Raina Heaton  
University of Hawai`i at Mānoa  
SSILA 2015

The status of syntactic ergativity in Kaqchikel

1. K’ichean syntactic ergativity

-A restriction on syntactic processes applying to ergative arguments (with respect to A’ extraction) (Dixon 1994, Manning 1996, Polinsky, to appear)

-Term has a long history of application to Mayan (and specifically K’ichean) languages to describe the phenomenon where a special verb form/syntactic construction is required to question, relativize, or cleft/focus ergative arguments, whereas no such construction is required to front absolute arguments (e.g. Dayley 1981; Mondloch 1978b; Pye 1991; Larsen 1987).

Table 1: Syntactic ergativity

<table>
<thead>
<tr>
<th>Process:</th>
<th>Verb form:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fronting the ergative subject of a transitive verb</td>
<td>Agent Focus or Antipassive</td>
</tr>
<tr>
<td>Fronting the absolutive subject of an intransitive verb</td>
<td>Transitive</td>
</tr>
<tr>
<td>Fronting the absolutive object of a transitive verb</td>
<td>Transitive (or Passive)</td>
</tr>
</tbody>
</table>

1.1 Agent Focus (AF)


(1) Xa ri ačin š-ox-k’am-o  
FOC DET man PST-1PL.ABS-bring-AF  
‘It was the man who brought us’

(2) Ačike n-i-č’el-en ri štən  
WH PRS-3SG.ABS-carry.in.arms-AF DET girl  
‘Who is carrying the girl?’

1.2 Antipassivization (AP)

ABSOLUTIVE + VERB + ANTIPASSIVE DERIVATION (+ OBLIQUE OBJECT)

---

1 This research was made possible by grants from the University of Hawaii Arts and Sciences Advisory Council and the Bilinski Foundation. My sincerest thanks to all of my consultants and friends in Guatemala—janila matyöx chiwe.

2 Glossing conventions: 1=1st person, 3=3rd person, ABS=absolutive, AF=agent focus, AP=antipassive, ASP=aspectual suffix, DET=determiner, DIR=directional particle, ERG=ergative, IMP=imperative, IP=independent pronoun, FOC=focus particle, MP=mediopassive, also called ‘completive’ passive, OBL=oblique, PL=plural, POS=possessive, PREP=preposition, PRS=present, PST=past, REL=relative clause marker, SG=singular, TV=transitive derivation, WH=wh-word.
2. Status of syntactic ergativity

-Transitive verbs can be used with extracted ergative arguments, which can create ambiguity.

(1b) Xa ri ačin š-ox-ru-k’əm pe
FOC DET man PST-1PL.ABS-3SG.ERG-bring DIR.toward
‘It was the man who brought us’

(3) Ri alaʔ ri n-Ø-u-č’el-eχ ri štən
DET boy REL PRS-3SG.ABS-3SG.ERG-carry.in.arms-TV DET girl
‘the boy who is carrying the girl’ OR ‘the boy who the girl is carrying’

-García Matzar and Rodríguez Guaján (1997), Majzul et al. (2000) noted that not all speakers require AF/AP
-Mondloch (1981), Trechsel (1993), Campbell (2000:225) noted some acceptance for transitives in RCs, Wh-questions, and cleft in K’iche’, especially in semantically unambiguous cases
-Similar pattern noted by Clemens et al. (2014) for Q’anjob’al relative clauses

3. The study

-Goal: To measure the vitality of the primary constructions exhibiting syntactic ergativity in Kaqchikel

-3 small studies (one per construction: RCs, Focus, Wh-questions) conducted in 2013 and 2014

-Tested subject extraction for RCs, Focus, and Wh-questions, and object extraction for RCs and Wh-questions.
  -Object conditions showed 95-99% use of transitives (as expected). Results below therefore only deal with subject extraction.

-Tested for:
  -Animacy effects (Does semantic ambiguity have an effect on structure?)
  -Age effects

3.1 Procedure and participants

-28 native speakers between the ages of 19 and ~70, from 10 mutually intelligible Kaqchikel dialects
-Single, monolingual interview sessions
-All picture-based elicitation tasks
  -3sg-3sg arguments only, to increase ambiguity in matched animacy items and cause AF to always show agreement with A.
Figure 1: Sample WH-question elicitation item
(4) Xun winəq n-Ø-u-nim ri alaʔ. Rîn w-etama-n one person PRS-3SG.ABS-3SG.ERG-push DET boy 1SG.IP 1SG.ERG-know-ASP
ačike. T-Ø-a-k’utux pe č-we! WH IMP-3SG.ABS-2SG.ERG-ask DIR.toward PREP-1SG
‘Someone is pushing the boy. I know who. Ask me!’

