Verb Argument Structure in Copainalá Zoque

Copainalá Zoque (hereafter COP Zoque) is a Mixe-Zoquean (MZ) language spoken in the northern area of the state of Chiapas, Mexico. Copainalá is one of about 30 small towns in Chiapas where the inhabitants still speak a variety of Chiapas Zoque. Soren Wichman (1993) estimates there are currently around a thousand speakers of Copainalá Zoque.

Copainalá Zoque is sometimes refered to as Wonderly's Zoque after the SIL linguist who published a series of papers in IJAL on the language's phonology and morphology (Wonderly 1951, 1952). Several SIL dictionaries for Chiapas Zoque also exist, including Copainalá Zoque (Harrison et al. 1981; Engel & Engel 1987; Harrison & Harrison 1984). These dictionaries provide valuable phonological and morphological sketches of the languages based on Wonderly's research. While these sources provide an excellent overview of several Chiapas Zoque languages, they are far from complete.

I spent my summer this year undergoing a crash course in Copainalá Zoque as part of the Mixe-Zoque Documentation Project headed by Terrence Kaufman and John Justeson. I worked with two speakers of Copainalá Zoque: Heriberto Aguilar López and Reynaldo Estrada López in an effort to elicit as many Zoque words as possible in a two month period. From the beginning I was struck by the verb argument structure of the language, and particularly, the way in which the productive style of verb compounding affects verb argument structure. I begin by describing the basic morphology and argument structure of simple verbs in COP Zoque, proceed to a description of the use of affixes to alter verb argument structure, and end with a description of verb compounding and its effect on verb argument structure.

Verb morphology and argument structure

COP Zoque is an agglutinative language with an ergative cross-reference morphology marked on the verb. The subject NP of a transitive clause also carries an ergative case suffix *-ʔis*. COP Zoque has a split ergative morphology in that both transitive and intransitive verbs in dependent clauses use the ergative prefixes to mark the subject. I focus on verbs in root clauses in this paper, and will use the third person ergative cross-referencing morphology to highlight verb transitivity. I provide examples of the verb paradigms in 1. One aspect of the transcription system worth noting is that COP Zoque, and for that matter all Zoque languages, employes a six vowel system. Five of the vowels are similar to the vowels in Spanish, but the sixth vowel is an unrounded, tense, usually nasalized vowel that varies between a mid back and high back position (Wonderly 1951.108). I use the barred i [ɨ] to represent this sound. You should also note that the voicing assimilation and palatal metathesis evident in these paradigms are regular throughout the language. Since my focus in this paper is on the argument structure of the verbs I present verb forms in the third person form to highlight the transitivity distinctions.

1. COP Zoque verb paradigms

a. General form person-stem-aspect-subject-(object)

a. Transitive

I cure it	ndzo?yɨpya ?ɨs	[n-tzo?yɨy-pa ?ɨs Ø]
you cure it	ndzo?yɨpya mis	[n-tzo?yɨy-pa mis Ø]
s/he cures it	cho?yɨpya	[y-tzo?yɨy-pa Ø Ø]
I cure you	ndzo?yɨpya ?ɨs mij	[n-tzo?yɨy-pa ?ɨs mij]
you cure me	ndzo?yɨpya mis ɨj	[n-tzo?yɨy-pa mis ?ɨj]
s/he cures me	tzo?yɨpya ?ɨj	[Ø-tzo?yɨy-pa Ø ?ɨj]

b. Intransitive

I walk	ka?ŋba ?ɨj	[Ø-ka?ŋ-pa ?ɨj]
you walk	ngya?ŋba mij	[ny-ka?ŋ-pa mij]
s/he walks	ka?ŋba	[Ø-ka?ŋ-pa Ø]

COP Zoque employes a variety of means for altering the argument structure of its verbs. Most frequently, it allows verb stems to alternate between transitive and intransitive forms by means of a zero derivational alternation like that of English. As in English, some COP Zoque verbs become intransitive by dropping their logical subject, as in 2. Other COP Zoque verbs form intransitive stems by dropping their logical object, as in 3. This phonemonon has led members of the Mixe-Zoque Documentation Project (MZDP) to assign Zoque verbs to two basic classes: 1. an unaccusative, or T2 class, such as those shown in 2., and an unergative, or T1 class, such as those shown in 3. COP Zoque contains at least two other classes of verbs: a fixed intransitive class, or I, as in 4, and a fixed transitive class, or T3, as in 5.

