



OBJECT LICENSING IN SAN JUAN ATITÁN MAM

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McGill Syntax-Semantics Group, November 19th, 2021

Land acknowledgement

I want to acknowledge that I live and work here in Berkeley and Oakland on unceded indigenous lands that belong to the Ohlone people. I have benefited from this land and I am grateful to live and work on the traditional and ancestral lands of the Muwekma Ohlone Tribe.

Nab'l Ajaw

Ay nman Ajaw tokxi tuj kya'j,
Ay tawil tx'otx', tawil kya'j, b'ix tkyaqil twitz
tx'otx'.
Chjonte tiy tu'n kukx tex qq'iji.
Nimxix tipumali b'ix qo tke'yntzi tuj tkyaqil nya
b'a'n twitz tx'otx'.
Q'ontz tb'a'n q'ab'i qib'ji.
Kukxt qsqixi junt q'ij.
Ajaw q'ontzi tb'anixix qximtz ex ky'uwlantzi
qchwinqlali.
Tuj tb'i Tepew, Gukumatz, Ixmucane, Ixpiyakok,
Hunahpu ex Ixbalenque
Nxi woqxen tchwinqlal tkyaqil xjal twitz tx'otx'.
Chjonte.

Oh our father Ajaw, you who are in heaven,
Owner of the earth, owner of the sky, and owner
of the whole world.
Thank you for giving us another day of life.
You are powerful and take care of us from all evil
that exists on earth.
Have mercy on us.
May every day be a great blessing.
Ajaw give us good thoughts and take care of our
lives.
In the name of Tepew, Gukumatz, Ixmucane,
Ixpiyakok, Hunahpu and Ixbalenque,
We entrust the lives of all people on earth.
Thank you.

Introduction

About me

6th year PhD student in linguistics at Berkeley

I started working with on Mam with speaker Henry Sales 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.

This work

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 research was funded by an Oswalt Endangered Language Grant from UC Berkeley.

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

Mam

Mam is spoken in the western part of Guatemala and into Mexico. (Law 2017, 123)

In Guatemala Mam towns are primarily located in Huehuetenango, San Marcos, and Quetzaltenango.

[https://commons.wikimedia.org/wiki/File:Departments_of_Guatemala_\(es\).svg](https://commons.wikimedia.org/wiki/File:Departments_of_Guatemala_(es).svg)



FIGURE 5.1 MAP OF THE MAYAN LANGUAGES. OVERLAPPING ISOGLOSSES: DARKER GRAY = MORE AREAL INNOVATIONS, LIGHTER = FEWER AREAL INNOVATIONS

Mam - dialect regions

Northern

Ixtahuacán, Nora England's work

Todos Santos, (Canger 1969)

San Juan Atitán, this work ★

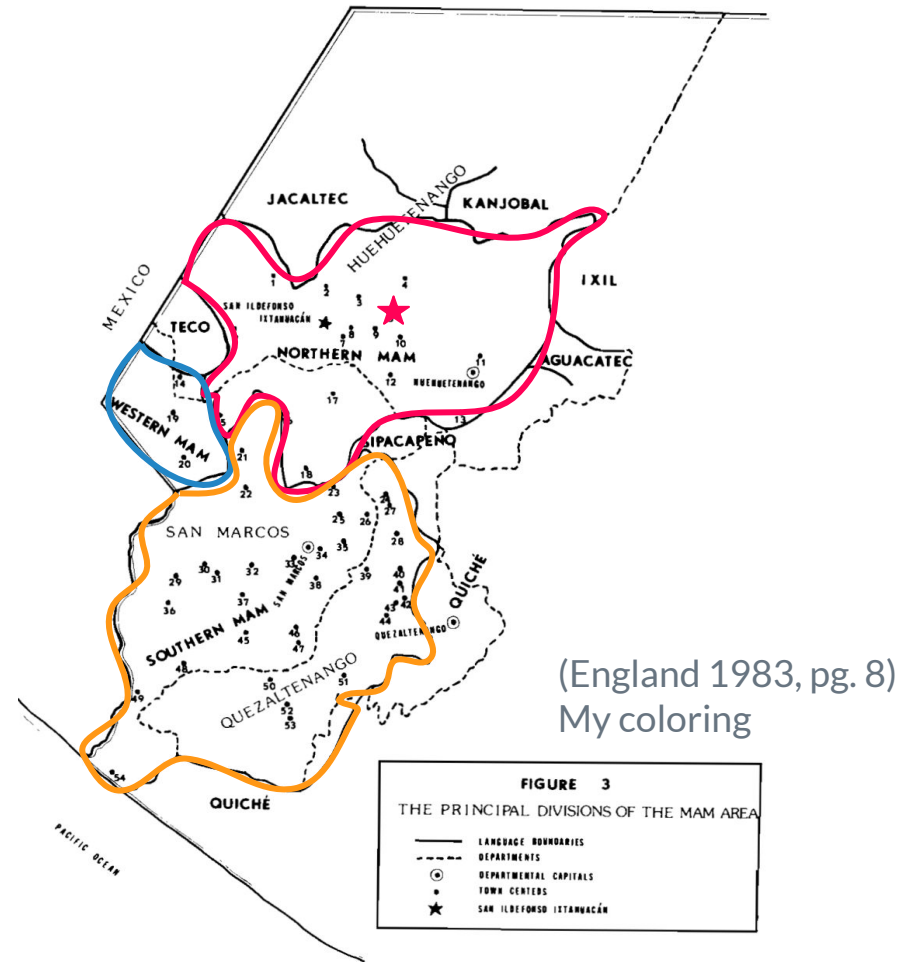
Western

Tacaná, (Munson 1984)

Southern

Cajolá, Pérez and Jiménez (1997) Pérez Vail (2014)

Comitancillo, Collins (2005, 2007)



San Juan Atitán

Located at 9,000ft elevation in Huehuetenango.

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

This is a view of the town from up in the mountains above it. Photo by me, June 2021.



Mam in the US

I've heard of Mam speakers all around the US and also in Canada.

Most people from San Juan Atitán in the US are located in the Bay Area, most centrally located in Oakland.

Some Oakland high schools report upwards of 60-70% Mam speaking students.

Photo by David Telles.



Speakers in this research

Henry Sales

29 yrs old

Mam / Spanish / English

Lives in Oakland

Silvia Lucrecia Carillo

24 yrs old

Mam / Spanish / learning English

Lives in San Juan Atitán



Photo by me, June 2021

Overview

Object Licensing

In San Juan Atitán Mam

Object marking in Mam

high set B

Most documentation of Mam shows that objects trigger **high set B (absolute agreement)** (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 Mam

high set B

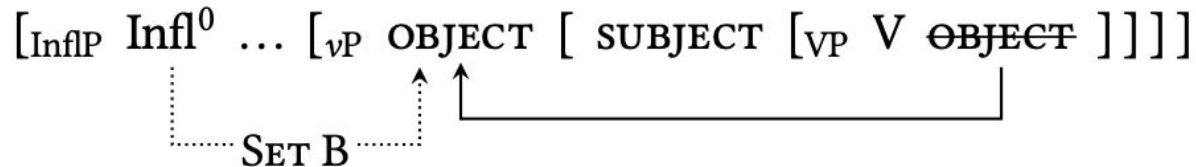
Coon et al. (2014) argue that in languages that mark Set B high (**high-abs**), objects are licensed by **Infl**.

(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**.'



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

(3) Ma \emptyset kub' n-qes-n=i a qa.
PROXB2/3SG DIR A2/3SG-grab-DS=ENC a PL
'I cut **them** down.'

(4) Ma **tz'**-ok t-ke'y-an Lucrecia qo'=y
PROXB2/3SG-DIR A2/3SG-see-DS Lucrecia 1PL.PRO=ENC
'Lucrecia saw **us** (exclusive).'

Set B asymmetry in San Juan Atitán Mam

high set B

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

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

default set B

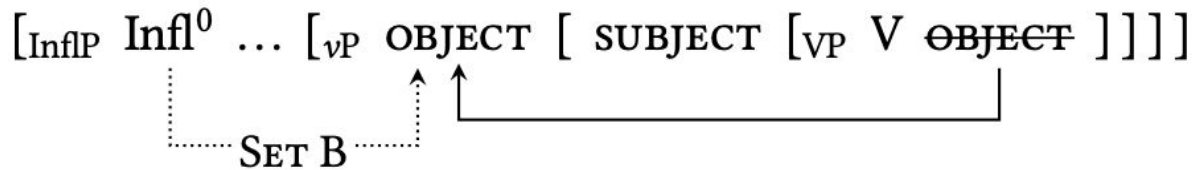
- (6) Ma **tz'-ok** t-ke'y-an Lucrecia **qin=i**.
PROX**B2/3SG**-DIR A2/3SG-see-DS Lucrecia **1SG.PRO=ENC**
'Lucrecia saw me.'

Default Set B marking raises questions:

1. What makes intransitive subjects different from transitive objects in SJA Mam?
 - Mayan language are famously ergative!
 - We expect intransitive subjects to receive the same marking as transitive objects.
 - Is Mam tripartite?

Default Set B marking raises questions:

2. What is the “default” agreement?
 - Agreement in the high slot of the verb is controlled via a phi probe on Infl (Coon et al. 2014)
 - Why doesn't this probe reach the object and spell out its phi features?
 - Is there a probe?



Why default?

Default Set B marking raises questions:

3. How are objects licensed?

- Objects in Mayan are argued to fall into two categories
(Coon et al. 2014)
 - Licensed high via Infl (high-absolutive)
 - Licensed low via Voice (low-absolutive)
- Is SJA Mam high-abs or low-abs?
- Is SJA Mam a no-abs language? (Meyers 2021)

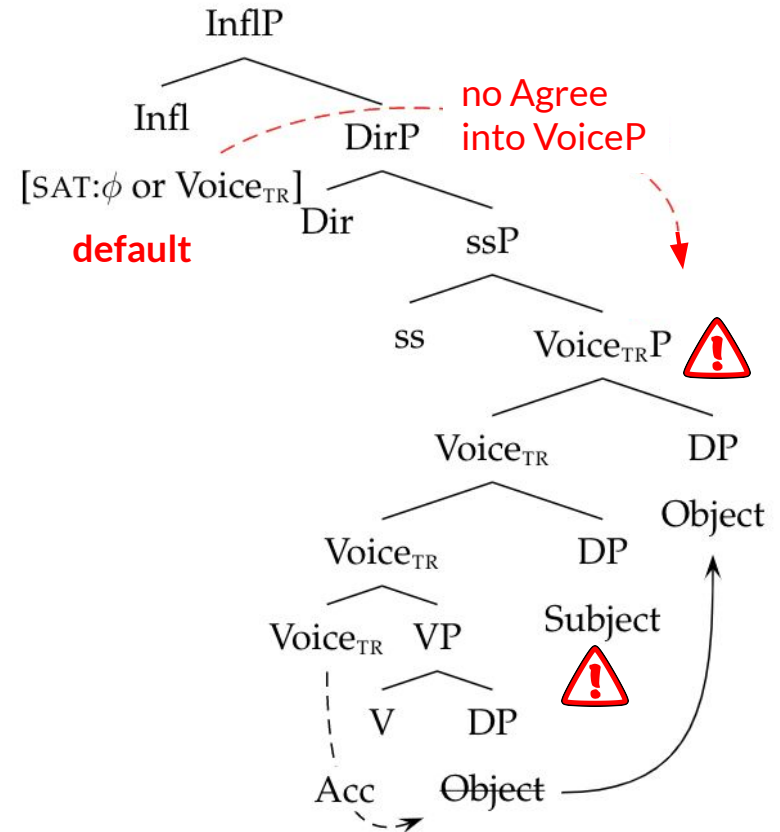
The analysis

Infl fails to reach objects specifically because the probe is restricted from probing into Voice_{TR}P. Default Set B reflects this.

