

# Reflexives and Reciprocals in Q'anjob'al\*

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## 1 Introduction

Reflexives in Q'anjob'al are mysterious on a very basic level: the reflexive morpheme has properties of particles, nouns, and prepositional “relational nouns”, but it are not clearly any of these. There is ample evidence that the reflexive morpheme *b'a* is nominal – it is inflected and behaves in many ways like a possessed noun – but it also sticks stubbornly close to the verb and cannot be moved, unlike other nouns and relational nouns.

This paper will explore five hypotheses about the nature of *b'a* and the possessive-like phrase it finds itself in. I draw no strong conclusions.

First I will give some background on Q'anjob'al grammar, including a fairly extensive discussion of fronting constructions. This is necessary because many of the arguments for and against the five hypotheses use fronting constructions. Section 3 will give the basic facts about the reflexive. Section 4 poses the questions to be answered and summarises the five hypotheses, which are then considered in detail in the following five sections. Finally, I summarise the arguments and make my concluding remarks. The appendix explains the spelling system of Q'anjob'al.

## 2 Q'anjob'al basics

Q'anjob'al is a Mayan language spoken in Guatamala. There is also a significant population of Q'anjob'al speakers in Los Angeles, California.

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Q'anjob'al is an ergative language. The basic word order is VSO.<sup>1</sup>

- (1) [ch- -∅ y- och -ej]<sub>V</sub> [ix Malin]<sub>S</sub> [naq Xhun]<sub>O</sub>.  
 ic- -3B 3A- like -tr]<sub>V</sub> [CL<sub>f</sub> Malin]<sub>S</sub> [CL<sub>m</sub> Xhun]<sub>O</sub>  
 'Malin likes Xhun.'

Non-third-person pronominal arguments are normally represented only by the verbal morphology. These verbal morphemes may represent agreement with usually-null pronouns, or they may be the arguments themselves, as in pronominal argument languages (Jelinek, 1984), or a combination thereof, as in Coon (2012). I take no stand on this question, and may refer to them as agreement markers, case markers or just morphemes.

Aspect, rather than tense, is marked on verbs. The verbal template is given in (2), with an example in (3). Here, because the arguments are pronominal and non-third person, the inflected verb is enough to be a complete sentence.

- (2) Aspect- -ABS("class B") ERG("class A")- **VERB** -suffixes
- (3) ch-            -ach            w-            och            -ej  
**aspect(ic)- -abs(2sB) erg(1sA)- V(like) -suffixes(tr)**  
 'I like you'

There are also a great number of particles. They mostly appear directly following the verb, and some are strictly ordered with respect to each other. Following O'Flynn (2011) I'll call the verb and these particles the *verbal complex*. The directionals *toq* or *teq* 'DIR3', if present, always mark the end of the verbal complex.<sup>2</sup>

- (4) [ch- **b'ey** -xa mi kan el- -toq]<sub>Verbal Complex</sub> [naq]<sub>S</sub> [iglesia]<sub>O</sub>  
 [ic- **walk** -XA DUB DIR1 DIR2- -DIR3]<sub>Verbal Complex</sub> [CL<sub>m</sub>]<sub>S</sub> [church]<sub>O</sub>  
 'He might walk into the church and stay there now.'

Table 1 gives the ergative (set A) and absolutive (set B) markers of Q'anjob'al. Although for all persons the possessive markers are just the ergative markers I gave them their own line for third person because our consultant never uses the third person *s-* on verbs. I follow

<sup>1</sup>All data unless otherwise indicated is from our class database of elicitations from our (amazing!) consultant Alejandra Fransisco (Bervoets et al., 2011). Examples marked (MT ex.XX) are from Mateo Toledo (2008), example XX.

**Abbreviations:**

1/2/3 = 1st/2nd/3rd person, c = completive aspect, ic = incomplete aspect, s/p = singular/plural, A/B = ergative (class A)/absolutive (class B), AF= agent focus, C = complementiser, CAUSE= causative, CL= classifier, CL<sub>an/plant/etc</sub> = classifier (animals/plants/etc.), m/f = masculine/feminine, DIR1/2/3 = directionals (three classes), DUB= dubitative particle, FOC= focus particle, intr = intransitive status marker, PAS= passive, POL = politeness marker, REFL= reflexive, sm = other status marker, STILL = 'still' particle, tr = transitive affix or status marker, XA= contrastive particle

<sup>2</sup>I refer the reader to O'Flynn (2011) and Kalin (2011) for further discussion.

the Mayanist tradition in calling the ergative markers Set A and the absolutive Set B.

| Person  | Ergatives (A) |       |        |       | Absolutives (B) |        |
|---------|---------------|-------|--------|-------|-----------------|--------|
|         | Singular      |       | Plural |       | Singular        | Plural |
|         | Pre-C         | Pre-V | Pre-C  | Pre-V |                 |        |
| 1       | hin           | w-    | ku-    | j-    | -in             | -on    |
| 2       | ha            | ∅     | he     | hey   | ach             | ex     |
| 3       | ∅-            | y-    | ∅-     | y-    |                 | ∅      |
| poss. 3 | ∅/s-          | y-    | ∅/s-   | y-    |                 |        |

Table 1: Forms

Case is marked on the verb, not on the DPs. The exception is possessives. Possessed DPs are ergative-marked to indicate the possessor. Third person possessives include the possessor’s classifier (e.g. for human possessors, *naq/ix* – masculine and feminine) if pronominal (5-b), and the full DP otherwise (5-c). Note that the third person pre-consonantal possessive ergative marker *s-* is optional. My consultant for the most part does not use it, except in the case of reflexive possessives, where it is obligatory (see section 8.2).

- (5)
- a. hin na  
1sA house  
‘my house’
  - b. (s)-na ix  
3sA-house 3sf  
‘her house’
  - c. (s)-na naq Xhun  
3sA-house 3m Xhun  
‘Xhun’s house’

## 2.1 Classifiers

Q’anjob’al has a classifier system, with classifiers preceding nouns most of the time, rather like determiners. They can also stand alone and are interpreted pronominally. In some fronting constructions they appear in the canonical position of the fronted constituent. I will gloss them all as CL but may refer to them as pronouns or in the latter case resumptive pronouns. I take no theoretical stand on their actual grammatical status.

- (6)
- a. s- b’itni **ix** Malin  
ic- sing CL<sub>f</sub> Mary  
‘Malin sings’ – *Determiner-like*
  - b. s- b’itni **ix**  
ic- sing CL<sub>f</sub>  
‘She sings’ – *Pronoun-like*
  - c. Ix Malin, s- b’itni **ix**  
CL<sub>f</sub> Malin, ic- sing CL<sub>f</sub>

## 2.2 Relational Nouns

Relational nouns – *sustantivos relacionales* – are a common Mesoamerican class of morphemes that generally have prepositional uses (Munro, 2012). Many but not all are homophonous with a noun, such as a body part. They are noun-like both in their homophony with actual nouns and in that they appear in possessive-like constructions. (Compare RN (7-a), possessive (7-b).) However, they differ in a number of ways. For one, a relational noun cannot appear without the possessive construction. RNs also cannot be modified (Mateo Toledo, 2008). Moreover, RN phrases can be added freely to sentences, as adjuncts, while an ordinary NP cannot. For example, in (7-c) the verb is absolutive-marked, indicating an intransitive clause; adding *wetoq* ‘with me’ does not require changing the verbal morphology to make it transitive.

- (7) a. X-in b’itni y- **etoq** naq  
 c- 1sB sing 3A- with CL<sub>m</sub>  
 ‘I sang with him.’
- b. X- ∅- ∅- lo -ay -toq ix Malin te’ s- **mansan** naq.  
 c- -3B 3A- eat -DIR2 -DIR3 CL<sub>f</sub> Malin CL<sub>plant</sub> 3A- **apple** CL<sub>m</sub>  
 ‘Malin ate his apple’
- c. X- ∅- b’itni naq w- **etoq**  
 c- 3B- sing CL<sub>m</sub> 1sA- **with**  
 ‘He sang with me.’
- d. X- ∅- ∅- lo’ -ay -toq ix Malin te’ **hin mansan**.  
 c- -3B 3A- eat -DIR2 -DIR3 CL<sub>f</sub> Malin CL<sub>plant</sub> 1sA **apple**  
 Malin ate my apple.

Relational noun phrases are usually obliques or adjuncts, but they can also be arguments (Munro, 2012). Notice that in (8-a) the second-person marker is ergative (A), so the relational noun phrase *yul te’ na* ‘in the house’ or ‘the inside of the house’ must be an object argument.

- (8) a. X- ∅- **-a** b’on y- ul te’ na  
 c- -3B **-2sA** paint 3A- in CL<sub>plant</sub> house  
 ‘You painted the inside of the house’
- b. X- ∅- q’an- -b’i -el y- ul ch’en uk’b’al  
 c- 3B- yellow- -turn -DIR2 3A- inside CL<sub>metal</sub> cup  
 ‘The inside of the cup turned yellow.’

