

Clausal Negation as Raising in San Dionisio Ocotepc Zapotec

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1 Introduction

San Dionisio Ocotepc Zapotec (hereafter SDZ) is an Otomanguean language spoken in Oaxaca, Mexico. SDZ has VSO as its main word order.¹

- 1) ù-zìì' Juáàny tòby xhùmbrejl. VSO
 com-buy Juan a hat
 'Juan bought a hat.'
- *ù-zìì' tòby xhùmbrejl Juáàny. *VOS
 com-buy a hat Juan

In addition to this word order, SDZ also has several word orders in which some constituent precedes the verb. In one variant, a constituent precedes the verb and there is a coreferential resumptive clitic pronoun on the verb. I will call this the form of the sentence one with an **external topic (e-topic)**. For expository purposes I will translate it into English with left dislocation, without claiming that the syntax of the SDZ e-topic is precisely that of the English construction.

- 2) **Juáàny** ù-zìì'í=by tòby xhùmbrejl. e-topic
 'Juan, he bought a hat.'

In a second variant, a constituent precedes the verb, but there is no resumptive pronoun. I will label this form of the sentence one with an **internal prominent**

¹ SDZ is an Otomanguean language spoken in San Dionisio Ocotepc, Oaxaca, Mexico by 2,000 - 3,000 people. Special thanks to Luisa Martínez, who provided all the SDZ data.

The orthography for SDZ is adapted from the practical orthographies for other Zapotec languages spoken in the Valley of Oaxaca. In the SDZ orthography symbols have their usual phonetic values, with the following exceptions. <x> = /ʒ/ before a vowel and /ʃ/ before a consonant, <xh> = /ʃ/, <dx> = /dʒ/, <ch> = /tʃ/, <c> = /k/ before back vowels, <qu> = /k/ before front vowels, and <rr> = trilled /r/. Doubled vowels are long. SDZ is a language with four contrastive phonation types: breathy <Vj>, creaky <V'V>, checked <V'>, and plain <V>.

Glosses use the following abbreviations: a=animal, aff= affirmative, cer = certainty, com = completive aspect, con = continuative aspect, cs = causative, def = definite future aspect, dem = demonstrative, foc = focus, hab = habitual aspect, neg = negative, p = possessed, plur = plural, pot = potential aspect, q = question, r=respect, ref=reflexive, rel = relative, stat= stative aspect, top=topic.

constituent (**i-prom**).

- 3) **Juáàny** ù-zì' tòby xhùmbrejì. i-prom
'Juan bought a hat/It was Juan who bought a hat.'

The element in i-prom position is often the focus of the sentence, but focus doesn't seem to be the only possible discourse function associated with this position. Other linguists working on Zapotec, e.g. Lee (1999), Black (2000) have called this the focus position. This may very well be correct in other Zapotec languages, but it does not seem to be correct for SDZ. In some examples, it appears to be simply be the subject. Consider these examples, where the subjects of meteorological and idiomatic verbs appear in the i-prom position with no special discourse context.

- 4) Cà-nì' gùzì'w
con-speak thunder
'It is thundering.'
- ✓Gùzì'w cá-nì' i-prom
*Gùzì'w cá-nì'=ní e-topic
- 5) Nù'ú tó'p íicy Juáàny.
exist white:hair head Juan
'Juan has white hair.'
- ✓Tó'p nù'ú íicy Juáàny. i-prom
white:hair exist head Juan

In this cases, the element in the i-prom position hardly seems to be new information. It is nor is it easy to see how 'thunder' is understood to contrast with a presupposition that something else is speaking or that 'white hair' exists on John's head in contrast to other things.

We also see cases where the phrase in the i-prom position shows properties more typically associated with topics.

- 6) Q: ¿Xhíí ù-zíí' Móòny?
what com-buy Ramón

‘What did Ramón buy?’

- ✓A: Mòòny ù-zíí’ tòby líbrr.
Ramón com-buy a book
- ✓A: Tòby líbrr ù-zíí’ Mòòny.
a book com-buy Ramón
- #A: Ù-zíí’ Mòòny tòby líbrr.
com-buy Ramón a book
‘Ramón bought a book.’

In this first answer to this question, *Mòòny* appears in the i-prom position. The definition of topic and focus is controversial (Lambrecht 1994, Polinsky 1999, and others), but on nearly all definitions, a constituent X is a focus if the sentence containing X is a felicitous response to a question that replaces X with an interrogative.

