I. Prepositions

(1) In many Mesoamerican languages, including Otomanguean more generally, location is marked by the use of positional verbs and body-part locatives, or relational nouns.

(2) **Body-part locatives** - use of body parts to encode spatial dimensions

<table>
<thead>
<tr>
<th>Body part</th>
<th>Common interpretations</th>
</tr>
</thead>
<tbody>
<tr>
<td>face</td>
<td>'on the surface of'</td>
</tr>
<tr>
<td>head</td>
<td>'on top of (something tall/narrow)'</td>
</tr>
<tr>
<td>back</td>
<td>'on top of (something flat)'</td>
</tr>
<tr>
<td>stomach</td>
<td>'under'</td>
</tr>
<tr>
<td>insides/heart</td>
<td>'inside'</td>
</tr>
<tr>
<td>hips</td>
<td>'to the side of, next to'</td>
</tr>
<tr>
<td>butt</td>
<td>'at the bottom of'</td>
</tr>
<tr>
<td>foot</td>
<td>'at the base of'</td>
</tr>
</tbody>
</table>

(3) One can not simply use semantic criteria to distinguish relational nouns from prepositions. In Alcozauca Mixtec, the words *ini* and *nùú* are also nominal - 'the insides of' and 'face', respectively. So, one could conceivably translate these as "the inner part of the river" or "the surface of the chair."

(a) **ndàkava ini itia**

   **COMP.fall.1S** inside river

   (Mendoza Ruiz, 2016, p.33)

   'I fell in the river.'

(b) **núú tiàyù índuú tikachi=ún**

   face chair **PROG.be** blanket=2s

   'Your blanket is on the chair.'

(4) What distinguishes these from regular nouns though? What defines *preposition* as a class?

(5) In several Zapotec languages, there is evidence that body-part locatives are indeed prepositions and not nominal. Lillehaugen and Foreman summarize three major criteria for evaluating this class of words in Zapotec languages:

   (a) only PPs (not NPs) can function as locative adjuncts
   (b) positional verbs can only select for PP (not NP) complements
   (c) body-part locatives can not be modified by quantifiers or adjectives, but nouns can.
Our goal is to evaluate Triqui in relation to these criteria to see how the words encoding spatial relations fit.

Itunyoso Triqui has both body-part locatives (on the left) and non-body-part locatives (on the right). The existence of the latter group might already lead us towards an analysis where there are relational nouns that are distinct from another class. Though, might the non-body-parts also be nominal?

For body-part locatives, nominal and non-nominal readings are possible in Itunyoso Triqui.

What about the non-body-part locatives? Some are nominal, but not all.
e. ru³ku⁴ beh³ f. ta²nin² beh³
behind house middle of house
'behind the house' 'in the middle of the house'
*the back part of the house' *the middle part of the house'

(10) It is possible to quantify all those that are interpreted nominally here.

bbij¹ rian³² 'two faces'
bbij¹ ri³ki³ 'two stomachs'
bbij¹ chu'ba⁴³ 'two insides'
bbij¹ chi³hninj⁵ 'two sides'
bbij¹ ska⁴ninj⁴ 'two gaps'
*bbij¹ che³cheh² 'two outer parts'
*bbij¹ ru³ku⁴ 'two backs'
*bbij¹ ta²nin² 'two middle parts'

(11) What about the locative adjunct criterion? The criteria are not so clear. Locative adjuncts do not require an overt locative marker at all. In fact, it is ungrammatical with 'go.'

(12) a. Ka³hanj² nih² sinh³ ya³kwej³
     perf.go pl child Oaxaca
     'The children went to Oaxaca.'

b. *Ka³hanj² nih² sinh³ rian³² ya³kwej³
     perf.go pl child to/face Oaxaca
     'The children went to Oaxaca.'

c. Nne³ nih² sinh³ (chu⁴ba⁴³) ya³kwej³
     be.sitting pl child (inside.of) Oaxaca
     'The children are in (inside of) Oaxaca.'