However, Munro (2012) argues that in these cases, the argument RN phrases are actually ordinary possessed NPs. Most RNs have nominal equivalents. For example *ti’* in its RN/prepositional use means ‘at the edge of’, but also means ‘mouth’. Most nominal meanings are close to the prepositional meaning. For example, *ul*’s prepositional meaning is ‘in’, and its nominal meaning is ‘the inside’. It is likely that it is the latter use that we see in

(8-b), though research is ongoing. Fronting facts also appear to be different:

- (9) a. Y- ul      tzetal yetal q'anyin  
       3A- inside what            yellow  
       'What is yellow on the inside?'  
 b. \*Y- etoq tzetal yetal x- -a      b'on -o'  
       3A- with what c-      -2B paint -tr  
       'What did you paint with?'

## 2.3 Fronting constructions

There is a pre-verbal position<sup>3</sup> that Q'anjob'al makes frequent use of. This position is used, among other things, for topic, focus, wh-words, and quantifiers.

### 2.3.1 Topic

Sentences with topicalised subjects are at least as common, in my experience, as verb-initial sentences. Only sentential subjects may be topicalised; to topicalise objects the sentence must be passivised.<sup>4</sup>

I have identified two forms of topicalisation. Transitive subjects, reflexive subjects, some possessors (probably of inanimate, intransitive subjects – see section 8.1.1), and unergative subjects are topicalised with a pause following the topic and a resumptive classifier in the canonical position of the topic. I will call this *resumptive-type topicalisation*.<sup>5</sup>

- (10) a. X- lo -ay -toq [naq Xhun] te'      tzoyol  
       c- eat- -DIR2 DIR3 [CL<sub>m</sub> Xhun] CL<sub>plant</sub> chayote  
       'Xhun ate chayote'  
 b. [Naq Xhun]<sub>Topic</sub>, // x- lo -ay -toq **naq** te'      tzoyol  
       [CL<sub>m</sub> Xhun]<sub>Topic</sub>, // c- eat- -DIR2 DIR3 **CL<sub>m</sub>** CL<sub>plant</sub> chayote  
       'Xhun, he ate chayote'

Obliques and unaccusative subjects have no pause and no resumptive. I will call this *No-resumptive topicalisation*.

- (11) a. Hoq hey- i -toq jun ab'en ti' [b'ay ix Margarita]  
       pot 2pA- take -DIR3 one package this [to CL<sub>f</sub> Margarita]

<sup>3</sup>In fact, more than one element may appear pre-verbally, but for our purposes one is enough.

<sup>4</sup>Some of our data indicates that Alejandra does not have this requirement for all objects. Note that just as with unaccusatives, this is no-resumptive topicalisation.

- (i) Te' mansan x- ∅- ∅- lo -ay -toq (\*te') ix Malin  
       CL<sub>plant</sub> apple c- 3B- 3A- eat -DIR2 DIR3 (\*CL<sub>plant</sub>) CL<sub>f</sub> Malin  
       'The apple, Malin ate it.'

<sup>5</sup>The distinction between unergative and unaccusative verbs is the subject of ongoing research; anything I say about this distinction should be taken as tentative.

- ‘You guys are going to take this package to Margarita.’
- b. [B’ay ix Margarita] hoq hey- i -toq jun ab’en ti’  
 [to CL<sub>f</sub> Margarita] pot 2pA- take -DIR3 one package this  
 ‘To Margarita you guys are going to take this package.’
- (12) a. X- ∅ ’ay yuchnaj te’ na  
 c- -3B DIR2 collapse CL<sub>plant</sub> house  
 ‘The house collapsed’
- b. [Te’ na] x- ∅ ’ay yuchnaj -oq (\*te’)  
 [CL<sub>plant</sub> house] c- -3B DIR2 collapse -sm (\*CL<sub>plant</sub>)  
 ‘The house, it collapsed’

### 2.3.2 Focus

Subjects ((13-b), (13-d), (14)), objects (13-a), adjuncts/obliques (13-c), and some possessors can all be focused. All but third-person subjects of transitive clauses (third person ergative arguments) can be freely focused. Focused phrases are normally preceded by the focus morpheme *a*. There is no copy of the classifier left in the canonical position.

- (13) a. [A jun saqchyob’al]<sub>O</sub> ch- ∅ -in tek’ -a’  
 [FOC one toy ]<sub>O</sub> ic- 3B -1sA kick -tr  
 ‘It’s *the toy* that I kick.’
- b. [A no’ wakax]<sub>S</sub> max ∅- kam -i  
 [FOC CL<sub>animal</sub> cow ]<sub>S</sub> c 3B- die -intr  
 ‘It’s *the cow* that died’
- c. [A y- etoq ix Malin]<sub>Oblique</sub> x- -ach b’itn -i  
 [FOC 3A- with CL<sub>f</sub> Malin]<sub>Oblique</sub> c- 2sB sing -intr  
 ‘It’s *with Malin* that you sang’
- d. Ay- -in x- -ach hin maq’ -a’  
 FOC?- 1sB c- -2sB 1sA hit -tr  
 ‘*I’m* the one that hit you.’

Focusing an ergative subject requires that the verb be in agent focus (AF).<sup>6</sup> In agent focus form (14-b), the verb loses its ergative marker and takes the suffix *-on/-n*. If it has a transitive suffix it loses that as well, and for some verbs the intransitive suffix *-i* is added. Trying to focus a transitive subject without AF results in an object focus interpretation where possible, as in (14-c).

- (14) a. Max- ∅ s- tayene -j [naq unin]<sub>S</sub> te’ na  
 c- -3B 3A- take.care.of -tr [CL<sub>m</sub> child]<sub>S</sub> CL<sub>plant</sub> house  
 ‘The child took care of the house’ (MT, ex.76)
- b. [A naq unin]<sub>S</sub> max- ∅ tayene -n te’ na  
 [FOC CL<sub>m</sub> child]<sub>S</sub> c- -3B take.care.of AF CL<sub>plant</sub> house

<sup>6</sup>Antipassive form is also possible, but Alejandra only produces agent focus, though she accepts antipassive.

- ‘It was the child who took care of the house’ (MT, ex.76)
- c. #[A naq unin]<sub>Object!</sub> max- ∅ s- tayene -j te’ na  
 [FOC CL<sub>m</sub> child]<sub>Object!</sub> c- -3B **3A-** take.care.of -tr CL<sub>plant</sub> house  
 ‘It was the house that took care of the child’ (MT, ex.76)

### 2.3.3 Wh-movement

Wh-words appear pre-verbally. There is no copy of the classifier in the wh-phrase’s canonical position. Objects (15-a), intransitive subjects (15-b), and PPs ((15-d), (15-c)) are questioned freely. With relational nouns, Alejandra prefers pied-piping with inversion (15-c),<sup>7</sup> though she also accepts RN stranding (15-d).

- (15) a. Tzetal yetal x- lo’ naq  
 what c- eat 3m  
 ‘What did he eat?’
- b. Maktxel s- tsew -i  
 who c- laugh -intr  
 ‘Who laughed?’
- c. [Maktxel y- etoq] x- y- a’ taj ix no’ txay?  
 [who 3A- with] c- 3A- CAUSE cook CL<sub>f</sub> CL<sub>animal</sub> fish  
 ‘With whom did she cook fish?’
- d. [Maktxel] x- y- a’ taj ix no’ txay y- etoq?  
 [who] c- 3A- CAUSE cook CL<sub>f</sub> CL<sub>animal</sub> fish 3A- with  
 ‘Who did she cook fish with?’

Just as with focus, ergative subjects require the verb to be in antipassive or agent focus form.

- (16) a. Maktxel x- ach ’il -on -i  
 who c- 2sB see -AF -intr  
 ‘Who saw you?’
- b. \*Maktxel x- ach y- il -a’  
 who c- 2sB 3A- see -tr  
 intended: ‘Who saw you?’

## 2.4 Status markers

Q’anjob’al has a set of morphemes that are called *status markers* in the literature. They mainly mark transitivity and intransitivity. The status markers of interest here are *-i* and *-oq* (intransitive), and *-V’* (transitive). The transitive marker is a harmonic vowel followed by a glottal stop. Status markers are usually only present phrase-finally, but on some intransitive verbs *-i* is always present (17-a). However, it is possible that these non-deleting “status

<sup>7</sup>Pied-piping with inversion – i.e. pied piping of the preposition but with the wh-word coming first – is characteristic of Mesoamerican languages, but is otherwise typologically unusual (Munro, 2011b).

markers” are no longer status markers at all, since they can at least sometimes be followed by a transitive suffix (17-b), making the verb transitive.

- (17) a. s- tzew **-i** ix Malin  
 c- laugh **-intr** CL<sub>f</sub> Malin  
 ‘Malin laughed’
- b. s- tzew **-i -j** nuej ix Malin naq Xhun  
 c- laugh **-intr -tr** sister CL<sub>f</sub> Malin CL<sub>m</sub> Xhun  
 ‘Malin’s sister laughed at Xhun.’