I have argued in Broadwell (2001, 2005a) that the overall organization of the clause SDZ is as follows:

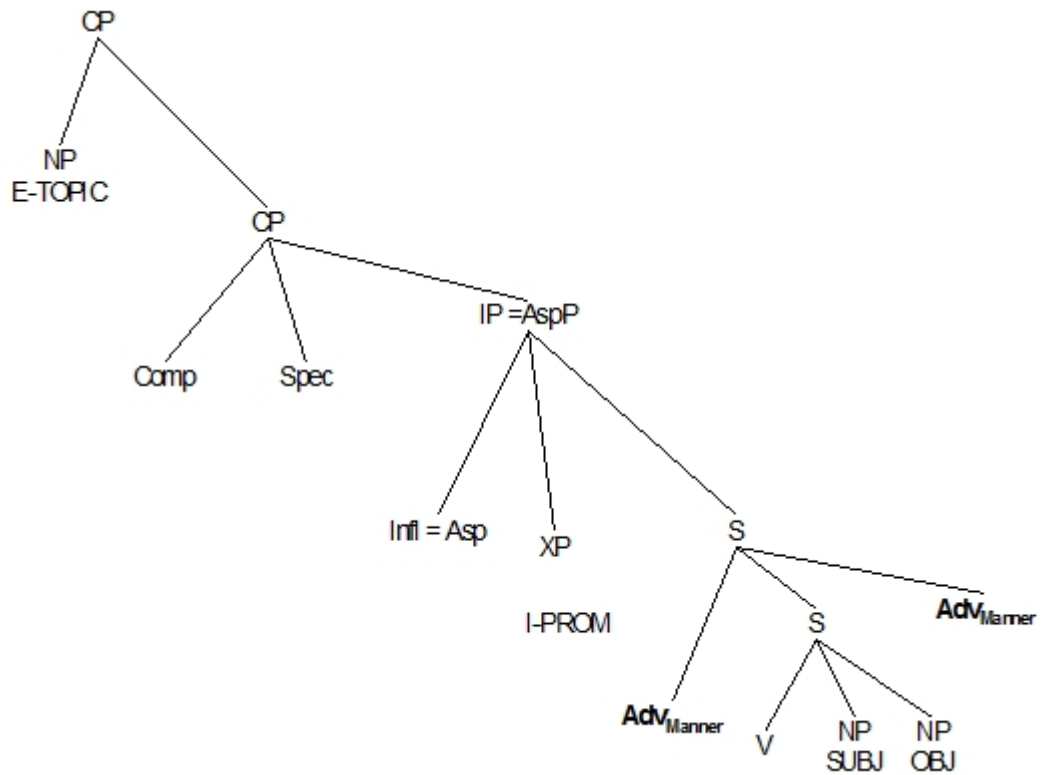


Figure 1 Partial clause structure of San Dionisio Ocotepéc Zapotec

In this structure, we can see that there is a class of manner adverbials which adjoins to S. The position of this adverb is very useful in identifying the left edge of the S constituent. Another point about this structure is that main verbs usually show up in the V position.. In most clauses, the Infl position is not overtly filled, but I will argue in section 5 below that verbs in the definite future appear here.

Manner adverbs may appear after the i-prom position, unlike other adverbs. They may not appear before the i-prom position.

- 7) Ngàngá' ù-dàw bè'cw bè'l. Adv₃ V
 quickly com-eat dog meat

‘The dog ate the meat quickly.’

*Ngàngá’ bè’cw ù-dàw bè’l.
quickly dog com-eat meat

*Adv₃ i-prom V

Bè’cw ngàngá’ ù-dàw bè’l.
dog quickly com-eat meat

✓i-prom Adv₃ V

2 Aspects

Most SDZ verbs are preceded by one of seven possible aspect markers. The most frequent allomorphs of these aspect markers are shown below, but there is a significant degree of irregularity in the aspect marking system.

