### **Restructuring and Agent Focus in Kaqchikel**

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The Society for the Study of the Indigenous Languages of the Americas January 2015 **The verb** *ajo* 'want' in Kaqchikel (Mayan; Guatemala) can take a propositional complement (1) or a predicative complement (2):

- (1) Yïn n- $\emptyset$ -w-ajo [<sub>CP</sub> chin rat n- $\emptyset$ -a-tz'ib'aj ri karta]. I INC-B<sub>3sg</sub>-A<sub>1sg</sub>-want that you INC-B<sub>3sg</sub>-A<sub>2sg</sub>-write the letter 'I want you to write the letter.'
- (2) Rje n- $\emptyset$ -k-ajo [ $\star$  n- $\emptyset$ -ki-tz'ib'aj ri karta]. they INC-B<sub>3sg</sub>-A<sub>3pl</sub>-want INC-B<sub>3sg</sub>-A<sub>3pl</sub>-write the letter 'They want to write the letter.'

Predicative complements of *ajo* as in (2) pass diagnostics for **restructuring infinitives** (Wurmbrand, 2001, *et seq*), but cannot be straightforwardly accounted for as Wurmbrand's (2014b) voice- or size-restructuring.

Predicative complements of *ajo* are IP control clauses. The lack of a CP layer contributes to their structural impoverishment. Transitive verbs in Kaqchikel use an **Agent Focus (AF)** form when its subject is  $\overline{A}$ -extracted (see Aissen, 1999; Stiebels, 2006, a.o.).

When the subject of a restructuring *ajo* 'want' is  $\overline{A}$ -extracted, **both** *ajo* **and the embedded verb exhibit AF:** 

- (3) Achike n-Ø-ajo-wan [★ n-Ø-tz'ib'a-n ri karta]?
   who INC-B<sub>3sg</sub>-want-AF INC-B<sub>3sg</sub>-write-AF the letter
   'Who wants to write the letter?'
- This behavior and additional details regarding AF morphology in restructuring clauses shows that the relationship between the syntactic trigger and morphological realization of AF must be more indirect than previously thought.

Contributes to a broader cross-linguistic discussion of the realization of extraction marking in restructuring clauses (see e.g. Chung 2004 on Chamorro, Chang 2014 on Tsou, and discussion in Wurmbrand 2014a).

## Predicative complements of 'want'

The verb *ajo* 'want' can take **a propositional complement** (1) or **a predicative complement** (2).

- (1) "Want" *ajo* with a propositional complement (CP):
  Yïn n-Ø-w-ajo [<sub>CP</sub> chin rat n-Ø-a-tz'ib'aj ri karta].
  I INC-B<sub>3sg</sub>-A<sub>1sg</sub>-want that you INC-B<sub>3sg</sub>-A<sub>2sg</sub>-write the letter
  'I want you to write the letter.'
- (2) "Want" *ajo* with a predicative complement (★): (=2)

Rje n-Ø-k-ajo [★ n-Ø-ki-tz'ib'aj ri karta]. they INC-B<sub>3sg</sub>-A<sub>3pl</sub>-want INC-B<sub>3sg</sub>-A<sub>3pl</sub>-write the letter 'They want to write the letter.' (4) Both verbs agree with the matrix subject:

Rje n-Ø-k ajo [★ n-Ø-ki-tz'ib'aj ri karta]. they INC-B<sub>3sg</sub>-A<sub>3pl</sub>-want INC-B<sub>3sg</sub>-A<sub>3pl</sub>-write the letter

'They want to write the letter.'

The interpreted subject of predicative complements must be the matrix subject:

- (5) Obligatory control with a predicative complement:
  - \* Rje n- $\emptyset$ -k-ajo [ $_{\bigstar}$  (rat) n- $\emptyset$ -a-tz'ib'aj ri karta (rat)]. they INC-B<sub>3sg</sub>-A<sub>3pl</sub>-want you INC-B<sub>3sg</sub>-A<sub>2sg</sub>-write the letter you Intended: 'They want you to write the letter.'

