.PRO**
            'Jose knows me.'

(22)   ***Chin**   t-tzqin   Jse.
            B1SG   A2/3SG-know   Jose
            Intended: Jose knows me

➔   These clauses completely lack InflP.
      (It's not just that the probe on Infl is defective)

Low licensing without Infl

★ The availability of objects, despite the absence of Infl indicates that these objects must be licensed by Voice.

(These clauses may still contain AspP and higher heads, we do not claim that *tzqin* clauses are only VoiceP's).
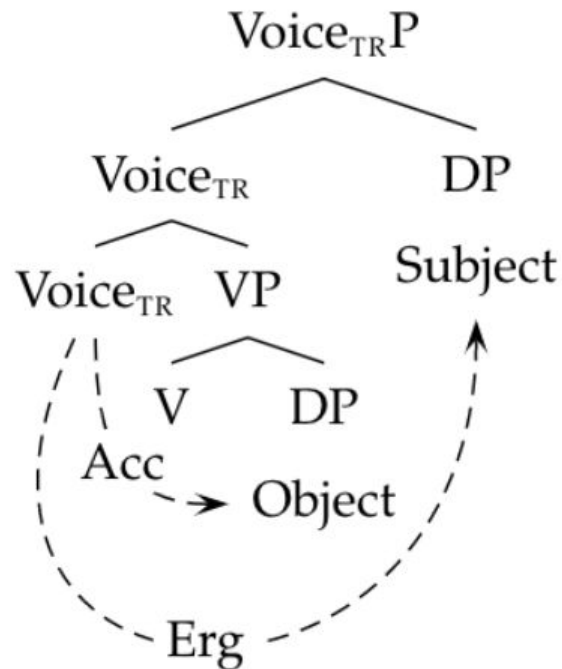
Conclusion

Summary of analysis

Puzzling data needing an explanation:

Intransitive subjects control fully agreeing high set B morphology
(23) Ma **chin** b'et=i.
    PROX **B1SG** walk=ENC
    'I walked.'

Transitive object appear in object position with default set B morphology
(24) Ma **tz'-**ok t-ke'y-an Lucrecia qin=i
    PROX**B2/3SG**-DIR A2/3SG-see-DS Lucrecia 1SG.PRO=ENC
    'Lucrecia saw me.'
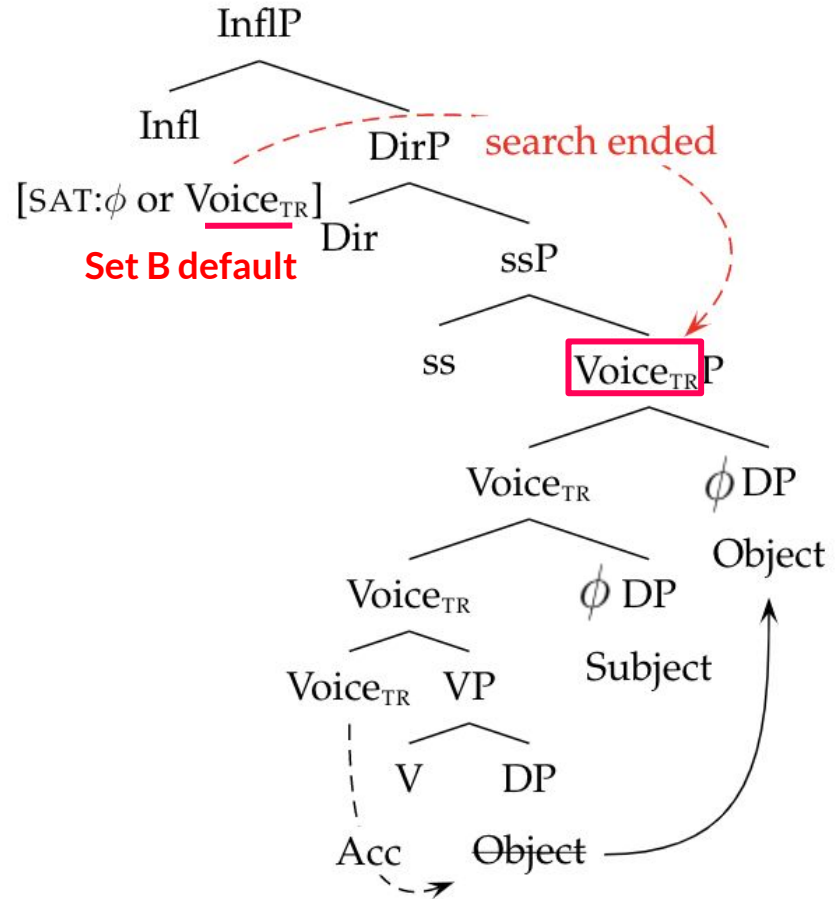
Summary of analysis

Explanation:

Transitive objects are licensed via Voice.

