The Emergence of Accusative Case in Copala Triqui

George Aaron Broadwell University of Florida

1. Introduction

1.1 Copala Triqui transitives

Copala Triqui (TRC) is an Otomanguean language, originally from Oaxaca, Mexico. Our research group, the Albany Triqui Working Group, has been working with members of the Copala Triqui community in the Albany NY area since 1998 to produce a dictionary, videos, a phone app and literacy materials.¹

We have also been working to understand the grammar of this language, and in particular its morphosyntax. The language has an accusative case particle *man* which occurs with transitive predicates in examples like (1) and (2).² As these examples show, Copala Triqui is a VSO language, and the accusative particle is obligatory for a pronominal object (1) and optional for a non-pronominal object (2).

- (1) Racuíj Juán man/*Ø no' help Juan acc/*Ø 3:f:s 'Juan helped her.'
- (2) Racuíj Juán man/Ø Mariá help Juan acc/Ø Maria 'Juan helped Maria.'

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. I follow their usage in the representation of the consonants, including the following conventions: $\langle x \rangle = [\int]$, $\langle xr \rangle = [g]$ (a retroflex alveopalatal sibilant), $\langle ch \rangle = [tf]$, $\langle chr \rangle = [tg]$, $\langle c \rangle = [k]$ (before front vowels), $\langle qu \rangle = [k]$ before back vowels, $[v] = [\beta]$ and $\langle j \rangle = [h]$. $\langle Vn \rangle$ 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. This paper uses the less cumbersome popular orthography, which is detailed enough to show the relevant morphological distinctions of the language.

This paper uses the following abbreviations 1 = first person, 2 = second person, 3 = third person, acc = accusative, an = animal, com = completive, dat = dative, dec = declarative, du = dual, f = feminine, indef = indefinite, m = masculine, neg = negation, negative, parag = paragraph, p = plural, pl = plural, pot = potential aspect, q = question particle/marker, rel = relative, s = singular.

¹I extend my sincere thanks to several Copala Triqui speakers – Román Vidal López, José Fuentes, Irma Fuentes, Jesús Fuentes, and Monica deJesus Ramírez – who have helped me in in learning about this language. I also thank the other members of our research group (Lauren Clemens, Rebecca Dinkel, Walter Little, Jamilläh Rodriguez, and Michael Stoop) for their assistance in investigating Triqui grammar. Thanks are also due to Martina Martinovic, Brent Henderson, Marcin Dadan, Brook Lillehaugen, and Eric Potsdam, and two anonymous referees for discussion of the facts in this paper.

²I refer here to the *man* which marks accusative as a case-marking particle, without making a commitment to its part of speech. As argued in 3, case in Copala Triqui may also be marked by a homophonous preposition *man*.

Copala Triqui also allows SVO order, and the pattern for accusative particle is the same -- obligatory for a pronominal object (3) and optional for a non-pronominal object (4).

- (3) Juán racuíj man/*Ø no' Juan help acc/*Ø 3:f:s 'Juan helped her.'
- (4) Juán racuíj man/Ø Mariá Juan help acc/Ø Maria 'Juan helped Maria.'

Copala Triqui also has a homophonous noun *man*, meaning 'body', as in (5).

(5) A'ngaj man Juán. hurt body Juan 'Juan's body hurts.'

A homophonous preposition *man* is used before the recipient with a number of ditransitive verbs such as *rqué* 'give', as in (6) and (7). For expository purposes, we can call this 'dative *man*'.

- (6) Rqué so' sa'anj [man gringó] give 3:m:s money dat gringo 'He gave money to the gringo.'
- (7) Rqué so' sa'anj [man so'] give 3:m:s money dat 3:m:s 'He gave money to the him.'

It is possible for a sentence to have both the accusative particle and the dative preposition man

(8) Narqué 'unj man Becky man nii no' return 1:s acc Becky dat mother 3:f:s 'I returned Becky to her mother.'3

I argue in this paper that the noun 'body', the accusative particle, and dative preposition *man* are synchronically three different parts of speech in modern Copala Triqui, as spoken by our consultants. However, in earlier recorded Copala Triqui (from about 1965-75), we find somewhat different grammatical patterns, and I will argue that in earlier Copala Triqui, the accusative particle and dative preposition *man* were not yet distinct. Thus, a distinct accusative case particle appears to have emerged out of a dative preposition in about the last sixty years. It is thus a contemporary example of a diachronic path from adposition to case-marker which has been proposed for several other languages.⁴

³Our speaker suggested a context of daycare center, where the staff return children to their parents at the end of the day.

⁴See for example the Latin topicalizing preposition *ad* 'with regard to' which has evolved to a case-marking preposition in modern Spanish Pensado (1995), Torrego Salcedo (1999), inter alia.

1.2 Prior research on the diachrony of datives and accusatives

The question of theoretical interest is how a language without overt case marking develops a case marker. Copala Triqui is one of three languages in the Triqui subgroup, and the other two members (Itunyoso and Chicahuaxtla Triqui) lack any accusative marker. Thus, it is reasonable to assume that Proto-Triqui (spoken perhaps 1000 years B.P.) had no accusative and Copala Triqui has developed overt case marking.

The literature of the origins of case systems identifies a few known pathways, as discussed in Blake (2001).

