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-∅-w-ajo \[CP \text{chin rat } n-∅-a-tz’ib’aj \text{ ri karta}].
   I INC-B\textsubscript{3sg}-A\textsubscript{1sg}-want that you INC-B\textsubscript{3sg}-A\textsubscript{2sg}-write the letter
   ‘I want you to write the letter.’

(2) Rje n-∅-k-ajo \[\blacklozenge n-∅-ki-tz’ib’aj \text{ ri karta}].
   they INC-B\textsubscript{3sg}-A\textsubscript{3pl}-want INC-B\textsubscript{3sg}-A\textsubscript{3pl}-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.

_predicate 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 $\bar{A}$-extracted (see Aissen, 1999; Stiebels, 2006, a.o.).

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

(3) Achike n-$\emptyset$-ajo-wan $\circledast$ n-$\emptyset$-tz’ib’a-n ri karta]?
    who INC-B$_{3sg}$-want-AF INC-B$_{3sg}$-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’
Two ways to ‘want’

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

(1) **“Want” *ajo* with a propositional complement (CP):**

Yiŋ n-∅-w-ajo \[CP \text{ chin rat } n-∅-a-tz’ib’aj \text{ ri } \text{ karta}.\]

I INC-B\(_{3sg}\)-A\(_{1sg}\)-want that you INC-B\(_{3sg}\)-A\(_{2sg}\)-write the letter

‘I want you to write the letter.’

(2) **“Want” *ajo* with a predicative complement (★): (=2)**

Rje n-∅-k-ajo [★ n-∅-ki-tz’ib’aj ri karta].

they INC-B\(_{3sg}\)-A\(_{3pl}\)-want INC-B\(_{3sg}\)-A\(_{3pl}\)-write the letter

‘They want to write the letter.’
Both verbs agree with the matrix subject:

\[
\text{Rje n-∅-[k]-ajo [★ n-∅-[ki]-tz’ib’aj ri karta].}
\]

they INC-B\textsubscript{3sg}-A\textsubscript{3pl}-want INC-B\textsubscript{3sg}-A\textsubscript{3pl}-write the letter

‘They want to write the letter.’

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

Obligatory control with a predicative complement:

\[
\ast \text{Rje n-∅-k-ajo [★ (rat) n-∅-a-tz’ib’aj ri karta (rat)].}
\]

they INC-B\textsubscript{3sg}-A\textsubscript{3pl}-want you INC-B\textsubscript{3sg}-A\textsubscript{2sg}-write the letter you

Intended: ‘They want you to write the letter.’
Predicative complements are small

¬ 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-tēj.
     I  ∃  cake  COM-B₃sg-A₁sg-eat
     ‘I ate some (cake).’

b.  * (Yïn) x-Ø-in-tēj  k’o (pastel).
     I  COM-B₃sg-A₁sg-eat  ∃  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. ✓ Ri a Juan [k’o n-∅-r-ajo] [★ n-∅-u-tz’ib’aj].
   the cl Juan  INC-B_{3sg}-A_{3sg}-want  INC-B_{3sg}-A_{3sg}-write
   ‘Juan wants to write something.’

b. * Ri a Juan n-∅-r-ajo [★ k’o n-∅-u-tz’ib’aj].
   the cl Juan INC-B_{3sg}-A_{3sg}-want  INC-B_{3sg}-A_{3sg}-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:**

\[ \text{Rje } \text{n-∅-k-ajo} \rightarrow [\ast \text{ma n-∅-ki-tz’ib’aj ta ri karta}]. \]

\[ \text{they INC-B}_{3\text{sg}}-\text{A}_{3\text{pl}}-\text{want NEG INC-B}_{3\text{sg}}-\text{A}_{3\text{pl}}-\text{write IRR the letter} \]

Intended: ‘They want to not write the letter.’

(9) **Predicative complements disallow independent aspect:**

\[ \text{Rje } \text{n-∅-k-ajo} \rightarrow [\ast \text{x-∅-ki-tz’ib’aj ri karta}]. \]

\[ \text{they INC-B}_{3\text{sg}}-\text{A}_{3\text{pl}}-\text{want COM-B}_{3\text{sg}}-\text{A}_{3\text{pl}}-\text{write the letter} \]

Intended: ‘They want to have written the letter.’
Predicative complements as restructuring

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

(10)  ✓ Yin n-∅-w-ajo [\(CP\) chin rat \([\text{ma} n-∅-a-tz’ib’aj \quad \text{ta}\) \(ri\) \(karta)\].
I INC-B\(_3\)s-A\(_1\)s-want \quad \text{that you NEG INC-B\(_3\)s-A\(_2\)s-write NEG the letter}
‘I want you to not write the letter.’