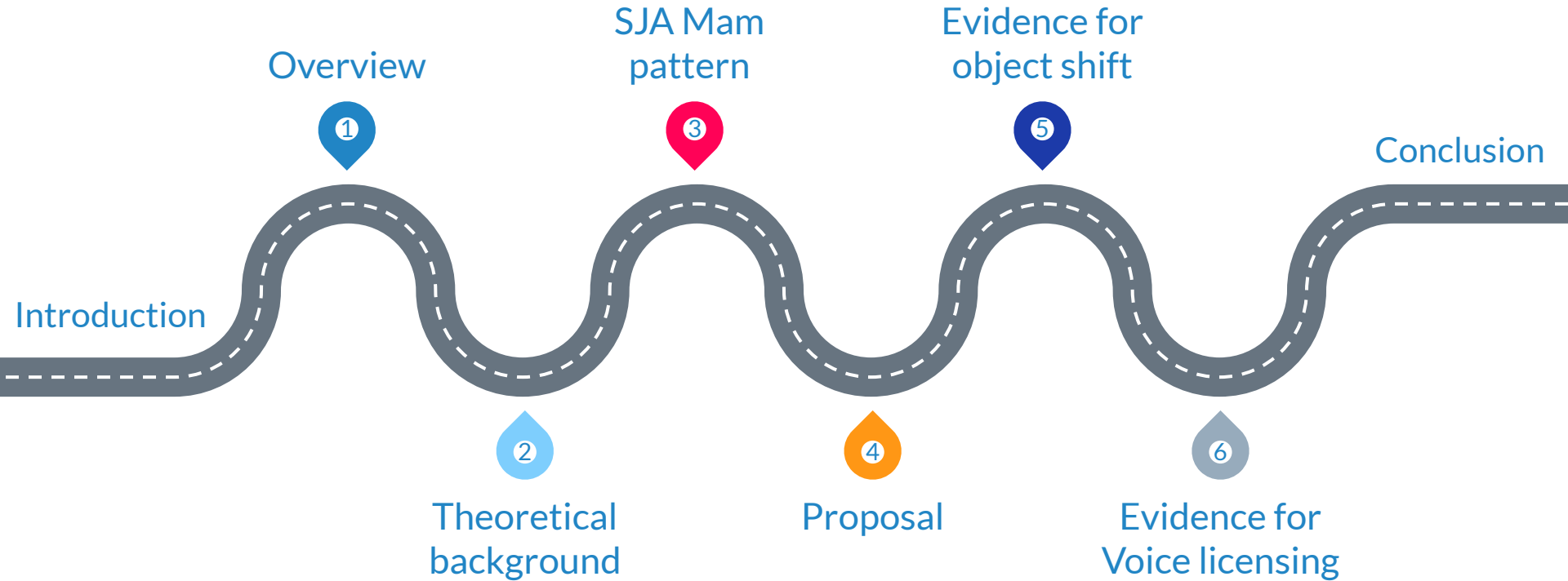
Objects are licensed by transitive Voice.

Objects *nonetheless* move to a position above the subject.

SJA Mam transitive clause



Roadmap



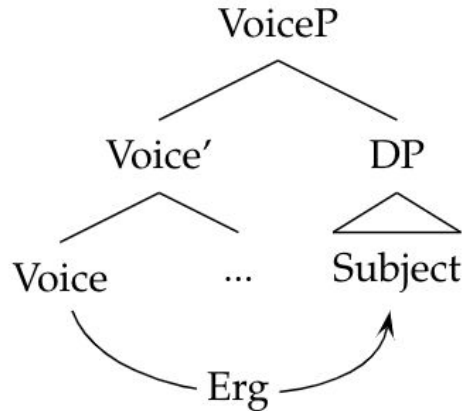
Theoretical background

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. I adopt the bundled v/Voice analysis (Clemens and Coon 2018) and use the **Voice** label for simplicity.



I adopt the rightward specifier analysis of Mayan word order in Little 2020.

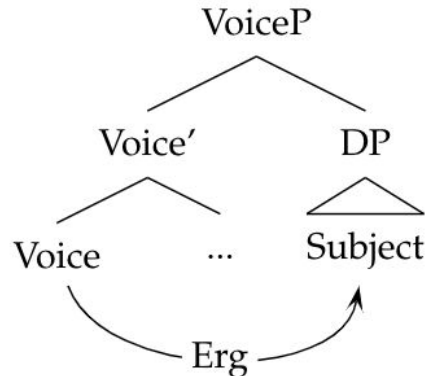
Set A: ergative and genitive (possessive)

Set A

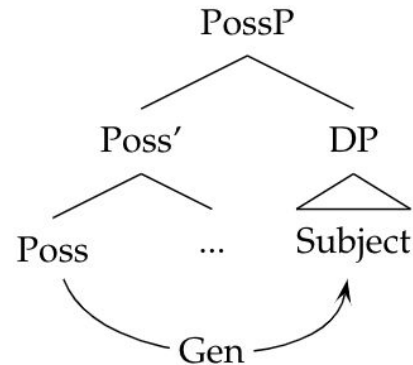
Set A morphemes reference transitive subjects as well as possessors. They prefix to verbs and nouns respectively.

San Juan Atitán Mam

(7) Ma w-il=i Lucrecia.
PROX A1SG-see=ENC Lucrecia.
'I saw Lucrecia.'



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



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

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



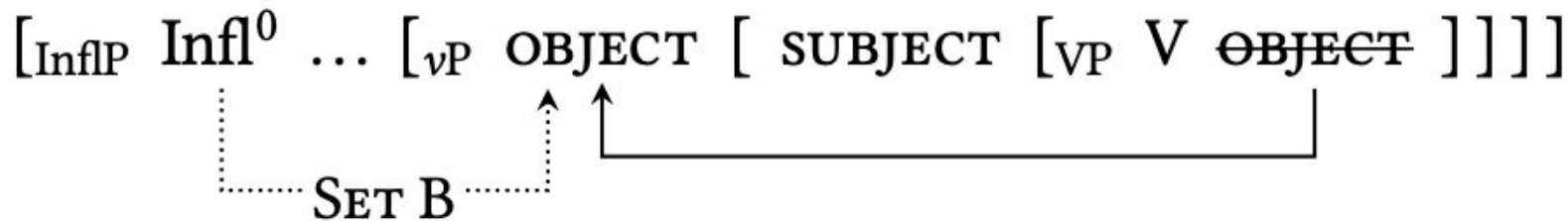
Ergative extraction constraint (named EEC by Aissen 2017)

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

(10) *Maktxel₁ max-Ø y-il[-a'] —₁ ix ix?
 who ASP-3ABS 3ERG-see-TV CLF woman
 intended: 'Who saw the woman?'
 (grammarical as: 'Who did the woman see?')

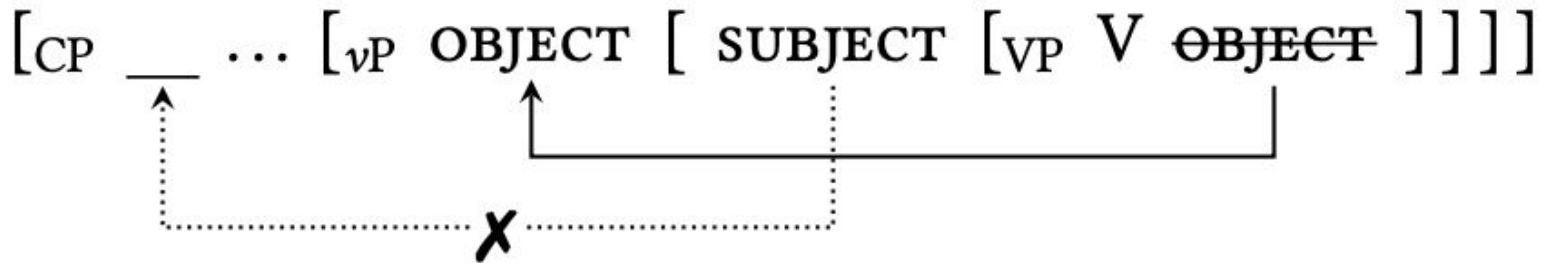
Coon et al.'s explanation

- ✓ High-abs languages license transitive objects via Infl^0
 - Objects must move above subjects



Coon et al.'s explanation

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



Set B: Transitive objects

vary

Mayan absolutive parameter:

The surface position of absolutive has two correlates:

high set B

high licensing of
objects- Infl

object moves
above subject



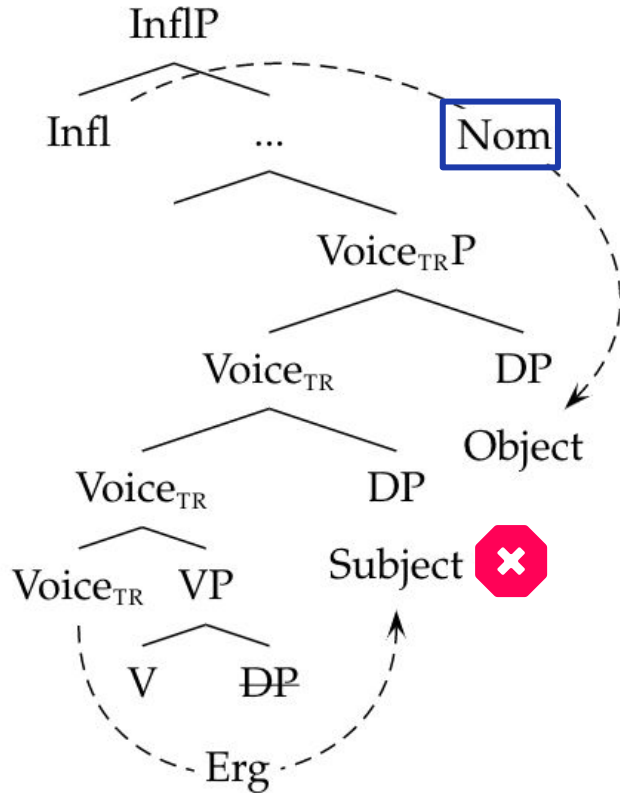
low set B

low licensing of
objects- Voice

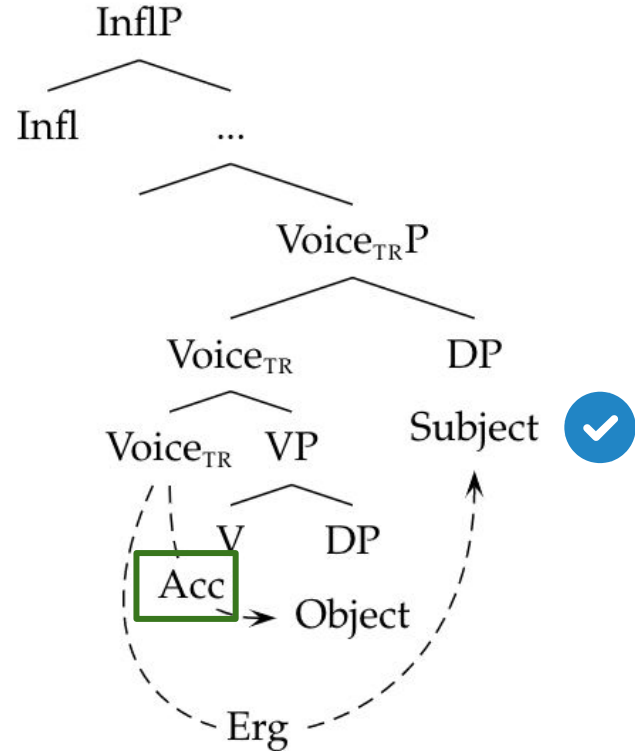
object stays low



high-abs



low-abs



Pushing on correlation

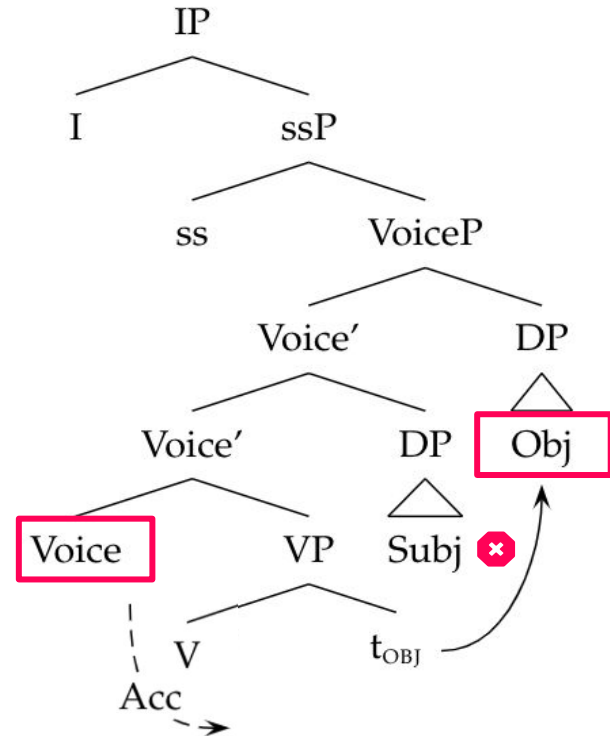
I show in this research on Mam that indeed the position of the object can block the subject, but that the position of the object can be high without getting case from Infl.



