Winter 2-2013

# The Copala Triqui auxiliary construction for emotional and psychological predicates 

George Aaron Broadwell<br>gbroadwell@albany.edu

Follow this and additional works at: http://scholarsarchive.library.albany.edu/cas_anthro_scholar
Part of the Language Description and Documentation Commons, Linguistic Anthropology Commons, and the Syntax Commons

## Recommended Citation

Broadwell, George Aaron, "The Copala Triqui auxiliary construction for emotional and psychological predicates" (2013).
Anthropology Faculty Scholarship. 1.
http://scholarsarchive.library.albany.edu/cas_anthro_scholar/1

# The Copala Triqui auxiliary construction for emotional and psychological predicates 

George Aaron Broadwell<br>University at Albany, State University of New York ${ }^{1}$

## 1 Background

### 1.1 Orientation and word order

Copala Triqui is an Otomanguean language in the Mixtecan family. It is spoken in Oaxaca, Mexico and by immigrants to other parts of Mexico and to the United States. Approximately 8001,000 speakers live in the Albany, New York area.

Like most other Otomanguean and Mesoamerican languages, Copala Triqui is a head-initial language. VSO is the most basic word order:

| 1. A'níi | Mariá | chraa | rá | yoó a. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| put | Maria | tortilla | in | tenate decl |
| 'Maria puts the tortilla in the tenate.' |  |  |  |  |

[^0]In addition to simple verbs like a'níĺ, Copala Triqui also has many compound verbs which are made up of two or three separate phonological words: ${ }^{2}$
2. Me rá Mariá chraa rá yoó a.
want Maria tortilla in tenate decl
'Maria wants the tortilla in the tenate.'

We have seen an example of a Copala Triqui verb with an NP object and PP oblique complement. As might be expected, a wide range of complement types are available, including intransitives, verbs with prepositional complements, verbs with clausal complements, and verbs with both nominal and clausal complements. The following is a preliminary phrase structure rule that reflects the range of subject and complement types in Copala Triqui :

5

$$
\begin{array}{llllll}
\mathrm{S}--> & \mathrm{V} & \left(\mathrm{~N}^{0}\right) & \mathrm{NP} & (\{\mathrm{CaseP} \mid \mathrm{NP}\}) & \mathrm{PP}^{*}
\end{array} \quad(\mathrm{CP})
$$

This view is made more complex, however, by the adverbs. There is a class of adverbs, that typically intervenes between the verb and the subject in a simple transitive:

| A'níí | ndo'o | Mariá | chraa | rá | yoó $\quad$ a. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| put | much | Maria | tortilla | in | tenate $\operatorname{decl}$ |

'Maria puts lots of the tortilla in the tenate.'

For the kind of compound verbs discussed in this handout, these adverbs go between the two parts of the compound:

4 | Me ndo'o rá | Mariá | chraa |  |
| :--- | :--- | :--- | :---: |
| want much $\quad$ (emotion particle) | Maria | tortilla |  |
|  | 'Maria wants a lot of tortilla.' |  |  |

[^1]My suggestion for these is two additional PS-rules:
$5 \quad$ AspP --> Asp S (Decl)
S --> (Adv) S

There is also a principle that in general, verbs in Copala Triqui are not realized in the base V position in the S . Instead, they are realized in the higher functional head, Asp, leaving the V position vacant.

I think these probably correspond to syntactic structures like the following:
(6)

(7)

Structure of clause with simple $V$
(8) Structure of clause with compound $V$


This suggests that the PS rule above needs to be modified to the following, which makes the V position optional. The interaction of the rest of the syntax and morphology will determine whether the verb is realized in $S$ or in AspP :

$$
\begin{array}{rllllll}
9 & S--> & (V) & \left(N^{0}\right) & N P & (\{\operatorname{CaseP} / N P\}) & P P^{*}
\end{array} \quad(C P)
$$

### 1.3 Case

Triqui has only one overt morphological case, marked by the accusative case particle man:
10.

| a. Que-ne'en | Mariá | (man) Juán. | 'Maria saw Juan.' |
| :---: | :---: | :--- | :---: |
| com-see | Maria | Acc Juan |  |
| b. Que-ne'en | Mariá | man so'. | 'Maria saw him.' |
| com-see | Maria | acc 3 sM |  |
| c. *Que-ne'en | Mariá | so'. | (Maria saw him.) |
| com-see | Maria | 3sM |  |

Man is obligatory before pronominal objects. In elicitation contexts, it is judged to be optional in all other contexts, but it is preferred before human objects and dispreferred before inanimates. ${ }^{3}$

### 1.4 Lack of pro-drop; filler-gap constructions

Copala Triqui is not a pro-drop language, so examples like (10a, b) with a missing NP are generally bad. Gaps will appear, however when some element is displaced to the left. For examples in this handout, this is usually due to relativization. In the following example, notice that there is no subject after the verb, since the subject has been relativized:

| 11. | nij | síí | chá $\left[\_\right]$ | chraa | tucuá | Simón |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| nij | sí́ | chá | chraa | tucuá | Simón |  |
|  | nij $^{3}{ }_{1}$ | zii $^{5}$ | cha $^{4}$ | chroa $^{3}$ | tucua $^{4}{ }_{1}$ | Simon $^{4}$ |
|  | plural | one(s) who | eat | tortilla | home of, house of | Simon |

'the ones who ate at Simon's house'
I've tried to mark gaps due to relativization with [_] to make the examples easier to follow.