8)

completive	ù-/bì-
continuative	cá(y)-
habitual	rr-/r-
potential	gí-/gú-/ì ^H -
definite future	s-/z-
neutral	na-/n-
negative	ní-/ny-

The completive, continuative, habitual, potential, and definite future aspect markers are shown for the following fairly regular verb /-ù'ld/ ‘to sing’:

9)	Bì -‘ld=bí com-sing=3	‘S/he sang.’
	Cáy -ù'ld=bí con-sing=3	‘S/he is singing.’
	R -ù'ld=bí hab-sing=3	‘S/he sings.’
	Gú -‘ld=bí pot-sing=3	‘S/he will sing.’

S-ù'ld=bí 'S/he will sing.'
def-sing=3

Some stative and/or adjectival predicates also appear in the neutral aspect:

10) Ná-bièjz xòòb.
 neu-dry corn
 'The corn is dry.'

The negative aspect does not typically appear in a main clause, but only in the complement to a predicate of negation:

11) Íity Juààny ny-ù'ld
 not Juan neg-sing
 'Juan didn't sing.'

Munro and Lopez (1999) and Lee (1999) have shown that the negative and potential aspects show many common properties which justify grouping them together as the **modal** aspects. The other aspects are referred to as **non-modal** aspects.

An important property of the modal aspects for this talk is that many verbs require modal aspect on their complement. (These verbs are largely comparable to those that take infinitival complements in English.) The most usual pattern is for the complement to occur in the potential aspect, shifting to the negative aspect when the matrix is in the completive. This pattern is summarized as follows:

12)	<u>Matrix verb</u>	<u>Complement verb</u>
	completive aspect	negative aspect
	other aspects	potential aspect

Here are some examples of this pattern with the verb *rr-cà'z* 'to want':

- 13) Rr-cà'z Juáàny cuèè lòtèrîi.
 hab-want Juan pot:win lottery

'Juan wants to win the lottery.'

- 14) Û-cà'z Juáàny ní-bèè'/*cuèè lòtèrîi.
 com-want Juan neg-win/pot:win lottery

'Juan wanted to win the lottery.'

We can see that the potential functions in embedded clauses in a manner like an infinitive in language such as English or Spanish. The negative aspect functions in the same way, but refers to events in the past.

3 Negation

3.1 Negation with non-modal complements

Sentential negation is shown with the negative *(qu)íity* plus either i.) a verb in with a non-modal complement (completive, continuative, or habitual aspect) + the clitic =*ti* on the following word/constituent or ii.) a verb in a modal aspect (negative or potential).²

The word order for sentences with negation depends on the aspect of the negated verb. If the negated verb is in a non-modal aspect, then the negative *(qu)íity* normally precedes the verb, and the verb has a clitic =*ti*' 'negative':

- 15) Íity ù-lù'ù=ti' Juáàny bzyáá lè'èny bòòls.
 neg com-put=neg Juan beans in bag
 'Juan didn't put the beans in the bag.'

- 16) Íity cá-yà'á=ti' Màríí..
 neg con-dance=neg Maria
 'Maria isn't dancing.'

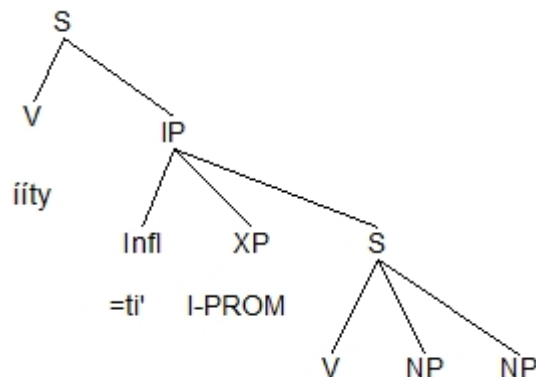
It is also possible to have a phrase between *(qu)íity* and the verb, and in this case, the clitic =*ti*' follows this phrase. The phrase after *(qu)íity* is interpreted as focused:

² The initial /k/ of negative *(qu)íity* is omitted when word-initial, and since this predicate does not show normal aspect inflection, it is almost always unprefixes. Only when *(qu)íity* is preceded by a clitic does the /k/ surface.

- 17) Íity Màríí=tí' ù-yà'á.
 neg Maria=neg com-dance
 'Maria (FOCUS) didn't dance/ It wasn't Maria who danced'
- 18) Íity bzyàá=tí' ù-lù'ù Juáàny lè'èny bòòls.
 neg beans=neg com-put Juan in bag
 'Juan didn't put *the beans* (FOCUS) in the bag.'
- 19) Íity lè'èny bòòls=tí' ù-lù'ù Juáàny bzyàà'.
 neg in bag=neg com-put Juan beans
 'Juan didn't put the beans *in the bag* (FOCUS).'