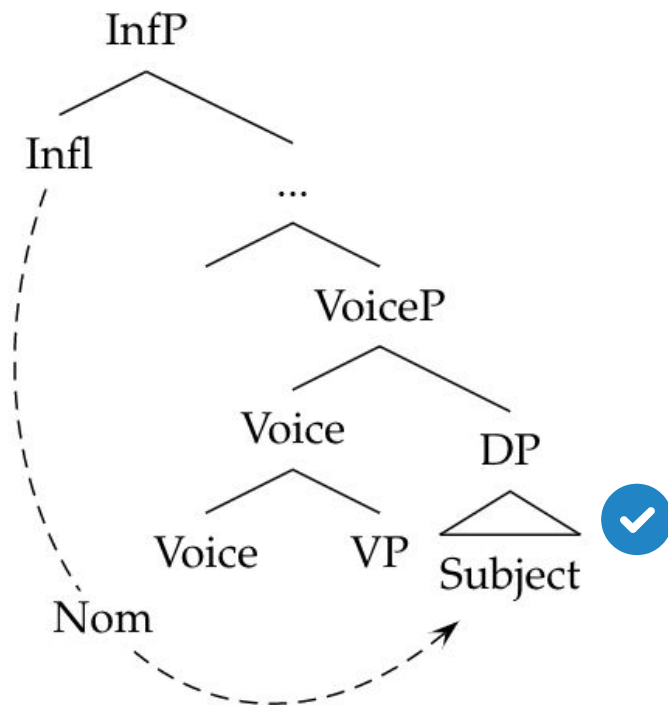
?-abs

low licensing - Voice

high surface
position of set B /
high object



all itv subjects (Coon et al. 2014)



San Juan Atitán Mam

The pattern

Intransitive = full set B agreement

high set B

(11) a. Ma **chn**-u'l=i.
PROX **B1SG**-arrive=ENC.
'I arrived (here).'

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

2sg Ma **tz**-ul=i.

3sg Ma **tz**-ul.

1pl.excl Ma **qw**-u'l=i.

1pl.incl Ma **qw**-u'l.

2pl Ma **chj**-u'l qi.

3pl Ma **chj**-u'l qa.

2sg Ma **∅** b'et=i.

3sg Ma **∅** b'et.

1pl.excl Ma **qo** b'et=i.

1pl.incl Ma **qo** b'et.

2pl Ma **chi** b'et qi.

3pl Ma **chi** b'et qa.

Transitive = *default set B*

default set B

default set B is overt

pronouns in object position

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

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.

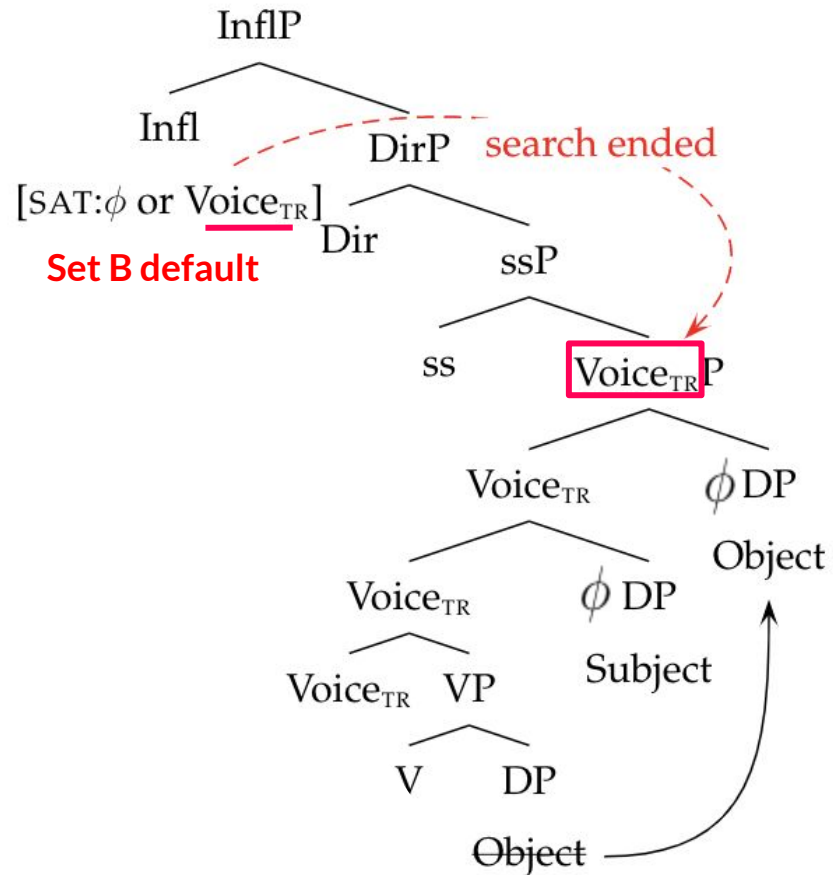
Probe restriction

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}]

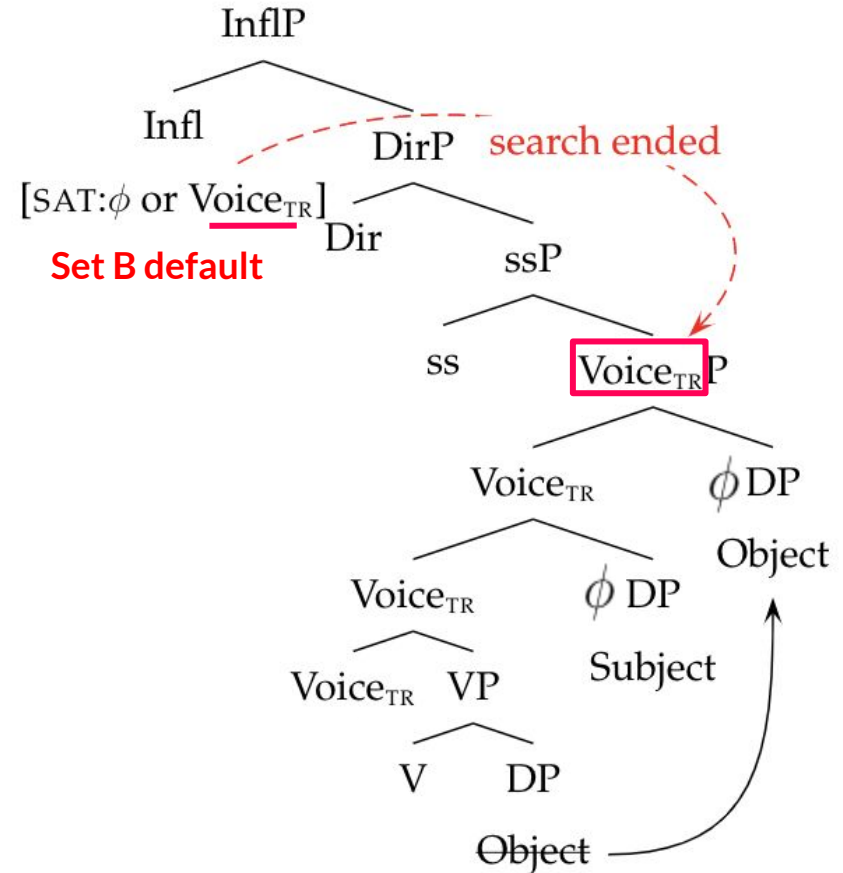


Probe restriction

When the probe reaches Voice_{TR} it must **stop its search**.

This type of restriction on probing is inspired by Keine's (2019, 2020) concept of 'horizons':

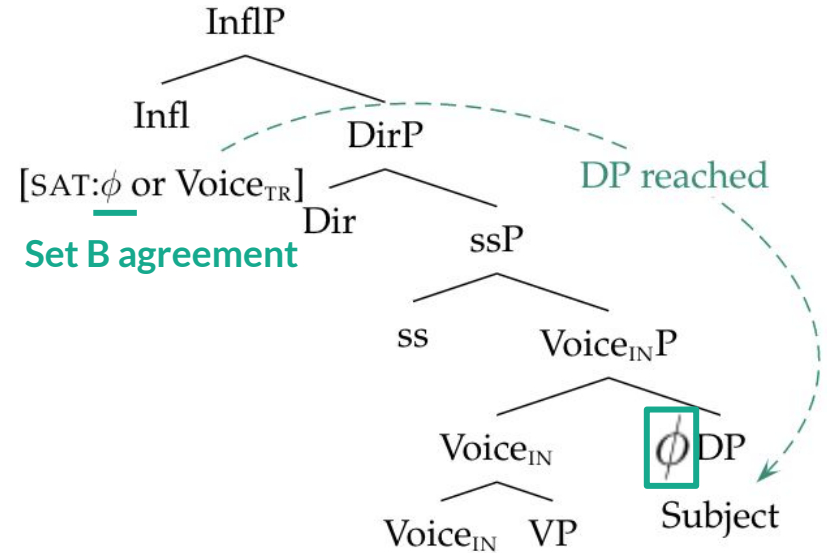
A probe is specified with Horizon X to account for 'selective opacity' configurations in which a given constituent is **opaque** for some operations but **transparent** for others.



Probe restriction

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

The subjects features are copied back to the probe and spelled out as fully agreeing Set B morphemes.

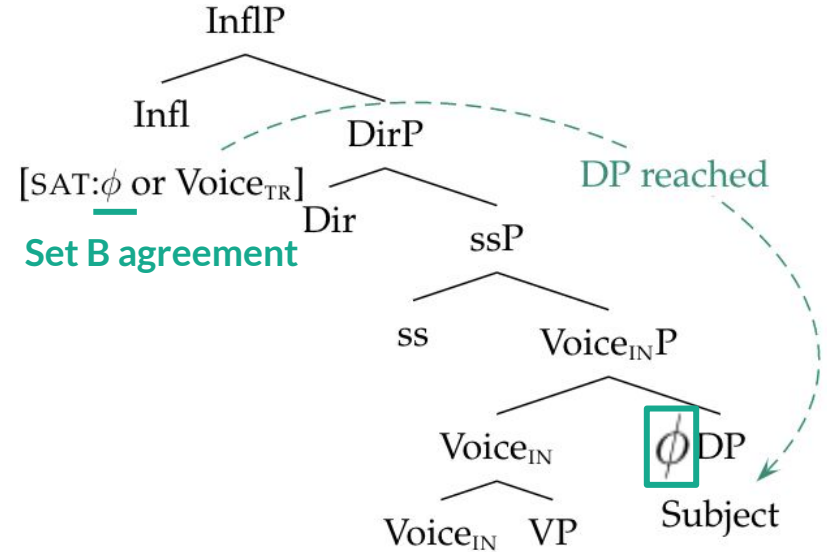


Probe restriction

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

This requires that the probe distinguish between Voice_{IN} and Voice_{TR}

This is motivated by the very different behavior of the two heads

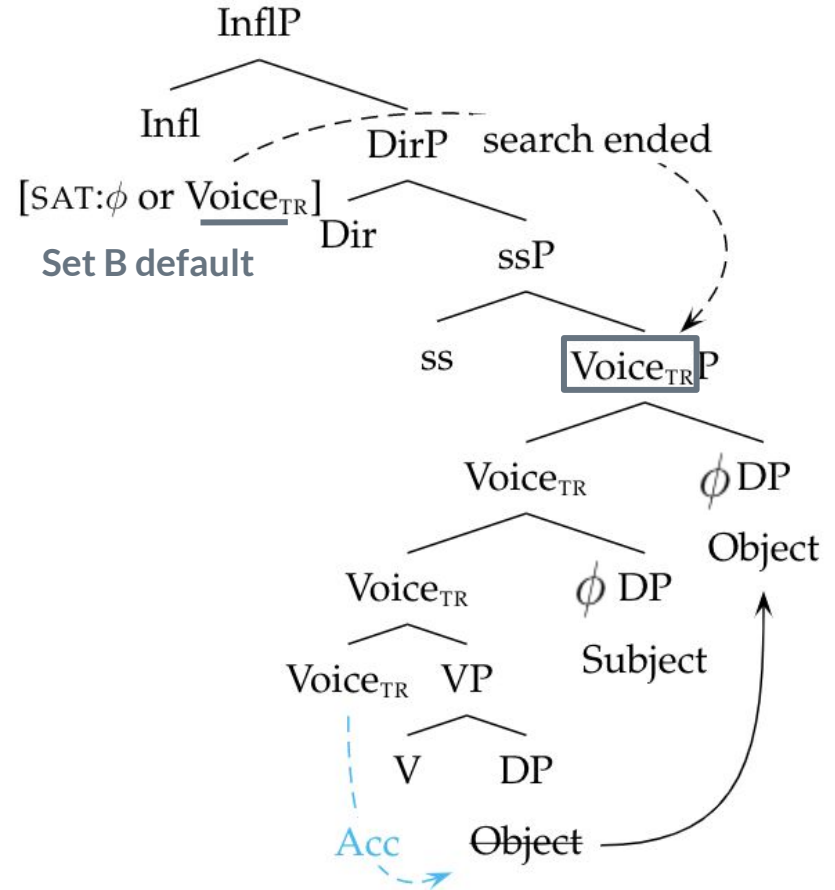


Voice licensing

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),

I propose objects in San Juan Atitán Mam are licensed via Voice_{TR} .