## 2 The emotion auxiliary construction

### 2.1 Basic overview

Copala Triqui has an unusual construction in which many verbs and adjectives with meanings

[^2]like 'love', 'hate', and 'envy' may sometimes be followed by an additional verb meaning 'see' or 'look at'. Consider the following examples:

| 12. | Nachri' | nii | ni'yaj | nii | man |
| :--- | :--- | :--- | :--- | :--- | :--- |
| nachri' | núj |  |  |  |  |
| nachri' | nii | ni'yaj | nii | man | núj |
|  | nii $^{3}{ }_{2}$ | ni' $^{\prime 3}$ yaj $^{2}{ }_{1}$ | nii $^{3}{ }_{2}$ | maa $^{3}{ }_{1}$ | nuj |
| hate, disrespect | INDEF | look $^{5}{ }^{5}$ | INDEF | ACC | we (exclusive) |

'People hate us' (1 Corinthians 4:12)

| 13. ne | caran' rá | Diose | ni'yaj | So' | man | Moisés |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ne | c- aran' rá | Diose | ni'yaj | so' | man | Moisés |
| $n{ }^{2}{ }_{1}$ | $\mathrm{c}_{-1} \quad \operatorname{aran}^{13} \mathrm{ra}^{4}$ |  | ${ }^{3} \mathrm{yaj}^{2}{ }_{1}$ | zo ${ }^{13}$ | $\mathrm{maa}^{3}{ }_{1}$ |  |
| and | COM like | God | look | 3 sGM | ACC | Moses |

'And God liked (favored) Moses.' (Acts 7:20)

'... and you love all others who follow God.' (Colossians 1:4)

And one slightly more complex example, which involves a subject which has been relativized. Notice a gap after both the emotion predicate and the auxiliary:

| 15. Gaxa ne | tuvi' | yo' | rej | do' | me ze | ni | me rá [ | ne'e [_] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| gaxa ne | tuvi' | yo' | rej | do' | me ze | ni | me rá | ne'e |
| gaa ${ }^{13} \mathrm{ne}^{2}$ | tuvi ${ }^{13}{ }_{1}$ | $\mathrm{yo}^{13}{ }_{3}$ | $\mathrm{rej}^{3}{ }_{1}$ | $\mathrm{do}^{\prime 1}{ }_{1}$ | $\mathrm{me}^{3} \mathrm{ze}^{32}$ | $n{ }^{3}$ | $m e^{3} \mathrm{ra}^{4}$ | ne'e ${ }^{3}$ |
| then | friends, family | 3 N | father | and | cleft marker | negative | want | look' |
| maa ne'ej | yo' ne | $\ldots$ |  |  |  |  |  |  |
| man ne'ej | yo' ne |  |  |  |  |  |  |  |
| $\operatorname{maa}^{3}{ }_{1} \quad$ ne'ej ${ }^{3}$ | $\mathrm{yo}^{13}{ }_{3} \mathrm{ne}^{2}{ }_{1}$ |  |  |  |  |  |  |  |
| acc baby | 3 N and |  |  |  |  |  |  |  |

Then her friends, family and father didn't want her baby and... (Legend of sun and moon 17)

However along with the unusual cases just seen, we also have cases where the same predicates appear with ordinary transitive syntax:

```
16. tzajj ne nachri' uxrá so' chrej chi'ii
```



```
    tzaj}\mp@subsup{}{}{2}\mp@subsup{n}{}{2}\mp@subsup{}{}{2
    but hate, disrespect very you path; road illness, harm, sickness
ei
ei
ei }\mp@subsup{}{}{32
emphatic particle
'..but you have hated the path of wickedness very much.' (Hebrews 1:9)
```



And anyone who loves their brother ...

| 18. Man | yuvii | aran' rá $\left[\_\right]$ | sa'anj | $\ldots$ |
| :--- | :--- | :--- | :--- | :--- |
| man | yuviï | aran' rá | sa'anj |  |
| maa $^{4}$ | yuvi ${ }^{31}$ | aran $^{13} \mathrm{ra}^{4}$ | sa'anj $^{32}$ |  |
| exist, live; | people | like | money |  |

There are some people who like money ... (1 Timothy 6:10)

What is difference between the regular transitive construction and the construction that uses the look'/see' auxiliary?

### 2.2 Corpus evidence

- Primary evidence for this construction comes from corpus of Copala Triqui which now has about 245,000 words. It includes folkloric and other texts from our working group in Albany as well as Barbara Hollenbach's extensive texts and her New Testament translation.
- It was only in the process of working through this corpus that I discovered the emotion auxiliary construction. Our own texts contained one (mistranslated!) example, while the New Testament had about 1,000 additional examples that allowed me to understand the pattern.


### 2.3 Modern speaker intuitions

- Examples like these sound good to our principal Copala Triqui language co-author, Román Vidal López.
- However, Mr. Vidal López has ne'en 'see' as the basic auxiliary used with all emotion verbs; he recognizes ni'yaj as another possibility, but does not volunteer sentences with this verb as auxiliary. ${ }^{4}$
- The Copala Triqui of the New Testament seems to represent the language of an older generation, where there was a predominance of ni'yaj as the auxiliary used in emotion constructions has changed to a preference for ne'en as the basic auxiliary.
- Mr. Vidal López cannot really explain the meaning difference between the emotion verb with and without the auxiliary in Spanish or English, other than to say that a person who uses the

[^3]auxiliary is speaking the language 'very fluently, the way people really used to do it.'