- Serial verb constructions, where verbs like 'give' are reanalyzed as dative [Heine et al (1991) for Ewe] or verbs like 'take' are reanalyzed as instrumental or accusatives cases. [Lord (1982:286-8) for the language Gã].
- Nouns of position or relationship are reanalyzed as various local cases. For example in the Finnic language Komi-Permiak, the noun *vyv* 'top' is the historical source of five cases (superlative, sublative, superessive, superterminative, and perlative) Austerlitz (1980:237). In many languages, body part terms such as 'mouth', 'face', 'heart' are the diachronic sources of case markers.

The Triqui diachronic development is an example of the second pathway, body part term to case marker.

Some parts of this diachronic development as discussed in prior work on Copala Triqui by Barbara Hollenbach. For example, writes of sentences like (1) and (2), "A personal object is often marked by *man* 'body of', and a pronominal object always is." (Hollenbach 1992:187). However, this quote seems to claim that the *man* which precedes the object is a noun meaning 'body'. Her more recent work lists *man* as a preposition (Hollenbach 2008:132) or as a preposition and a noun (Hollenbach 2015:152).

However, Hollenbach's analysis has never distinguished between prepositional and case-marking uses of *man*, and no prior research has identified three different kinds of *man*. I will argue in this paper that understanding the three different parts of speech involved is important to understanding the historical development.

1.3 Three kinds of man

Contemporary Copala Triqui has three distinct readings for man, which I argue are:

- 1. A **noun** meaning 'body'
- 2. A case marker for accusative
- 3. A **preposition** appearing before datives.

Although these three kinds of man are phonologically identical, they show quite different syntactic behavior. They can be distinguished by four properties:

- 1. Optionality in-situ. Only the case marker man can be omitted before an in-situ NP
- 2. Pied-piping. Only the **noun and the preposition** can be pied-piped.
- 3. Stranding. Only the **preposition** shows unrestricted stranding.⁵
- 4. Omission before a gap. Only the **case marker and the preposition** man can be omitted before a gap.

The following table summarizes these facts.

	Optionality in-situ	Can be pied- piped	Can be stranded	Can be omitted in extraction
man 'body'	no	yes	for some speakers	no
ordinary noun	no	yes	for some speakers	no
man 'accusative'	yes	no	no	yes, obligatory
man 'dative'	no	yes	yes	yes, optional
ordinary preposition	n no	yes	yes	yes, optional

Table 1

In 2, I discuss the first criterion, omission in situ. In section 3, I discuss contexts in which the dative appears. In section 4, I discuss the second and third criteria, pied-piping and stranding. And in section 5, I discuss the fourth criterion, optionality in extraction.

2. Conditions on the use of the accusative

As stated above, in elicitation contexts, the accusative is obligatory for a pronominal object and optional for a non-pronominal object.

- (9) Racuíj Juaná man/Ø Mariá help Juana acc/Ø Maria 'Juana helped Maria.'
- (10) Racuij Juaná man/*Ø no' help Juana acc/*Ø 3:f:s 'Juana helped her.'

However, there are a few cases where the accusative is either obligatory or strongly preferred. In all of these cases, it may be that the function of the accusative is to reduce ambiguity as to the subject and object of the transitive verb. There are two subcases. The first is when subjects are extracted. The second is when the animacy of the subject is equal to or lower than that of the object.

⁵This contrast is discussed in more detail in 4.4.

2.1 Accusative and subject extraction

If the subject is extracted and the animacy of the subject is equal to or lower than that of the object, then the object must be preceded by the accusative.

Contrast subject and object extraction in (11) and (12). As these examples show, when the object is extracted in (11), there is no accusative and the NP which follows the verb must be interpreted as the subject of the verb. When the subject is extracted in (12), then the object must be preceded by the accusative.

```
(11) Me sií ticavi' Juan?
who kill Juan
'Who did Juan kill?' (*'Who killed Juan?')
```

```
(12) Me síí ticavi' man Juán?
who kill acc Juan
'Who killed Juan?'
```

If the accusative is omitted, then speakers interpret the sentence as showing object extraction instead of subject extraction.

```
(13) *Me síí ticavi' Juán?
who kill Juan
*'Who killed Juan?' (OK as 'Who did Juan kill?')
```

Similar facts are seen in relative clauses. Note that in (14a) and (15a), the inclusion of the accusative leads to an interpretation of the example as subject extraction. If the accusative is omitted, then speakers interpret the examples as object extraction, even when this yields implausible results, as in (15b).

```
(14) a. [Chii se que-ne'e man Mariá]RelCl a'nga' man rel com-see acc Maria laugh 'The man who saw Maria laughed.'
```

```
b. [Chii se que-ne'e Mariá]<sub>RelCl</sub> a'nga'
man rel com-see Maria laugh
'The man who Maria saw laughed.' (*'The man who saw Maria laughed.')
```

```
(15) a. Nij so' tiguij xe'e man [chuvee se chan' [___] man Mariá.]RelCl 3:m:p kick acc dog rel bite [gap] acc Maria 'They kicked the dog that bit Maria.'
```

```
b. Nij so' tiguíj xe'e man [chuvee se chan' Mariá [___].]<sub>RelCl</sub> 3:m:p kick acc dog rel bite Maria [gap] 'They kicked the dog that Maria bit.'
```

If the subject outranks the object in animacy or the semantics of the verb make the subject and object unambiguous, then the accusative may be omitted before the object in subject extraction. Thus in (16), there is no accusative before *sa'anj* 'money', since its lower animacy makes it clear that it must be the object of the verb.

```
(16) xnii naru'vee sa'anj rihaan chana [Hollenbach (2008:67)] boy return money to woman 'the boy who returned the money to the woman'
```

The obligatory use of the accusative in instances of subject extraction seems clearly to function as a way of reducing ambiguity in transitives.