### 3 Basics of Q’anjob’al reflexivity

Q’anjob’al has a reflexive morpheme *b’a*. A simple reflexive sentence has an ergative agreement marker on the verb, no absolutive marker,<sup>8</sup> and the verb is followed by an ergative-marked *b’a*. For example, in (18) we have the (pre-vocal) first person singular ergative *w-* before the verb, and the verb is followed by the (pre-consonantal) first person singular ergative *hin* and *b’a*.

- (18) Ch- **w-** och -ej **hin b’a**  
 ic- **1sA-** like -tr **1sA REFL**  
 ‘I like myself’

In the third person, *b’a* is followed by a pronoun or full DP, indicating the semantic subject of the sentence. In (19-a) we have a masculine pronoun *naq* following *b’a*, and in (19-b) the full DP *naq Xhun* follows *b’a*.

- (19) a. Ch- y- och-ej ∅- b’a **naq**  
 ic- 3A- like-tr 3A- REFL **CL<sub>m</sub>**  
 ‘He likes himself’
- b. Ch- y- och-ej ∅- b’a **naq Xhun**  
 ic- 3A- like-tr 3A- REFL **CL<sub>m</sub> Xhun**  
 ‘Xhun likes himself’

I will refer to these pronouns and DPs as *post-b’a phrases*, and the full post-verbal phrase including *b’a*, such as *b’a naq Xhun*, as the *b’a-phrase*.

[b’a [naq Xhun]<sub>post-b’a phrase</sub>]<sub>b’a-phrase</sub>

Reflexives are limited to direct object roles (20) – they are not used in obliques – and do not refer outside of their smallest clause (21).

- (20) a. \*X- y- il ix Rachael jun no’ labaj [k’atan (s)- **b’a** ix]  
 c- 3A- see CL<sub>f</sub> Rachael a CL<sub>animal</sub> snake [near 3sA- **REFL** CL<sub>f</sub>]  
 Intended: ‘Rachael saw a snake near herself’

<sup>8</sup>There could be a third-person absolutive marker, as 3B is null.

- b. X- y- il ix Rachael jun no' labaj [k'atan ix]  
 c- 3A- see CL<sub>f</sub> Rachael a CL<sub>animal</sub> snake [near CL<sub>f</sub>]  
 'Rachael<sub>i</sub> saw a snake near her<sub>i/j</sub>'
- (21) a. Ch- ∅- na' il naq Xhun [tol ch- y- och -ej **b'a** naq Yakin]  
 ic- 3A- think see? 3m Xhun [C ic- 3A- like -tr **REFL** CL<sub>m</sub> Yakin]  
 'Xhun<sub>i</sub> thinks Yakin<sub>j</sub> likes himself<sub>\*i/j</sub>'
- b. Ch- ∅- na' il naq Xhun [tol ch- y- och -ej naq Yakin **naq**]  
 ic- 3A- think see? 3m Xhun [C ic- 3A- like -tr CL<sub>m</sub> Yakin **CL<sub>m</sub>**]  
 'Xhun<sub>i</sub> thinks Yakin<sub>j</sub> likes him<sub>i/\*j/k</sub>'

Both the strict and sloppy reading are available in sentences like (22):

- (22) X- y- ab' q'ajab' b'a naq Paul y- ul radio axka k'ax naq Ringo  
 c- 3A- hear talking REFL CL<sub>m</sub> Paul 3A- in radio as also CL<sub>m</sub> Ringo  
 'Paul heard himself of the radio and Ringo did too.'  
 i.e. Paul heard Paul and Ringo heard Ringo OR Paul and Ringo heard Paul

*B'a* has no other meaning: it is not a body part or component part word.

I have found only one use for *b'a*: reflexives. They are not in middle constructions. Alejandra could not think of a way to say this with *b'a*:

- (23) Junb'ey x- txon -chaj -toq te' tzoyol  
 fast c- sell -?? -DIR3 CL<sub>plant</sub> chayote  
 'The chayote (squash) were selling fast'

They are not emphatic, as in the English *The grinch himself carved the roast beast*. Focus constructions front the focused constituent and have a focus particle *a* (see section 2.3). Alejandra could not think of a way to use *b'a* to be emphatic. Finally, the applicative uses the possessive:

- (24) X- -∅ w- it -ej **hin** lob'ej chuman  
 c- -3B 1sA- bring -tr 1sA lunch  
 'I brought lunch for myself' lit: 'I brought my lunch'

## 4 Questions

The two main questions to answer are these:

**Question 1** What is *b'a*?

**Question 2** In the third person, what is the relationship between *b'a* and the post-*b'a* phrase?

Possible answers to Question 1 are:

1. Verbal particle

2. Noun

3. Relational Noun

Question 2 asks first whether *b'a* and the classifier and noun form a constituent, and then what the constituent(s) are:

- (25) a. V [b'a]<sub>?</sub> [CL NP]<sub>?</sub>  
b. V [b'a CL NP]<sub>?</sub>  
c. [V b'a]<sub>Verbal Complex</sub> [CL NP]<sub>?</sub>

I have no definite answer to these questions. My best guess is that [b'a NP] forms a constituent, and *b'a* is something nominal – Hypothesis 4 or 5 below – but there is evidence for and against every hypothesis I consider.

## 4.1 Hypotheses

I will consider five hypotheses, and present evidence for and against each.

**Hypothesis 1 (VOS)** *b'a* is nominal, and [ERG-ba] is the object, [CL NP] the subject:

V [ERG-b'a]<sub>O</sub> [CL NP]<sub>S</sub>

**Hypothesis 2 (Subject *b'a*)** *b'a* is nominal, and [ERG-ba] is the subject, [CL NP] the object:

V [ERG-b'a]<sub>S</sub> [CL NP]<sub>O</sub>

**Hypothesis 3 (Particle)** *b'a* is a verbal particle and [CL NP] is the subject:

[V-ERG-b'a]<sub>Verbal Complex</sub> [CL NP]<sub>S</sub>

**Hypothesis 4 (PossP)** *b'a* is nominal and [ERG-ba CL NP] is a possessive phrase:

V [ERG-b'a CL NP]<sub>PossP S/O</sub>

**Hypothesis 5 (RN)** *b'a* is a relational noun:

V [ERG-b'a CL NP]<sub>S/O</sub>

## 5 Hypothesis 1: VOS

Let us first consider Hypothesis 1.

**Hypothesis 1** *b'a* is nominal, and [ERG-ba] is the object, [CL NP] the subject:

V [ERG-b'a]<sub>O</sub> [CL NP]<sub>S</sub>

For example:

- (26) ch- y- och-ej [∅- b'a]<sub>O</sub> [naq Xhun]<sub>S</sub>  
 ic- 3A- like-tr [3A- REFL]<sub>O</sub> [CL<sub>m</sub> Xhun]<sub>S</sub>  
 'Xhun likes himself'

The verb is ergative-marked, indicating the clause is transitive, so we expect there to be an object. Compare the following non-reflexive and reflexive clauses. The object in each appears directly following the verb.

- (27) a. ch- w- och -ej [ix Malin]<sub>O</sub>  
 ic- 1sA- like -tr [CL<sub>f</sub> Malin]<sub>O</sub>  
 'I like Malin'  
 b. ch- w- och -ej [hin b'a]<sub>O?</sub>  
 ic- 1sA- like -tr [1sA REFL]<sub>O?</sub>  
 'I like myself'

Recall that non-third-person arguments (here, the subject) are just marked on the verb, so there is no separate subject here. The constructions lose their parallel when the subject is third person:

- (28) a. ch- y- och -ej [naq Xhun]<sub>S</sub> [ix Malin]<sub>O</sub>  
 ic- 3A- like -tr [CL<sub>m</sub> Xhun]<sub>S</sub> [CL<sub>f</sub> Malin]<sub>O</sub>  
 'Xhun likes Malin'  
 b. ch- y- och -ej [∅- b'a]<sub>O?</sub> [naq Xhun]<sub>S?</sub>  
 ic- 3A- like -tr [3sA- REFL]<sub>O?</sub> [CL<sub>m</sub> Xhun]<sub>S?</sub>  
 'Xhun likes himself'

If *b'a* is indeed the object, reflexives clauses, and only reflexive clauses, have VOS word order. While this is of course possible, it is hard to explain.

The "subject" can be topicalised like a normal subject. Notice too that this is resumptive-type topicalisation like with normal subjects.

- (29) [naq Xhun]<sub>Topic</sub>, // ch- y- och -ej [∅- b'a]<sub>O?</sub> **naq**  
 [CL<sub>m</sub> Xhun]<sub>Topic</sub>, // ic- 3A- like -tr [3sA- REFL]<sub>O?</sub> **CL<sub>m</sub>**  
 'Xhun, he likes himself'

The "subject" can also be focused and questioned. However, as we will see in section 10, reflexives differ from normal transitive clauses in that agent focus form is optional for focus and ungrammatical for wh-questions.