- I would take this to mean that if there is a semantic effect of the auxiliary, it is subtle or difficult for our language consultant to explain to us.
- Mr Vidal López also volunteered the following example, which is interesting, for emphasizing the point that ne'e(n) doesn't involve literal vision when it appears in this construction:

19. 

| 'unj | 'aran' | ndo'o | ráj | ne'ej | chra' |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 'unj | 'aran' | ndo'o | rá $=\mathrm{j}$ | ne'e $=$ j | chra' |
| 'unj ${ }^{1}$ | 'aran ${ }^{13} \mathrm{ra}^{4}$ | ndo'o ${ }^{32}$ | $\mathrm{ra}=\mathrm{j}^{4}$ | ne'e $=\mathrm{j}^{3}$ | chra ${ }^{132}$ |
| I | like | much | $($ emotion particle $)=1 \mathrm{sg}$ | see' $=1 \mathrm{sg}$ | music |

' I like the music very much.'

### 2.4 Corpus evidence (again)

- Because our language consultant could not explain the difference, I've begun comparing corpus examples of the same predicate with and without the auxiliary. Preliminary results
- Use with the auxiliary is the default with human and divine objects; most departures from this pattern involve generic objects (e.g. people, one's brother) used without the auxiliary
- Use without the auxiliary is the default with inanimate; the few rare departures from this pattern involve excessive love of an inanimate (e.g. love of money) that show other signs of syntactic emphasis
- The texts don't have many examples of non-human animate objects (e.g. animals), so that part of the hierarchy is not clear
- A tentative conclusion is that the auxiliary plays (or played) some role in indicating emphasis, but that this has become conventionalized for most animate objects. The likely semantic process is inflation, whereby conventionalization works to diminish the emphatic value of linguistic expressions over time (Dahl 2001). ${ }^{5}$

[^4]
## 3 Predicates which appear in the emotion auxiliary construction

The following verbs and adjectives may appear with the emotion auxiliary construction: ${ }^{6}$
20

| Triqui | Category | Gloss |
| :--- | :--- | :--- |
| 'anj rá | verb | be startled, be surprised by |
| 'ęe rá | adj | love, hold in esteem, take care of |
| a'maan rá | verb | be angry, upset about |
| a'nga' nacoó | verb | mock |
| amán rá | verb | believe in, have faith in |
| aran' rá | verb | like |
| aráya'ánj | verb | with |
| chu'vi' | verb | be worried about |
| chumán rá | verb | believe in, have confidence in |
| me rá | verb | want, love ${ }^{7}$ |
| na'áj | adj | be embarrassed about |
| nachri' | verb | hate, disrespect |
| nihá' rá | verb | be happy about |
| nucuáj rá | verb | have confidence in |
| táá ri'yunj | verb | hate, oppose, be in disagreement with |
| uun rá | verb | love, desire |
| uun xcój rá | verb | be envious |
| xcoj ruvąa rá | adj | be envious, be hateful |
|  |  |  |

6 Some of these predicates are adjectives and some are verbs. This has morphological consequences, but no syntactic consequences of any importance for this construction, so far as I can see. The morphological distinction between the two types of predicates is discussed in Appendix A.
7 The Triqui verb includes both a sense close to English 'love' as well as senses more like 'want (to have)' and 'want (to do)'. Only the first sense occurs with the auxiliary construction.

Although they either contain the emotion particle rá or fall into the semantic category of epistemic predicates, the following verbs and adjectives do not appear with the auxiliary:

| Triqui | Category | Gloss |
| :--- | :--- | :--- |
| 'yaa rá | verb | think |
| a'ne rá | verb | stop doing |
| a'vej rá | verb | permit, allow |
| achríj rá | verb | suspect |
| navij rá | verb | decide, think about |
| nanó rá | verb | be sad |
| uun yạ rá | verb | be convinced |
| xcaj raá | verb | think |

Many of the emotion words contain the particle rá, approximately 'heart, center of emotions, self'. Rá is not exclusive to the emotions, howiever, since it is used in a wide range of mental states, including thinking, permitting, suspecting, and allowing.

## 4 Restrictions on parts of the emotion construction

### 4.1 The initial emotion predicate - lexical and transitivity restrictions

The initial emotion predicate has to come from the set of verbs and adjectives listed in 3 above. To be used in the emotion auxiliary construction, the predicate must be used in the subcategoriation in which it takes a NP object.

Chumán rá 'believe' is a verb with a few different options for complement type includingnij síí chumán rá 'the ones who believed' (used with no object) and chumán rá nij so' se vaa Diose me so' 'they believed that he was God' (used with a clausal object). These uses aren't eligible for the emotion auxiliary construction. Only cases where the predicate takes a NP object occur with the auxiliary.