2.2 Accusative preference and animacy

A related case is found when the subject and object are equal in animacy and the semantics of the verb allow either to potentially be interpreted as subject.⁶ In such cases, some speakers report that omission of the accusative is 'confusing'. See (18) for an example of this judgment.

- (17) Chan' chuvee man Maria [Notes 3:54] bite dog acc Maria 'The dog bit Maria.'
- (18) ?Chan' chuvee Maria [Notes 3:54] bite dog Maria 'The dog bit Maria.'

Some speakers also say that it sounds odd to omit the accusative in examples like (20), where there is an inanimate subject and object.

- (19) Tucuxra' ra'a chruun man xruj [Notes 5:99] break branch tree acc pot 'The tree branch broke the pot.'
- (20) ?Tucuxra' ra'a chruun xruj [Notes 5:99] break branch tree pot 'The tree branch broke the pot.'

However, these judgments are variable; other speakers accept (18) and (20).

Thus, the judgments for obligatory use of man differ for the sentences discussed in 2.1 and 2.2. The ambiguity created by subject extraction requires accusative marking for all speakers. Some speakers also prefer to use the accusative in cases where the subject's animacy is equal to or lower than the object's animacy.

Linguistic Discovery 17.2:1-20

⁶A verb-initial sentence is not truly ambiguous, since VSO is grammatical and VOS is ungrammatical. Nevertheless, some speakers still report that they find sentences of the kind in (18) 'confusing' and add the omitted *man*.

2.3 Accusative marking in discourse

While accusative is usually judged optional in elicitation, natural discourse follows some familiar patterns from research on differential object marking (discussed in Aissen (2003), Bossong (1991) inter alia).

In order to gain a better understanding the occurrence of overt accusative marking, I annotated a sample of approximately 1,240 clauses from Copala Triqui folkloric texts. The corpus contained 217 transitive clauses with overt objects. Of these clauses, only 41 (18.9%) show an overt accusative. Categorizing the clauses by type of direct object reveals clear preferences in the use of the accusative. The major factors appear to be animacy, pronominal status, and specificity.

The examination shows that accusative marking is clearly sensitive to the pronominal and animate status of the object, with both kinds of objects far more likely to be marked. Of the 17 animate pronominal objects, 100% have overt accusative marking, confirming the results of elicitation and previous literature. Below is an example from the corpus showing the accusative with an animate pronominal object:

(21) Ca-taj no' nij xnii ne qui-'yaj soj chrúún man so' com-tell 3:f:s pl boy and pot-do 2:pl stove acc him 'She told the boys, "Put him in an oven!" [Broadwell et al. (2009:line 72)]

Inanimate or non-human pronominal objects, however, show different behavior in elicitation. Our consultants find the use of the accusative before yo' 'it, that' to be optional in sentences like the following.

(22) Mariá ri'yanj nee ne 'unj chá man/Ø yo'.

Maria cook meat and 1:s eat acc/Ø it

'Maria cooked meat and I ate it.'

While this is the judgment in elicitation tasks, the corpus does not show a clear example of this sort. Instead, the majority of inanimate pronominal objects are null in the text. Our corpus contained 13 inanimate or non-human objects, and all were null. (23) shows an example of the kind of non-human null object found in Copala Triqui discourse. Here the two italicized locations show null pronouns referring to the objects of the verbs 'search for' and 'eat'. In context, the null pronoun is understood to refer to insects.

(23) Nii, dan me se chee xo' nano' xo' (pro) chá xo' (pro) a. night new:parag go 3:an search:for pro 3:an eat 3:an pro dec 'At night it (the bat) goes and searches for (them) and eats (them).' [Animals 3:6]

Animacy is also important for non-pronominal objects. While animate objects are frequently accusative, inanimate objects very rarely occur with an overt accusative. Of 139 inanimate objects, only 2 (1.44%) have an overt accusative marker, while the remainder (97.84%) are unmarked.

2.4 Accusative summary

For the purposes of this paper, the most important generalization about the accusative case-marker can be summarized as follows:

Case-marking rule

Accusative *man* is optional, except a.) when the object is an animate pronominal, or b.) when the subject is extracted and the subject is equal to or lower than the object in animacy.

In contrast to the accusative, the noun man 'body' cannot be deleted

```
(24) a. Tu'n\underline{a}\underline{a} \ man \ so'. [Notes 6:95] itchy body 3:m:s 'He is itchy.'

b. *Tu'n\underline{a}\underline{a} \ so'. itchy 3:m:s
```

Nor can the dative *man* be deleted:

'Who is itchy?'

(25) *Mariá g-o' xto' man/*Ø ne'ej* Maria com-give kiss dat/*Ø baby 'Maria kissed the baby.'