I'd like to argue that the two possibilities for finite complements following *(qu)íity* correspond to two different ways of expanding IP, and that in the sentences above, the focused element is in the same i-prom position identified earlier.

As for the =tí' clitic, I would like to suggest that it appears in the Infl head position of the following clause, but it then cliticizes to the end of the following word or phrase, whether that is the i-prom or the verb. Thus the structure is as follows:



In this structure, the complement of *(qu)íity* is an IP which comes with its i-prom position. Note also that the material after Infl is an XP, so both NP and PP may appear here. One additional proviso – *(qu)íity* is not a verb by standard

morphological tests in SDZ; I have shown it under a V node in this tree diagram for the sake of simplicity, but so far as I can see, nothing crucial rests on the label in the tree.

3.2 Negation with modal complements

If the complement of *(qu)íity* is modal (negative or potential), then we see a rather different pattern. No =*ti*' clitic appears, and now the subject of the verb must appear after *(qu)íity*:

20) Íity Juààny ní-gù' bzyàá lè'èny bòòls.
 neg Juan neg-put beans in bag
 'Juan didn't put the beans in the bag.'

21) Íity Màríí gí-yà'.
 neg Maria pot-dance
 'Maria won't dance.'

*Íity gí-yà' Màríí.

22) Íity Màríí ní-yà'á.
 neg Maria neg-dance
 'Maria didn't dance.'

*Íity ní-yà'á Màríí.

23) Íity réé=bíiny ùnàà ny-èèd.
 not pl-people female neg-come
 'The women didn't come.'

*Íity ny-èèd réé=bíiny ùnàà.

Unlike the modal complements, non-modal complements don't allow us to focus a non-subject argument to a position after the negation:

24) Íity Màríí ní-yàw bzyàà.
 neg Maria neg-eat beans
 'Maria didn't eat the beans.'

*Íity bzyàà ní-yàw Màríí.
 neg beans neg-eat Maria

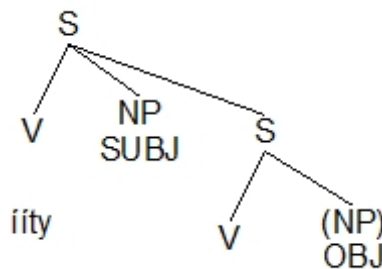
25) Íity Juáàny ní-gù' bzyàá lè'èny bòòls.
 neg Juan neg-put beans in bag
 'Juan didn't put the beans in the bag.'

*Íity lè'èny bòòls ní-gù' Juáàny bzyàá
 neg in bag neg-put Juan beans

To emphasize a constituent other than the subject, it is necessary to switch to a non-modal complement:

26) Íity bzyàá=ti' ù-dàw Màríí
 neg beans=neg com-eat Maria
 'Maria didn't eat the beans (FOCUS).'

I will argue here that the correct structure for negation with a modal complement is as follows:



Note that in contrast to the non-modal negation, the modal negation takes an S as its complement. The NP that follows the negation is necessarily the subject of

both *íity* and the following verb, and thus objects or PPs cannot appear between the two verbs.

4 Negation as raising

4.1 Comparison to English

These facts are complex and perhaps hard to understand. But I will argue that many of them find explanation if we think of *(qu)íity* as a kind of raising predicate, with a range of possibilities like *seem* or *appear* in English. Consider sentences like the following:

- 27) It seems [that Mary went to Oaxaca].
 Mary seemed [to go to Oaxaca]

In the first example, *seem* takes a clausal complement which includes its subject. In the second, it takes an infinitival complement, and the subject of *seem* is the logical subject of the following infinitive.

Compare the following two SDZ sentences:

- 28) *Íity* [_{IP} ù-lù'ù=ti' Juáàny bzyàá lè'èny bòòls]. *non-modal*
 neg com-put=neg Juan beans in bag *complement*
 'Juan didn't put the beans in the bag.'
- 29) *Íity* Juáàny [_S ní-gù' bzyàá lè'èny bòòls]. *modal*
 neg Juan neg-put beans in bag *complement*
 'Juan didn't put the beans in the bag.'