### 4.2 The initial subject can be any size

There is no constraint on the subject of the first emotion verb; it can be arbitrarily large, as in the following example:

'Then Herod and the soldiers that belonged to him hated Jesus and they mocked him.' (Luke 23:11)

### 4.3 The auxiliary

The auxiliary is subject to extensive constraints on its aspect, which are the subject of section 5 below.

### 4.4 The subject after the auxiliary

The subject after the auxiliary has only two options. It is usually a pronoun, as in the example above. In a few examples, it is a repetition of the preceding proper noun, usually Diose 'God'. The pronoun has to match the preceding subject in person, number, and gender. Proper nouns match exactly.

## 5 The morphosyntax of the ni'yaj and ne'en auxiliaries.

Although ni'yaj and ne'en have lost their usual semantics as perception verbs, they are still verbs. This is shown by several characteristic morphosyntactic properties, but I will only talk about one tonight - the aspectual and tonal morphology of verbs.

### 5.1 High and low register stems

Copala Triqui has a complex morphophonological system that cannot be fully discussed here, but this section gives a basic overview. (See Hollenbach 1984, 2004 for a complete overview of the system.)

Copala Triqui verbs do not show very much productive segmental morphology but have some rather complex tonal changes. Each verb has two tonal stems, one in the upper register and one in the lower register. There are some complex rules for relating the upper and lower register tonal stems, but in the practical orthography used here, the low-toned stem is shown with an underscore on the final syllable of the verb stem. In the gloss line, I have indicated the lowered stem with the gloss Low. The different tonal stems play a role in both the aspect and the negation system of the language.

### 5.2 Aspectual affixes; full and defective paradigms

The primary aspectual affix is a $/ \mathrm{k}(\mathrm{V})$-/ prefix which signals completive aspect when used with the upper register stem. The $/ \mathrm{k}(\mathrm{V})$-/ prefix signals potential aspect when it is used with lower register stem. ${ }^{8}$ The verb stem with no prefix is the continous aspect:
22. a. Ne'en Juán man so'. Continuous $=\varnothing+$ high register
see Juan ACC him
Juan sees him.
b. Que-ne'en Juán man so'. Completive $=k V+$ high register

COM-see Juan ACC him
'Juan saw him.'
c. Que-ne'en Juán man so'. Potential $=k V+$ low register

POT-see:LOW Juan ACC him
'Juan will see him.'
About two-third of the verbs in Copala Triqui show a pattern like ne'en, with use of the $/ \mathrm{kV}-/$ prefix plus the shift of tone register to signal change of aspect. These verbs show the full paradigm. The

[^5]remainder of the verbs show the defective paradigm, which does not use the prefix, but shows aspect change only through the tone change. Chá 'eat', is a verb like this:

| 23. a. | Chá Juán. | Continous/Completive $=$ High register |
| :--- | :--- | :--- |
| eat Juan |  |  |
| 'Juan eats/ate.' |  |  |
| b. |  |  |
| Chan Juan. |  |  |
| eat:Low Juan |  |  |
| 'Juan will eat.' |  |  |

Of the two verbs which function as auxiliaries, ne'en shows the full paradigm, while ni'yaj has the defective paradigm. It shows its potential aspect solely through its low register form, ni'yaj.

### 5.3 Negatives

Use of a negative particle - ne (for completive or continous aspect) or se (for potential aspect) triggers an usual toggle effect on the register of the following verb. As Hollenbach (1976) showed, the relationship between high and low register stems and aspect is reversed after these particles. Thus we can compare the affirmative statements above with their negative counterparts, observing the effect on the tone register of the verb stem:
24.
a.Ne'en Juán man so'. $\varnothing$ + high reg see Juan acc him 'Juan sees him.'
b.Que-ne'en Juán man so'. $k V+$ high reg com-see Juan acc him 'Juan saw him.'
c.Que-ne'en Juán man so'. $k V+$ low reg pot-see:Low Juan acc him
'Juan will see him.'

Ne ne'en Juán man so'. $\varnothing+$ high reg neg see Juan acc him 'Juan does not see him.'

Ne que-ne'én Juán man so'. $k V+$ low reg neg com-see:Low Juan acc him
'Juan did not see him.' (NEG^ HR[+] --> [ ])
Se que-ne'en Juán man so'. $k V+$ high reg
neg:pot pot-see Juan acc him
'Juan will not see him.' (NEG^ HR[ ] --> [+] )

### 5.4 Aspect matching in auxiliaries

When either of these verbs functions as an auxiliary, it continues to show aspect inflection which matches the aspect of the emotion verb which controls it. The first example shows ne'en in the potential aspect:


So if we are truly brothers, and you are reconciled with him, then just as you love me, think of him (in the same way). (Philemon 1:17)

In this example, the second emotion verb is uun rá, appearing in the potential form as guun rá. The potential form on this verb then triggers the potential on the corresponding auxiliary, quene'én. Thus the auxiliary is showing the aspectual morphology consistent with a verb. This combination of $/ k(\mathrm{~V})-/$ prefix plus tone change is not found with any other part of speech in Copala Triqui, so this is a very clear diagnostic of a verb.