 $\overline{A}$ -movements cannot target the edge of a predicative complement. The existential quantifier *k'o* 'some one/thing' must move to preverbal positional:

- (6) *K'o/majun* must be in preverbal focus position:
  - a. ✓ (Yïn) k'o (pastel) x-Ø-in-tëj.
    I ∃ cake com-B<sub>3sg</sub>-A<sub>1sg</sub>-eat
    'I ate some (cake).'
  - b. \* (Yïn) x- $\emptyset$ -in-tëj k'o (pastel). I сом-B<sub>3sg</sub>-A<sub>1sg</sub>-eat  $\exists$  cake

These existential operators A-move from argument positions and can trigger Agent Focus (Erlewine, to appear).

## Predicative complements are small

#### (7) K'o cannot target the edge of the predicative complement:

- a.  $\checkmark$  Ri a Juan  $\boxed{k'o}$  n- $\emptyset$ -r-ajo [  $\underset{NC-B_{3sg}}{}$ -A\_{3sg}-want  $\underset{NC-B_{3sg}}{}$ -A\_{3sg}-write  $\land$  Juan wants to write something.'
- b. \* Ri a Juan n- $\emptyset$ -r-ajo  $[\star k'o n-\emptyset-u-tz'ib'aj].$ the cL Juan INC-B<sub>3sg</sub>-A<sub>3sg</sub>-want  $\exists$  INC-B<sub>3sg</sub>-A<sub>3sg</sub>-write

In addition, predicative complements disallow the complementizer chin.

#### Predicative complements lack a CP layer.

## Predicative complements as restructuring

Predicative complements of *ajo* 'want' pass diagnostics for restructuring in the sense of Wurmbrand (2001, *et seq*).

A hallmark of Wurmbrand's restructuring embeddings is that they are *functionally impoverished*:

- (8) Predicative complements disallow negation:
  - \* Rje n- $\emptyset$ -k-ajo [ $\star$  ma n- $\emptyset$ -ki-tz'ib'aj ta ri karta]. they INC-B<sub>3sg</sub>-A<sub>3pl</sub>-want NEG INC-B<sub>3sg</sub>-A<sub>3pl</sub>-write IRR the letter

Intended: 'They want to not write the letter.'

- (9) Predicative complements disallow independent aspect:
  - \* Rje n- $\emptyset$ -k-ajo [ $\star$  x- $\emptyset$ -ki-tz'ib'aj ri karta]. they INC-B<sub>3sg</sub>-A<sub>3pl</sub>-want COM-B<sub>3sg</sub>-A<sub>3pl</sub>-write the letter

Intended: 'They want to have written the letter.'

No such restriction holds of propositional (CP) complements of *ajo*:

- (10)  $\checkmark$  Yïn n-Ø-w-ajo [<sub>CP</sub> chin rat ma n-Ø-a-tz'ib'aj ta ri karta]. I INC-B<sub>3s</sub>-A<sub>1s</sub>-want that you NEG INC-B<sub>3s</sub>-A<sub>2s</sub>-write NEG the letter 'I want you to not write the letter.'
- (11)  $\checkmark$  Yïn n-Ø-w-ajo [*CP* chin rat x-Ø-a-tz'ib'aj ri karta]. I INC-B<sub>3s</sub>-A<sub>1s</sub>-want that you COM-B<sub>3s</sub>-A<sub>2s</sub>-write the letter  $\approx$  'I want you to have written the letter.'

For Wurmbrand (2001, 2004), restructuring embeddings disallow independent tense/aspect, negation, and external arguments, **because they are structurally small, VP embeddings**. (*v*P in Wurmbrand (2014a))

But there are two problems for adopting this analysis for Kaqchikel:

- The verb in the restructuring embedding *does* exhibit aspect and agreement morphology, although their values are parasitic on the matrix verb.
- (12) Obligatory aspect concord and subject agreement concord:  $ASP-B-A-want [ + ASP-B-A-verb_{tr} + e^{-t}]$

## But predicative complements are not that small

2 Kaqchikel does have even smaller "aspectless complements":

- (13) 'Start' embeds a smaller complement:
  - a. X-∅-u-chäp [wa'-in]. сом-B<sub>3sg</sub>-A<sub>3sg</sub>-start eat-NMZ 'She started to eat.'
  - b. X-Ø-u-chäp [ru-tz'et-ïk] com-B<sub>3sg</sub>-A<sub>3sg</sub>-start A<sub>3sg</sub>-see-NMZ
     'She started to see it.' (Imanishi and Mateo Pedro, 2013)

Imanishi and Mateo Pedro (2013); Imanishi (2014) argue that such embeddings are nominalizations. Regardless, the point stands that there are embeddings with *less* functional material than ★.