3. Dative man

As stated above, the dative *man* is used before the recipient with a number of ditransitive verbs such as *rqué* 'give', as in (26).

(26) Rqué so' sa'anj [man gringó] give 3:m:s money dat gringo 'He gave money to the gringo.'

The verbs that allow this dative include

- a.) verbs of transfer such as *rqué* 'give' (usually to 1st or 2nd person recipient), o' 'give' (usually to 3rd person recipient), *narqué* 'return', *nago'* 'deliver, return to its original owner'⁷
 - b.) verbs of causation like *naqui'yaj* 'make', as in examples like (27):
 - (27) naqui'yaj Jesucristó na vinó man na [John 2:1] make Jesus Christ wine dat water 'Jesus made wine out of water.'
- c.) a few verbs that take equative complements such as *tucu'náj* 'call (someone by a name)', in examples like (28):⁸

_

⁷Although the difference between the two verbs for give *o'* and *rque'* is usually based on the person of the recipient, there are some complex issues involving point of view with these verbs which are outside the scope of this paper. ⁸Note that Copala Triqui and English have different orders for the objects in equative contexts. The Copala Triqui in (28) is literally 'and Jesus called Peter to him'.

- (28) ne tucu'nájº Jesucristó Pedró man so' a [Luke 6:14] and call Jesus Peter dat 3:m:s dec 'and Jesus called him Peter.'
 - d.) a few verbs of deprivation such as 'yaj ituu 'steal', as in (29):
- (29) qui-'yaj ituu súi ituu rasuun man tucuá so' [Luke 12:39] com-steal thief thing dat house:of 3:m:s 'The thieves stole things from his house.'
 - e.) a few verbs of position and placement, such as axríj..taga' 'put in jail', as in (30):
- (30) ne caxríj nij so' taga' man roj so' 'o yan' a [Acts 4:3] and com-put pl 3:m:s jail dat du 3:s one night dec 'And they put them in jail for the night.'
 - f.) a few idioms with double objects. One such idiom is o'...xto' 'give a kiss', seen in (31):
- (31) *Mariá g-o'* xto' man ne'ej Maria com-give kiss dat baby 'Maria kissed the baby.'

A generalization about all the types of verbs which appear with dative *man* is that they have a subcategorization like the following: $\langle NP_{\text{[subject]}} | NP_{\text{[object]}} | P_{\text{P}} | man NP_{\text{[object]}} | >$.

4. Filler-gap constructions

Many of the syntactic criteria that distinguish the three types of *man* from each other rely on filler-gap constructions. Copala Triqui has several such constructions in which noun phrases and prepositional phrases have been dislocated from their positions after the verb. This can happen through Topicalization, Wh-movement, relative clauses, and Neg-fronting.

In this paper, I will only illustrate two of these filler-gap constructions: Wh-movement and relative clauses. Wh-movement obligatorily displaces NPs and PPs to a clause-initial position, leaving a gap. ____ shows the expected postverbal position for the subject:

- (32) Me síí c-aráán [___] chrej rihaan soj? [Gal 5:7] who com-prevent [gap] road to 2:pl 'Who blocked your road?'
- (33) canó nij rasuun chi'<u>ii</u> chéé [___] rihaan chumi<u>i</u> [Vidal Lopéz (2011:44:1)] all pl thing bad move [gap] to world 'all the bad things that happen in the world'

This is fairly simple for the extraction of the subject. However, there are multiple complications for the extraction of other constituents, as discussed in the sections that follow.

Linguistic Discovery 17.2:1-20

4.1 Objects in filler-gap constructions

The normal way to question an object is to front the NP without any accusative marker.

```
(34) Me sií ticavi' Juán [__]? who kill Juan [gap] 'Who did Juan kill?'
```

The wh-word is not normally preceded by the accusative marker: 10

```
(35) [(*?Man) me sii]<sub>NP</sub> ticavi' Juan?
(acc) who kill Juan
'Who did Juan kill?'
```

Also ungrammatical is pied-piping with inversion:

```
(36) [*Me sii man]<sub>NP</sub> ticavi' Juan?
who acc kill Juan
'Who did Juan kill?'
```

The accusative is also not stranded in wh-questions.

```
(37) [Me sii]<sub>NP</sub> ticavi' Juan (*man)?
who kill Juan (*acc)
'Who did Juan kill?'
```

Similar patterns are seen in relative clauses. Consider again the following examples (repeated from (15) above), where relativization of the object is accompanied by omission of the accusative in (38b):

```
(38) a. Nij so' tiguij xe'e man [chuvee se chan' [___] man Mariá.]RelCl 3:m:p kick acc dog rel bite [gap] acc Maria 'They kicked the dog that bit Maria.'
```

```
b. Nij so' tiguíj xe'e man [chuvee se chan' Mariá [___].]<sub>RelCl</sub> 3:m:p kick acc dog rel bite Maria [gap] 'They kicked the dog that Maria bit.'
```

Thus the general pattern for objects in filler-gap constructions is omission of the accusative marker. Although we have no volunteered or textual examples of the accusative before an object gap in contemporary Copala Triqui, in 6.2 we show that older texts do show this pattern and contemporary speakers accept constructed examples of this type.