(Qu)íity is not a verb in SDZ, but it otherwise shares many properties with raising verbs. It takes two types of complements. The non-modal complement includes its subject, and participates in structures comparable to *It seems that Mary went to Oaxaca*. The modal complement is missing its subject, which appears as the subject of the higher predicate.

Thus despite the superficial differences between Zapotec negation and English raising verbs, there is a deeper similarity between the two constructions. The essence of raising is a shared subject between two adjacent predicates, and SDZ negation involves a subject-sharing construction, albeit of a less familiar

variety.

4.2 Idioms, raising, and negation

Just as in English, idiomatic subjects may undergo raising to the subject of the negative predicate. There are a number of idiomatic constructions in SDZ where an experiencer subject appears as the possessor of the noun *lòò* 'face':

30) Rr-tùì-nééy lòò Màrìì liìz=ní'.
hab-shame-app face Maria house=3ref
'Maria is ashamed of her house.'
(lit. 'Maria's face is shamed with her house.')

31) Rr-chigá' lòò Màríì liìz-à.
hab-surprise face Maria house-1s
'Maria is surprised by my house.'
(lit. 'Maria's face is surprised (at) my house.')

The idiomatic subjects persist when raised to become subject of negative raising predicate:

32) Íity lòò Màrìì ì-túy-nééy liìz=ní'.
neg face Maria pot-shame-app house=3ref
'Maria won't be ashamed of her house.'

33) Íity lòò Màríì ì-chigá' liìz-à
neg face Maria pot-surprise house-1s
'My house won't surprise Maria'

Meteorological subjects like 'rain' also raise in the negative:

34) Íity nìisgìì ní-yàjb.
neg rain neg-fall.
'It didn't rain.'

4.3 Other raising predicates in SDZ

While SDZ does not have raising verbs corresponding to 'seem', 'appear', or other members of this semantic category, it does have other predicates with a raising syntax similar to that shown by *qu(iity)*. An examination of such verbs shows that the aspect of the complement is lexically specified by the semantics of the raising predicate. *Rr-zàlòò* 'begin' is a raising verb which selects a continuative complement.

35) Ù-zàlòò Juáàny cáy-ù'ld.
 com-begin Juan con-sing
 'Juan began to sing.'

36) Ù-zàlòò nìisgìì cá-yàjb.
 com-begin rain con-fall
 'It began to rain.'

Cáàdy 'still not' is another raising predicate, and it requires potential aspect on its complement.

37) Cáàdy Màríí cùà' gèèt.
 still:not Maria pot:throw tortillas
 'Maria still doesn't make tortillas.'

Thus *(qu)iity* appears to be a member of a small set of raising predicates in the language and the elements associated with raising include both verbs like *rr-zàlòò* 'begin' and non-verbal predicates like *(qu)iity* 'not' and *cáàdy* 'not yet'.

5 The definite future and its interaction with negation

5.1 The definite future

The analysis above is strengthened by the interaction of negation and the definite future. SDZ, like other Valley Zapotec languages, has two different aspects which are translated into the future in English/Spanish. The definite future is marked with *s-* or *z-*; the potential has a number of allomorphs, the most common of which is *g-*:

- 38) S-àw báád bèld yù'ù.
 def-eat duck snake earth
 'The duck is going to eat a worm.'
- 39) G-âw báád bèld yù'ù.
 pot-eat duck snake earth
 'The duck is going to eat a worm.'

The difference between these two is subtle and Lee (1999) has done the most careful investigation of the semantics. The names of the definite future reflects its use with future events that are more certain and also perhaps closer in time. The potential is appropriate with a wider range of future events and shows less of a speaker commitment to the certainty or proximity of the event.

Despite the close semantics, verbs in the potential and future aspects show strikingly different syntactic properties, and most of these properties follow from the assumption that a verb in the definite appears in the Infl position, while a verb in the potential remains in the ordinary V position.³ Evidence for this is discussed in the following sections.

5.2 Lack of i-prom in the definite future

As previously argued, SDZ has a preverbal i-prom position for elements which bear a discourse function such as TOPIC or FOCUS.⁴ This i-prom position is not possible when the verb is in the definite future aspect (*s-/z-*). In contrast, this position is possible when the verb is in the potential aspect.

- 40) S-àw báád bèld yù'ù.
 def-eat duck snake earth
 'The duck is going to eat a worm.'

