

# Micro- and macro-parameters in Mayan syntactic ergativity

Robert Henderson, Jessica Coon, and Lisa Travis

{robert.henderson,jessica.coon,lisa.travis}@mcgill.ca

Towards a Theory of Syntactic Variation – EHU, Bilbao, June 5 - 7, 2013

## 1 Introduction

One hurdle for a unified theory of ergativity is that not all languages with ergative case/agreement morphology exhibit the well known prohibition on ergative extraction (Aldridge 2008b, Campana 1992, Dixon 1994, Manning 1996, Smith-Stark 1978, etc.).

- (1) Q'ANJOB'AL  
*\*Maktxel max y-il-a' ix ix?*  
 who ASP ERG3-see-TV CL woman  
 Intended: 'Who saw the woman?'

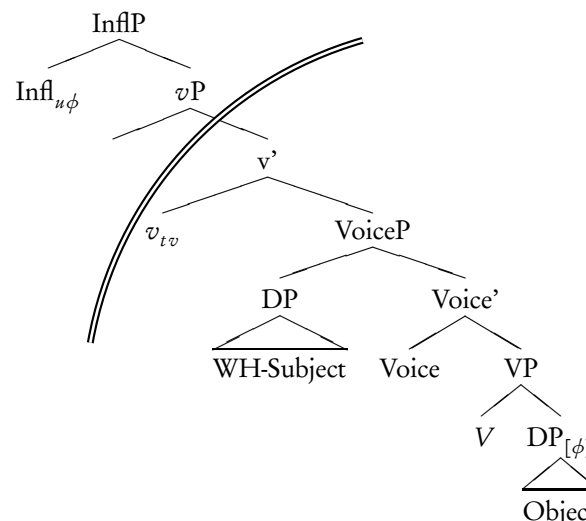
- (2) KAQCHIKEL  
*\*Achike x-u-tz'ët ri ixoq?*  
 who ASP-ERG3-see the woman  
 Intended: 'Who saw the woman?'

- (3) CHOL  
*Maxki tyi y-il-ä jñi x-'ixik?*  
 who ASP ERG3-see-TV DET CL-woman  
 'Who saw the man?'

Recent research in Coon et al. 2011 has explored the idea that the height of absolutive case assignment is the source of this difference, connecting the pattern to the influential proposal that objects get case from  $\text{Infl}^\circ$  in some ergative languages and  $v_{tv}$  in others (e.g., Aldridge 2004, 2008a, Legate 2002, 2008).<sup>1</sup>

<sup>1</sup>See Weisser et al. 2012 for another kind of proposal in which moving an ergative subject prevents absolutive objects from getting case.

- In Q'anjob'al and Kaqchikel (high-ABS languages), objects get case from  $\text{Infl}^\circ$ .
- Moving the ergative argument across  $\text{Infl}^\circ$  on the way to Spec-CP interferes with the assignment of object case, resulting in ungrammaticality.



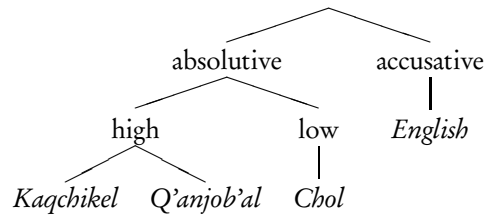
- In Chol, absolutive is assigned from  $v_{tv}$  in transitive clauses.
- Ergative subjects can therefore move without depriving the object case.

**Today's Goal:** Explore variation in how high-ABS languages like Kaqchikel and Q'anjob'al repair the problem of agent extraction.

- Contra what most of the Mayan literature assumes, Mayan AGENT FOCUS (AF) morphology is doing radically different things in closely related languages.
- In Q'anjob'al, it is  $\text{voice}^\circ$  that assigns case to transitive objects

- In Kaqchikel, it is **voice**<sup>o</sup> that allows the subject to be base-generated above Infl.
- In particular, Kaqchikel AF-voice supports Clitic Left Dislocation (CLLD), like Malagasy voice as analyzed by Travis (2006).

**Main Conclusion:** There is micro-variation in high-ABS languages based on the flavors of **voice**<sup>o</sup> available for non-canonical transitive clauses.



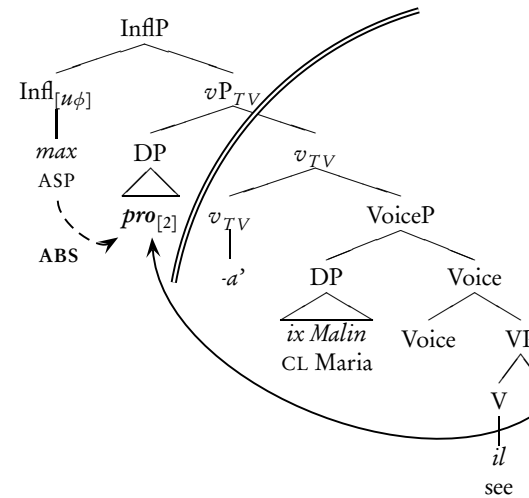
## 2 AF in a Modified Coon-Preminger-Mateo Account

Consider a normal transitive clause in Q'anjob'al. It will be our point of reference.