- (30) a. [A ix Malin]<sub>Focus</sub> ch- y- och -ej b'a  
 [FOC CL<sub>f</sub> Malin]<sub>Focus</sub> ic- 3A- like -tr REFL  
 'It's *Malin* who likes herself.'  
 b. [A ix Malin]<sub>Focus</sub> ch- 'och -on b'a  
 [FOC CL<sub>f</sub> Malin]<sub>Focus</sub> ic- like -AF REFL  
 'It's *Malin* who likes herself.'

- c. Maktxel x- y- il Ø- b'a  
 who c- 3A- see 3A- REFL  
 ‘Who saw him/herself?’

That the “subject” is focusable supports this hypothesis, but that there is a non-AF form available counts against it.

If *b'a* is the object, it should be focusable and questionable like the ordinary object in (31-a) and (32-b), but it is not.

- (31) a. [A naq Xhun]<sub>Object</sub>, ch- y- och -ej ix Malin  
 [FOC CL<sub>m</sub> Xhun]<sub>Object</sub>, ic- 3A- like -tr CL<sub>f</sub> Malin  
 ‘It’s *Xhun* that Malin likes’  
 b. \*[(A) B'a]<sub>Object?</sub>, ch- y- och -ej ix Malin  
 [FOC REFL]<sub>Object?</sub> ic- 3A- like -tr CL<sub>f</sub> Malin  
 Intended: ‘It’s *herself* that Malin likes’
- (32) a. Maktxel s- na x- Ø Ø- b'on naq?  
 who 3A- house c- -3B 3A- paint CL<sub>m</sub>  
 ‘Whose house did he paint?’  
 b. \*Maktxel s- b'a x- y- il naq?  
 who 3A- REFL c- 3A- see CL<sub>m</sub>  
 Intended: ‘Whose self did he see?’/‘Who saw himself?’

Finally, if *b'a* is nominal, it should be modifiable, like the noun *q'ab'* ‘hand’ in (33-a). This is not possible; (33-b) gives one of several unsuccessful attempts to say something like “My own fine self”.

- (33) a. K'am x- je' q'anon naq Xhun [s- **k'ajil** q'ab]  
 NEG c- can use CL<sub>m</sub> Xhun [3A- **broken** hand]  
 ‘Xhun couldn’t use his broken hand.’  
 b. \*X- w- il hin watx' wili hin b'a  
 c- 1sA- see 1sA good looking 1sA REFL  
 Intended: ‘I saw my own handsome self’

In conclusion, the argument for Hypothesis 1 is that the “subject” is topicalisable, focusable, and question-able. Counting against it are the VOS word order, that *b'a* cannot be fronted, and that a nominal *b'a* should be modifiable but it is not.<sup>9</sup>

<sup>9</sup>Since the World of Reflexives workshop I have become aware of another approach to this problem. Coon and Mateo Pedro (to appear) and Coon (2012) suggest that *b'a* is indeed an object, but that it is Caseless, and therefore is licensed by (pseudo?-)incorporation into the verb. This provides nice support for their theory of agent focus. This too seems as viable a hypothesis as any here. It will require further investigation. Currently I see three problems: one, the “bare” noun *b'a* is accompanied by its ergative marker, and in the first and second person this is a separate word, which may be hard to incorporate into the verb. More importantly, reflexives have three focus forms, one of which actually does have agent focus, as we’ll see in section 10. Finally, reflexive possessives are also proposed to be incorporated, but unlike *b'a* they *can* be fronted as part of a possessive phrase, and when the subject is not fronted, it intervenes between the verb

## 6 Hypothesis 2: *b'a* is the subject

At the World of Reflexives workshop where this paper was presented, an audience member suggested that *b'a* could be the subject, a possibility that I had not considered. Many of the pros and cons of this hypothesis are similar to Hypothesis 1, that *b'a* is the object.

**Hypothesis 2** *b'a* is nominal, and [ERG-*b'a*] is the subject, [CL NP] the object:

V [ERG-*b'a*]<sub>S</sub> [CL NP]<sub>O</sub>

For example:

- (34) ch- y- och-ej [∅- *b'a*]<sub>S</sub> [naq Xhun]<sub>O</sub>  
 ic- 3A- like-tr [3A- REFL]<sub>S</sub> [CL<sub>m</sub> Xhun]<sub>O</sub>  
 ‘Xhun likes himself’

It is very unusual, perhaps unheard of, for a reflexive morpheme to be the subject. It also violates condition A. These count strongly against Hypothesis 2.

This is still a nominal-*b'a* hypothesis, so the unmodifiability of *b'a* is a problem. This hypothesis does not include anomalous VOS word order, an improvement over 1.

Fronting facts are reversed, but have essentially the same issue: subjects and objects should both be frontable, but *b'a* is never frontable.

We expect the “object” – the post-*b'a* phrase – *not* to be topicalisable, but we saw in (29) that it is. We also saw that for Alejandra, objects can sometimes be topicalised. However, other speakers such as Pedro Mateo (Coon and Mateo Pedro, to appear) agree that the post-*b'a* phrase can be topicalised, but do not allow objects to be topicalised.

We expect that focusing or questioning the object should not require Agent Focus, and this is true, as we saw in (30-a). However, for focus, agent focus is optional for reflexives, unlike for regular objects. (35-a) may only mean Xhun is the subject, because of the agent focus form of the verb. Recall that (35-b) is grammatical in addition to (30-a) above. This time, the non-AF forms count *for* the current hypothesis, and the AF form counts against it.

- (35) a. [A naq Xhun]<sub>Subject/\*Object</sub> ch- -∅ 'och -**on** [ix Malin]<sub>Object/\*Subject</sub>  
 FOC CL<sub>m</sub> Xhun c- -3B like -AF CL<sub>f</sub> Malin  
 \*‘It’s Malin who likes Xhun’/‘It’s Xhun who likes Malin’  
 b. [A naq Xhun]<sub>Object?</sub> x- 'il -**on** [∅- *b'a*]<sub>Subject?</sub>  
 FOC CL<sub>m</sub> Xhun c- see -AF 3A- REFL  
 ‘It’s Xhun that saw himself’

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and the object:

- (i) a. A s- na naq Xhun, x- b'on -o'  
 FOC 3A- house CL<sub>m</sub> Xhun c- paint -tr  
 ‘It’s is own house that Xhun painted.’  
 b. x- lo -ay -toq [naq Yakin]<sub>Subject</sub> [(te') s- keneya]<sub>Object</sub>  
 c- eat -DIR2 -DIR3 CL<sub>m</sub> Yakin (CL<sub>plant</sub>) 3A- banana  
 ‘Yakin<sub>i</sub> ate his<sub>i/\*j</sub> banana.’

We also expect the “subject” *b’a* to be focusable and questionable, but we saw in (31-b) above that it is not frontable at all. This is so even if we change the verb to agent focus.

## 7 Hypothesis 3: Particle

**Hypothesis 3** *b’a* is a verbal particle and [CL NP] is the subject:

[V-ERG-*b’a*]<sub>Verbal Complex</sub> [CL NP]<sub>S</sub>

The *b’a* phrase appears right after the verbal complex. That it sticks so close to the verb could be explained if *b’a* were an arity-reducing verbal particle, and therefore in fact within the verbal complex. Q’anjob’al does have a great number of verbal particles.

An argument against *b’a* being nominal is that it is unmodifiable; this is an argument for it being a particle.

The strongest argument against Hypothesis 3 is that no other verbal particle is inflected, while *b’a* is always ergative-marked. This makes it at least as strange a verbal particle as it is a noun.

Another issue is that these verbal particles gather into words. Our consultant has strong word-boundary intuitions. The reader may have noticed that sometimes the verb and its prefixes form one word and sometimes it is two; this is due to what I assume are phonological factors governing clitic clusters in Q’anjob’al. Post-verbally, these particles can also gather into words. In the following example, notice the last two particles form the word *eltoq*. This particle *el/il* also appears in reflexives but it never attaches itself to the *b’a* phrase. This could of course be an artefact of the particular phonology of *b’a*, but it is surprising that *never* appears in a clitic cluster. In (36-b) we would expect *\*elb’a*, in parallel with *eltoq* in (36-a). (36-c) confirms that particles other than directionals can indeed cluster. Here they form a word with the verb.

- (36) a. ch-b’ey-xa mi kan **el-toq** naq iglesia  
 ic-walk-XA DUB DIR1 DIR2-DIR3 CL<sub>m</sub> church  
 ‘He might walk into the church and stay there now.’
- b. ch-jos xa **el b’a** naq Xhun  
 c-shave XA DIR2 REFL CL<sub>m</sub> Xhun  
 ‘Xhun is shaving now.’
- c. [Ya **-to -mi**]<sub>V</sub> k’alta hach ay  
 [sick -STILL -DUB]<sub>V</sub> still 2sB exist  
 ‘You must still be sick’

My consultant had originally told me that the relational noun phrase *yet ewi* ‘yesterday’ could intervene between the verbal complex and the *b’a* phrase. She has since changed her mind. This evidence could go both ways: the fact that she would even entertain it could mean that the *b’a* phrase does not belong to the verb; on the other hand the fact that it is not in fact grammatical is an argument that the *b’a* phrase does belong to the verb, and the last particle of the verbal complex is not DIR3 but rather *b’a*.