Voice heads

	Intransitive Voice	Transitive Voice
Assigns ergative	x	✓
Assigns accusative	x	✓
Triggers argument movement	x	✓

Voice heads

	Intransitive Voice	Transitive Voice
Assigns ergative	x	✓
Assigns accusative	x	✓
Triggers argument movement	x	✓
Horizon for Infl	x	✓

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 *matrix* clauses with 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
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
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
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

Relativization

(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

Focus

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

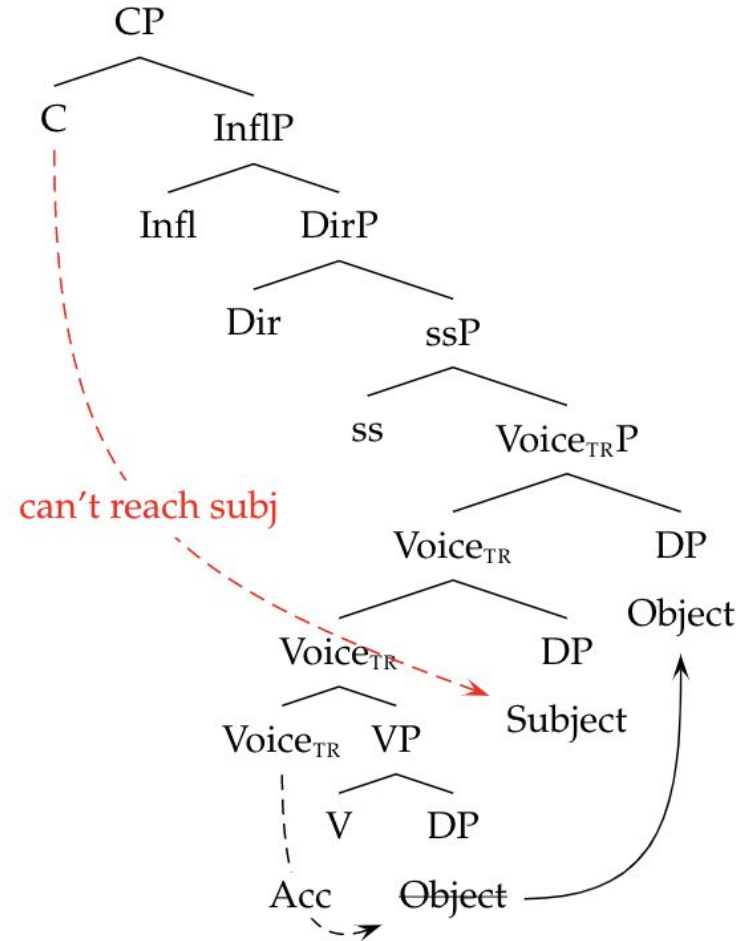
(17) A Jse ma tz'-ok b'yon-ta ay
FOC Jose PROX B2/3SG-DIR hit-ta 2SG.PRO.ENC

'JOSE hit you.'

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

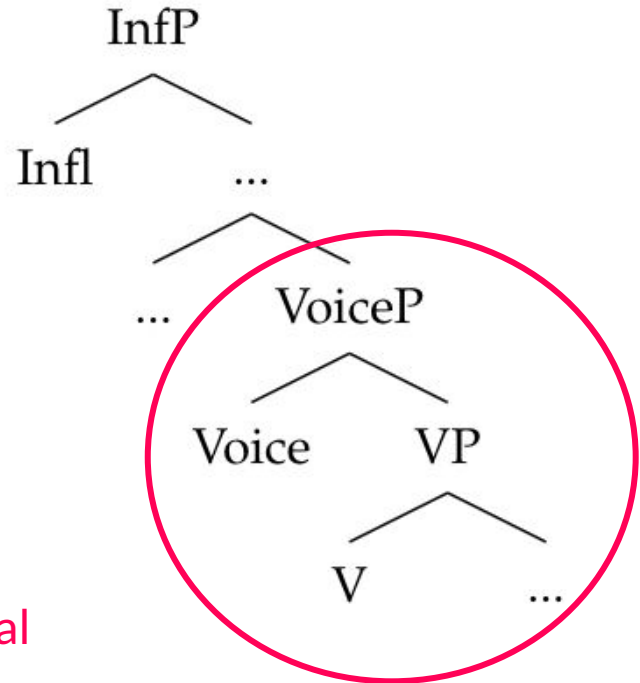
→ But, the object could also move after getting case as well

Objects licensed via Voice

Evidence from nonfinite clauses

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



What we are looking for

High-abs language: Q'anjob'al

(17) *Q'anjob'al* (Coon et al. 2014, 196)

- a. **Ch-in** **y-il[-a']** **ix** **Malin.**
ASP-1ABS 3ERG-see-TV CLF Maria
'Maria sees me.'

- b. **Max-ach** **hin-laq'-a'.**
ASP-2ABS 1ERG-hug-TV
'I hugged you.'

What we are looking for

High-abs language: Q'anjob'al

Non-finite clauses lack Infl to license the high-objects in the usual way

(18) *Q'anjob'al* (Coon et al. 2014, 196)

- a. *Chi uj [hin y-il ix Malin].
 ASP be.able.to 1ABS 3ERG-see CLF Maria
 intended: 'Maria can see me.'
- b. *Lanan [hach hin-laq'-a'].
 PROG 2ABS 1ERG-hug-TV
 intended: 'I am hugging you.'

What we are looking for

High-abs language: Q'anjob'al

To license objects, the Agent Focus/ "Crazy Antipassive" construction is used. Coon et al. (2014) argue that the AF morpheme provides a low licenser for the object.

(19) *Q'anjob'al* (Coon et al. 2014, 221)

- a. Chi uj [hin y-il-on[-i] ix Malin].
ASP be.able.to 1ABS 3ERG-see-AF-ITV CLF Maria
'Maria can see me.'

- b. Lanan [hach hin-laq'-on-i].
PROG 2ABS 1ERG-hug-AF-ITV
'I am hugging you.'

What we are looking for

In Ch'ol, a low-abs language which licenses objects via Voice, non-finite clauses pose no issue for transitive clauses:

(20) *Ch'ol* (Coon et al. 2014, 202-203)

- a. Mejl [i-k'el-oñ].
be.able.to 3ERG-see-1ABS
'She can see me.'

- b. Choñkol [k-mek'-ety].
PROG 1ERG-hug-2ABS
'I am hugging you.'

What we are looking for

Intransitive subjects are licensed by Infl across the board, and thus they are unavailable across the board.

(21) *Ch'ol* (Coon et al. 2014, 203)

- a. Tyi ts'äm-i-yoñ.
ASP bathe-ITV-1ABS
'I bathed.'
- b. Choñkol [k-ts'äm-el].
PROG 1ERG-bathe-NML
'I am bathing.'
- c. *Choñkol [ts'äm-i-yoñ].
 PROG bathe-ITV-1ABS
intended: 'I am bathing.'

(22) *Q'anjob'al* (pg. 197,198)

- a. Max-ach way-i.
ASP-2ABS sleep-ITV
'You slept.'
- b. Lanan [ha-way-i].
PROG 2ERG-sleep-ITV
'You are sleeping.'
- c. *Lanan [hach b'ey-i].
 PROG 2ABS walk-ITV
intended: 'You are sleeping.'

There is no available low licenser, and the itv subject is ergative in both languages

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 InfIP is not straightforward.

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 InfIP is not straightforward.

Mam - Nonfinite clauses

Characteristics of fully non-finite clauses in England (2013)

- verbs appear with *-l* suffix
- verbs do not have any inflection for person
- can have incorporated objects if they are simple/non-specific
- all other arguments are oblique

(23) *Ixtahuacán 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 when to buy (it).'

'Se fue la gente a comprarlo.'

- No VoiceP at all to license objects or subjects

Mam - Non-finite clauses

→ No VoiceP at all to license objects or subjects

(24) *San Juan Atitán Mam*

O chj-ex xjaal [laq'o-l (t-ee)]
CMPL B2/3PL-go person [**buy-NF** (A2/3SG-RN)]
'The people went to buy (it).'

Mam - Aspectless clauses

Simple complements of *aj* want

→ Contain InfP

(25) *Ixtahuacán Mam* (England 2013, 300)

∅-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).

Mam - Aspectless clauses

In San Juan Atitán

AGR-
INFL

(26) W-aj=i [**chn**-aq'nan=i].
A1SG-want=ENC [**B1SG**-work=ENC]
I want to work.

Same as
matrix
pattern!

DEF-I
NFL

(27) W-aj=i [**tz'**-ok **t**-ke'yn=i qin=i].
A1SG-want=ENC [**B2/3SG**-DIR **A2/3SG**-see=ENC 1SG.PRO=ENC]
I want you to see me.

AGR-
INFL

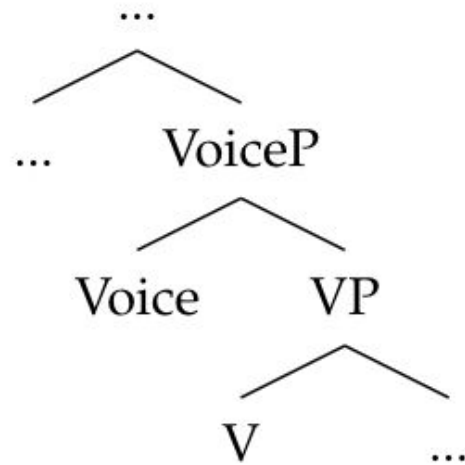
(28) W-aj=i [**chn**-ok **t**-ke'yn=i].
A1SG-want=ENC [**chn**-DIR **A2/3SG**-see=ENC]
I want you to see me.

Finding a lonely VoiceP in SJA Mam

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

However, some *matrix* clauses lack any high-abs options,

Suggesting that matrix clauses can lack Infl.