- (4) *Max-ach y-il-a' ix Malin.*  
 ASP-ABS2 ERG3-see-TV CL Maria  
 'Maria saw you.'

- verb first
- ABS cliticizes to ASP
- prefixal ERG agreement on the verb crossreference the subject
- verb suffixed with transitive (TV) status suffix

Example (4) is analyzed as follows: (i) The subject get ergative case from  $v_{TV}$ , (ii)  $v_{TV}$  is a phase, (iii) The object, in this case a *pro*, moves to the phase edge to check case from Infl.

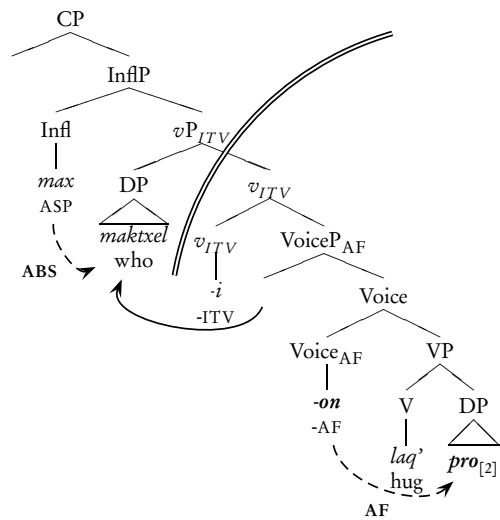


This analysis correctly predicts that only objects of transitive verbs should be able to move out of normal transitive clauses. To A'-move ergative subjects, the AF form of the verb must be used (Aissen 1999, Kaufman 1990, Smith-Stark 1978, Stiebels 2006).

- (5) \**Maktxel max-ach s-laq'-a'?*  
 who ASP-ABS2 ERG3-see-TV  
 Intended: 'Who hugged you?'

- (6) *Maktxel max-ach laq'-on-i?*  
 who ASP-ABS2 see-AF-ITV  
 'Who hugged you?'

- The verb bears AF morphology
- The clause is thematically transitive
- There is no ERG. Only a single ABS agreement morpheme is available
- The verb agrees with the object
- The verb bears the intransitive status suffix



Because *Maktxel* is free to get case from Inff on its way to Spec-CP,  $v_{ITV}$  can be used, meaning no ergative case is assigned.<sup>2</sup> Crucially, the object can be case-licensed in-situ by **-on**.

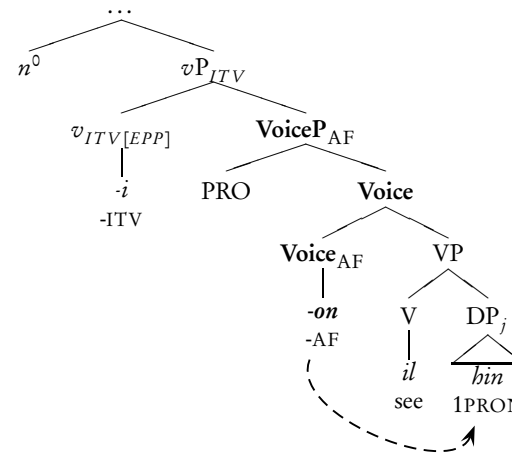
**Big Picture:** In transitive clauses, objects in High-ABS languages must move to a phase edge to get case, blocking movement of the subject.

- We might expect, then, for AF to appear in other contexts where objects cannot get case in the usual way.
- Non-finite clauses, the canonical example, do not have Inff, and thus should not license ABS

This is precisely what we observe in the following examples, which illustrate what the Mayanist literature calls the "CRAZY" ANTIPASSIVE (Kaufman 1990, Pascual 2007, Quesada 1997).

- (7) \**Chi uj [bin y-il-a]*.  
 ASP be.able.to ABS1 ERG3-see-TV  
 Intended: 'It is possible for her to see me.'

- (8) *Chi uj [bin y-il-an-i]*.  
 ASP be.able.to ABS1 ERG3-see-**AF**-ITV  
 'It is possible for her to see me.'



Without **-on**, the object would not get case. Just like in clauses where the transitive subject must move, **-on** intervenes to case-license objects when they would otherwise be ungrammatical in a normal transitive clause. In this view, notice that Agent Focus is a bit of a misnomer.

### 3 The Challenge from Kaqchikel

Kaqchikel has similar-looking basic transitive clauses.