- (37) a. x- in k'ubil hin b'a (y- et) ewi  
 c- 1sA- hide 1sA REFL (**3A- on**) yesterday
- b. %ox- -in k'ubil y- et ewi hin b'a  
 c- 1sA- hide **3A- on** yesterday 1sA REFL  
 'I hid yesterday'

Finally, *b'a* is not a strictly arity-reducing particle in the way, say, the passive is. Verbs in reflexive sentences retain their transitive suffixes. What's more, the case marker on the verb is ergative. If *b'a* were truly arity-reducing, the case marker would be absolutive, as in the passive.

- (38) a. ch- y- och-**ej** b'a naq  
 ic- **3A-** like-**tr** REFL 3m
- b. \*ch-  $\emptyset$ - 'och-**ej** b'a naq  
 ic- **3B-** like-**tr** REFL 3m  
 Intended: 'He likes himself'
- c. \*ch- y- och b'a naq  
 ic- **3A-** like REFL 3m  
 Intended: 'He likes himself'
- d. \*ch-  $\emptyset$ - 'och b'a naq  
 ic- **3B-** like REFL 3m  
 Intended: 'He likes himself'

Compare this with the passive, where the absolutive  $\emptyset$ - is used and the transitive suffix *-ej* is dropped in favour of the passive *-lay*.

- (39) ch-  $\emptyset$ - 'och **-lay** naq Xhun y- uj ix Malin  
 ic- **3B-** like **-pass** CL<sub>m</sub> Xhun 3A- by CL<sub>f</sub> Malin  
 'Malin likes Xhun'/'Xhun is liked by Malin.'<sup>10</sup>

However, there are other indications of transitivity-reduction that come from extraction facts. We saw in section 2.3 that only absolutive arguments could be extracted freely, without agent focus. Recall that despite the ergative verb-marker, reflexives also freely allow extraction of the "subject". This partial-detransitivising effect will be explored further in section 10. Table 2 gives a summary of the transitive- and intransitive-like properties of the Q'anjob'al reflexive.

<sup>10</sup>Passives are very common in Q'anjob'al, and our consultant often gives them as translations of active English sentences.

| Transitive  | Intransitive   |
|---|--|
| allows normal ergative extraction (AF)  | allows extraction patterns usually restricted to intransitives |
| may be two case markers on verb (null 3B)<br>verbal case marker is ergative (A) | may be only one case marker on verb                            |
| retains transitive verbal suffixes  |  |

Table 2: Transitive and intransitive behaviour of reflexives

Summing up, *b'a* is well-positioned in the clause to be a particle, but its ergative inflection counts against this hypothesis. The arity-reduction facts argue both ways: the sentence is *less* transitive, but not fully intransitive like a passive. If *b'a* is a particle, perhaps it is not an arity-reducing particle like *-lay* (PASS) but rather a specifically reflexivising particle whose effect on transitivity is not as clear-cut.

## 8 Hypothesis 4: Possessive NP

Recall that possessive phrases have the following form:

ERG possessed (3p possessor)

That is, there is an ergative marker preceding the possessed noun, and in the case of a third-person possessor, the possessor follows the possessed noun.

Possessive phrases look identical to the *b'a*-phrase. (*B'a naq Xhun* ‘Xhun’s self’ cannot stand alone, however – it is just as bad as English.)

- (40)
- a. hin na  
1sA house  
‘my house’
  - b. hin b'a  
1sA REFL  
‘myself’
  - c. s/∅-na ix  
3A-house 3sf  
‘her house’
  - d. s/∅-b'a ix  
3A-REFL 3sf  
‘herself’
  - e. S/∅-na naq Xhun  
3A-house 3m Xhun  
‘Xhun’s house’
  - f. ... s/∅- b'a naq Xhun  
... 3A- REFL 3m Xhun  
‘Xhun ... himself’

Because of this striking similarity I propose Hypothesis 4:

**Hypothesis 4** *b'a* is nominal and [ERG-*b'a* CL NP]<sub>PossP</sub> is a possessive phrase:

V [ERG-*b'a* CL NP]<sub>PossP</sub>

This hypothesis is not without its problems. First, we have already seen that regular possessed nouns can be modified, but *b'a* cannot. (See example (33)). Second, all possessive phrases can stand alone, but the full-DP *b'a*-phrase cannot. This is of course unsurprising typologically, but if it is truly just a possessive phrase, we would expect it to be able to stand alone as in the following exchanges:

- (41) a. Tzetal yetal x- lo' naq Yakin  
 what c- eat CL<sub>m</sub> Yakin  
 'What did Yakin eat?'  
 b. Te' mansan naq Xhun  
 CL<sub>plant</sub> apple CL<sub>m</sub>  
 'Xhun's apple.'
- (42) a. Maktxel ch- y- och -ej naq Xhun?  
 who ic- 3A- like -tr CL<sub>m</sub> Xhun  
 'Who does Xhun like?'  
 b. \*S/∅- *b'a* naq Xhun  
 3A- REFL CL<sub>m</sub> Xhun  
 Intended: '\*Xhun's self'

However, it is possible that this is a pragmatic issue. Full-DP and pronominal third person reflexives always pattern together, except in this case. *B'a naq* can stand alone.

- (43) a. Maktxel ch- y- och -ej naq Xhun?  
 who ic- 3A- like -tr CL<sub>m</sub> Xhun  
 'Who does Xhun like?'  
 b. S/∅- *b'a* naq  
 3A- REFL CL<sub>m</sub>  
 'Himself.'

Hypothesis 4 actually has three sub-hypotheses: the PossP is a transitive subject, an intransitive subject, or an object.

We have seen that under different circumstances, subjects and objects can be fronted. The *b'a*-phrase on the other hand can never be fronted.

Let us now look at each sub-hypothesis individually.

## 8.1 Subject of transitive

The ergative marker on the verb indicates that the clause is transitive. However, if so, where is the object? It could perhaps be represented only by verbal morphology. Absolutive third person is null anyway, so the object could just be a null 3B morpheme:

- (44) ch- [- $\emptyset$ ] <sub>Object?</sub> w- och -ej [hin b'a] <sub>Subject</sub>  
 ic- [-**3B**] <sub>Object?</sub> 1sA- like -tr [1sA REFL] <sub>Subject</sub>  
 'I like myself'

However, I have found third person objects to always be overt; there should be a classifier or full DP.

- (45) a. ch-  $\emptyset$  w- och -ej **ix**  
 ic- -3B 1sA- like -tr CL<sub>f</sub>  
 'I like her'  
 b. \*ch-  $\emptyset$  w- och -ej  
 ic- -3B 1sA- like -tr CL<sub>f</sub>  
 Intended: 'I like her'

There is no separate overt object in the reflexive clause under this hypothesis, which is strange. Stranger still is that the ergative marker on the verb agrees with the possessor, which never happens with regular possessives. (46-b) is ungrammatical because the ergative marker *y-* is third-person, like in (47-a).

- (46) a. ch- (- $\emptyset$ ?) w- och -ej hin b'a  
 ic- (-3B) 1sA- like -tr 1sA REFL  
 'I like myself'  
 b. \*ch- **y-** och -ej hin b'a  
 ic- **3A-** like -tr 1sA REFL  
 Intended: 'I like myself'

Example (47-b) is ungrammatical because it has first person ergative marking *in* on the verb, like in a reflexive.

- (47) a. x-  $\emptyset$   $\emptyset$ - tek' [jun **hin** tx'i'] kab' pelota  
 c- -3B **3A-** kick [one **1sA** dog] two ball  
 'My dog kicked two balls'  
 b. \*x-  $\emptyset$  **-in** tek' [jun **hin** tx'i'] kab' pelota  
 c- -3B **-1sA** kick [one **1sA** dog] two ball  
 Intended: 'My dog kicked two balls'

Fronting facts are against the transitive subject hypothesis. First, while a regular possessive subject can be fronted, the *b'a*-phrase cannot.

- (48) a. [A cham hin patron] x- maq' -on ix hin txutx  
 [FOC POL 1sA boss] c- hit -AF CL<sub>f</sub> 1sA mother  
 'It's *my boss* who hit my mother.'  
 b. \*[A hin b'a] x- -in maq' (-on) (-i)  
 [FOC 1sA REFL] c- -1sA hit (-AF) (-intr)  
 Intended: '*I* hit myself' of 'I hit *myself*'

We saw in section 5 that in third person reflexives, the post-*b'a* phrase can be fronted, stranding *b'a*. This is not possible with the possessor of a transitive subject:

- (49) a. [Maktxel s-txitx] x-ach chi-on-i  
 [who 3A-rabbit] c-2sB bite-AF-intr  
 'Whose rabbit bit you?'  
 b. \***Maktxel** x-ach chi-on **s-txitx**  
**who** c-2sB bite-AF **3A-rabbit**

Despite the various transitive properties of the reflexive clause, things do not look good for the *b'a*-phrase as a transitive subject.