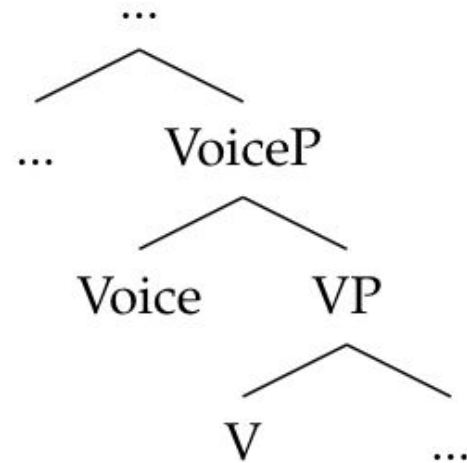


Tzqin - know

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

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

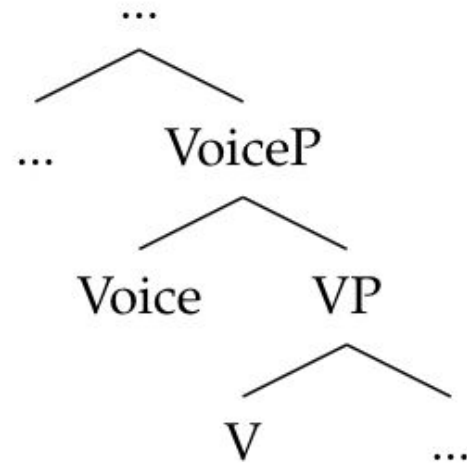
(30) *Chin t-tzqin Jse.
B1SG A2/3SG-know Jose
Intended: Jose knows me



Ky'i - don't want

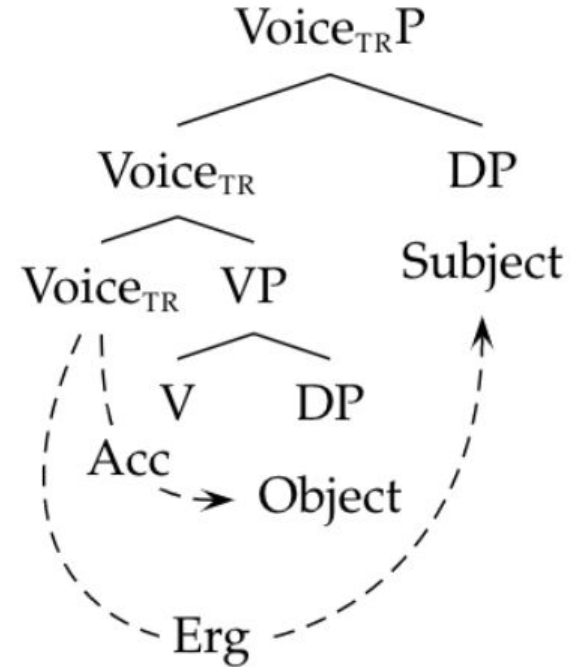
In *ky'i* clauses, the alternation with the prescriptive, fulling agreeing Set B marking is unavailable.

- (31) N-ky'i=y qa.
A1SG-not.want=ENC PL
'I don't want them.'
- (32) *Chi n-ky'i=y (qa).
B2/3PL A1SG-not.want=ENC (PL)
Intended: 'I don't want them.'



Low licensing without Infl

- Conclusion: these clauses completely lack InflP. (It's not just that the probe on Infl is defective)
- ★ The availability of objects, despite the absence of Infl indicates that these objects are licensed by Voice.

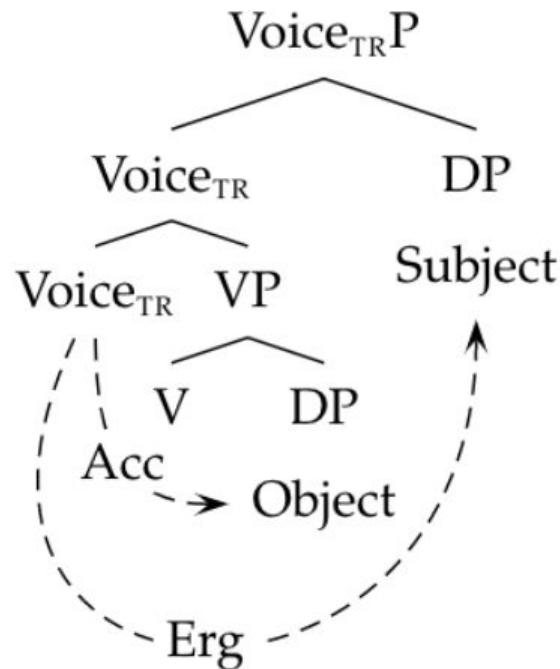


What is case-licensing?

- Voice case licenses objects, but there is no “low-abs” morpheme to reflect the Agreement

Proposal

1. Voice Agrees with the object without copying its features (*pure satisfaction*, Deal 2021)
2. The full features of the pronoun are pronounced on the DP itself.



Other aspectless and non-finite clauses in Mam

Aspectless clauses: extended ergativity

Many aspectless clauses (embedded or seemingly “matrix”) in Mam (and across Mayan) show patterns of extended ergativity.

Contexts for extended ergativity in Mam:

1. When clauses (*taj*, *aj*, *ok*, *kwanto*)
2. *Tu'n* clauses (because, result)
3. *Nimb'* clauses (progressive / happening right now) - SJA Mam data only
4. Focused adverbials

Extended ergativity

Many aspectless clauses (embedded or seemingly “matrix”) in Mam (and across Mayan) show patterns of extended ergativity.

Piece 1: intransitive subjects receive ergative

(37) *Ostuncalco Mam* (England 1989, 302)

In	chi	wan	[teej	n-poon-e']
PROG	3BPL	eat	[when	A1SG-arrive=ENC]

'They were eating when I arrived.'

Extended ergativity

Many aspectless clauses (embedded or seemingly “matrix”) in Mam (and across Mayan) show patterns of extended ergativity.

Piece 1: intransitive subjects receive ergative

(38) *San Juan Atitán Mam*

n-ipan	jb'al	[taj	n-pon-i]
IMP-strong	raing	[when	A1SG-arrive=ENC]

‘It was raining when I arrived.’

Extended ergativity

Piece 2: transitive objects also receive ergative

(39) *Ixtahuacán Mam* (England 1989, 292)

... ok **t-q-il** u'j ...
... when **A2/3SG-A1PL-see** book ...
'... when we see the book.'

(40) *Ixtahuacán Mam* (England 1983, 15)

... (aj) **t-jaw** **ky-tx'ee'ma-n** xjal t-tzee'
... when **A2/3SG-DIR** **A2/3PL-cut-DS** person A2/3SG-tree
'... when the people cut his tree.'

Extended ergativity

Piece 2: transitive objects also receive ergative

(41) *San Juan Atitán Mam*

... taj **t-w-il=i** ay ...
... when **A2/3SG-A1SG-see=ENC** 2SG.PRO ...
'... when I saw you'

(42) *San Juan Atitán Mam*

... taj **t-tzaj** **q-laq'o-n=i** pan
... when **A2/3SG-DIR** **A1PL-buy-DS=ENC** bread
'... when we cut the bread.'

Extended ergativity

Piece 2: transitive objects also receive ergative
(seemingly with fully agreeing paradigm in Ixtahuacán)

(43) *Ixtahuacán Mam* (England 1989, 292)

... aj **n**-kub' **t**-tzeeq'a-n-a
... when **A1SG-DIR** **A2/3SG**-hit-DS=ENC
'... when you hit me.'

Extended ergative

Piece 2: transitive objects also receive ergative

In San Juan Atitán the fully agreeing form is not available at all.

(44) a. Taj **t**-ok **t**-ke'yn=i qin=i
when **A2/3SG**-DIR **A2/3SG**-see=ENC 1SG.PRO=ENC
When you saw me

b. **Taj **w**-ok **t**-ke'yn=i
when **A1SG**-DIR **A2/3SG**-see=ENC
When you saw me.

Accounting for extended ergativity

The object itself is unchanged. As is verbal morphology outside of agreement: nothing is intransitivized, nor are there any signs of nominalization.

(45) Taj	t -ok	t -ke'yn=i	qin=i
when	A2/3SG -DIR	A2/3SG -see=ENC	1SG.PRO=ENC
When you saw me			

I propose that the argument is licensed all the same, but the mechanism responsible for object agreement in the high slot is different.

Accounting for extended ergativity

This is also evidence that throughout the language, there is a morpheme in the typical high “Set B” slot.

In matrix clauses, it is **default Set B** and in these clauses, it is **default Set A**.

(46) Ma **tz'**-ok **t**-key'n=i qin=i.
 PROX **B2/3SG**-DIR **A2/3SG**-see=ENC 1SG.PRO=ENC
 You saw me.

(47) Taj **t**-ok **t**-ke'yn=i qin=i
 when **A2/3SG**-DIR **A2/3SG**-see=ENC 1SG.PRO=ENC
 When you saw me.

Conclusion

Summary of analysis

Puzzling data needing an explanation:

Intransitive subjects control fully agreeing high set B morphology

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

Transitive object appear in object position with default set B morphology

(49) 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

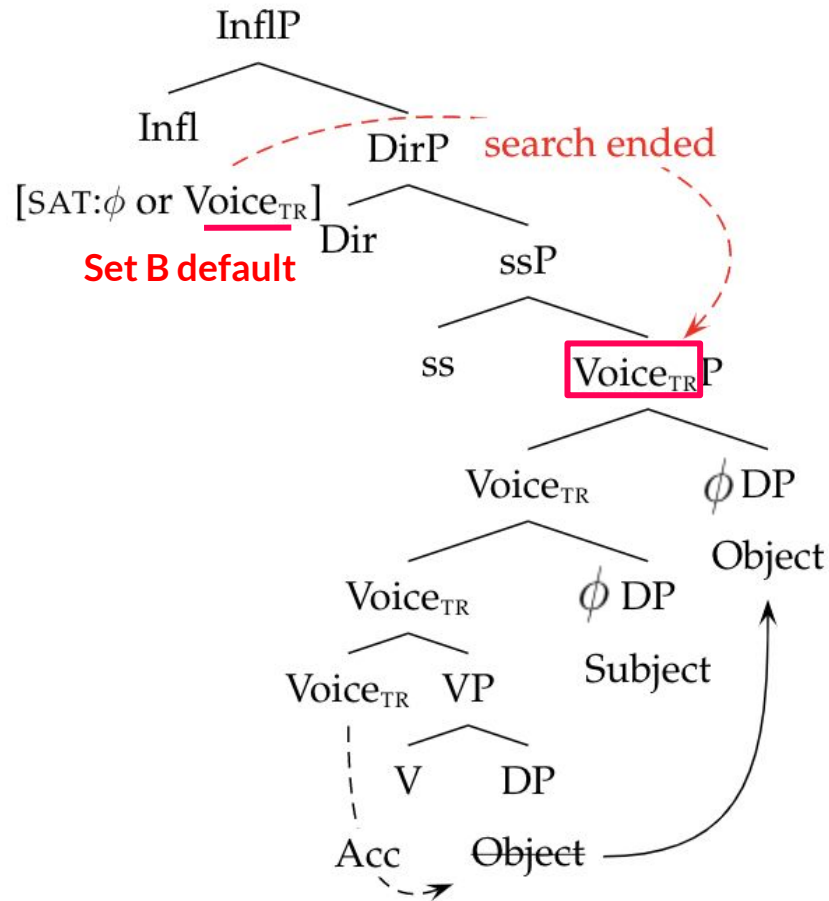
Explanation:

Transitive objects are licensed via Voice.

Transitive objects *nonetheless* obligatorily move above the subject.

The probe on Infl cannot probe into Voice_{TR}P, resulting in default agreement.

[SAT: ϕ or Voice_{TR}]



What about the standardized variety?