- (9) *X-at-ru-tz'ët xta Mariy.*  
 ASP-ABS2-ERG3-see CL Maria  
 'Maria saw you.'

- Verb first
- ABS precedes ERG agreement
- Sadly, Kaqchikel has lost its status suffixes

Like in Q'anjob'al, the ergative argument cannot undergo A'-movement from a normal transitive clause. Instead, AF voice must be used.

<sup>2</sup>If  $v_{TV}$  were used, Inff would not be able to discharge its case, preventing the derivation from converging.

(10) \**Achike x-at-ru-tz'ët.*  
 who ASP-ABS2-ERG3-see  
 Intended reading: 'Who saw you?'

(11) *Achike x-at-tz'et-o.*  
 who ASP-ABS2-see-AF  
 'Who saw you?'

- The verb bears AF morphology.
- The clause is thematically transitive
- There is no ERG. Only a single ABS agreement morpheme is available.
- Here we have object agreement.<sup>3</sup>

So far things look very similar to Q'anjob'al. The null hypothesis is that Kaqchikel **-o**, like Q'anjob'al **-on**, is a special **voice**<sup>o</sup> that assigns ABS in its c-command domain.

**Prediction:** Kaqchikel, like Q'anjob'al, should use **-o** in non-finite clauses to case-license objects.

This prediction is not borne out.

- Like in Q'anjob'al, normal transitive clauses assigning ABS are banned in non-finite contexts.
- This is because there is no Infl.

(12) \**X-Ø-in-chäp* [e *nu-tij-ik*].  
 ASP-ABS3PL-ERG1-start ABS3PL ERG1-eat-NML  
 Intended: 'I started to eat them'

Unlike in Q'anjob'al, we cannot use AF to allow non-finite transitives to license an absolutive object.

(13) \**X-Ø-in-chäp* [e *nu-tij-o'ik*].  
 ASP-ABS3PL-ERG1-start ABS3PL ERG1-eat-AF-NML  
 Intended: 'I started to eat them'

Instead, Kaqchikel just completely bans ABS in non-finite clauses. We must either use the passive or the anti-passive, neither of which allows an ABS argument.

(14) *X-Ø-in-chäp* [*ki-tij-ix-ik*].  
 ASP-ABS3-ERG1-start ERG3PL-eat-PAS-NML  
 lit. 'I started their being eaten.'

(15) *X-Ø-in-chäp* [*nu-tij-in-ik k-ichin*].  
 ASP-ABS3-ERG1-start ERG1-eat-AP-NML ERG3PL-RN  
 lit. 'I started my eating for them.'

This is completely unexpected Kaqchikel AF and Q'anjob'al AF are **voice**<sup>o</sup> heads that assign case in their c-command domain.

- Maybe Kaqchikel speakers have this morpheme sitting around in their grammar, but they haven't figure out useful it would be to put it in non-finite clauses.
- The option we pursue is that Kaqchikel AF subjects are base-generated above Infl in a CLLD-like structure.
- AF would introduce a *pro* in its specifier that is bound by the agent, which is base-generated above Infl.
- Thus, AF would have nothing to do with licensing objects.
- Therefore, objects in non-finite clauses should be unable to get case.

## 4 A Malagasy Interlude

As is well known, Western Malayo-Polynesian (WMP) languages have a rich voice system allowing arbitrary DPs to be subjects without the concomitant demotion of the thematic agent to oblique status. This is illustrated with the following examples from Malagasy (Travis 2006: ex. 2).

(16) *Manasa ny lamba amin'ny savony ny lehilaby.*  
 AT.wash DET clothes with.DET soap DET man  
 'The man washes the clothes with the soap.'

<sup>3</sup>Warning! Unlike in Q'anjob'al, we do not always have object agreement in Kaqchikel AF clauses. We'll be putting this aside for this talk. See Coon et al. 2011 for discussion of this point.

(17) *Sasan'ny lehilahy amin'ny savony ny lamba.*  
 TT.wash.DET man with.DET soap DET clothes  
 'The man washes the clothes with the soap.'

(18) *Anasan'ny lehilahy ny lamba ny savony.*  
 CT.wash.DET man DET clothes DET soap  
 'The man washes the clothes by the man.'

There are a variety of approaches to WMP subjects:

- They are A' topics: Pearson 2001, Sells 2000, Richards 2000
- They are absolutive arguments: Aldridge 2012, DeGuzman 1988, Gerdts 1988
- They are base-generated in their surface position. Voice morphology links them up with their thematic position: Keenan 2000, Sells 1998, Travis 2006

We want to explore analyses of the third type, especially Travis 2006, as a possibility for Kaqchikel AF.