## Proposal

#### The restructuring embedding $(\bigstar)$ is an IP control clause.

- 1 The restructuring embedding completely lacks the CP layer.
- 2 Aspect is realized in Infl (Aissen, 1992, a.o.).
  - The restructuring Infl is defective, lacking its own aspect valuation.
  - The defective Infl will probe upwards for an aspect specification and will find the higher Infl head (Baker and Willie, 2010, see also Wiklund 2007).
- 3 Negation in Kaqchikel is in the CP domain (above Infl) and therefore disallowed.
- 4 The embedded PRO carries the φ-features of its controller, explaining the subject agreement on both verbs.

Recall that both 'want' ajo and the embedded verb agree with the subject:

(14) Rje x- $\emptyset$ -k -ajo [ $\star$ =IP x-at-ki -tz'ib'aj rat]. they com-B<sub>3sg</sub>-A<sub>3pl</sub>-want com-B<sub>2sg</sub>-A<sub>3pl</sub>-write you 'They want to write you.'

In (14), the embedded verb is transitive, so both verbs show **Set A** (ergative) agreement with the third-plural subject.

A potential hypothesis is that this too is the result of head-to-head agreement:

(15) Head-to-head agreement for both aspect and agreement concord:

ASP-B<sub>3sg</sub>-A-*ajo* [
$$\star$$
=IP ASP-B-A-verb object] subject e.g. (14)

When the complement of *ajo* 'want' is intransitive, the intransitive verb agrees with the subject with **Set B (absolutive) agreement**:

- (16) Yïn n- $\emptyset$ - $\overline{w}$ -ajo [ $\star$ =IP y- $\overline{i}$ -b'e Japon]. I INC-B<sub>3sg</sub>-A<sub>1sg</sub>-want INC-B<sub>1sg</sub>-go Japan 'I want to go to Japan.'
- Subject agreement concord is *not* due to agreement between corresponding functional heads, unlike aspect concord.

Agreement occurs independently in the lower verbal complex, targeting the embedded subject PRO.

# Agent Focus and restructuring

Transitive verbs appear in an Agent Focus form in certain constructions:

- subject *wh*-questions;
- subject focus fronting;
- subject relatives; and
- 4 subject existentials.

(See Erlewine to appear on Kaqchikel; see also Smith-Stark 1978; Aissen 1999, 2011; Stiebels 2006; Norcliffe 2009; Coon et al. to appear)

Intransitive verbs do not participate in the AF alternation.

AF is used when the ergative argument is  $\overline{A}$ -extracted.

AF involves the addition of an AF suffix (in **bold**) and changes to agreement.

- **Q:** How does AF affect a restructuring clause—i.e., when the subject of *ajo* 'want' is extracted?
- A: Both *ajo* 'want' and the embedded transitive verb show AF.
- (17) a. Achike n- $\emptyset$ -ajo-**wan** [ $\star$ =IP n- $\emptyset$ -tz'ib'a-**n** ri karta]? who INC-B<sub>3sg</sub>-want-**AF** INC-B<sub>3sg</sub>-write-**AF** the letter 'Who wants to write the letter?' (=3)
  - b. \* Achike n- $\emptyset$ -r-jo [ $\star$ =IP n- $\emptyset$ -tz'ib'a-**n** ri karta]? who INC-B<sub>3sg</sub>-A<sub>3sg</sub>-want INC-B<sub>3sg</sub>-write-**AF** the letter
  - c. \* Achike n- $\emptyset$ -ajo-**wan** [ $\star$ =IP n- $\emptyset$ -u-tz'ib'aj ri karta]? who INC-B<sub>3sg</sub>-want-**AF** INC-B<sub>3sg</sub>-A<sub>3sg</sub>-write the letter

Note: This is not the general behavior of AF.

For example, when *ajo* 'want' takes a propositional (CP) complement, extracting the matrix subject does not affect the embedded verb:

- (18) a. Achike n- $\emptyset$ -ajo-**wan** [*<sub>CP</sub>* chin n- $\emptyset$ -u-tz'ib'aj ri karta]? who INC-B<sub>3sg</sub>-want-**AF** that INC-B<sub>3sg</sub>-A<sub>3sg</sub>-write the letter 'Who<sub>i</sub> wants him/her<sub>i</sub> to write the letter?'
  - b. \* Achike n- $\emptyset$ -ajo-**wan** [<sub>CP</sub> chin n- $\emptyset$ -tz'ib'a-[n] ri karta]? who INC-B<sub>3sg</sub>-want-**AF** that INC-B<sub>3sg</sub>-write-**AF** the letter
- A transitive verb is in AF if *that verb's subject* is  $\overline{A}$ -extracted.