Standardized Mam:

Transitive objects control fully agreeing high set B morphology

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

Standardized variety

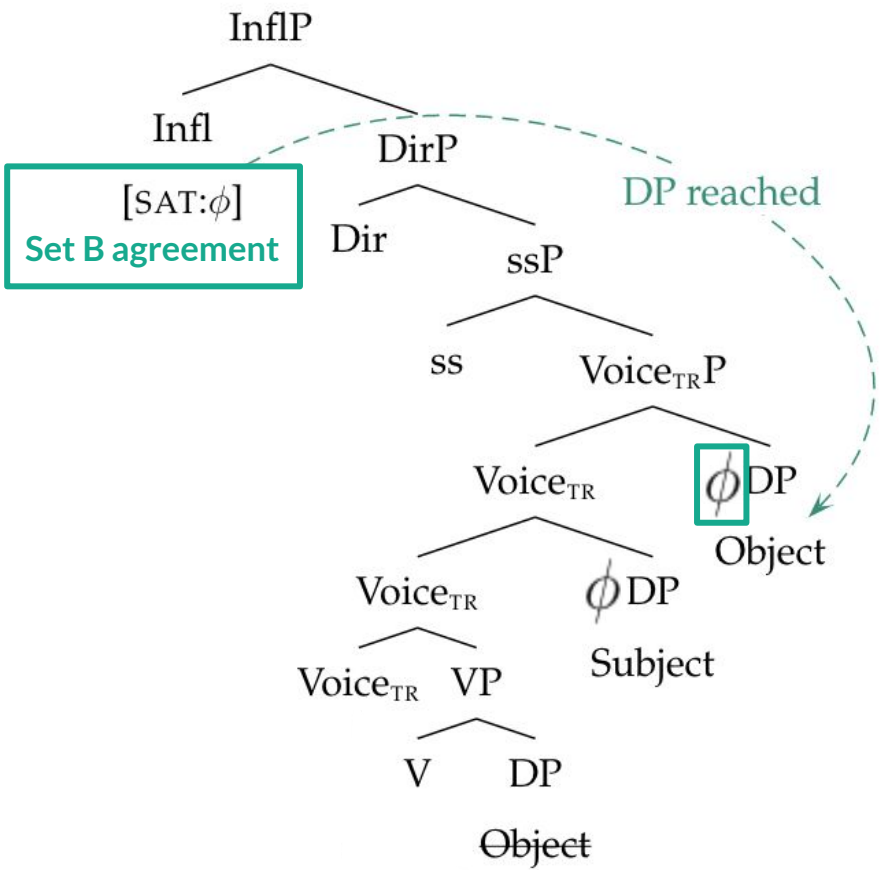
Full set B agreement paradigm for objects:

The probe on Infl in this variant does not have the Voice_{TR} restriction

Probe on Infl:

[SAT: ϕ]

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	X
Low Set B	X	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	X	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	Q'anjob'al embedded AF objects SJA Mam objects
Low Set B	Ch'ol itv subjects	Ch'ol objects

Tripartite?

Yes! All low-abs languages are *underlyingly* tripartite.

- Nominative - Intransitive subjects (Infl)
- Ergative - Transitive subjects (Voice_{TR})
- Accusative - Transitive objects (Voice_{TR})

Most low-abs languages use one one strategy to morphologically realize Nominative and Accusative as *absolute*.

SJA Mam simply marks all three case assignments distinctly.

What causes EEC effects?

This analysis of Mam shows us that even just looking within Mayan languages, while the case licensing of the object tends to correlate with its position, low licensed objects can move *anyway*.

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*



Thank you

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Appendices

1. [Word order in Mayan](#)
2. [Ch'ol, Q'anjob'al, & SJA Mam: Where are the objects?](#)
3. [Statives in SJA Mam](#)

Appendix 1: word order

Word order in Mayan

There are three main camps of approaches to V-initial word orders in Mayan. Here I briefly outline and compare two of them, before adopting the rightward specifiers approach.

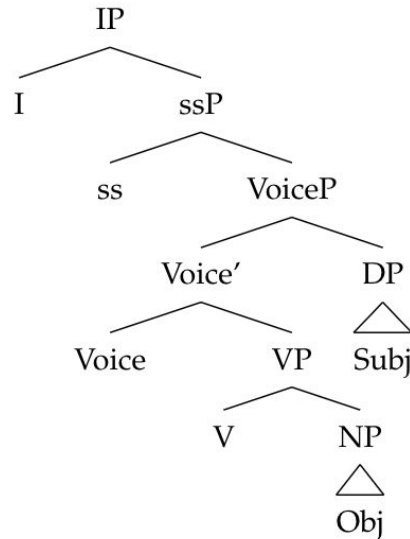
1. Rightward specifiers (Aissen 1992, Little 2020)
2. Prosodic reordering of NPs (Clemens & Coon 2018)
- (3. VP-fronting (Coon 2010) - not discussed here)

Word order in Mayan

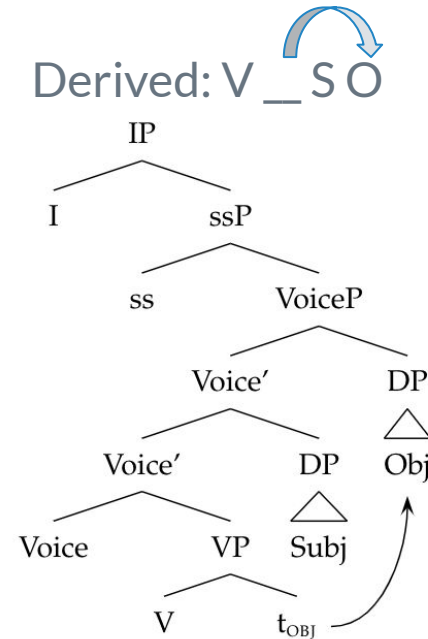
rightward specifiers

Rightward specifiers are proposed for V-initial Mayan languages by England (1991) and Aissen (1992). Little (2020) updates and expands on this analysis.

Baseline: VOS



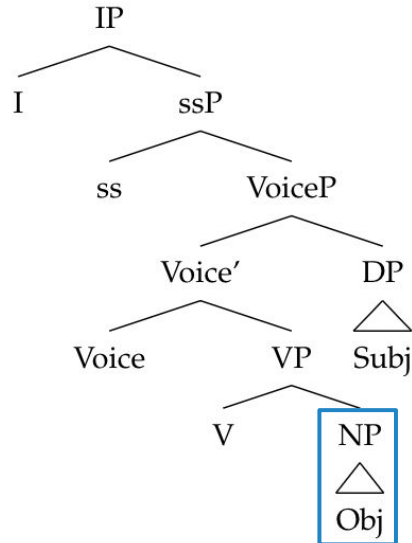
Derived: V _ S O



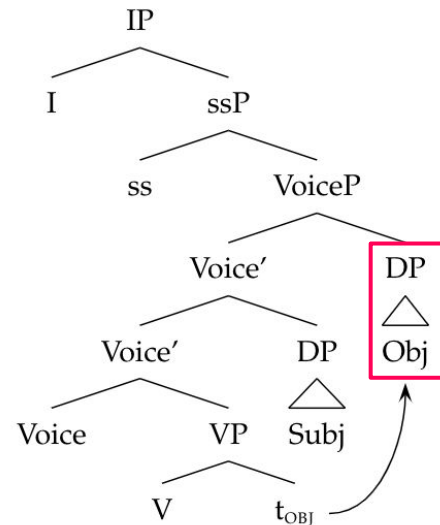
VOS/VSO alternating languages

rightward
specifiers

NP objects stay low
VOS



DP object move
VSO



Rigid VSO languages

rightward
specifiers

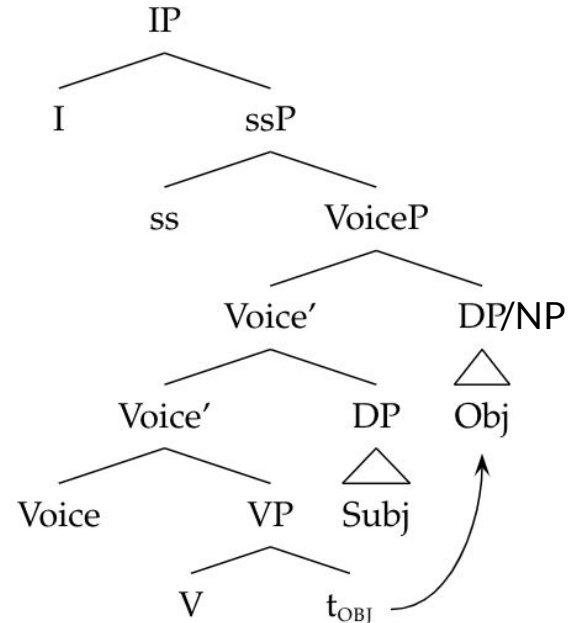
NP objects

San Juan Atitán Mam

V		S	O
N-chi	qes-an	xuj	pan
INC-B2/3PL	cut-AP	woman	bread
'The women are cutting bread.'			

Note that something must be different about this movement as to allow for subject extraction. The object is not considered a “syntactic” object of the verb.

Objects always move
VSO



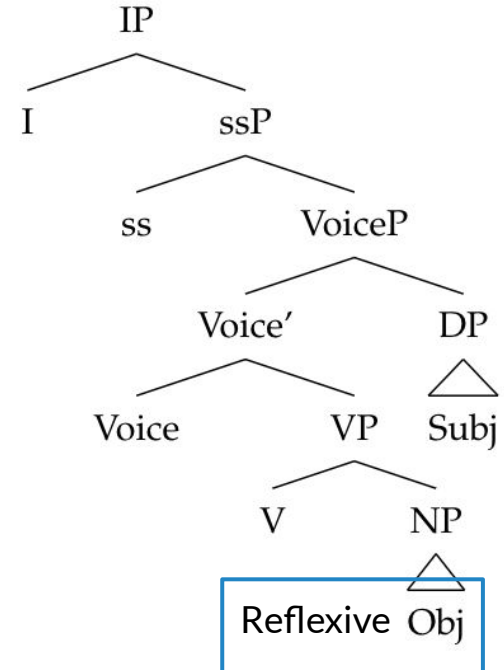
Rigid VSO languages: VOS reflexives

rightward specifiers

Only reflexive objects remain low, and this is because they must be bound.

San Juan Atitán Mam

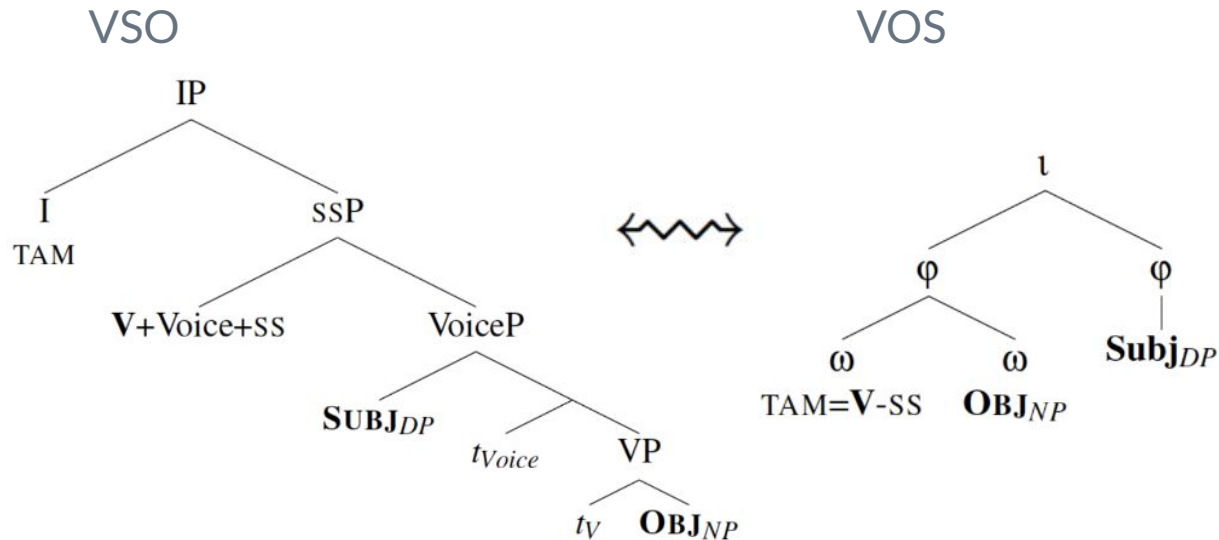
V	O	S
N- \emptyset -ewan	t-ib'	Jse.
INC-B2/3SG-hide	A2/3SG-self	Jose
'Jose is hiding himself.'		



An alternative: Clemens and Coon 2018

prosodic
reordering

No rightward specifiers
Baseline VSO (via verb movement)
NP objects uniquely reorder with the verb



Benefits of Little's (2020) analysis

rightward specifiers

1. Object shift is overt

Little notes the strong correlation that all languages that are rigid VSO show EEC effects. This is very clearly captured on the rightward movement account.

The movement of the object above the subject is *overt* because the language shows VSO word order.

Compare to Clemens and Coon (2018)

Without rightward specifiers, the EEC-causing object movement is always covert.

Benefits of Little's (2020) analysis

rightward specifiers

2. Transitive reflexive objects in Mam

Regardless of the syntactic transitivity of the verb, all reflexive objects in rigid VSO languages like Mam must stay low - and trigger VOS word order.