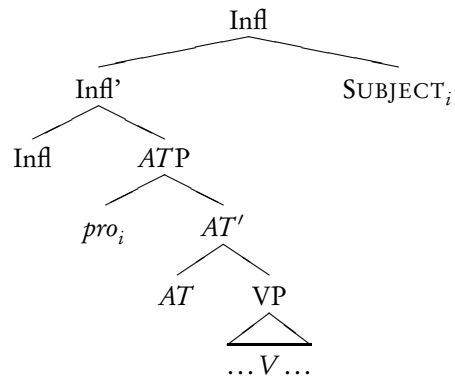
- Travis's idea, extending work by Pearson (2001) and Sportiche (1998), is that Malagasy subjects are like Italian CLLD-arguments (Cinque 1990: pg. 61).

(19) *Gianni, lo conosciamo.*  
 Gianni, CL we.know  
 'Gianni, we know him.'

Importing this idea into Malagasy, we can say that:

- Voice morphology introduces a *pro* in its specifier.
- The overt subject is base-generated in Spec-Infl and binds *pro*.

Malagasy clauses thus have the abbreviated structure below.



- Note that Travis 2006 base-generates the *pro* for AT, CT, and TT clauses in different specifiers.
- In particular, following Pearson 2001, they are generated in various inner/outer aspectual heads.

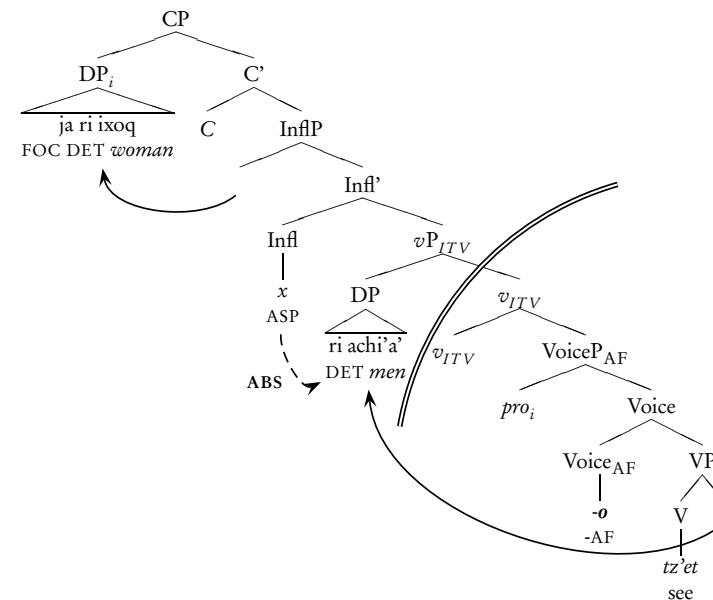
## 5 Kaqchikel AF-subjects as Malagasy-style subjects

We propose that Kaqchikel AF-clauses have the structure of a normal Malagasy Agent Topic clause.

- AF morphology is a special flavor of voice, like Malagasy Agent Topic, which introduces an *pro* in its specifier.
- It assigns this *pro* an agentive theta-role.
- The actual agent DP is instead base-generated in Spec-Infl.

Consider an example like (20).

(20) *Ja ri ixoq x-e-tz'et-o ri achi'a'.*  
 FOC DET woman ASP-ABS2-see-AF DET man-PL  
 'It's the woman who saw the men.'



This analysis explains the distribution of AF across finite and nonfinite contexts:

- Objects can get case as they usually do (from Infl) by moving to the phase edge.
- Focused subjects and WH-subjects are able to move to Spec-CP unimpeded because they are base-generated high.

In non-finite clauses, though, things predictably go wrong. In the following example, for instance, there is no Infl, so the object cannot get case. Unlike in Q'anjob'al, though, AF cannot help because it does not assign case in its c-command domain.

- (21) \**X-Ø-in-chäp* [e *w-aq'oma-n-ik*].  
 ASP-ABS3PL-ERG1-start ABS3PL ERG1-heal-AF-NML  
 Intended: 'I started to heal them'

The result is that only one argument can be licensed. We have to detransitivize such clauses, for instance, by using the passive.

- (22) *X-Ø-in-chäp* [*k-aq'oma-x-ik*].  
 ASP-ABS3-ERG1-start ERG3PL-heal-PAS-NML  
 lit. 'I started their being healed.'

While there is still more work to be done to show that AF-clauses behave like CLLD structures, the analysis explains this core difference between Kaqchikel and Q'anjob'al, languages which otherwise behave very similarly. In the final section, we want to consider another construction showing the deep similarities between Malagasy and Kaqchikel.