2. Unaccusative or T2 verbs

a. jajku te? pama
0-jak-wɨ te? pama
3Abs-cut-COMP the clothes
'The clothes cut.'

b. ?ɨksu te? ?ɨksi
0-?ɨks-wɨ te? ?ɨks-i
3Abs-grind-COMP the shell-NOM
'The corn shelled.'

3. Unergative or T1 verbs

a. jayu te? pɨn
0-jay-wɨ te? pɨn
3Abs-write-COMP the man
'The man wrote.'

b. kɨ?spa te? tuwi
0-kɨ?s-pa te? tuwi
3Abs-bite-INC the dog
'The dog bites.'

4. Fixed intransitive or I verbs

a. saʔu teʔ yomo
0-saʔ-wɨ teʔ yomo
Abs-wake-COMP the woman
'The woman woke.'

b. miʔksu teʔ ʔuneʔ
0-miʔks-wɨ teʔ ʔuneʔ
Abs-move-COMP the child
'The child moved.'

5. Fixed transitive or T3 verbs

a. kyɨjtzu (teʔ kakawa) teʔ pɨʔnis
y-kɨtz-wɨ (teʔ kakawa) teʔ pɨn-ʔis
3Erg-drink-COMP (the chocolate) the man-Erg
'The man drank (the chocolate).'

b. ʔyisu (teʔ nyanaj) teʔ ʔuneʔs
y-ʔis-wɨ (teʔ y-nanaj) teʔ ʔuneʔ-ʔis
3Erg-see-COMP (the 3Erg-mother) the child-Erg
'The child saw (his/her mother).'

The fixed intransitive verbs require a causative prefix to produce an acceptable transitive sentence (see the examples in 6):

6. Transitive forms of fixed intransitive verbs

a. yajsaʔu teʔ ʔuneʔ teʔ yomoʔs
yaj-saʔ-wɨ teʔ ʔuneʔ teʔ yomo-ʔis
CAUSE-wake-COMP the child the woman-Erg
'The woman woke the child.'

b. yajmiʔksu teʔ kuy teʔ ʔuneʔs
yaj-miʔks-wɨ teʔ kuy teʔ ʔune-ʔis
CAUSE-move-COMP the stick the child-Erg
'The child moved the stick.'

c. yajkaʔu pɨʔnis teʔ choʔŋgoya
yaj-kaʔ-wɨ pɨn-ʔis teʔ choʔŋgoya
CAUSE-die-COMP man-Erg the rabbit
'The man killed a rabbit.'

I will admit to choosing my examples to highlight differences between COP Zoque and English. Although COP Zoque and English share a zero derivational form of the alternation between transitive and intransitive verbs, there are certain differences in which verbs participate in the alternation and whether they fall into the unaccusative or unergative verb classes.

COP Zoque does not have a productive passive unlike other Zoque languages. However, COP Zoque does not require all arguments of the fixed transitive verbs to be expressed, so the

examples shown in (5) are equally acceptable without an overt object argument.

I spent a little time this summer trying to determine if the fixed intransitive verbs could be further divided into unaccusative and unergative sets. My first discovery was that the causative prefix *yaj-* is productive semantically as well as morphologically. Verbs with the *yaj-* prefix always have a indirect causative reading. The sentence in (6a), for example, could also be translated as 'The woman made the child wake.' COP Zoque is one of those languages that uses the causative morphology with the verb 'to die' (*kaʔ*). Even the sentence in (6c) allows an indirect causative reading, i.e. 'The man made a rabbit die.' Thus, there is no semantic basis for distinguishing the typically unaccusative verbs in (6) from typically the unergative verbs in (7). There is a temptation to use the translation into English or Spanish as a basis for deciding whether a Zoque verb is unaccusative or unergative. This must be avoided in the absence of language internal evidence from Zoque.

7. Transitive forms of fixed intransitive verbs

a. yajmaŋu nyanaʔs teʔ ʔyunetaʔm
yaj-maŋ-wɨ y-nana-ʔis teʔ y-ʔuneʔ-taʔm
CAUSE-go-COMP 3ERG-mother-Erg the 3ERG-child-PL
'Their mother made her children go.'

b. yajwituʔu teʔ tyumin teʔ yomoʔs
yaj-wituʔ-wɨ teʔ y-tumin teʔ yomo-ʔis
CAUSE-return-COMP the 3ERG-money the woman-Erg
'The woman made his/her money return.'