Linguistic Discovery 17.2:1-20

¹⁰On this point, I have slightly varying judgments. Some speakers judged these sentences as bad, others as unusual but possibly acceptable. This type of sentence has, so far as I can tell, never been volunteered as a translation of English or Spanish sentences with a questioned object.

4.2 Prepositions in filler-gap constructions

When the questioned element is the object of a preposition, we see two possibilities. Prepositions can be stranded (40) or pied-piped (followed by inversion) (41).¹¹

- (39) Ca-taj Juán nana yo' rihaan José com-say Juan word that to Jose 'Juan said that word to Jose.'
- (40) Me se ca-taj Juán nana yo' rihaan [__] who com-say Juan word that to [gap] 'Who did Juan said that word to?'
- (41) [Me se rihaan] PP ca-taj Juán nana yo' [__] who to com-say Juan word that [gap] 'To whom did Juan said that word?'

Relative clauses only show the stranding option, as seen in (42) and (43).

- (42) Che'é dan inanj [snó'o ne a'mii chree nii because:of:that only man neg speak bad indef che'é [___]]_RelCl g-uun sú chij about [gap] pot-become leader 'Because of that, only a man who no one speaks badly about will become leader.' [1 Tit 3:2]
- (43) *Veé dan ne maan* [quili' man ni'yó xráá [___]]RelCl c-a'néé afterwards only cactus:fruit exist spine on [gap] com-put:inside tucuya rá tu'va chunee rabbit in mouth:of fox 'Afterwards the rabbit only put tunas with spines (lit. tunas that spines existed on) in the fox's mouth.' [Fox and rabbit, line 12]

4.3 Dative man in filler-gap constructions

Recall from our previous discussion that man is also used before the recipient with a number of ditransitive verbs such as $rqu\acute{e}$ 'give' and o' 'give'. The following examples (repeated from (6) and (25)) show this dative man.

¹¹Pied-piping with inversion (PPI) is an areal feature of Mesoamerican languages, as first noted by (Smith Stark 1988). In this word order, the interrogative element precedes the preposition. PPI has been explored in some detail in San Dionicio Ocotepec Zapotec (Broadwell 1999), (Broadwell 2001), in Ocotepec Mixtec (Eberhardt 1999), and in Tzotzil (Aissen 1996).

- (44) Rqué so' sa'anj [man gringó] give 3:m:s money dat gringo 'He gave money to the gringo.'
- (45) *Mariá g-o'* xto' man ne'ej Maria com-give kiss dat baby 'Maria kissed the baby.'

Although dative *man* is phonologically identical to accusative *man*, it shows surprisingly different syntactic properties. Dative *man* may be pied-piped (46a) and stranded (46b).

- (46) a. [Me sii man]_{PP} rqué so' sa'anj? who dat give 3:m:s money 'Who did he give money to?'
 - b. [Me sii]_{NP} rqué so' sa'anj man [__]? who give 3:m:s money dat 'Who did he give money to?'

In this respect, dative *man* shows behaviour identical to a preposition. Compare the judgments in (46) to the stranding (40) or pied-piping (41) options seen with prepositions.

Relativization of the object of the dative *man* shows stranding, like the patterns seen in 4.2. Consider (47) and (48).

- (47) [Ne'ej se g-o' Mariá xto' man [___]]_RelCl a'ngaa. baby rel com-give Maria kiss dat [gap] laugh 'The baby that Maria kissed laughed.'
- (48) [Xcuu se c-anó chi'ii man [___]]RelCl nari' nacuaj rá animal rel com-arrive illness dat [gap] recover 'The animal that got sick recovered' (Lit. 'The animal that illness arrived to recovered')
- 4.4 Interrogative possessors in filler-gap constructions

Nouns pied-pied with an interrogative possessor. Note that they show a wh-initial order (pied-piping with inversion):

- (49) Qui-ránj Juán tocuá Migué com-buy Juan house Mike 'Juan bought Mike's house.'
- (50) [Me se tocua]_{NP} qui-ránj Juán [__] who house com-buy Juan [gap] 'Whose house did Juan buy?'

Some speakers also allow extraction of just the possessor, stranding the noun. 12

```
(51) Me se tacavi' Juán tinúú [__]? [Notes 2:243] who kill Juan brother [gap] 'Whose brother did Juan kill?' (Lit 'Who did Juan kill the brother of?')
```

However, most speakers prefer the pied-piped structure, and this is almost always the order which is volunteered.

```
(52) [Me se tinuu]<sub>NP</sub> tacavi' Juán [__]? [Notes 2:243] who brother kill Juan [gap] 'Whose brother did Juan kill?'
```

In contrast to relativization of subjects, objects, and objects of prepositions, Copala Triqui avoids relative clauses with a gap corresponding to the possessor of some argument (e.g. structures comparable to 'the man whose wife fell'), and thus our evidence about possessors is confined to wh-questions.¹³

The noun *man* 'body' is like other nouns in stranding or pied-piping when there is extraction of the possessor. Verbs like *tu'naa* 'be itchy' require a body part as their subject. If no more specific body part (e.g. hand, leg, head) is mentioned, then *man* serves as the subject (53).

```
(53) a. Tu'naa man so'. [Notes 6:95] itchy body 3:m:s 'He is itchy.'
b. [Me se man]<sub>NP</sub> tu'naa? who body itchy 'Who is itchy?'
c. Me se tu'naa man [__]?
```

who itchy body [gap]

'Who is itchy?'