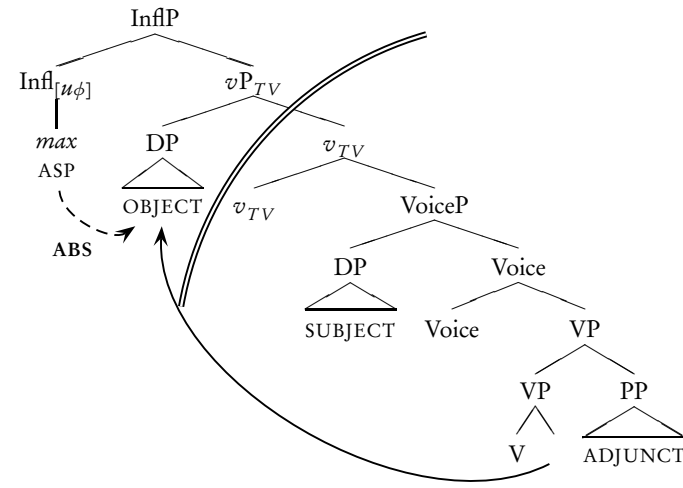
## 6 CLLD is a General Strategy in Kaqchikel

Take a high-level view of our analysis of AF across Kaqchikel and Q'anjob'al.

- AF in Q'anjob'al is about case-licensing objects.
- AF in Kaqchikel is about introducing a pronoun that can bear the agent theta role, and which can be bound by a higher argument.

We might expect then that Kaqchikel has other heads comparable to *-o*, which introduce *pro* arguments bearing other theta roles, so that the appropriate arguments can be extracted.

- Transitive objects (like intransitive subjects) can always move, so we might not expect a construction analogous to Theme Topic in Malagasy.
- But! Any oblique argument / adjunct base-generated below *vP* is predicted to be unable to undergo A'-movement for focus/questioning/etc.



- The prediction is that low adjuncts cannot undergo A'-extraction from normal clauses, but high adjuncts can.
- To extract low adjuncts, we predict that, parallel to transitive subjects, they should be base-generated in the left periphery and bind a *pro*.
- This *pro* should be introduced by a verbal head, which we will see, just when a low adjunct is extracted.
- Kaqchikel has just such an adjunct extraction construction, which we explore now.

As a first rough cut, Kaqchikel adjuncts fall into two classes based on whether they freely occur on both sides of the predicate.

- (23) (*Iwir*) *x-i-samäj* (*iwir*).  
 yesterday ASP-ABS1-work (yesterday)  
 'I worked yesterday.'

- (24) (*Chanin*) *x-i-samäj* (*chanin*).  
 quickly ASP-ABS1-work quickly  
 'I worked quickly.'

- (25) (\**Pa juyu'*) *x-i-samäj* (*pa juyu'*).  
 P mountain ASP-ABS1-work P mountain  
 'I worked in the country.'

- (26) (\**R-ik'in nu-te'*)      *x-i-samäj*      (*r-ik'in nu-te'*).  
 ERG3-RN ERG1-mother ASP-ABS1-work ERG3-RN ERG1-mother  
 'I worked with my mother.'

An abbreviated inventory looks like:

- two-sided: temporal, manner
- one-sided: locative, comitative, instrumental, goal

Henderson 2007 provides two arguments that two-sided adjuncts adjoin to a structurally superior projection in the clause. First, we do not get free permutation across these classes. The two-sided adjuncts prefer to be right-most when they are to the right of the verb.

- (27) *X-Ø-u-sipaj*      *chi r-e*      *nu-te'*      *iwir.*  
 ASP-ABS3-ERG3-give P ERG3-RN ERG1-mother yesterday  
 'She gave it to my mother yesterday.'

- (28) ??*X-Ø-u-sipaj*      *iwir*      *chi r-e*      *nu-te'*.  
 ASP-ABS3-ERG3-give yesterday P ERG3-RN ERG1-mother  
 'She gave it yesterday to my mother.'

- (29) *Xi-Ø-xajon*      *r-ik'in*      *wana'*      *iwir.*  
 ASP-ABS3-dance ERG3-RN ERG1-sister yesterday  
 'He danced with my sister yesterday.'

- (30) ??*Xi-Ø-xajon*      *iwir*      *r-ik'in*      *wana'*.  
 ASP-ABS3-dance yesterday ERG3-RN ERG1-sister  
 'He danced yesterday with my sister.'