In the restructuring embeddings, the subject is base-generated high as an argument of 'want' and controls the embedded subject:

(19)  $subject_i$  want [ $_{\bigstar=IP}$  PRO<sub>i</sub> verb ...]

The restructuring embedding ( $\bigstar$ =IP) under 'want' should be the same, regardless of whether the matrix subject is  $\overline{A}$ -extracted or not.

The information which determines the use of AF is not local to the embedded verb.

Similar interactions are observed in some Austronesian languages, such as Chamorro (Chung, 2004) and Tsou (Chang, 2014).

#### (20) Chamorro *wh*-agreement baseline (Chung, 2004):

- a. Ha-istotba häm. 3SG-bother us 'It bothers us.'
- b. Hafa um-istotba si Juan? what wн[NOM]-bother Juan 'What bothers Juan?'
- c. Hafa pãra u-fa'tinas si Juan? what FUT WH[OBJ]-make Juan
   'What is Juan going to make?'

(Chung, 1994)

### (21) Chamorro *wh*-agreement and restructuring (Chung, 2004):

- a. Ma-tutuhun ma-ayudan maisa siha i ma'estru.
   3PL-begin 3PL-help self them the teacher
   'The teachers began to help themselves.'
- b. Hayi siha na famagu'un t<um>utuhun um-istotba who PL L children wh[NOM].begin wh[NOM]-bother si Miguel? Miguel

'Which children began to bother Miguel?'

Idea: Suppose that AF is akin to *wh*-agreement in Chamorro.

- Assume an underlying ergative/absolutive pattern of Case, not realized on the nominals but reflected in agreement alignment.
- Ā-operators are moved to a designated Focus projection (Aissen, 1992, a.o.), although this Focus head is unpronounced.
- The Focus head agrees in Case features with what it has fronted, as in analyses of Austronesian "voice" as extraction marking (Chung, 1994; Rackowski, 2002; Pearson, 2005).

### AF = Focus[Case:ERG].

Among existing analyses, this is most similar to Stiebels (2006).

6 AF is realized on lower verbs via head-to-head agreement with the higher Focus head.

Similar to Chung's proposal for Chamorro, based on Bhatt's (2005) proposal for Hindi restructuring with long-distance agreement.

## No AF concord with intransitive verbs

Recall that intransitive verbs do not participate in the AF alternation.

When *ajo* 'want' embeds an intransitive predicative complement and the subject is  $\overline{A}$ -extracted, *ajo* shows AF but the intransitive verb is unaffected:

(22) ✓ Achike n-Ø-ajo-wan [★=IP n-Ø-b'e Japon]?
 who INC-B<sub>3sg</sub>-want-AF INC-B<sub>3sg</sub>-go Japan
 'Who wants to go to Japan?'

Either intransitive verbs do not agree with the Focus head in AF or agree but do not morphologically realize AF. It is *not* that intransitive verbs never find themselves in an AF configuration.

A possible new view of AF's "syntactic ergative" distribution: What if AF marked subject extraction (e.g. AF = Focus[Case:NOM]), but only transitive verbs are able to morphologically realize the AF alternation?

# Conclusion

## Conclusion

- I analyze the restructuring embedding of Kaqchikel 'want' *ajo* as a functionally impoverished, IP embedding.
- Aspect concord—but not agreement concord—is due to upward head-to-head agreement (Baker, 2008).
- The interaction of Agent Focus with restructuring teaches us that the relationship between the syntactic trigger of AF and its morphological realization must be more indirect than previously thought.
- I sketch a novel analysis of AF as Case-agreement as in analyses of extraction marking in Austronesian languages.
- AF concord is explained as head-to-head agreement of extraction marking features, which is independently attested cross-linguistically (Chung, 2004; Chang, 2014; Wurmbrand, 2014a, a.o.).

## Matyöx! Questions?

An earlier version of this work is available as a paper at http://ling.auf.net/lingbuzz/001685/.Handout and slides at http://mitcho.com.

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