(11)  ✓ Yin n-∅-w-ajo [\(CP\) chin rat \(x-∅-a-tz’ib’aj \quad \text{ri} \quad \text{karta})].
I INC-B\(_3\)s-A\(_1\)s-want \quad \text{that you COM-B\(_3\)s-A\(_2\)s-write the letter}
\(\approx\) ‘I want you to have written the letter.’
But predicative complements are not that small

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

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

1. 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:**

\[
\text{ASP—B—A—want} \quad [\star \quad \text{ASP—B—A—verb}_{tr}]
\]
Kaqchikel does have even smaller “aspectless complements”:

(13) ‘Start’ embeds a smaller complement:

a. X-∅-u-chäp [wa’-in].
   COM-B_{3sg}-A_{3sg}-start eat-NMZ
   ‘She started to eat.’

b. X-∅-u-chäp [ru-tz’et-ïk]
   COM-B_{3sg}-A_{3sg}-start A_{3sg}-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 (★) 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 \( \phi \)-features of its controller, explaining the subject agreement on both verbs.
Restructuring and agreement

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

(14) \textit{Rje x-∅-[k]-ajo \quad [\star=IP x-at-[ki]-tz’ib’aj \ rat].}  
\textit{they com-B\textsubscript{3sg}-A\textsubscript{3pl}-want \quad com-B\textsubscript{2sg}-A\textsubscript{3pl}-write you}  

‘They want to write you.’

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

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

(15) \textbf{Head-to-head agreement for both aspect and agreement concord:}  
\textit{ASP–B\textsubscript{3sg}–A–ajo [\star=IP ASP–B–A–verb \ object] \ subject \ e.g. (14)}

\begin{center}
\includegraphics[width=\textwidth]{diagram.png}
\end{center}
Restructuring and agreement

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

(16) Yin n-∅-[w]-ajo [★=IP y-[i]-b’e Japon].

I INC-B₃sg-A₁sg-want INC-B₁sg-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:

1. subject *wh*-questions;
2. subject focus fronting;
3. 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 $\bar{A}$-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-∅-ajo-[**wan**] [★=IP n-∅-tz’ib’a-[n ri karta]? who INC-B\_3sg\_want-AF INC-B\_3sg\_write-AF the letter ‘Who wants to write the letter?’ (=3)

b. * Achike n-∅-r-jo [★=IP n-∅-tz’ib’a-a-[n ri karta]? who INC-B\_3sg\_A\_3sg\_want INC-B\_3sg\_write-AF the letter

c. * Achike n-∅-ajo-[**wan**] [★=IP n-∅-u-tz’ib’aij ri karta]? who INC-B\_3sg\_want-AF INC-B\_3sg\_A\_3sg\_write the letter
Agent Focus and restructuring

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-∅-ajo-wan [CP chin n-∅-u-tz’ib’aj ri karta]? who INC-B_{3sg}-want-AF that INC-B_{3sg}-A_{3sg}-write the letter ‘Who, wants him/her to write the letter?’

b. * Achike n-∅-ajo-wan [CP chin n-∅-tz’ib’a- n ri karta]? who INC-B_{3sg}-want-AF that INC-B_{3sg}-write-AF the letter

☞ A transitive verb is in AF if *that verb’s subject* is *A*-extracted.
In the restructuring embeddings, the subject is base-generated high as an argument of ‘want’ and controls the embedded subject:

\[(19) \text{ subject}_i \text{ want } [\star=\text{IP PRO}_i \text{ verb ...}]\]

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

The information which determines the use of AF is not local to the embedded verb.
Restructuring and extraction marking

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 WH[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.
   \[ \text{3PL-begin} \quad \text{3PL-help} \quad \text{self} \quad \text{them} \quad \text{the teacher} \]
   ‘The teachers began to help themselves.’

b. Hayi siha na famagu’un t<**um**>utuhun **um**-istotba
   wh\[ \text{who PL L} \quad \text{children} \quad \text{WH[NOM].begin} \quad \text{WH[NOM]-bother} \]
   si Miguel?
   Miguel
   ‘Which children began to bother Miguel?’
**Proposal**

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

1. Assume an underlying ergative/absolutive pattern of Case, not realized on the nominals but reflected in agreement alignment.

2. Ā-operators are moved to a designated Focus projection (Aissen, 1992, a.o.), although this Focus head is unpronounced.

3. 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).

4. **AF = Focus[Case:ERG].**
   *Among existing analyses, this is most similar to Stiebels (2006).*

5. 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.*
Recall that intransitive verbs do not participate in the AF alternation.

When *ajo* ‘want’ embeds an intransitive predicative complement and the subject is *Ā*-extracted, *ajo* shows AF but the intransitive verb is unaffected:

(22)  ✓ Achike n-∅-ajo-wan ⭐=IP n-∅-b’e Japon?  
who INC-B$_{3sg}$-want-AF INC-B$_{3sg}$-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
• 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.).
Acknowledgements

*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.

This work would not be possible without the patience and kindness of my primary consultant Ana López de Mateo. This work was supported by a MIT Ken Hale Fund fieldwork award. For helpful discussion and comments, I thank Bronwyn Bjorkman, Jessica Coon, Lauren Eby Clemens, Hadas Kotek, Mark Norris, David Pesetsky, Coppe van Urk, anonymous reviewers, as well as the audience at the First American International Morphology Meeting. I also thank Jairo Bala López for discussion of judgments and Louisa Bielig for support in the field. Errors are mine.