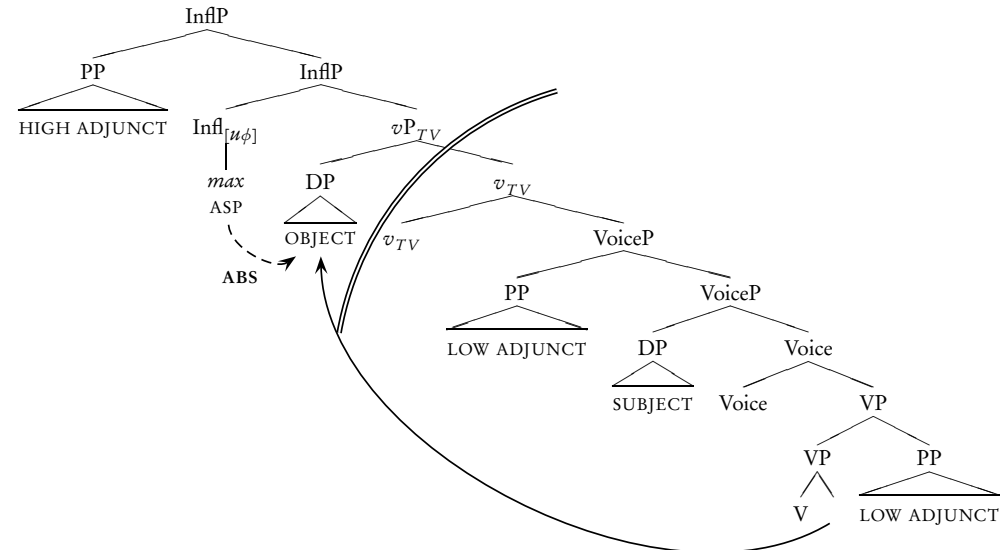
The second argument is that while one-sided adjuncts prefer to be final, they can occur between subject and object. Two-sided adjuncts never can.

- (31) *X-Ø-u-löq'*      *ri äk'*      *pa k'ayb'al ri*      *xta Irma.*  
 ASP-ABS3-ERG3-buy DET chicken P market DET CL Irma  
 'Irma bought the chicken in the market.'

- (32) \**X-Ø-u-löq'*      *ri äk'*      *iwir*      *ri xta Irma.*  
 ASP-ABS3-ERG3-buy DET chicken yesterday DET CL Irma  
 'Irma bought the chicken yesterday.'

Based on these observations, we propose the following:

- Temporal and manner adjuncts adjoin higher than *vP*.
- locative, comitative, instrumental, and goal adjuncts adjoin to *VP* or *VoiceP*. The latter allows us to account for *V > O > PP > S* word order.



Assuming this distribution makes a critical prediction. Low adjuncts should be trapped in *vP*, unable to undergo A<sup>2</sup>-movement to higher projections. In contrast, high adjuncts should be able to be extracted freely. This is borne out.

- We can freely form temporal and manner questions on normal clauses.

- (33) *Jampe' x-at-el?*  
 when ASP-ABS1-leave  
 'When did you leave?'

- (34) *Achike modo x-at-el?*  
 what manner ASP-ABS1-leave  
 'How did you leave?'

In stark contrast, questioning low adjuncts from normal clauses is not possible.

- (35) \**Akuchi x-at-el?*  
 where ASP-ABS2-leave  
 ‘Where did you leave?’
- (36) \**Achoj ik’in x-at-el?*  
 WH RN ASP-ABS2-leave  
 ‘With whom did you leave?’
- (37) \**Achoj ch-e x-Ø-a-taq?*  
 WH P-RN ASP-ABS3-ERG2-send  
 ‘To whom did you send it?’

In order to form these questions, the verbal clitic **wi** must appear.

- (38) *Akuchi x-at-el wi?*  
 where ASP-ABS2-leave **wi**  
 ‘Where did you leave?’
- (39) *Achoj ik’in x-at-el wi?*  
 WH RN ASP-ABS2-leave **wi**  
 ‘With whom did you leave?’
- (40) *Achoj ch-e x-Ø-a-taq wi?*  
 WH P-RN ASP-ABS3-ERG2-send **wi**  
 ‘To whom did you send it?’

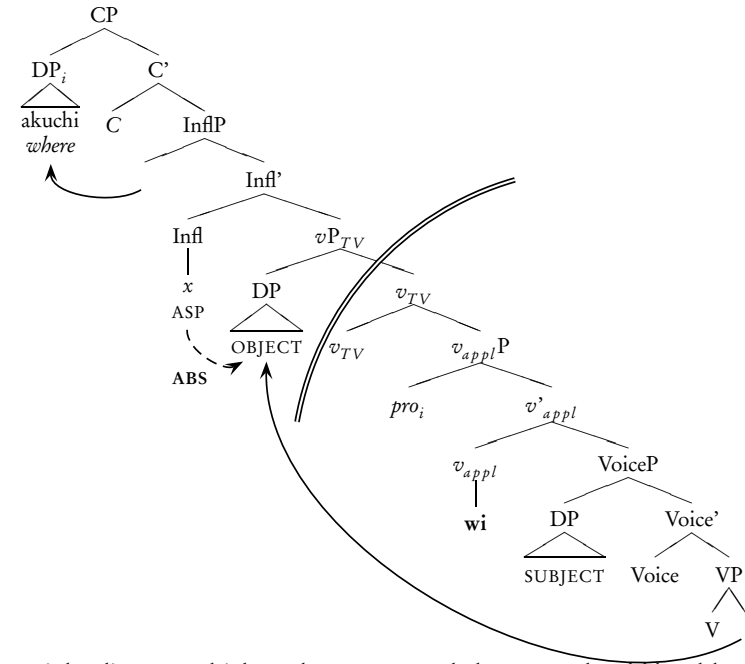
**wi** is banned if co-occurring with the extraction of high adjuncts, e.g., (41).