Figure 2: Sample RC elicitation item
(5) E k’o kaʔiʔ štàn-iʔ, kinəq’, škoyʔaʔ. Ačike štàn k’o ri retaʔ pa ru-wi?? 3PL exist 2 girl-PL bean tomato WH girl exist DET sign PREP 3SG.POS-top
‘There are two girls, a bean plant, and a tomato plant. Which girl has the arrow over her?’
Figure 3: Sample focus elicitation item
(6) E k’o xun štan čuqa xun ala? pa ru-či? palow. Ačike š-Ø-ban-atɔʔ?
3PL exist 1 girl also 1 boy PREP 3SG.POS-mouth sea WH PST-3SG.ABS-do-MP
‘There are a boy and a girl at the beach. What happened?’

4. Results
4.1 Relative Clauses
Figure 4: Instances of transitives vs. AF/AP in subject relative clauses by age

-Transitives are quite prevalent in SRCs for all ages, even the oldest generation
-AF/AP was not mandatory for ANY speaker
- No significant\(^3\) age effect
- No significant animacy effect (119 vs. 104 transitives in AA vs. AI conditions)

### 4.2 Focus constructions

**Figure 5:** Instances of transitives vs. AF/AP in subject focus constructions by age

- Transitives are both acceptable and used more frequently than AF/AP by all but the oldest generation
- For the youngest generation, AF is never mandatory and appears only 5% of the time
- While several stated a preference for AF, only 1 speaker (41-50) used AF for all items
- Significant age effect (\(\beta: -6.04 \pm 4.80, p<0.05\))
- No significant animacy effect (291 vs. 397 transitives in AA vs. AI conditions)

### 4.3 Wh-Questions

---

\(^3\) Significance was calculated using a fixed effect linear regression with subject and item as random effects.
Figure 6: Instances of transitives vs. AF/AP in subject wh-questions by age

- AF/AP is mandatory for most speakers, and all speakers over the age of 40
- BUT transitive structures are becoming more acceptable when questioning subjects for speakers 20-30
- Significant age effect ($\beta$: 14.19 ±2.04, $p<0.0001$)
- No significant effect for animacy (24 vs. 29 transitives in AA vs. AI conditions)

4.4 Overarching trends

Table 2: Instances of transitives vs. AF/AP in subject extraction

<table>
<thead>
<tr>
<th></th>
<th>AF/AP</th>
<th>Transitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>RC</td>
<td>20</td>
<td>223</td>
</tr>
<tr>
<td>Focus</td>
<td>224</td>
<td>464</td>
</tr>
<tr>
<td>WH</td>
<td>225</td>
<td>53</td>
</tr>
</tbody>
</table>

Figure 7: Instances of transitives vs. AF/AP in subject extraction (%)

- Asymmetrical distribution of syntactic ergativity
-Subject wh-questions are the only constructions which still require AF/AP for a majority of speakers

5. Thoughts on the asymmetry
-Counterexample to the observed tendency that subordinate clauses are less subject to syntactic change than main clauses (Givón 1971, 1984).

Extraction contexts within Mayan:
-Observation from Stiebels (2006:510-11) that AF is most often mandatory in focus contexts (12/15), followed by questions (9/15), then relative clauses (6/15).
-Only Mam has mandatory AF for wh-questions and not focus or RCs (cf. England 1983)
-Poqomam and Poqomchi’ have optional AF in all three contexts

-Chukchi shows the opposite pattern, with restrictions on the ergative in RCs but not wh-questions (Polinsky to appear, examples 15-17).

-Frequency and/or salience effects: Wh-questions vs. relative clauses

6. Conclusion
-It is not only ‘some’ speakers who do not have mandatory AF/AP in contexts of A’ extraction, it is now quite common, suggesting that syntactic ergativity is being lost in Kaqchikel
-This loss is asymmetric, with RCs and focus constructions employing more transitives than wh-questions
-There is evidence of age-grading, where the young adult generation is least likely to find AF/AP mandatory in any of the three contexts
-Animacy (semantic ambiguity) does not affect the use of AF/AP
-Research on AF and AP in Kaqchikel therefore needs to be conducted carefully

References:
Linguistics 2.3-82.