The body part cannot be omitted for such verbs (54).

```
(54) *Tu'naa so'. [Notes 6:95] itchy 3:m:s (Intended: 'He is itchy.')
```

¹²The conditions for extraction of possessors from NPs are still under. Investigation and the judgments are somewhat variable from speaker to speaker. Some speakers seem to allow extraction only from absolutive NPs.

¹³Speakers prefer to paraphrase the sentence to avoid such gaps. Thus instead of saying 'The man whose wife fell got mad', speakers volunteered alternatives such as 'Because the man's wife fell, he got mad' or 'The woman fell and her husband got mad'.

4.5 Summary

The following table summarizes the behavior of various elements in filler-gap constructions demonstrated in this section

	Can be pied-piped Can be stranded		
man 'body'	yes ((53b))	for some speakers ((53c))	
ordinary noun	yes ((52))	for some speakers ((51))	
man 'accusative'	no ((35),(36))	no ((37))	
man 'dative'	yes ((46a))	yes ((46b))	
ordinary preposition yes ((41))		yes ((40))	

Table 2

As this table shows, *man* 'body' is exactly like ordinary nouns in its possibilities and dative *man* is exactly like ordinary prepositions. The accusative *man*, however, shows a pattern that is unlike either nouns or prepositions.

5. Preposition omission in extraction

A poorly understood phenomenon in Copala Triqui is the deletion of some prepositions before an extraction site. Consider the following examples of preposition deletion with *rihaan* 'to'.

- (55) a. *Me chang nago' Mariá ne'ej rihaan* [__] *ga?* which woman return Maria baby to [gap] q 'Which woman did Maria return the baby to?'
 - b. *Me chana nago' Mariá ne'ej rihaan* [__] *ga*? [notes 6:102] which woman return Maria baby to [gap] q 'Which woman did Maria return the baby to?'

Dative *man* is like some other Copala Triqui prepositions in that it may be deleted before a gap.

- (56) a. *Me sii* rqué so' sa'anj man [__]? who give 3:m:s money dat [gap] 'Who did he give money to?'
 - b. Me sii rqué so' sa'anj man [__]? who give 3:m:s money dat [gap] 'Who did he give money to?'

Recall that the accusative marker shows a somewhat similar pattern, but its omission is obligatory. Contrast (57) with (56).

(57) Me sií ticavi' Juán (*man)? who kill Juan (*acc) 'Who did Juan kill?'

It is not possible to delete other elements, such as nouns, before an extraction site.

- (58) Me se tacavi' Juán tinúú? [Notes 2:243] who kill Juan brother 'Whose brother did Juan kill?'
- (59) *Me se tacavi' Juán tinúú? who kill Juan brother *'Whose brother did Juan kill?' (OK as 'Who did Juan kill?')

Preposition deletion at extraction sites has also been documented in a few other languages. For example, Joseph (1980) notes that in Modern Greek, "When the target of Relativization is the object of a preposition, and the deletion strategy is employed, Greek displays an interesting added wrinkle. Greek does not tolerate preposition stranding, and when the object of the preposition is deleted, the preposition itself is deleted along with its object." This is shown by sentences like (60)

(60) o Yanis ine o anθropos pu eksartomaste [Joseph (1980:238)] John/nom is/3sg the-man/nom comp depend/ipl 'John is the man we depend on.'

Contrast this with the normal syntax of *eksartame* 'depend on, which cannot take a direct object in simple sentences, always occurring with the preposition *apo* 'from':

- (61) a. eksartomaste apo ton Yani [Joseph (1980:238)] depend/ipl from John/acc 'We depend on John.'
 - b. *eksartomaste ton Yani depend/ipl John/acc

Old English also shows cases of deletion of a preposition before an extraction site, as in Greek and Copala Triqui, as discussed in Allen (1980).

6. Comparison to older Copala Triqui

In the preceding sections, I have shown that contemporary Copala Triqui has three different types of *man* corresponding to three different part of speech categories. This is shown by the syntactic tests shown above.

However, when we look at texts collected in Copala Triqui in the last century, we find some slight differences in the patterns of the use of *man* which suggest that about sixty years ago the accusative and dative uses of *man* were not so clearly separated. The two areas where there are

detectable differences are a.) multiple instances of *man* in the same clause and b.) stranded accusatives.

6.1 Multiple instances of *man*

In contemporary Copala Triqui, the available case marking patterns for verbs of transfer are as follows:

- 1. V NP₁ [ston/rihaan NP₂]
- 2. V NP₁ man NP
- 3. V man NP₁ man NP₂

The first possibility is seen in (62).

(62) Rqué so' sa'anj [ston gringó] give 3:m:s money to gringo 'He gave money to the gringo.'

The second possibility is seen in (63).

(63) Rqué so' sa'anj [man gringó] give 3:m:s money acc gringo 'He gave money to the gringo.'

The third pattern is seen in a sentence like following (repeated from (8) above):

(64) Narqué 'unj man Becky man nii no' return 1:s acc Becky acc mother 3:f:s 'I returned Becky to her mother.'