### 8.1.1 Subject of intransitive

The ergative marker on the verb speaks against this hypothesis, and even if we allow for a kind of in-between clause, we still have the same problem as in section 8.1: the ergative marker is agreeing with the possessor, not the possessed. Here is an intransitive example. The absolutive marker in a normal possessive is third person; it does not agree with the possessor.

- (50) a. X-  $\emptyset$ - chi'b'il no' hin chitam  
 c- **3B**- get.fat CL<sub>animal</sub> 1sA pig  
 'My pig got fat'  
 b. \*X- **-in** chi'b'il no' hin chitam  
 c- **-1sB** get.fat CL<sub>animal</sub> 1sA pig  
 Intended: 'My pig got fat'

Again, the whole *b'a*-phrase should be frontable, but it is not. However, for intransitives there is a very interesting parallel with reflexives: in some cases the possessor of an intransitive subject can be fronted, stranding the possessed, just like with *b'a*.

- (51) a. Maktxel s-txi' x- 'elaj -oq  
 whose 3A-dog c- run.away -intr  
 'Whose dog ran away?'  
 b. **Maktxel** x- 'elaj **s-txi'**  
 whose c- run.away 3A-dog  
 'Whose dog ran away?'
- (52) a. [A y- aq' naq Xhun] x- yax-b'iel -oq  
 [FOC 3A- tongue CL<sub>m</sub> Xhun] c- blue-turn -intr  
 'It was *Xhun*'s tongue that turned blue'  
 b. [A **naq Xhun**] x- yax-b'iel y- **aq'**  
 FOC CL<sub>m</sub> Xhun c- blue-turn **3A- tongue**  
 'It was *Xhun*'s tongue that turned blue'

If these (b) cases are indeed a separation of the possessor from the possessed, perhaps it is not so strange that *b'a* can be stranded, even if the *b'a*-phrase is a constituent.

However, these fronting facts are not identical. We saw that the possessor in the *b'a*-phrase could be topicalised, but topicalisation of intransitive subject possessors is mixed. It seems that topicalisation of possessors depends on animacy. If the possessed NP is animate, the possessor cannot be fronted alone.

- (53) a. Naq Ringo, x-  $\emptyset$  'uqi y- a'ej naq  
 CL<sub>m</sub> Ringo, c- -3B boil -intr 3A- water CL<sub>m</sub>  
 'Ringo, his water boiled'
- b. \*Ix Malin, x- way (s-) nuej (ix)  
 CL<sub>f</sub> Malin, c- sleep 3A- sister (CL<sub>f</sub>)  
 Intended: 'Malin, her sister slept'

*B'a* is presumably animate, but it is still strandable.

Focus of intransitive subject possessors seems to depend entirely on animacy. The data here is clearer than for topicalisation. For example, here we have a minimal pair: the verbs are the same, only the possessed NP varies. It was Alejandra who proposed that it was an issue of animacy.

- (54) a. A **ix Meaghan** x- 'el telnaj  $\emptyset$ - **tz'ib'al**  
 FOC CL<sub>f</sub> **Meaghan** c- DIR2 fall 3A- **book**  
 'It's Meaghan whose book fell (off something)'
- b. \*A **ix Meaghan** x- 'el telnaj s- **nuej**  
 FOC CL<sub>f</sub> **Meaghan** c- DIR2 fall 3A- **sister**  
 Intended: 'It's Meaghan whose sister fell (off something)'
- c. A  $\emptyset$ - **nuej ix Meaghan** x- 'el telnaj -oq  
 FOC 3A- **sister** CL<sub>f</sub> **Meaghan** c- DIR2 fall -intr  
 'It's Meaghan's sister who fell (off something)'

Wh-questions so far seem to be consistent for all intransitive subject possessors: the possessed NP may always be stranded or fronted, as in (51) above. This is similar but not identical to reflexives, where *b'a* must be stranded.

The *b'a*-phrase as an intransitive subject is an improvement over it being a transitive subject. The problem of possessor-agreement remains, as does the unfrontability of the *b'a*-phrase. However, the parallels with intransitive possessor-fronting are supportive.

## 8.2 Object

If the possessive phrase is an object, it makes sense that the verb has ergative marking. However, just as in the subject hypotheses above, we have only one overt DP. This time the problem is that there is no overt subject. No other third person subjects are marked only on the verb, making reflexives exceptional again.

In contrast to the subject hypotheses above, there is nothing strange about the person

of the ergative marker: the subject is not the *b'a*-phrase but rather either just the ergative morphology (pronominal argument hypothesis) or a null pronoun. It just happens that the possessor has the same phi-features as the subject, just as in a regular “reflexive possessive”, where the subject and possessor co-refer. The only difference is the lack of overt subject in the third person. (a) and (b) here have the same form:

- (55) a. Ch- w- och -ej [ix hin nuej]<sub>Object</sub>  
 ic- 1sA- like -tr [CL<sub>f</sub> 1sA sister]<sub>Object</sub>  
 ‘I like my sister’  
 b. Ch- w- och -ej [hin b’a]<sub>Object?</sub>  
 ic- 1sA- like -tr [1sA REFL]<sub>Object?</sub>  
 ‘I like myself’

In the third person, we are lacking an overt subject in the reflexive:

- (56) a. Ch- y- och -ej [naq unin]<sub>Subject</sub> [no’ s- tx’i’]<sub>Object</sub>  
 ic- 3A- like -tr [CL<sub>m</sub> child]<sub>Subject</sub> [CL<sub>animal</sub> 3A- dog]<sub>Object</sub>  
 ‘The child likes his (own) dog.’  
 b. Ch- y- och -ej (**\*naq**)<sub>Subject</sub> [∅- b’a naq Xhun]<sub>Object</sub>  
 ic- 3A- like -tr (**\*CL<sub>m</sub>**)<sub>Subject</sub> [3sA- REFL CL<sub>m</sub> Xhun]<sub>Object</sub>  
 ‘Xhun likes himself’

Example (56-a) is an example of a “reflexive possessive”: the subject and the possessor of the object co-refer. If the *b'a*-phrase is a possessive, surely it is a reflexive possessive. This is borne out in the fronting facts. Fronting a non-coindexed subject leaves the object still requiring an overt possessor; fronting a co-indexed subject leaves the possessed NP without an overt possessor.

- (57) a. [Jujon heb’ naq winaq unin] ch- -∅ y- och -ej s- txutx  
 [every 3p 3m man child] ic- -3B 3A- love -tr 3A- mother  
 ‘Every boy<sub>i</sub> loves his<sub>i/\*j</sub> (own) mother’  
 b. [Jujon heb’ naq winaq unin] ch- -∅ y- och -ej s- txutx **naq**  
 [every 3p 3m man child] ic- -3B 3A- love -tr 3A- mother **CL<sub>m</sub>**  
 ‘Every boy<sub>i</sub> loves his<sub>\*i/j</sub> (some guy’s) mother’

However, with regular reflexive possessives, the possessor appears to be an ordinary subject, not a possessor in a PossP. The base word order is VSO, and the object PossP simply lacks an overt possessor:

- (58) X- lo -ay -toq [naq Yakin]<sub>Subject</sub> [(te’) s- keneya]<sub>Object</sub>  
 c- eat -DIR2 -DIR3 [CL<sub>m</sub> Yakin]<sub>Subject</sub> [(CL<sub>plant</sub>) 3A- banana]<sub>Object</sub>  
 ‘Yakin<sub>i</sub> ate his<sub>i/\*j</sub> banana.’

I conclude therefore that although the reflexive possessive and the reflexive look the same on the surface when the subject/possessor is fronted, it is moving from a different place. In

reflexive possessives it comes from the subject position between the verb and object, and in reflexives it comes from whatever the position is after *b'a*.

Finally, a regular possessive object can also be replaced with a pronoun, but the *b'a*-phrase cannot.

- (59) a. X - $\emptyset$  -in lo' ay- -toq te' hin mansan.  
 c- -3B -1sA eat DIR2- DIR3 CL<sub>plant</sub> 1sA apple  
 'I ate my apple'  
 b. X - $\emptyset$  -in lo' ay- -toq **te'**  
 c- -3B -1sA eat DIR2- DIR3 **CL<sub>plant</sub>**  
 'I ate it.'
- (60) a. ch- (- $\emptyset$ ?) w- och -ej hin b'a  
 ic- (-3B) 1sA- like -tr 1sA REFL  
 'I like myself'  
 b. #ch-  $\emptyset$  w- och -ej **ix**  
 ic- -3B 1sA- like -tr **CL<sub>f</sub>**  
 \*'I like myself'/'I like her'

I conclude that the *b'a*-phrase is not a normal reflexive possessive phrase, but it at least makes a better object or intransitive subject than transitive subject. Agreement facts look very good for the object interpretation. Fronting facts look quite good for an intransitive subject hypothesis. However, the full phrase cannot be fronted, which counts against Hypothesis 4.

## 9 Hypothesis 5: relational noun

Recall that a relational noun is a prepositional morpheme that must always be in a possessive-like phrase: it is ergative-marked, and in canonical word order at least, third-person possessors must follow the relational noun (RN). For example, *etoq* means 'with'.