Subject Set B
intransitive

N- \emptyset -ewan t-ib' Jse.
INC-B2/3SG-hide A2/3SG-self Jose
'Jose is hiding himself.'

Subject Set A
transitive

O kub' t-qesan tib' Jse
CPL DIR A2/3SG-cut A2/3SG-self Jose
'Jose cut himself.'

Benefits of Little's (2020) analysis

rightward specifiers

2. Compare to Clemens and Coon (2018) [no rightward specs/movement]

The exceptional reflexive VOS order in rigid VSO languages is analyzed as an intransitive pseudo-noun incorporation (antipassive incorporation) structure (the object restricts the domain of the verb - not an “argument”).

When V moves to Voice and ss, it's really
X wrongly predicts only *intransitive syntax*

V[v+n] fronting

Perhaps predicate fronting?

X These authors specifically argue against a predicate fronting analysis in Mayan.

VP[V+NP] fronting

Benefits of Little's (2020) analysis

rightward
specifiers

3. Historical development of word order- baseline VOS

Norman and Campbell 1978

Proto-Mayan: VOS basic word order

V_SO when object was marked with DEF or ANIM.

prosodic
reordering

Little's analysis captures the evolution of this historical word order by positing that the object movement in VSO orders became generalized to virtually all objects in some Mayan languages.

Benefits of Little's (2020) analysis

rightward
specifiers

3. Compare to Clemens and Coon (2018)

VSO is the baseline word order
and
VOS is derived in special cases

prosodic
reordering

If VSO has been available in Mayan since PM (even only for DPs), we can say that rigid VSO languages just stopped allowing the special reordering of NPs with the verb. But why?

Appendix 2: Ch'ol, Q'anjob'al, & SJA Mam Where're the objects?

The problem with VOS/VSO languages

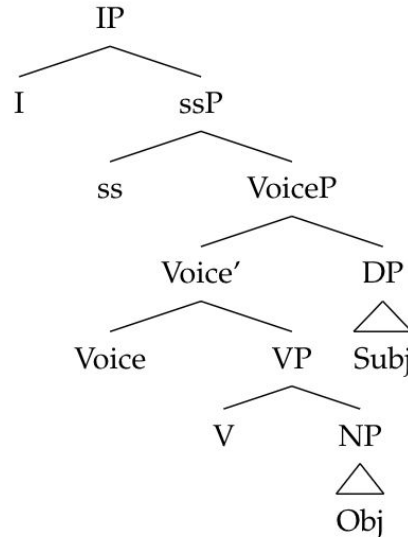
rightward specifiers

Adopting rightward specifiers means every instance of VSO across Mayan is due to object movement.

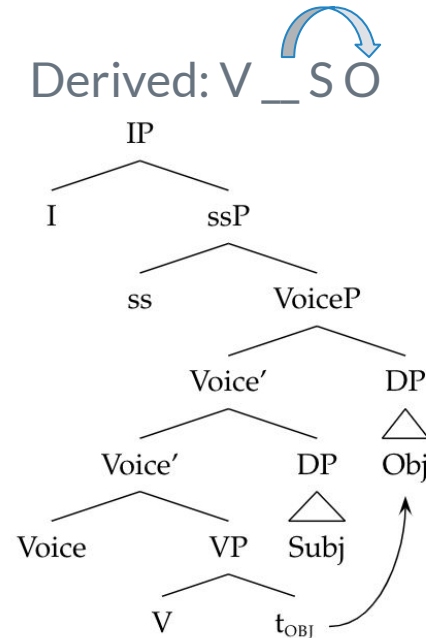
While this works very nicely for rigid VSO languages like Q'anjob'al and Mam,

It raises questions about Ch'ol.

Baseline: VOS



Derived: V _ S O



Q'anjob'al

Rigid VSO

(Coon et al. 2014, 192)

Max y-il[-a'] naq winaq ix ix.
ASP 3ERG-see-TV CLF man CLF woman
'The man saw the woman.'

Q'anjob'al is VSO

ABS markers appear high

EEC

Q'anjob'al

ABS markers appear high

(Coon et al. 2014, 187)

Max-ach y-il-aʔ

ASP-2ABS 3ERG-see-TV

'She saw you.'

Max-ach way-i.

ASP-2ABS sleep-ITV

'You slept.'

Q'anjob'al is VSO

ABS markers appear high

EEC

Q'anjob'al

EEC effects

(Coon et al. 2014, 193)

*Maktxel₁ max-Ø y-il[-a'] —₁ ix ix?
who ASP-3ABS 3ERG-see-TV CLF woman

intended: 'Who saw the woman?'

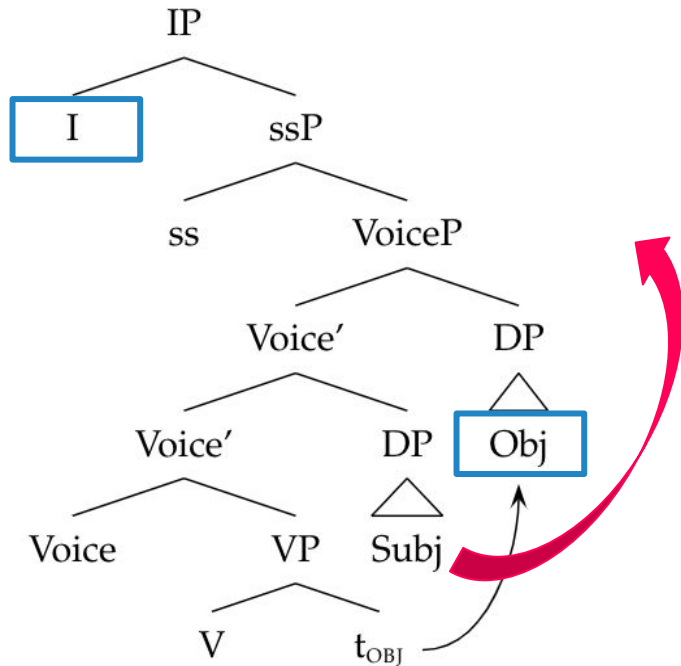
(grammatical as: 'Who did the woman see?')

Q'anjob'al is VSO

ABS markers appear high

EEC

Q'anjob'al

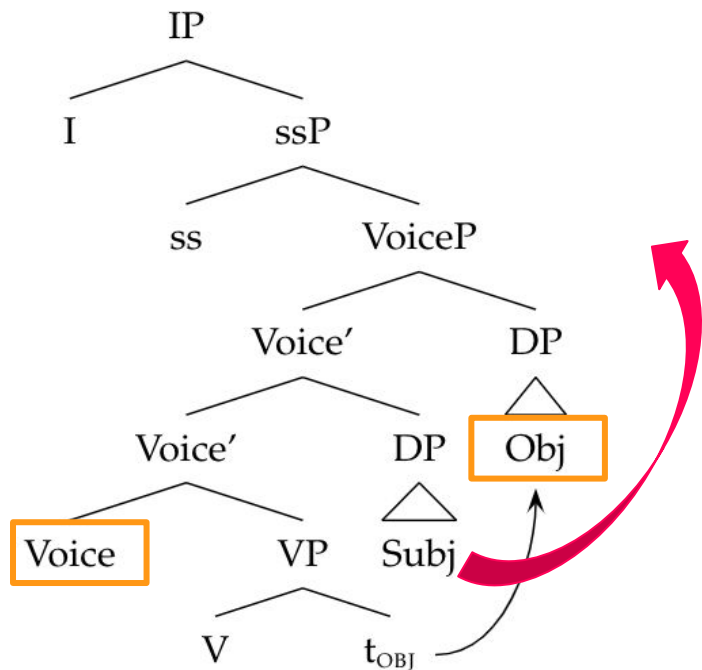


Objects are licensed via **Infl** (Coon et al. 2014).

Surface VSO indicates object movement (Little 2020).

- ★ The transitive subject cannot extract due to the object being in the way.

SJA Mam



Objects are licensed via **Voice**

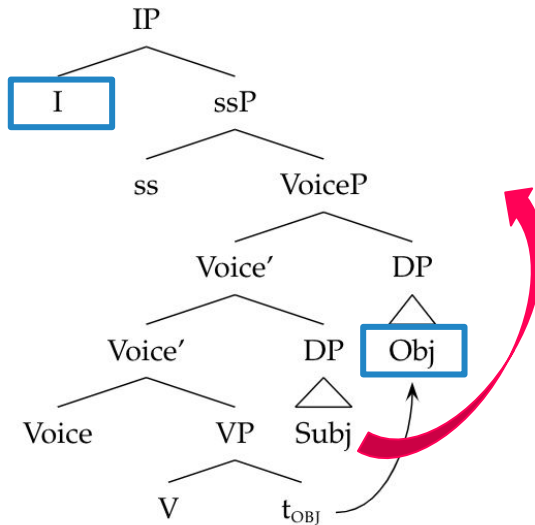
Surface VSO indicates object movement (Little 2020).

- ★ The transitive subject cannot extract due to the object being in the way.

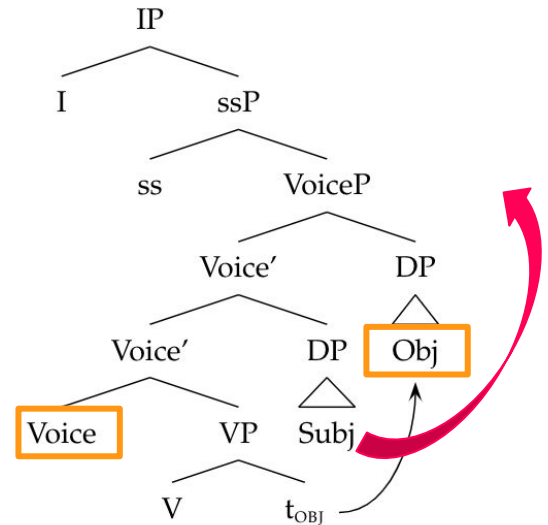
Landing site of the object

Regardless of the licensing of the object, the movement above the subject blocks subject extraction.

Q'anjoba'l
Infl- obj, EEC
Rigid VSO



SJA Mam
Voice - obj., EEC
Rigid VSO



Ch'ol

Alternating VOS/VSO

(Little 2020, 129)

VOS objects = NPs

[_V *Ta' i-k'ux-u*] [_O *waj*] [_S *aj-Rosa*].
PFV A3-eat-TV **tortilla** NC-Rosa
'Rosa ate a tortilla.'

VSO objects = DPs

[_V *Ta' i-k'ux-u*] [_S *aj-Rosa*] [_O *jiñi waj*].
PFV A3-eat-TV NC-Rosa **DET tortilla**
'Rosa ate the tortilla.'

Ch'ol is alternating
VOS/VSO

ABS markers appear low

No EEC

Ch'ol

ABS markers appear low

(Coon et al. 2014, 190)

Tyi y-il-ä-yety.

ASP 3ERG-see-TV-2ABS

'She saw you.'

Tyi uk'-i-yety.

ASP cry-ITV-2ABS

'You cried.'

Ch'ol is alternating
VOS/VSO

ABS markers appear low

No EEC

Ch'ol

No EEC effects

(Coon et al. 2014, 193)

Tyi y-il-ä x-'ixik jiñi wiñik.

ASP 3ERG-see-DTV CLF-woman DET man

'The man saw the woman.'

Maxki₁ tyi y-il-ä (____₁) jiñi wiñik (____₁)?

who ASP 3ERG-see-TV DET man

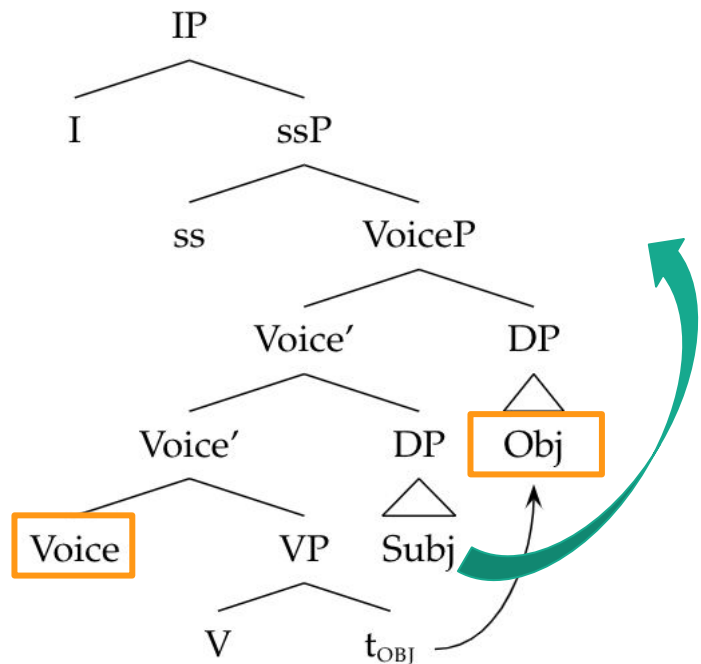
'Who saw the man?'/ 'Who did the man see?'