The next example shows ni'yaj in the potential aspect while functioning as an auxiliary:


Are we looking for a way to make God angry at us? (1 Corinthians 10:22)

This final example also shows the low-register form of the auxiliary ni'yaj $j$, this time in a negative context:

| 27. Tzaj ne | ne |  | gưun |  | niha' |  | rá | Diose |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| tzaj ne | ne |  | g- | unu | niha' | uxrá | rá | Diose |
| $\text { tzaj }^{2} \mathrm{ne}^{2}$ |  | al. var. | $c_{-1}$ | $\text { uun }^{13}$ | $\text { nia }^{11} \mathrm{ra}^{4}{ }_{2}$ | $\text { uxra }^{4}$ | $\mathrm{ra}^{4}{ }_{1}$ | $\mathrm{Dio}^{3} \mathrm{se}^{1}$ |
| ni'yaj | Diose | man | que'ee | nij so' | ma' |  |  |  |
| ni'yaj | Diose | man | que'ee | nij so' | ma' |  |  |  |
| $\mathrm{ni}^{\prime 2} \mathrm{yaj}{ }^{32}{ }_{1}$ | Dio ${ }^{3} \mathrm{se}^{1}$ | $\mathrm{maa}^{3}{ }_{1}$ | que'ee | $\mathrm{nij}^{1} \mathrm{zo}^{13}$ | $\mathrm{ma}^{13}$ |  |  |  |
| look':LOW | God | acc | many | they | final partic |  |  |  |

But God was not happy with most of them ... (1 Corinthians 10:5)
Notice that in this case the first verb in the emotion sequence gunun nihá ${ }^{\prime}$.. rá has become low register not due to any semantics of the aspect of the event, but purely due to the morphological requirement that a verb following the negative particle ne must appear in low register tone.
Nevertheless, the auxiliary appears in the same low-register tone, suggesting that the aspect matching requirement is a morphological property of the auxiliary construction.

## 6 The syntax of the emotion auxiliary construction

Given the discussion so far, the syntax of the Copala Triqui construction ought to reflect the kinds of syntactic structures that are plausible for auxiliaries -- and emotion auxiliaries, in particular -- in languages of the world.

### 6.1 Ordinary auxiliaries in Copala Triqui

Because Copala Triqui is a head-initial language, auxiliaries precede the main verb. The words that are the best candidates for auxiliaries in Copala Triqui are síj 'finish', navij 'stop', and uun che'e 'begin'. The auxiliaries have the property of being immediately followed by another verb without an intervening subject, and are generally subject to the requirement that they must match the aspect of the main verb (Hollenbach 2004:19).

Consider the following example in which síj is the auxiliary and avi' 'die' is the main verb. Both are in the completive aspect, and the auxiliary precedes the main verb. The subject of both, Jesucristó, follows.

| 28 Dan me se |  | quisíj | cavi' | Jesucristó |
| :---: | :---: | :---: | :---: | :---: |
| dan me se |  | qui- síj | c- avi' | Jesucristó |
| dan ${ }^{32} \mathrm{me}^{3} \mathrm{ze}^{32}+$ dial. var.,sp. var. (new paragraph) | $\begin{aligned} & \text { gaa }^{13} \\ & \text { when } \end{aligned}$ | $\begin{aligned} & \text { qui- }_{-1} \text { zij }^{5} \\ & \text { com- complete, finish, arrive } \end{aligned}$ | $\begin{array}{ll} \mathrm{c}-1 & \mathrm{avi}^{13} \\ \text { com } & \text { die } \end{array}$ | Jesus Christ |
| rihaan rcutze |  |  |  |  |
| rihaan rcutze |  |  |  |  |
| riaan ${ }^{32}{ }_{1}$ rcu $^{3}$ tze $^{1}$ |  |  |  |  |
| to cross |  |  |  |  |
| And after Jesus had died on the cros | s, ... ( | cts 1:3) |  |  |

### 6.2 Emphatic auxiliaries

Clearly, the forms of ni'yaj and ne'en that appear with emotion verbs do not show the word order of an ordinary auxiliary in Copala Triqui. Instead the Copala Triqui sentences seem to show a sentence that has the following surface properties:

| Verb $_{i}$ or <br> Adjective $_{\text {i }}$ <br> [any aspect, | Full $\mathrm{NP}_{\mathrm{j}}$ [can be conjoined, | Aux $_{i}$ <br> [must match aspect of V or | Det $_{j}$ <br> [Pronominal copy of the | (Acc) | NP <br> [the verb must have an object] |
| :---: | :---: | :---: | :---: | :---: | :---: |

$\left.\begin{array}{|l|l|l|l|l|l|}\hline \text { can be negated, } & \text { negated, etc.] } & \text { Adj] } & \begin{array}{l}\text { subject; If the } \\ \text { modified, etc., }\end{array} & & \\ \text { subject is a } \\ \text { from a } \\ \text { particular set of } \\ \text { predicates] } & & & \begin{array}{l}\text { NP, it } \\ \text { can be }\end{array} & & \\ \text { repeated] }\end{array}\right]$

The parts of this structure that are highlighted are the parts that are optional; the parts that make you a 'very fluent' speaker.

If we take them out we have a normal Triqui transitive clause; if we put them in, we have a transitive clause where the speaker has "echo"-ed the verb-subject at the beginning with a weaker version - auxiliary-pronoun. A comparable English structure might be something like Tamar hates - she does - the town band of Tlacolula or I hate, I do, your approach to sluicing and your sense of fashion as well. Note that in these structures the Aux-Pron structure interrupts the constituency of the clause around it to insert auxiliary material.