I have tried a number of other tests as well to see if any resulted in a distinction between different classes of intransitive verbs. Table 1 shows the results of an antipassive test that I tried. Zoque speakers will accept the use of the antipassive suffix -*ʔoy* with some fixed intransitive verbs, e.g. *put* 'leave', *tɨn* 'shit', *poy* 'run', *jem* 'swim', *min* 'come', and *maŋ* 'go'. The antipassive suffix most often add the meaning of doing something at a distance. The antipassive form of the verb put 'leave' would be *puʔtoy* 'leave someplace distant'. The antipassive forms of some verbs have ideosyncratic readings such as *maʔŋoy* 'go before'. Other intransitive verbs are not acceptable with the antipassive suffix, e.g. *kaʔ* 'die', *kun* 'fall', *poʔn* 'tire', *miʔks* 'move', *siŋ* 'swell', *putz* 'rot' and *ʔaŋwaj* 'open'.

Table 1. Antipassive test with fixed intransitive verbs.

Acceptable		Unacceptable	
put	'leave'	*kaʔ*	'die'
tɨn	'shit'	*kun*	'fall'
poy	'run'	*ʔaŋwaj*	'open'
jem	'swim'	*miʔks*	'move'
min	'come'	*siŋ*	'swell'
maŋ	'go'	*putz*	'rot'
jɨy	'cry'	*poʔn*	'tire'

I have also tried a test using the applicative suffix -jay. The applicative suffix typically promotes the indirect argument of a ditransitive verb to the direct object. Zoque speakers, however, use it with fixed intransitive verbs to indicate an indirect causative reading, e.g., pyutjayu 'he/she left it', jyɨyjayu 'it made him/her cry'. Zoque speakers find the applicative suffix to be acceptable with most of the fixed intransitive verbs, so this suffix does not seem promising as an unaccusativity test.

Roberto Zavala also recommended trying a cognate object test with the fixed intransitive verbs. Unfortunately, I did not have time to try this test with more than a few of the verbs. This test looks promising, in that unergative verbs such as *cry* or *run* will allow cognate objects, e.g. 'cry a cry' or 'run a run'. If this test does separate the unergative and unaccusative verbs, then it appears that unergative verbs may be best analyzed as underlying transitive verbs. If this turns out to be the case, then Zoque would only have one class of intransitive verbs that are all unaccusative. Obviously more work is needed in this area.

I need to briefly discuss auxiliaries before turning to the verb compounds in Zoque. I provide some examples of the auxiliary construction in (8). Zoque auxiliaries form independent clauses with separate aspect and person marking. In fact, it is only the semantic interpretation of these sentences that suggests an auxiliary reading rather than a complex clausal construction. Verb compounds are distinct from the auxiliary construction in that compounds feature only one use of aspect and person marking. Compounding in Zoque also affects stress assignment. Primary stress is on the penultimate syllable while a secondary stress occurs on the first syllable. Zoque compounds alter the first syllable and thus alter secondary stress placement as well.

8. Zoque Auxiliary Constructions

a. maŋba chɨjku
maŋ-pa y-tzɨk-wɨ
go-INC 3Erg-do-COMP
'he/she is going to do it.'

b. minba chɨjku
min-pa y-tzɨk-wɨ
come-INC 3Erg-do-COMP
'he/she is coming to do it.'

c. sunba chɨjku
sun-pa y-tzɨk-wɨ
want-INC 3Erg-do-COMP

d. muspa chɨjku
mus-pa y-tzɨk-wɨ
can-INC 3Erg-do-COMP

'he/she wants to do it.' 'he/she can do it.'

I present a first set of Zoque verb compounds in (9).