Ch'ol is alternating
VOS/VSO

ABS markers appear low

No EEC

Ch'ol



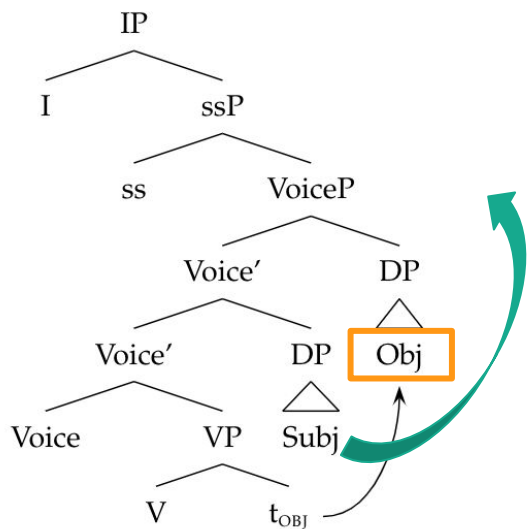
Objects are licensed via **Voice** (Coon et al. 2014).

Surface VSO indicates object movement (Little 2020).

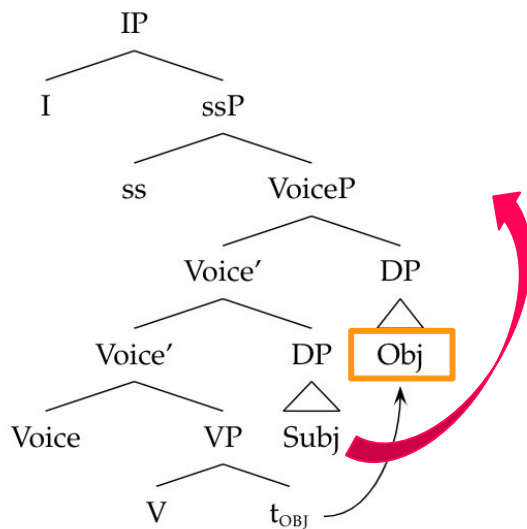
→ How do we explain the ability of the transitive subject to Abar extract if the object is “in the way”?

Landing site of the object

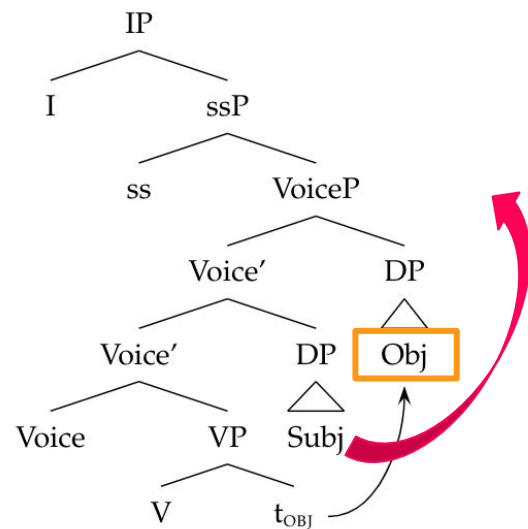
Ch'ol
Voice - obj, No EEC
VSO_{DP}



Q'anjoba'l
Infl- obj, EEC
Rigid VSO



SJA Mam
Voice - obj., EEC
Rigid VSO



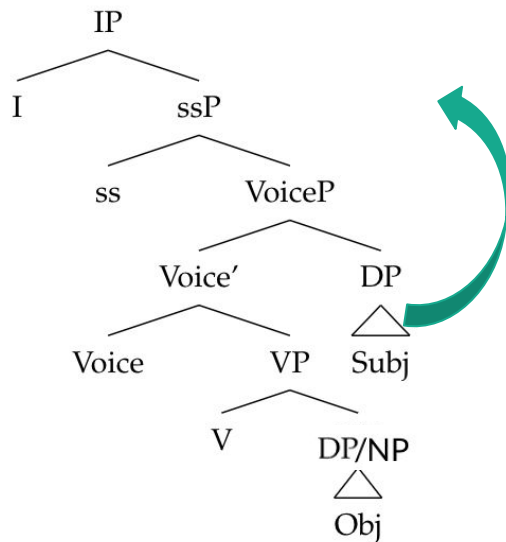
Proposal #1

DP object stay low when the Agent needs to extract

This would not effect post verbal word order since the subject is extracted. (=SVO)

In other words, baseline here is VOS

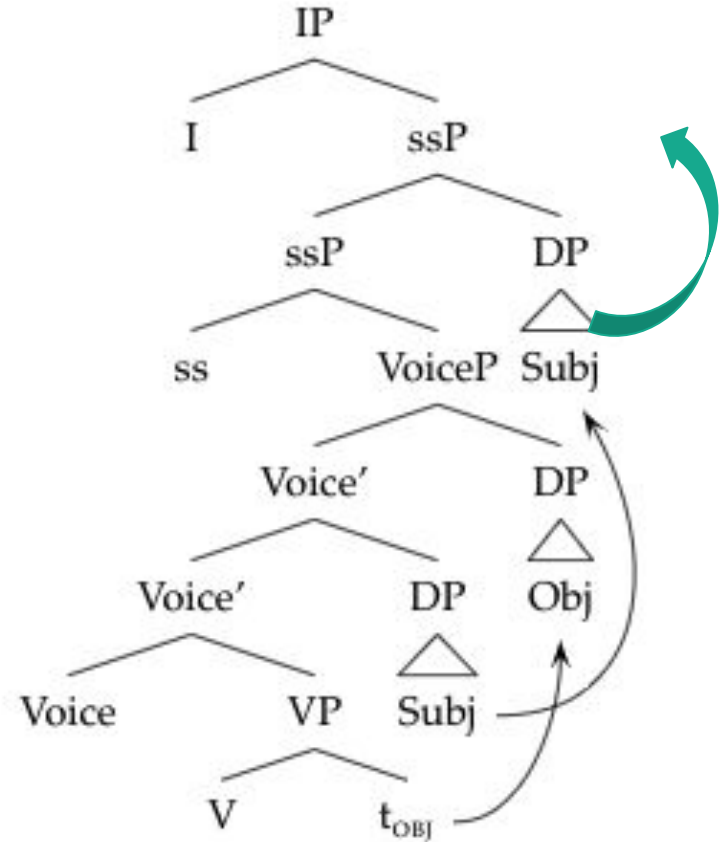
Maxki₁ tyi y-il-ä (~~()~~) jiñi wiñik (())?
who ASP 3ERG-see-TV DET man
'Who saw the man?'/ 'Who did the man see?'



Proposal #2

DP object move to a specifier of VoiceP, but this does not block movement.

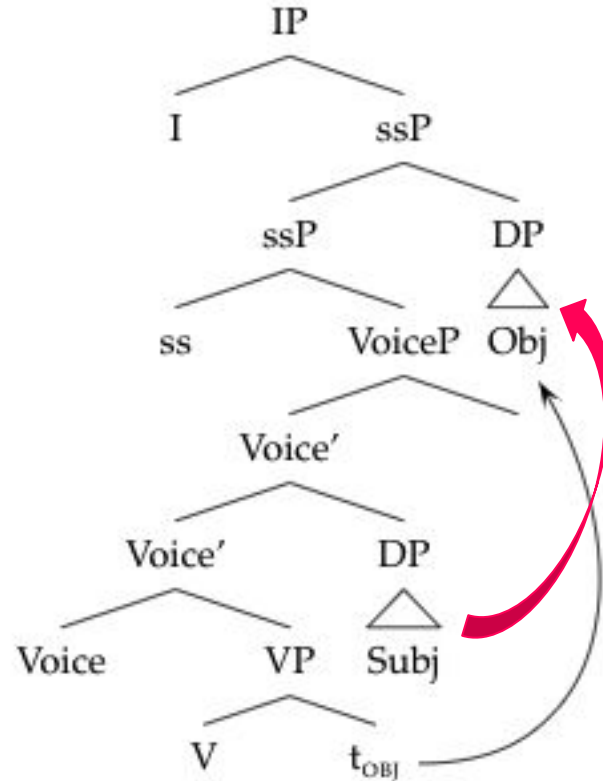
We can posit that Spec,ssP (or a different low functional head) represents the vP “escape hatch” and object movement in Ch’ol is to a lower position.



Proposal #2

In Q'anjob'al and Mam, the object moved directly to Spec,ssP.

(or through Spec,VoiceP)



“Statives” in Mam

Non-verbal predicates

post predicate pronouns

(i)	Ajxnaq'tzal	qin=i	
	teacher	1SGPRO=ENC	
	'I'm a teacher.'		
2sg	Ajxnaq'tzal	=i	
3sg	Ajxnaq'tzal	(txin)	(CLF.GIRL)
1pl.excl	Ajxnaq'tzal	qo=i	
1pl.incl	Ajxnaq'tzal	qo	
2pl	Ajxnaq'tzal	q=i	
3pl	Ajxnaq'tzal	qa	

→ Subjects are indicated with full pronouns following the predicate

Stative predicates

post predicate pronouns

(ii)	Sikyan	qin=i	
	Tired	1SGPRO=ENC	
	'I'm tired'		
2sg	Sikyan	=i	
3sg	Sikyan	(txin)	(CLF.GIRL)
1pl.excl	Sikyan	qo=i	
1pl.incl	Sikyan	qo	
2pl	Sikyan	q=i	
3pl	Sikyan	qa	

→ Subjects are indicated with full pronouns following the predicate

Active intransitive (with aspect)

high set B

(iii) Ma **chin** tan=i.
PROX **B1SG** sleep=ENC.
'I slept (today).'

2sg Ma **∅** tan=i.
3sg Ma **∅** tan (txin) (CLF.GIRL)
1pl.excl Ma **qo** tan=i.
1pl.incl Ma **qo** tan.
2pl Ma **chi** tan qi.
3pl Ma **chi** tan qa.

→ Subjects are indicated with **agreeing high Set B morphemes**

Active intransitive (with null aspect)

post predicate pronouns

(iv)	Tan	qin=i.	
	sleep	1SGPRO=ENC	
		'I slept (yesterday/*today).'	
2sg	Tan	=i.	
3sg	Tan	(txin)	(CLF.GIRL)
1pl.excl	Tan	qo=i.	
1pl.incl	Tan	qo.	
2pl	Tan	q=i.	
3pl	Tan	qa.	

→ Subjects are indicated with full pronouns following the predicate

Active intransitive (with null aspect)

The presence of the null aspect head condition the post predicate pronoun subject marking.

(v) Ma **chin** tan=i
PROX **B1SG** sleep=ENC.
'I slept (today). / Ya dormí.

(vii) **Ma tan **qin=i**
PROXsleep **1SGPRO=ENC.**
Int: 'I slept (today).

(vi) Tan **qin=i** ew
sleep **1SGPRO=ENC** yesterday
I slept yesterday. / Dormí ayer.

(viii) **O tan **qin=i** ew
CMPLSsleep **1SGPRO=ENC** yesterday
Int: I slept yesterday. / Dormí ayer.

Active intransitive (with null aspect)

This seems to be different from the default Set B cases for objects, because the overt default Set B is ungrammatical, the high slot is truly *empty*.

(ix) UI **qin=i** ew
arrive **1SGPRO=ENC** yesterday
I arrived yesterday.

(x) ****Tz-ul** **qin=i** ew
B2/3SG-arrive **1SGPRO=ENC** yesterday
Int: I arrived yesterday.