### 6.3 The constituent structure of Copala Triqui

I suggested in the first part of the handout that the structure of two part verbs in Copala Triqui was as follows:


This structure will work well for the emotion verbs under consideration.
For emotion adjectives in the continuous aspect, the adverb will go after the first part of the adjective:

29
'eee ndo'o rá
love much (emotion particle) Maria acc Juan
'Maria loves Juan very much.'

The structure is as follows: ${ }^{9}$

9 When the supporting verb is present to carry the potential aspect, the structure will be a bit more complex. Here I assume that the verb 'be' or 'exist' takes the adjectival sentence as its subject complement. See Appendix A for a structure.


### 6.4 The constituent structure of the auxiliary emotion construction

I'm going to propose that the tree that comes closest to representing (my understanding of) the grammar of this construction is the following:


To license the S shown in this tree, we will need a special phrase structure rule, which we can write as follows:

| S--> | (V\|Adj) | ( $\mathrm{N}^{0}$ ) | NP | Aux | Det | \{CaseP \|NP\} |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\uparrow=\downarrow$ | $\uparrow=\downarrow$ | $(\uparrow$ SUBJ $)=\downarrow$ | $\uparrow=\downarrow$ | $\downarrow$ INDEX $=\uparrow$ SUBJ INDEX | $(\uparrow \mathrm{OBJ})=\downarrow$ |
|  | [EMOTION + ] |  |  | $\downarrow$ ASP $=\uparrow$ ASP |  |  |
|  | @TRIQ-EMOT(PRED FN $\uparrow$ ) |  |  |  |  |  |
|  | 1 | 2 | 3 | 4 | 5 | 6 |

This contrasts with the ordinary rule for S in the language which is as follows ${ }^{10}$
S --> (V|Adj)
$\left(\mathrm{N}^{0}\right) \quad \mathrm{NP} \quad(\{$ CaseP $\mid \mathrm{NP}\})$
PP*
(CP)
$\uparrow=\downarrow$
$\uparrow=\downarrow$
$(\uparrow$ SUBJ $)=\downarrow(\uparrow \mathrm{OBJ})=\downarrow$
$\left(\uparrow \mathrm{OBL}_{\theta}\right)=\downarrow \quad(\uparrow \mathrm{COMP})=\downarrow$

It is worth discussing the various parts of the special emotion predicate rule and how they work to account for this emotion auxiliary construction. This rule describes a special kind of S, not licensed by the usual PS-rules of the language (and so it probably should count as kind of

10 Modified slightly from (9) above to include the possibility of Adj as head of S.
'construction' in the grammar.) In contrast to most PS-rules, nearly all of the items on the right side of the rule are obligatory. The V or Adj will typically be realized in the Asp higher in the tree, and the appearance of the particle is dependent on the lexical item in slot 1 .

The S must be headed by a Verb or Adjective with a special feature [EMOTION + ], and in this construction, the verb is obligatorily transitive, thus the appearance of an object in slot 6 . The element in slot 1 also has the notation @TRIQ-EMOT(PRED FN $\uparrow$ ). This is a convention from Asudeh, Dalrymple, and Toivonen (2008) which is intended to treat special semantic and pragmatic effects associated with constructions. TRIQUI-EMOTION is the name of the construction, and the @ symbol calls on a 'template' of special interpretation for the elements named in this rule. Because I am still working on understanding the semantics and pragmatics of the construction, this template is still awaiting full specification.

After the verb and subject, there must be an auxiliary (slot 4), and its aspect ( $\downarrow$ ASP) must be equal to the aspect of the main verb. After the auxiliary, there must be a pronoun or proper noun (Det) in slot 5 , and its INDEX must be equal to that of the SUBJ (slot 2). The pronoun must satisfy this constraint on its index value, but otherwise does not contribute to the feature structure of the sentence.

Thus the rule correctly describes all the essential features of the construction:

| Verb $_{i}$ or <br> Adjective $_{\text {i }}$ <br> [ from a <br> particular set of <br> predicates] <br> causes a subtle semantic effect | Full <br> NP/DP/QP ${ }_{j}$ <br> [can be conjoined, relativized, quantified, negated, etc.] | $\mathrm{Aux}_{\mathrm{i}}$ <br> [must match aspect of $V$ or Adj] | Det $_{j}$ <br> [Pronominal copy of the subject, If the subject is a proper NP, it can be repeated] | CaseP/NP <br> [the verb must have an object] |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & (\mathrm{V} \mid \text { Adj })\left(\mathrm{N}^{0}\right) \\ & \uparrow=\downarrow \quad \uparrow=\downarrow \\ & \text { [EMOTION }+] \\ & \text { @TRIQ- } \\ & \text { EMOT(PRED FN } \uparrow \text { ) } \\ & \hline \end{aligned}$ | $\begin{aligned} & \mathrm{NP} \\ & (\uparrow \text { SUBJ })=\downarrow \end{aligned}$ | $\begin{aligned} & \uparrow=\downarrow \\ & \downarrow A S P=\uparrow A S P \end{aligned}$ | Det $\downarrow I N D E X=\uparrow S U B J \text { INDEX }$ | $\begin{aligned} & \{\text { CaseP } \mid \mathrm{NP}\} \\ & (\uparrow \mathrm{OBJ})=\downarrow \end{aligned}$ |

### 6.5 Comparison to other languages

Viewed in this light, the Copala Triqui construction is in the continuum of other repetitive and reduplicative constructions. It repeats the initial V SUBJ in reduced form as Aux Pro to achieve a subtle semantic effect which was probably emphatic in origin.