9. Zoque Verb Compounds

a. ʔyujkisu
y-ʔuk=is-wɨ
3Erg-drink=try-COMP
'he/she tried to drink it.'

c. witpujtu
0-wit=put-wɨ
3Abs-walk=leave-COMP
'he/she left to walk.'

c. waʔnisu
0-wan-ʔis-wɨ wan (I) + ʔis (T) = T1
3Abs-sing=try-COMP
'He/she tried to sing.'

d. wyatkaʔmu
y-wat=kaʔm-wɨ wat (T2) + kaʔm (T2) = T
3Erg-cinch=tighten-COMP
'He/she tightened it by cinching.'

e. tzoʔtpujtu
0-tzoʔt=put-wɨ tzoʔt (T2) + put (I) = T2
3Abs-hurt=leave-COMP
'He/she left and slipped.'

f. poyeminu
0-poyeʔ=min-wɨ poyeʔ (I) + min (I) = I
3Abs-run-come-COMP
'He/she came running.'

g. tzihliŋwihtu
0-tzih=liŋ=wit-wɨ tzih (T2) + liŋ (I) + wit (I) = I
3Abs-hang=flap=walk-COMP
'It hung and flapped above.'

i. chinbuhtu
y-tziŋ=put-wɨ tziŋ (I) + put (I) = T2
3Erg-bathe=leave-COMP
'He/she bathed and left.'

j. chakwitu?u
y-tzak=witu?-wɨ — tzak (T1) + witu? (I) = T2
3Erg-leave=return-COMP
'He/she returned.'

k. tza?maŋhamu
0-tzam =maŋ=jam-wɨ — tzam (T3) + maŋ (I) + jam (T3) = T1
3Abs-say=go=remind-COMP
'He/she remembered.'

10. Adverbial Compounds

a. wyi?twitu?u
y-wi?t=witu?-wɨ — wi?t 'twist' (T2) + wi?tu? 'return' (I) = T
3Erg-twist=return-COMP
'he/she turned it again.'

b. kenwitu?u
0-ken=witu?-wɨ — ken 'see' (T1) + witu? 'return' (I) = I
3Abs-see=return-COMP
'He/she looked around.'

c. tzo?ngi?mu
0-tzo?n=ki?m-wɨ — tzo?n 'jump' (I) + ki?m 'climb' (I) = (I)
3Abs-jump=climb-COMP
'He/she jumped up.'

d. kengi?mu
0-ken=ki?m-wɨ — ken 'see' (T1) + ki?m 'climb' (I) = I
3Abs-see=climb-COMP
'He/she looked up.'

e. mingɨ?yu
0-min=kɨ?y-wɨ — min (I) + kɨ?y (T2) = I
3Abs-come=begin-COMP
'He/she began to come.'

f. tɨpki?mu
0-tɨp=ki?m-wɨ — tɨp (T1) + ki?m (I) = I
3Abs-jump=climb-COMP
'He/she jumped up.'

11. Argument Addition Compounds

a. jyɨʔmgaʔu
y-jɨʔm=kaʔ-wɨ — jɨʔm (T2) + kaʔ (I) = T
3Erg-hang=die-COMP
'he/she killed it by hanging.'

b. jyɨʔmgiʔmu
y-jɨʔm=kiʔm-wɨ — jɨʔm (T2) + kiʔm (I) = T
3Erg-hang=climb-COMP
'he/she climbed it by hanging.'

c. wyiʔtkaʔu
y-wiʔt=kaʔ-wɨ — wiʔt (T2) + kaʔ (I) = T
3Erg-twist=die-COMP
'he/she killed it by twisting (its neck).'

d. wyaskoʔtzu
y-was=koʔtz-wɨ — was (T1) + koʔtz (T2) = T
3Erg-chew=break-COMP
'He/she broke it by chewing.'

12. Argument Reduction Compounds

a. weʔnbujtu
0-weʔn=put-wɨ — weʔn (T2) + put (I) = I
3Abs-part=leave-COMP
'It parted while leaving.'

b. tzɨmwijtu
0-tzɨm=wit-wɨ — tzɨm (T1) + wit (I) = I
3Abs-carry=walk-COMP
'He/she walks everywhere with their stuff.'

c. kijpotoŋu
0-kip=ʔotoŋ-wɨ — kip (T1) + otoŋ (I) = I
3Abs-fight=speak-COMP
'He/she argued.'

I will end by noting that preliminary comparisons across the Mixe-Zoque languages reveal some fascinating differences in verb argument structures. Some of the languages, such as Oluta, have productive passive constructions, and thus, rely upon compounding to a lesser degree. There are also many differences between these languages in the transitivity of cognate verb roots.

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