- (41) \**Jampe x-at-el wi?*  
 when ASP-ABS2-leave **wi**  
 ‘When did you leave?’

These observations confirm the prediction that movement from low adjunct positions (roughly below *vP*) should be more difficult than from high adjunct positions. Furthermore, we can make sense of this **wi** by assimilating it to Kaqchikel AF (as previous authors have done in more descriptive terms, e.g., Ayres 1983).

- **wi** is the morphological realization of an applicative head that introduces a *pro* in its specifier.

- Just like with transitive subjects, the WH-expression is base-generated above *vP* and binds this *pro*.
- Thus, the object can still get case without blocking the WH-expression from moving to Spec-CP.



- High adjuncts, which are base-generated above *vP*, should be able to move with impunity.

Not only does this analysis explain the distribution of **wi**, but it reinforces the contrasts we’ve shown between Kaqchikel and Q’anjob’al.

- Q’anjob’al has no analog of **wi**. This is expected if Q’anjob’al, unlike Kaqchikel, does not use a CLLD-type strategy in general.
- The existence of **wi** further assimilates Kaqchikel to Malagasy, which has a Circumstantial Topic voice, allowing arguments with various oblique roles to be subject (Paul 2000: p.91/94, ex.3a-b/6d).

- (42) INSTRUMENT  
*Anapahany bozaka ny antsiny.*  
 CT.cut.3(GEN) grass DET knife.3(GEN)  
 ‘Her knife is used by her to cut grass’



- (43) LOCATIVE  
*Itoeranay ity trano ity.*  
 CT.live.1PL(GEN) DET house DET  
 ‘This house is lived in by us.’

- (44) GOAL  
*Nandrosoan-dRakoto vary ny vahiny.*  
 PST.CT.serve.GEN.Rokoto rice DET guest  
 ‘The guests were served rice by Rakoto.’

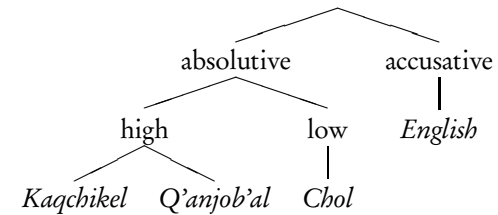
In the Travis 2006 account, all of these subjects would be base-generated in Spec-InfI and bind a *pro* in the specifier of a Circumstantial Topic head.

- Kaqchikel *wi* looks to be a close analog that only occurs in extraction contexts.
- Combined with observations about AF, adjunct extraction provides further evidence that Kaqchikel uses Malagasy-like CLLD constructions to license the extraction of expressions that could otherwise not move.

## 7 Conclusions

This talk has focused on those languages that ban the A'-extraction of transitive subjects from normal transitive clauses.

- In particular, we want to know if there is variation in how these movements are "repaired".
- We've shown that there is variation, even in closely related languages like Kaqchikel and Q'anjob'al.
  - Just when transitive subjects move, Q'anjob'al makes use of a construction that allows objects to be case-licensed in-situ. In these AF clauses, Q'anjob'al behaves like related languages that allow subject extraction generally, e.g. Chol.
  - In contrast, Kaqchikel uses a CLLD strategy to allow transitive subjects to extract. Just in these clauses, Kaqchikel behaves like a completely unrelated language on the ergative continuum, namely Malagasy.



## Acknowledgments

This research was supported by SSHRC grant #435-2012-0882, *The mental representation of language variation: macro- and micro-parameters*. We want to thank Maayan Adar, Ryan Bennett, Liwen Hou. Of course, all mistakes and misunderstandings are our own.

## Abbreviations

Abbreviations in glosses are as follows: ABS – absolutive; AF – agent focus; AP – antipassive; APPL – applicative; ASP – aspect marker; AT – actor topic; CL – clitic; CT – circumstantial topic; DET – determiner; DIR – directional; DTV – derived transitive suffix; ERG – ergative; FOC – focus marker; GEN – genitive; ITV – intransitive verb suffix; NML – nominal; P – preposition; PERF – perfect; PL – plural; PREP – preposition; PST – past; RN – relational noun; TT – theme topic; TV – transitive verb suffix; WH – constituent question marker.