³ I have given a somewhat simplified account of the syntax of the definite future. See Broadwell (2007) for more detail. My analysis is influenced by Lee (1999), in which San Lucas Quiavini Zapotec verbs in the definite future move into [Spec, FocP].

⁴ In Broadwell (2002), I call this the internal prominence (i-prom) position, to distinguish it from a CP-adjoined position for external topics (e-topic). In that paper, I also give more detailed argumentation for the multiple discourse roles of elements that occupy the i-prom position.

- | | | |
|-----|---|------------------------------|
| | *Báád s-àw bèld yù'ù.
duck def-eat snake earth | *i-prom &
definite future |
| 41) | G-âw báád bèld yù'ù.
pot-eat duck snake earth
'The duck is going to eat a worm.' | |
| | ✓Báád g-âw bèld yù'ù.
duck pot-eat snake earth
'The duck is going to eat a worm.' | ✓i-prom &
potential |

5.3 Manner adverbs and the definite future

Manner adverbs (Adv_{Manner}) must not precede a verb in the definite future, though these adverbs may precede a verb in other aspects.

- | | | |
|-----|--|--|
| 42) | Diáp g-ú'ld Màrì.
strongly pot-sing Maria
'Maria will sing strongly/loudly.' | ✓ Adv_{Manner} &
Potential |
| | *Diáp s-ù'ld Màrì.
strongly def-sing Maria | * Adv_{Manner} &
Definite Future |
| | S-ù'ld Màrì diáp.
def-sing Maria strongly | |
| | G-ú'ld Màrì diáp.
def-sing Maria strongly | |

Pursuing this latter approach, the examples above will have the following (simplified) representations:⁵

⁵ For expository purposes, the trees shown in this figure show potential positions for focused and adverbial positions in parentheses. The excluded positions in the definite future are shown with strike-out to emphasize their unavailability.

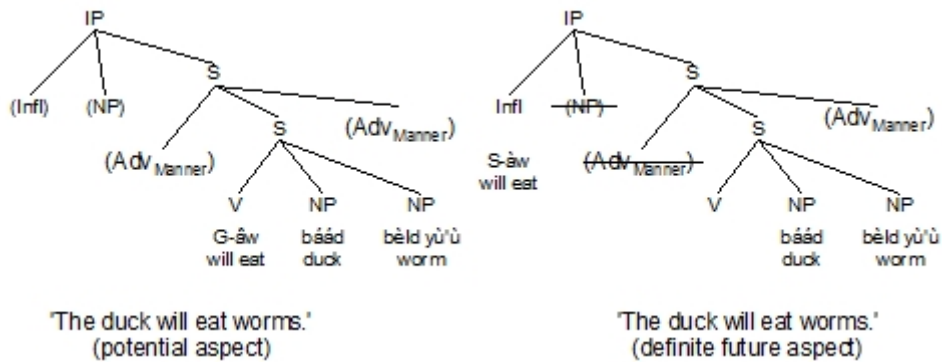


Figure 4 The syntax of potential and definite future aspects compared

These trees show that when the verb is in the definite future aspect, it appears in the Infl position, and the i-prom and manner adverb positions are excluded. (See Broadwell 2007 for an account of this effect.)

5.4 The definite future and negation

The syntactic structure just posited for negation also accounts for an otherwise puzzling restriction on aspect and the definite future. While both potential and definite future are available in the affirmative, the definite future is ungrammatical in the negative:

- 43) *Íity s-âw=ti' bâád bèld yù'ù.
 neg pot-eat=neg duck snake earth
 ('The duck is not going to eat a worm.')

The potential is good, and shows the usual negation structure for a modal

- 44) Íity bâád g-àw' bèld yù'ù.
 neg duck pot-eat snake earth
 'The duck is not going to eat a worm.'

We can account for the ungrammaticality of the definite future in the negative as

follows – when a non-modal aspect appears on the complement of *(qu)íity*, the Infl of the complement clause must contain the clitic =*ti'*. However, a verb in the definite future must also appear in Infl, and the demands of the negation and the definite future are incompatible with each other – a single Infl node cannot contain both these elements.

6 Conclusion

An analysis of negation as a raising predicate in San Dionisio Ocotepéc Zapotec correctly accounts for a number of facts about word-order, clitics, and aspect marking in the language, and expands our understanding of raising predicates more generally.

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