However, although our consultants accept sentences of this third type, we have reasonably strong evidence that this pattern is innovative, and not found in older Copala Triqui.

There is a large body of texts in Copala Triqui, due to the work of Barbara Hollenbach, who published various folktales (Hollenbach 1977,1982,1988) and along with her husband Bruce Hollenbach, translated the New Testament into Copala Triqui. This work comprises a corpus of about 280,000 words.

A search of this corpus, focused on the grammar of verbs which potentially take two objects, finds no instances of such verbs followed by two instances of *man*. The great majority of the verbs which occur with the dative discussed in section 3 appear in this corpus with *man* before the second object and no overt marker before the first object. That is, nearly all the examples in the older textual material show a syntax like the following:

(65) Nago' soj nana sa' man tinúú soj [1 Thes 5:11] pot:deliver 2:p word good dat brother:of 2:p 'Deliver the good word to your (pl.) brothers.'

A small number of instances of such verbs appear with an alternative case-marking pattern, with accusative before the first object and *rihaan* 'to' before the second object. It seems to occur when the NP (theme) is forced to be accusative since it is a pronoun. In that case, the recipient is marked with *rihaan*.

```
(66) Dan me se nago=j man nij so' rihaan soj [Rev 3:9] new:parag pot:deliver=1:s acc 3:m:pl to 2:pl I will deliver them to you (pl)
```

Our contemporary speakers judged sentences like (66) as unnatural, which probably indicates a change in grammaticality. Instead, they offered alternatives like (64), which have both accusative and dative *man* in the same clause.

The fact that the older corpus contains no such examples calls for an explanation. Many languages avoid using the same adposition or case-marker more than once in the same clause, an effect often called 'Case OCP' or 'identity avoidance' in the syntactic literature. (Similar effects have been discussed in general Yip (1998), as well as specific cases in English (Ross 1972), Hindi (Mohanan 1994), and Japanese (Hiraiwa 2010, among others).

Thus, if we posit an analysis of earlier Copala Triqui in which both accusative and dative are marked by a preposition *man*, we find a natural explanation for why there is an apparent prohibition on using both accusative and dative *man* in the same clause. However, since accusative *man* is no longer prepositional in contemporary Copala Triqui, there is no prohibition in the grammar against sentences such as (64).

6.2 Stranded accusative

As discussed above, in contemporary Copala Triqui, the accusative cannot be stranded in whquestions.

```
(67) Me sií ticavi' Juan (*man)?
Who kill Juan (*acc)
'Who did Juan kill?'
```

In this respect it contrasts with the dative, which may be stranded:

```
(68) Me se me qui-'yaj Jesuchristó na vinó (man) ___ ga?

What be com-make Jesus Christ wine dat [gap] q

'What did Jesus make wine out of?'
```

However in the Copala Triqui texts of the mid-20th century, we often find instances of stranded accusatives. These are mostly confined to relative clauses, since the text corpus contains few whquestions:

```
(69) Q se mozó sij ca-nacúún Diose man [__] ca-noco' man Diose because servant rel com-call God acc [gap] pot-follow acc God Because the servant that God called will follow God [1 Cor 7:21]
```

(70) Xa' sú racuíj Nimán Diose man [___],
truly one:who help Spirit God acc [gap]
tzaj ne ne'en so' naqui'yaj cuu so' cunudanj rasuun
but know 3:m:s be:wise 3:m:s all thing
'But truly the one who the Holy Spirit helps, he knows how to be wise in all things.'
[1 Cor 2:15]

Our Copala Triqui consultants apparently never volunteer accusatives in object relative clauses, but accept constructed examples of this sort as grammatical. Consider the pair of examples in (71), where (71a) is volunteered, but the constructed example in (71b) is also accepted.

- (71) a. *Xcuu* se que-ne'e=j [___] nari'nacuaj rá animal rel com-see=1:s [gap] recover 'The animal that I saw recovered.'
 - b. *Xcuu* se que-ne'e=j man [___] nari'nacuaj rá animal rel com-see=1:s acc [gap] recover 'The animal that I saw recovered.'

The difference between contemporary Copala Triqui and that recorded in the mid-20th century texts can also be explained through the idea that in earlier Copala Triqui, the accusative was marked via a preposition *man*. Since accusative *man* was still prepositional in the early texts, stranded accusatives are just another instance of stranded prepositions.

7. Conclusion

In conclusion, this paper has attempted to demonstrate that in contemporary Copala Triqui, there are three parts of speech corresponding to the word *man*. 'Body' *man* is a noun, dative *man* is a preposition, and accusative *man* is a case marker.

The only category shared with other Triqui languages is the nominal 'body' reading, so this must be the oldest sense of the word. Mid 20th century Copala Triqui, as attested in the textual corpus, shows the grammaticalization of 'body' into a preposition used to mark both accusatives and datives. (This is the grammaticalization discussed in Hollenbach (1992:187) and Hollenbach (2015:152).)

In the speech of contemporary Copala Triqui people, however, the accusative has become a separate case marker, with a grammar distinct from that of the dative preposition. Thus the research reported here has documented the evolution of a case marker from a preposition in the decades between the mid 20^{th} century and the present.

References

Aissen, Judith. 2003. Differential object marking: Iconicity vs. economy. *Natural Language & Linguistic Theory* 21(3):435-483.