- (61) X-in b'itni y-etoq naq  
 c-1sgB sing 3A-with CL<sub>m</sub>  
 'I sang with him.'

The grammar of Q'anjob'al (Baquix Barreno et al, 2005) lists *b'a* as an RN. We have already seen that the form of the possessive is identical to the form of the reflexive and to that of RNs, so reflexives and RNs have identical forms. Better yet, relational nouns cannot appear outside of the possessive form, and neither can *b'a*. Similarly, neither *b'a* nor RNs can be modified.

RN phrases are usually obliques or adjuncts. We saw in example (8) that they may perhaps also be arguments, but it is likely that all of these cases will turn out to be nominal. *B'a*, on the other hand, is always an argument. Here is an attempt by Alejandra to put it in an oblique:

- (62) \*X- y- il ix Rachael jun no' labaj [k'atan (s)- **b'a** ix]  
 c- 3A- see CL<sub>f</sub> Rachael a CL<sub>an</sub> snake [near 3sA- REFL 3m]  
 Intended: 'Rachael saw a snake near herself'

Of course, this example has *b'a* inside a PP. I have also been unable to elicit a *b'a*-phrase as a third argument. For example, we saw in example (24) that the possessive is used for applicative meanings such as *I brought myself lunch*. Only a small set of verbs allow a double object construction anyway, and everything I have found with *b'a* puts it right after the verb.

What we have, then, in terms of the argument status of *b'a* and RNs, is that RNs are usually or perhaps always non-arguments, while *b'a* is always an argument.

RNs can also be fronted as a full phrase, unlike the *b'a*-phrase, as we saw in (13-c) above. RN-stranding is also possible, which does match the *b'a* pattern. This is true whether the RN-phrase is an oblique or an argument.

- (63) a. **Maktxel** x- y- a' taj ix no' txay **y- etoq?**  
**who** c- 3A- CAU cook CL<sub>f</sub> CL<sub>animal</sub> fish **3A- with**  
 'Who did she cook the fish with?'  
 b. **Tzetal** x- q'an- -b'iel **y- ul?**  
**what** c- yellow- -turn **3A- inside**  
 'What turned yellow on the inside?'

Otherwise, Hypothesis 5 has most of the same problems as Hypothesis 4, namely those related to there being only one overt argument. The verb is marked for two arguments, and there are problems interpreting the *b'a*-phrase as a subject or an object.

## 10 Transitivity

Hopper and Thompson (1980) in their paper on transitivity propose that transitivity is a spectrum, not an absolute, and that transitivity is a property of entire clauses, not just morphemes or verb forms. Reflexive clauses are less transitive than ordinary transitives, as are reflexive possessives.<sup>11</sup> The idea is that some object are more *individuated* than others. An object is more individuated if it is more distinct from the environment, and more distinct from the subject. Less individuation therefore includes reflexives. According to Hopper and Thompson, "an action can be more effectively transferred to a patient which is individuated than one which is not" (p253). Reflexives are described as having, in many languages, an "intermediate" status between transitive and intransitive clauses. It is certainly true that some reflexive markers look very close to fully intransitivising the verb. For example, in French the particle *se* makes a verb reflexive, so that nothing is required in the place of the object. Reflexivised verbs are unaccusative in that they join a small set of unaccusatives such as *tomber* 'fall' and *aller* 'go' that take the auxilliary *être* 'be' rather than *avoir* 'have' in the past.

<sup>11</sup>Much thanks is due to Pamela Munro (p.c. 2011) for bringing this idea to my attention.

- (64) a. Jean rase Paul.  
 Jean shaves Paul  
 ‘Jean shaves Paul’  
 b. Jean se rase  
 Jean se rase.  
 Jean REFL shaves  
 ‘Jean shaves (himself)’  
 c. Jean **a** rasé Paul.  
 Jean **has** shaved Paul  
 ‘Jean shaved Paul’  
 d. Jean s’ **est** rasé  
 Jean REFL **is** shaved  
 ‘Jean shaved himself’

However, even in French the effect is not fully intransitivising (Sportiche, 2010). Consider the following exchange:

- (65) a. Seul Jean se rase  
 only Jean REFL shaves  
 ‘Only Jean shaves himself’  
 b. #Non, Jean rase Paul aussi!  
 no, Jean shaves Paul too  
 ‘No, Jean shaves Paul too!’

If *se rase* were truly unaccusative, *seul Jean* would be the theme of *Seul Jean se rase*, so the reply in (65-b) would make sense.<sup>12</sup>

The fact that even French *se* is not fully detransitivising is a point for the particle interpretation of *b’a*. If such morphemes can be not fully arity-reducing and yet still be verbal particles, so can *b’a*.

Q’anjob’al reflexive clauses display reduced transitivity (Munro, 2011a). We saw in section 5 that reflexives pattern with intransitive clauses in terms of extraction. Subjects of transitive clauses cannot be wh-moved unless the verb is in agent focus form. Objects and intransitive subjects, on the other hand, can be wh-moved freely and may not have agent-focus form. Similarly, the post-*b’a* phrase can be wh-moved without agent focus, and agent focus is ungrammatical. All of the (b) examples here are unacceptable because of the agent focus form of the verb.

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<sup>12</sup>Interestingly, in Q’anjob’al (i) is ambiguous:

- (i) asan naq Xhun x- Ø- josil b’a  
 only CL<sub>m</sub> Xhun c- 3sA- shave REFL  
 ‘Xhun is the only one who shaves himself’ OR ‘Xhun shaves only himself’

More research is needed here. The ambiguity may arise from the scope of *asan* ‘only’: [*Only Xhun*] *self-shaves* vs. *The only (shaving-related) case that is true is the one where Xhun shaves himself*.

- (66) a. Maktxel x- y- il Ø- b'a – *Reflexive*  
 who c- 3A- see 3A- REFL  
 'Who saw him/herself?'  
 b. \*Maktxel x- 'il -on Ø- b'a  
 who c- see AF 3A- REFL  
 Intended: 'Who saw him/herself?'
- (67) a. Maktzel x- Ø- b'on s- na – *Reflexive Possessive*  
 who c- 3A- paint 3A- house  
 'Who painted his own house?'  
 b. \*Maktzel x- Ø- b'on -on s- na  
 who c- 3B- paint AF 3A- house  
 Intended: 'Who painted his own house?'
- (68) a. Tzetal yetal x- -Ø Ø- lo' naq – *Object-wh*  
 what c- -3B 3A- eat CL<sub>m</sub>  
 'What did he eat?'  
 b. \*Tzetal yetal x- -Ø lo' -on naq  
 what c- -3B eat AF CL<sub>m</sub>  
 Intended: 'What did he eat?'
- (69) a. Maktxel s- -Ø tsew -i – *Intransitive Subject-wh*  
 who c- -3B laugh -intr  
 'Who laughed?'  
 b. #Maktxel s- -Ø tsew -on -i  
 who c- -3B laugh -AF -intr  
 '\*Who laughed?'/ 'Who laughed at it?'

Focus, as we saw, is similar but not identical. Agent focus form is not required for reflexives, despite the ergative marker on the verb and the fact that the clause is semantically transitive.

(70) gives the unfocused forms of the following examples.

- (70) a. X- -in y- il naq Ringo – *Transitive Subj*  
 c- -1B 3A- see CL<sub>m</sub> Ringo  
 'Ringo saw me.'  
 b. X- Ø waj -ik b'a heb' Beatles b'ay kampo – *Reflexive*  
 c- 3A- gather -DIR2 REFL 3p Beatles in park  
 'The Beatles gathered in the park.'  
 c. X- Ø- 'uq -i y- a'ej naq Ringo – *Poss of inanimate intr Subj*  
 c- 3B- boil -intr 3A- water CL<sub>m</sub> Ringo  
 'Ringo's water boiled'  
 d. X- Ø- Ø- b'on heb' Beatles s- na – *Reflexive Possessive*  
 c- 3B- 3A- paint 3p Beatles 3A- house  
 'The Beatles painted their own house.'

No agent focus for reflexives is fine. It is also fine for possessors of inanimate intransitive subjects and subjects of reflexive possessives.

- (71) a. \**[A naq Ringo] x- -in y- il -i – Transitive Subj*  
       [FOC CL<sub>m</sub> Ringo] c- -1B 3A- see -tr  
       Intended: ‘It was **Ringo** who saw me’
- b. *[A heb’ Beatles] x- ∅ waj (-ik) b’a b’ay kampo – Reflexive*  
       [FOC 3p Beatles] c- 3A- gather (-DIR2) REFL in park  
       ‘It was **The Beatles** who gathered in the park.’
- c. *[A naq Ringo] x- -∅ ’uq -i s- y- a’ej – Poss inanim intr S*  
       [FOC CL<sub>m</sub> Ringo] c- -3B boil -intr 3A- 3A- water  
       ‘It’s *Ringo’s* water that boiled’
- d. *A heb’ Beatles x- ∅- b’on s- na – Reflexive Possessive*  
       FOC 3p Beatles c- 3A- paint 3A- house  
       ‘It’s *the Beatles* who painted their own house.’