## References

- Aissen, Judith. 1999. Agent Focus and Inverse in Tzotzil. *Language* 75:451-485.
- Aldridge, Edith. 2004. *Ergativity and word order in Austronesian languages*. Doctoral dissertation, Ithaca, NY: Cornell University.
- Aldridge, Edith. 2008a. *Generative Approaches to Ergativity*. *Language and Linguistic Compass: Syntax and Morphology* 2:966-995.
- Aldridge, Edith. 2008b. *Phase-based account of extraction in Indonesian*. *Lingua* 118:1440-1469.
- Aldridge, Edith. 2012. *Antipassive and Ergativity in Tagalog*. *Lingua* 122:192-203 (Special Issue Accounting for Ergativity, guest-edited by Beatriz Fernández and

- Itziar Laka).
- Ayres, Glenn. 1983. *The Antipassive "Voice" in Ixil*. International Journal of American Linguistics 49:20-45.
- Campana, Mark. 1992. *A Movement Theory of Ergativity*. PhD thesis, Montreal: McGill University.
- Cinque, Guglielmo. 1990. *Types of A'-Dependencies*. Cambridge, Mass.: MIT Press.
- Coon, Jessica, Pedro Mateo Pedro, and Omer Preminger. 2011. *The Role of Case in A-Bar Extraction Asymmetries: Evidence from Mayan*. Harvard University, ms.
- Dixon, R. M. W. 1994. *Ergativity*. Cambridge: Cambridge University Press.
- Gerds, Donna. 1988. *Antipassives and causatives in Ilokano: Evidence for an ergative analysis*. In Studies in Austronesian linguistics, Ed. R. McGinn: 295-322. Athens, OH: Ohio University Center for International Studies.
- De Guzman, V. 1988. *Ergative analysis for Philippine languages: An analysis*. In: McGinn, R. (Ed.), Studies in Austronesian Linguistics. Ohio University Center for International Studies, Athens, Ohio, pp. 323-345.
- Johns, Alana. 1992. *Deriving Ergativity*. Linguistic Inquiry 23:57-88.
- Kaufman, Terrence. 1990. *Algunos Rasgos Estructurales de Los Idiomas Mayances con Referencia Especial al K'iche'*. In *Lecturas sobre la lingüística maya*, eds. Nora England and Stephen R. Elliot, 59-114. Antigua: CIRMA.
- Keenan, Edward. 2000. *Morphology is structure: A Malagasy test case*. In Formal issues in Austronesian linguistics, Eds. I. Paul, V. Phillips and L. Travis: 23-41. Dordrecht: Kluwer.
- Manning, Christopher. 1996. *Ergativity: Argument Structure and Grammatical Relations*. Stanford, CA: Center for the Study of Language and Information.
- Legate, Julie Anne. 2002. *Warlpiri: Theoretical Implications*. Doctoral dissertation, Cambridge, MA: MIT.
- Legate, Julie Anne. 2008. *Morphological and Abstract Case*. Linguistic Inquiry 39:55-101.
- Pascual, Adán F. 2007. *Transitividad y dependencia sintáctica y discursiva en Q'anjob'al*. MA thesis, México: CIESAS.
- Paul, Ileana M. 2000. *Malagasy Clause Structure*. Doctoral dissertation, Montreal, QC: McGill University.
- Pearson, Matthew. 2001. *The clause structure of Malagasy: A minimalist approach*. Doctoral dissertation, Los Angeles, CA: UCLA.
- Quesada, J. Diego. 1997. *A Note on Mayan 'Crazy' Antipassivization*. Theoretical Linguistics 23:79-112.
- Richards, Norvin. 2000. *Another look at Tagalog subjects*. Formal issues in Austronesian linguistics, ed. by Ileana Paul, Vivianne Phillips, and Lisa Travis, 105-116. Dordrecht: Kluwer.
- Sells, Peter. 1998. *The functions of voice markers in the Philippine languages*. In Morphology and its relation to phonology and syntax, Eds. S. Lapointe, D. Brentari and P. Farrell: 111-137. Stanford: CSLI Publications.
- Sells, Peter. 2000. *Raising and the order of clausal constituents in the Philippine languages*. Formal issues in Austronesian linguistics, ed. by Ileana Paul, Vivianne Phillips, and Lisa Travis. Dordrecht: Kluwer.
- Smith-Stark, Thomas 1978. *The Mayan Antipassive: Some facts and Fictions*. In Papers in Mayan Linguistics, ed. Nora England, 169-187. The Curators of the University of Missouri.
- Sportiche, Dominique (1998). *Partitions and Atoms of Clause Structure*. London: Routledge.
- Stiebels, Barbara. 2006. *Agent Focus in Mayan Languages*. Natural Language and Linguistic Theory 24:501-570.
- Travis, Lisa. 2006. *Voice morphology in Malagasy as Clitic Left Dislocation or through the looking glass: Malagasy in Wonderland*. In Hans-Martin Gärtner, Paul Law, Joachim Sabel (eds.) Clause Structure and Adjuncts in Austronesian Languages, Mouton de Gruyter, Berlin, 281-318.