(http://link.springer.com/article/10.1023/A:1024109008573).

Aissen, Judith. 1996. Pied-piping, abstract agreement, and functional projections in Tzotzil. *Natural language and linguistic theory 14:447-491*.

- Allen, Cynthia. 1980. Movement and deletion in Old English. *Linguistic Inquiry* 11(2):261-323.
- Austerlitz, Robert. 1980. Typology and universals on a Eurasian east-west continuum. In G. Brettschneider & C. Lehmann, eds. *Wege zur Universalienforschung. Sprachwissenschaftliche Beiträge zum 60 Geburtstag von Hansjakob Seiler*. 235-44. Tübingen: Gunter Narr.
- Blake, Barry. 2001. Case. Cambridge: Cambridge University Press.
- Bossong, Georg. 1991. Differential object marking in Romance and beyond. Paper presented at the New Analyses in Romance Linguistics: Selected Papers from the XVIII Linguistic Symposium on Romance Languages, John Benjamins, Amsterdam.
- Broadwell, George Aaron. 2001. Optimal order and pied-piping in San Dionicio Zapotec. In *Formal and empirical issues in Optimality Theoretic syntax*, edited by Peter Sells. Stanford: CSLI, pp. 197-223.
- Broadwell, George Aaron. 1999. Focus alignment and optimal order in Zapotec. In *Proceedings* of the 35th Chicago Linguistics Society, pp. 15-28.
 - http://www.essex.ac.uk/linguistics/external/lfg/www-
 - $\underline{lfg.stanford.edu/pubs/papers/broadwell-1999-0602.pdf.gz}.$
- 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.
- Eberhardt, Roy. 1999. Questions and inversion in Ocotepec Mixtec. Workpapers of the Summer Institute of Linguistics, UND Session 43, paper 1.
- Heine, B; U Claudi; and F Hünnemeyer. 1991. *Grammaticalization*. Chicago: University of Chicago Press.
- Hiraiwa, Ken. 2010. Spelling out the Double-o Constraint. *Natural Language & Linguistic Theory* 28.3:723-770.
- Hollenbach, Barbara E. 1992. A syntactic sketch of Copala Trique. Studies in the syntax of Mixtecan languages 4:173-431.
 - (http://www.ethnologue.com/show_work.asp?id=92847458695).
- Hollenbach, Barbara E. 1977. El origen del sol y de la luna: Cuatro versiones en el trique de Copala. *Tlatocan* 7:123-170.
- Hollenbach, Barbara E. 1988. *Three Trique myths of San Juan Copala*. Mexico City: Summer Institute of Linguistics.
- Hollenbach, Barbara E. 1982. A Copala Trique deluge story. *Latin American Indian Literatures* 6(2):114-25. (http://www.ethnologue.com/show_work.asp?id=9284745857).
- Hollenbach, Barbara E. 2008. *Gramática popular del triqui de Copala, San Juan Copala, Oaxaca*. D.F., Mexico: Instituto Lingüístico de Verano, A.C.
- Hollenbach, Barbara E. 2015. Diccionario Triqui-Espanol y Espanol-Triqui: Triqui de San Juan Copala. (http://barbaraelenahollenbach.com/Posted.htm) (accessed 11/12/18).
- Joseph, Brian. 1980. Recovery of information in Relative Clauses: evidence from Greek and Hebrew. *Journal of Linguistics* 16(2):237-244.
- Lord, Carol. 1982. The development of object markers in serial verb languages. In Paul Hopper and Sandra Thompson. *Syntax and semantics, vol 15: Studies in transitivity*. New York: Academic Press.
- Mohanan, Tara. 1994. Case OCP: A constraint on word order in Hindi. In Miriam Butt, Tracy Holloway King, Gillian Ramchand, eds., eds. *Theoretical perspectives on word order in South Asian languages:* 185-216. Stanford, CA: CSLI.

Pensado, Carmen. 1995. La creación del complemento directo preposicional y la flexión de los pronombres personales en las lenguas románicas. In Carmen Pensado, eds. *El complemento directo preposicional*. 179–233. Madrid: Visor Libros.

- Ross, John R. 1972. Doubl-ing. Linguistic Inquiry 3:61-86.
- Smith Stark, Thomas C. 1988. 'Pied-piping' con inversion en preguntas parciales. Centro de estudios lingüísticos y literarios, Colegio de México y Seminario de lenguas indígenas Manuscript.
- Torrego Salcedo, Esther. 1999. El complemento directo preposicional. In I. Bosque & V. Demonte, eds. *Gramática descriptiva de la lengua española. Vol. 2: Las construcciones sintácticas fundamentales. Relaciones temporales, aceptuales y modales.* 1779-1805. Madrid: Espasa Calpe.
- Vidal Lopéz, Román. 2011. Nana naguan' rihaan nij sú chihaan' / Consejos para la gente Triqui / Words of counsel for the Triqui people. Albany NY: University at Albany. Albany, NY: Institute for Mesoamerican Linguistics.
- Yip, Moira. 1998. Identity avoidance in phonology and morphology. In Steven G Lapointe, Diane Brentari, and Patrick Farrell, eds., eds. *Morphology and its Relation to Phonology and Syntax*. 216-246. Stanford, CA: CSLI.