If the post-*b’a* phrase is a transitive subject, as in hypothesis 1, it is a subject that patterns with intransitive subjects, despite there being an object, *b’a*. If it is an object or intransitive subject, as in hypotheses 2 and 3, then it patterns as expected. If it is a possessor, as in hypotheses 4 and 5, then it patterns with possessors of inanimate subjects of intransitive clauses, except that the full *b’a*-phrase cannot be focused.

However, as we saw in section 5, agent focus is possible in reflexives and reflexive possessives. This form is ungrammatical for unaccusative possessors, but this is not surprising since agent focus never occurs in true intransitives.

- (72) a. *A naq Ringo x- -in il -on -i – Transitive Subj*  
       FOC CL<sub>m</sub> Ringo c- -1B see -AF -intr  
       ‘It was *Ringo* who saw me’
- b. *A heb’ Beatles x- ∅ waj -on b’a b’ay kampo – Refl*  
       FOC 3p Beatles c- 3A- gather -AF REFL in park  
       It was *The Beatles* who gathered in the park.
- c. \**A naq Ringo x- -∅ ’uq -on -i s- y- a’ej – Unacc Poss*  
       [FOC CL<sub>m</sub> Ringo] c- -3B boil -AF -intr 3A- 3A- water  
       Intended: ‘It’s *Ringo’s* water that boiled’
- d. *A heb’ Beatles x- ∅- b’on -on s- na – Reflexive Possessive*  
       FOC 3p Beatles c- 3A- paint AF 3A- house  
       ‘It’s *the Beatles* who painted their own house.’

Finally, there is a special focus construction which exists only with reflexives (73-b), possessors of inanimate subjects of intransitive clauses (73-c), and possibly relational nouns (73-e). Normal focus has no resumptive classifier in the canonical position. But with a pause after the focused phrase, a resumptive classifier appears in these cases. Sometimes, possibly just in these forms, a ‘FOC’ is optional. This form does not seem to be available for the reflexive possessive.

- (73) a. \*A naq Ringo, // x- -in y- il **naq** – *Transitive Subj*  
 FOC CL<sub>m</sub> Ringo, // [c- -1B 3A- see]<sub>v</sub> CL<sub>m</sub>  
 Intended: ‘It was *Ringo* who saw me’
- b. (A) heb’ Beatles, // x- ∅ waj b’a **heb’** b’ay kampo – *Refl*  
 (FOC) 3p Beatles, // c- 3A- gather REFL **3p** in park  
 ‘It was *The Beatles* who gathered in the park.’
- c. A naq Ringo, // x- ∅ ’uq -i s-y-a’ej **naq** – *Unacc Poss*  
 [FOC CL<sub>m</sub> Ringo], // c- -3B boil -intr 3A-3A-water CL<sub>m</sub>  
 ‘It’s *Ringo’s* water that boiled’
- d. \*A heb’ Beatles, // x- ∅- b’on s- na **heb’** – *Reflexive Possessive*  
 FOC 3p Beatles, // c- 3A- paint 3A- house **3p**  
 Intended: ‘It’s *the Beatles* who painted their own house.’
- e. (A) ch’en uk’b’al, // x- q’an- -b’iel y- ul **ch’en**  
 (FOC) CL<sub>metal</sub> cup, // c- yellow- -turn 3A- inside CL<sub>metal</sub>  
 ‘It’s the cup that turned yellow on the inside.’ – *RN, but maybe just Unacc*

This special focus form is very much like the resumptive-type topic, except that it includes the focus morpheme *a* and as such is given a focus interpretation. However, the set of NPs they work with are not the same. Both resumptive-type topic and focus occur with reflexives and inanimate possessors of intransitive subjects, but resumptive-type topic occurs with transitive subjects, and this focus construction does not occur with transitive subjects. As it is transitivity that so often governs the availability of fronting constructions, this is a surprising distinction.

In summary, reflexives pattern mostly with intransitives for extraction, one way or the other. If the post-*b’a* phrase is a subject, we can say it acts like an intransitive subject for wh-movement and focus in that no agent focus is necessary. If it is a possessor, we can say that it acts like the possessor of an intransitive subject for wh-movement and focus in that it can be fronted without *b’a*.

However, reflexives also pattern with transitives in that agent focus form is possible for reflexives in focus constructions. If the post-*b’a* phrase is a subject, we can say it acts like an transitive subject for focus in that agent focus is possible. On the other hand, if it is a possessor, we cannot say that it acts like a possessor here at all, since it can be fronted with agent focus.

## 11 Summary

In section 3 I suggested that *b’a* might be a verbal particle, a noun, or a relational noun; and that the structure of the third-person *b’a*-phrase might be [b’a] [CL NP] or [b’a CL NP]. Here I will summarise the arguments I made for and against each of these possibilities.

**Verbal particle:**

| <b>For</b>   | <b>Against</b>   |
|--|--|
| - <i>b'a</i> can't be modified (so it's not a noun)  | - <i>b'a</i> is inflected unlike all other verbal particles        |
| - <i>b'a</i> can't be fronted in any way – it stays with the verb  | - <i>b'a</i> does not form a word with other particles or the verb |
| - Cross-linguistically, detransitivising reflexive particles are not necessarily <i>fully</i> detransitivising | - <i>b'a</i> is not fully detransitivising                         |

Table 3: Arguments for and against *b'a* as a particle**Noun:**

| <b>For</b>   | <b>Against</b>  |
|--|---|
| - inflected  | - can't be modified   |
| - strandable like nouns (as independent subj/obj or as possessed NP) | - can't be fronted (as independent subj/obj or as possessed NP) |

Table 4: Arguments for and against *b'a* as a Noun**Relational Noun:**

| <b>For</b>                        | <b>Against</b>  |
|-----------------------------------|---|
| - needs possessive phrase like RN | - always an argument – RNs are (almost?) always obliques/adjuncts |
| - strandable like RN              | - can't be fronted/pied-piped                                     |
| - can't be modified like RN       |   |

Table 5: Arguments for and against *b'a* as a Relational Noun**Separate constituents**

| <b>For</b>   | <b>(<i>V [b'a] [DP]</i>):<br/>Against</b>    |
|--|--|
| - two overt arguments (matches ergative verb, semantics) | - forces anomalous VOS or reflexive subject  |
| - Separable  | - single constituent sometimes separable too |
|  | - <i>b'a</i> is not frontable on its own     |

Table 6: Arguments for and against separate constituents

| <i>One constituent</i><br>For                                     | <i>(V [b'a DP]):</i><br>Against                                    |
|---|--|
| - <i>b'a</i> strandable like intransitive subject possessors, RNs | - <i>b'a</i> -phrase not frontable<br><br>- missing overt argument |

Table 7: Arguments for and against a single constituent

## 12 Conclusion

All of the hypotheses considered here are problematic. I have no solution. In a lot of ways, the *b'a*-phrase behaves most like a intransitive possessive subject, but the significant problems remain that the full *b'a*-phrase cannot be fronted and the verbal agreement is with the possessor, rather than the possessed.

Coon and Mateo Pedro (to appear)'s idea of bare noun incorporation into the verb warrents further investigation, as it allows *b'a* to be nominal yet still stick close to the verb. However, see footnote 9 for some arguments against it.

My current research in Q'anjob'al is on unergative and unaccusative possessives; perhaps this will shed some light on reflexives as well.

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## A Spelling

There is a (largely) phonemic writing system for Q'anjob'al. The obstruents are given below in the Q'anjob'al orthography and their IPA equivalents.<sup>13</sup>

| bilabial       | alveolar  | post-alveolar | retroflex | velar   | uvular    | glottal |
|----------------|-----------|---------------|-----------|---------|-----------|---------|
| p /p/          | t /t/     |               |           | k /k/   | q [q]~[χ] | ' /ʔ/   |
| b' /p'/ or /β/ | t' /t'/   |               |           | k' /k'/ | q' /q'/   |         |
|                | tz /ts/   | ch /tʃ/       | tx /tʂ/   |         |           |         |
|                | tz' /ts'/ | ch' /tʃ'/     | tx' /tʂ'/ |         |           |         |
|                | s /s/     | xh /ʃ/        | x /ʂ/     | j /x/   |           |         |

Table 8: Q'anjob'al obstruents

**Sonorants:** /i/, /ε/ (e), /a/, /o/, /u/, /m/, /n/, /l/, /w/, /j/ (y), /r/ (r).

*h* appears word-initially to indicate a lack of glottal stop before a vowel. Sometimes even word-internally these sorts of glottal stops appear. For example, *chyochej* ‘like.3A’ gains a glottal stop when the ergative marker *y-* is lost in the passive, *ch'ochlay*. The glottal stop in the spelling therefore indicates the pronunciation, but does not distinguish between a phonemic glottal stop and a glottal separating morphemes.

<sup>13</sup>It is not clear what the first sound, written *b'*, is. Phonetically, it looks very much like an bilabial ejective /p'/. See Kuang (2011); Fowlie (2011) for details.