We might compare it to English construction with similar Aux Pro repetitions like 30 John loves syntax, he does / \%John loves syntax, does he / John loves syntax, does he? where there are similar constraints of identity of tense and coreference between parts of the main sentence and the tag. Triqui is similar to English, but with a "internal tag".

Copala Triqui also seems within the range of reduplicative constructions, where what we have is not full repetition of the verb and subject, but partial reduplication of aspectual and index values within the sentence. ${ }^{11}$

## 7 References

Asudeh, Ash; Dalrymple, Mary; and Ida Toivonen. 2008. Constructions with lexical integrity: templates as the lexicon-syntax interface. In Miriam Butt and Tracy Holloway King (eds). Proceedings of of the LFG08 Conference. CSLI Publications. http://cslipublications.stanford.edu/.

Broadwell, George A; Matsukawa, Kosuke; Martín del Campo, Edgar; Scipione, Ruth,; and Susan Perdomo (eds). (2009). The origin of the sun and moon: A Copala Triqui legend (Román Vidal López, narrator). Munich: Lincom Europa.

Broadwell, George A. (2012) Un método para añadiro textos religiosos rápidamente a un base de datos lingüístico: un estudio del triqui de copala. Coloquio sobre Lenguas Otomangues y Vecinas (COLOV), Oaxaca, Mexico. April 2012. (http://www.academia.edu/1721760/Un metodo para anadir textos religiosos rapidamente a un a base de datos linguistica Un estudio del triqui de copala)

Broadwell, George A. (in progress.) Differential object marking in Copala Triqui. ms.

[^6]Dahl, Osten (2001). Inflationary effects in language and elsewhere. In Joan Bybee and Paul Hopper (eds.) Frequency and the Emergence of Linguistic Structure, Amsterdam: John Benjamins. pp. 471-480.

Ghomeshi, Jila; Jackendoff, Ray; Rosen, Nicole; \& Russell, Kevin. (2004). Contrastive focus reduplication in English (the salad-salad paper). Natural Language \& Linguistic Theory, 22, 307-357.

Hollenbach, Barbara E. 1976. Tense-negation interplay in Copala Trique. International Journal of American Linguistics 42:126-32.

Hollenbach, Barbara. 1984a. The phonology and morphology of tone and laryngeals in Copala Trique. Ph.D. thesis, University of Arizona.

Hollenbach, Barbara E.. 1992. A syntactic sketch of Copala Trique. Pages 173-431 in C. Henry Bradley and Barbara E. Hollenbach, editors. Studies in the syntax of Mixtecan languages, Volume 4. (Summer Institute of Linguistics and the University of Texas at Arlington Publications in Linguistics 111.) Dallas: Summer Institute of Linguistics and the University of Texas at Arlington.

Hollenbach, Barbara. 2004. Gramática popular del triqui de Copala. ms. (Posted at http://www.sil.org/~hollenbachb/Posted.htm)

Hollenbach, Barbara. 2005 Vocabulario preliminar de triqui de San Juan Copala, Oaxaca. ms. (Posted at http://www.sil.org/~hollenbachb/Posted.htm)

Matsukawa, Kosuke. 2012. Phonetics and phonology of Chicahuaxtla Triqui tones. Ph.D. thesis, University at Albany. http://gradworks.umi.com/3517280.pdf\#search = 'kosuke + matsukawa.

Scipione, Ruth 2010. Phonetic adaptations of Spanish loanwords in Copala Triqui. Ph.D. thesis. University at Albany.

Vidal-Lopez, Román. (2012). Naną naguan' rihaan nij síi chihaan' / Consejos para la gente Triqui / Words of counsel for the Triqui people. Edited by George A Broadwell, Ashley LaBoda, Sharone Horowit-Hendler, and Gabriela Aquino Dehesa. IMS Occasional Publication No. 16. Albany NY: University at Albany.

## 8 Orthographic and glossing conventions

The orthography used in this paper is based on the practical orthography developed by Barbara and

Bruce Hollenbach of the Summer Institute of Linguistics for their translation of the New Testament. We follow their usage in the representation of the consonants, including the following conventions: $\langle\mathrm{x}\rangle=[\mathrm{S}],\langle\mathrm{xr}\rangle=$ [s] (a retroflex alveopalatal sibilant), $\langle\mathrm{ch}\rangle=[\mathrm{t}],\langle\mathrm{chr}\rangle=[\mathrm{ts}],\langle\mathrm{c}\rangle=$ [k] (before front vowels), <qu> = [k] before back vowels, [v] = [ $\beta$ ] and $<\mathrm{j}>=[\mathrm{h}] .<\mathrm{Vn}>$ represents a nasalized vowel. Trique has five level tones $(1,2,3,4,5)$ and three contour tones (13, 31, 32), as discussed in Hollenbach (1984). There are two orthographies - a popular orthography used in most publications intended for Triquis (which shows the five most important tonal distinctions) and the linguistic orthography with full tone marking. Most of the texts in the corpus (and nearly all the examples in this paper) are in the popular orthography and are presented in this paper in their original spelling, along with my "reconstituted" version of what the corresponding full tone marking would be. The popular orthography also underrepresents some of the less important segmental phonemic contrasts (e.g. /s/ and /z/ are both spelled $\langle\mathrm{s}\rangle$ ).