Transitive objects obligatorily move above the subject.

The probe on Infl cannot probe into Voice$_{TR}$P.

   [SAT: φ or Voice$_{TR}$]

InflP

Infl

[SAT:ϕ or Voice$_{TR}$]

Set B default

DirP   search ended

Dir

ssP

ss   Voice$_{TR}$P

Voice$_{TR}$ ϕ DP

Voice$_{TR}$ ϕ DP   Object

Voice$_{TR}$ VP   Subject

Voice$_{TR}$ V   DP

Acc   Object

What about the standardized variety?

Standardized Mam:

Transitive objects control fully agreeing high set B morphology

(25)   Ma   **chn**-ok   t-ke'yan   Lucrecia
          PROX **B1SG**-DIR   A2/3SG-see   Lucrecia
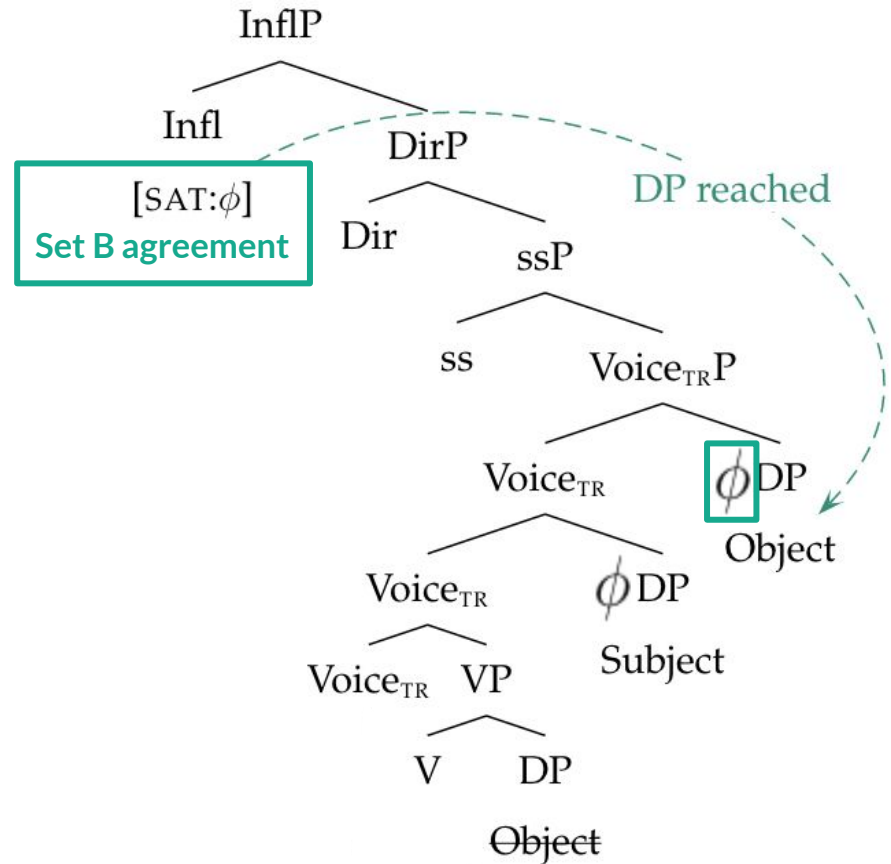   'Lucrecia Saw me.'

Standardized variety

Full set B agreement paradigm for objects:

The probe on Infl in this variant does not have the Voice$_{TR}$ restriction

Probe on Infl:

  [SAT: $\boldsymbol{\varphi}$]

Desirable outcome: Variation located in the probe specifications

High-/low- abs in Mayan

Coon et. al. (2014) correlate the position of Set B with the licenser of objects

	Infl licensing objects	Voice licensing object
High Set B	Q'anjob'al	✗
Low Set B	✗	Ch'ol

High-/low- abs in Mayan

SJA Mam suggests that there is more to the story…

	Infl licensing objects	Voice licensing object
High Set B	Q'anjob'al	**SJA Mam**
Low Set B	✗	Ch'ol

High-/low- abs in Mayan

SJA Mam suggests that there is more to the story…

	Infl licensing arguments	Voice licensing arguments
High Set B	Q'anjob'al	**SJA Mam objects**
Low Set B	**Ch'ol itv subjects**	Ch'ol objects

What causes EEC effects?

This analysis of Mam pushes us to rethink what mechanism causes / correlates with the ECC.

Language that mark Set B high in the verb stem show EEC effects. (Tada 1993)

Languages that licensed objects via Infl show EEC effects.(Coon et. al. 2014, Coon et al. 2021)

Languages in which the object moves above the subject show EEC effects.

regardless of the morphological placement of the Set B marker
regardless of which head licensed the object

Nim chjonte kyiy tu'n kyb'ini

Tessa Scott and Henry Sales

FAMLi6, November 12th, 2021

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