Examples shown here are presented in four-line glossing, where the first line is the ordinary practical orthography of the language, then the original practical with morphological divisions, followed by full phonemic with full tonal representation with morphological divisions. The third line thus attempts to disambiguate both the segmental and tonal underrepresentations of the practical orthography. In this line I have also attempted to show both component parts of compounds that may be syntactically separated. Finally, the forth line is a standard morphological gloss.

Glosses use the following abbreviations: caus = causative, com $=$ completive aspect, decl $=$ declarative, $\mathrm{du}=$ dual, indef $=$ indefinite, $\mathrm{m}=$ masculine gender, $\mathrm{n}=$ neutral gender (used for inanimates and deities), $\mathrm{p}=$ possessed form, $\mathrm{pl}=$ plural, poss $=$ possessed, $\mathrm{pot}=$ potential aspect, $\mathrm{q}=$ question particle, rel $=$ relative marker, rep $=$ repetitive, $s \mathrm{~g}=$ singular, $\mathrm{wh}=$ interrogative.

## 9 Appendix A - The distinction between adjectives and verbs

An adjective can be used alone with a continous or completive interpretation, but requires an additional verb like $g$-ąa 'will exist' or $g$-ㅡㅡun 'will become' to host the potential aspect morphology.

| 31. 'ee rá | Mariá (ni'yadj no') | man | Juán. |
| :---: | :---: | :---: | :---: |
| love | Maria (look' she) | acc | Juan |

'Maria loves/loved Juan.'

In the potential, the verb 'become' is recruited to carry the aspect marking ${ }^{12}$
32. G-üun 'eee rá Mariá (nị'yaj no') man Juán
pot-become:Low love Maria (look':Low she) acc Juan
'Maria will love Juan.'

In contrast, verbs can be directly inflected, as follows:

| 33. Ca-'ánj rá | Mariá (ní'yaj no') | man Juán |
| :--- | :--- | :--- | :--- |
| pot-be startled:Low | Maria (look':Low she) | acc Juan |

'Maria will be startled by Juan.'
The following is a possible structure for the supporting verb:


[^7]
[^0]:    1 I extend my sincere thanks to three Copala Triqui speakers - Román Vidal López, José Fuentes, and Irma Fuentes who have helped me in in learning about this language. I also thank my current and former students Edgar Martín del Campo, Kosuke Matsukawa, Susan Perdomo, Sharone Horowit-Hendler, Ruth Scipione, and Ashley LaBoda for their help in understanding Triqui grammar. I thank Steve Wechsler, Ashwini Deo, and David Beaver and an audience at University of Texas at Austin for helpful comments on portions of this paper. Thanks are also due to Barbara Hollenbach, who graciously answered a number of questions via e-mail. The lexicon and corpus were analysed with Fieldworks Language Explorer (FLEx) version 7.2.7, SIL International, and the Copala Triqui New Testament was added to the corpus and aligned with an English translation via the Translation Editor component. I thank the support staff at SIL for their assistance with various aspects of this project.

[^1]:    2 When two parts of a compound are adjacent to each other, I give them a single gloss in the interlinear glossing. When they are separated by some other element, I repeat the gloss on each element.

[^2]:    3 However Broadwell (in progress) shows that the situation in texts is considerably more complex. Essentially, it appears that accusative marking is extremely likely for specific human objects and very unlikely for non-specific inanimate objects. However, there are also some conflicting effects from the relative animacy of subject and object that make the account more difficult to formulate.

[^3]:    4 There is one additional phonological difference; the dialect represented in the New Testament translation has ne'en for 'see', while in Mr Vidal López's dialect, it is pronounced ne'e.

[^4]:    5 Dahl cites the following case from Mandarin. For scalar predicates such as kuài 'fast', the modifier hĕn, whose traditional meaning is 'very' has become conventionalized and quasi-obligatory, and thus it is felt to be odd when omitted, signalling some special distinction. In the same way, the Copala Triqui auxiliary appears to be conventional with human objects of emotion predicates in the corpus, more notable for its rare absences.

[^5]:    8 In the practical orthography for Copala Triqui, $/ \mathrm{k} /$ will be written $<\mathrm{c}>$ before back vowels and $<$ qu $>$ before front vowels. The vowel that follows $/ \mathrm{k} /$ is not synchronically predictable. For vowel-initial monosyllabic stems, the prefix is $/ \mathrm{g}$-/ instead of $/ \mathrm{k}-/$.

[^6]:    11 There are some approaches to syntactic reduplication in the generative literature, but all that I am aware of involve full repetition and are achieved via movement of constituents to the left (e.g. Ghomeshi et al 2004). Verb + subject should not be a constituent in anyone's theory. The reduplicant is also to the right of the base in Copala Triqui. Both of these seem like enormous obstacle to movement as a plausible approach to the Copala Triqui construction.

[^7]:    12 Some adjectives idiosyncratically prefer the verb vaa 'exist' or nuu 'put' as their aspect carrier.