(13) Though, Triqui distinguishes between toponyms and smaller containers - you do not say "in Oaxaca", but you have to say "in my car."

(14) a. A³raj⁵=sij³ chu'ba⁴³ si³-ka²min⁴²=sij³
     sing=3m inside poss'd-car=3m
     'He is singing in his car.'

b. *A³raj⁵=sij³ si³-ka²min⁴²=sij³
     sing=3m poss'd-car=3m
     'He is singing in his car.'

(15) What about the positional verbs requiring locative (PP) adjuncts criterion?
(16) Examples - the verb *ttaj* requires a locative adjunct.

    a.  Ttaj$^5$  ba$^4$su$^{43}$  rian$^{32}$  me$^4$sa$^{43}$
        be.on.top  glass  face  table
        ‘The glass is on (the surface of) the table.’
    b.  *Ttaj$^5$  ba$^4$su$^{43}$  me$^4$sa$^{43}$
        be.on.top  glass  table
        ‘The glass is on (the surface of) the table.’

(17) So does the verb *nne*, but recall that it depends on the size of the location.

    a.  Nne$^3$  ba$^4$su$^{43}$  ri$^3$ki$^3$  me$^4$sa$^{43}$
        be.sitting  glass  stomach  table
        ‘The glass is sitting under the table.’
    b.  *Nne$^3$  ba$^4$su$^{43}$  me$^4$sa$^{43}$
        be.sitting  glass  table
        ‘The glass is sitting under the table.’

(18) We can check off Itunyoso Triqui as satisfying this criterion, clearly. Though, we have a caveat that it is semantically incongruent to place an object on a toponym, but smaller objects with clear physical orientations (tables, houses, shovels, trees, etc) require overt locative adjuncts with positional verbs.

(20) What about quantifier or adjectival manipulation as our last criterion? We expect this with nouns, but not prepositions.

(21) With ‘*put on top of*’, the quantifier can not precede the word ‘*face*.’ There is no possible nominal interpretation of this body-part locative.

    a.  K-u$^4$taj$^4$  yyaj$^{32}$  rian$^{32}$  bbij$^1$  me$^4$sa$^{43}$
        PERF-put.on.top.1S  flower  face  two  table
        ‘I put the flowers on top of (the surface of) the two tables.’
    b.  *K-u$^4$taj$^4$  yyaj$^{32}$  bbij$^1$  rian$^{32}$  me$^4$sa$^{43}$
        PERF-put.on.top.1S  flower  two  face  table
        ‘I put the flowers on top of (the surface of) the two tables.’

(22) We have a similar finding with the word ‘*outside of*’, though note that this is already not considered a noun.
a. $K^a_3^3 h^a_4^3$ $c^a_3^3 c^a_3^3 h^a_1^4$ $b^a_1^3 h^a_1^1$ $t^a_1^3 k^a_2^4$ $s^a_1^3 j^a_3^3$  
   \text{PERF.go.1s outside three house.of} = 3M  
   ‘I went outside of his three houses.’

b. *$K^a_3^3 h^a_4^3$ $b^a_1^1 h^a_1^1$ $c^a_3^3 c^a_3^3 h^a_2^4$ $s^a_1^3 j^a_3^3$  
   \text{PERF.go.1s three outside house.of} = 3M  
   ‘I went outside of his three houses.’

(23) However, it seems like we \textit{can} put a quantifier before or after the other nominal locatives here, with a slightly poetic reading in the (b) examples.

a. $K^a_4^4 c^a_1^1$ $r^a_1^1$ $k^a_3^3$ $b^a_1^1$ $h^a_1^3$  
   \text{PERF-pass.1s stomach two house}  
   ‘I passed under two houses.’

b. $K^a_4^4 c^a_1^1$ $b^a_1^1$ $r^a_1^1$ $k^a_3^3$ $b^a_1^3$  
   \text{PERF-pass.1s two stomach house}  
   ‘I passed under two houses.’

a. $K^a_4^4 c^a_1^1$ $c^a_1^3$ $r^a_1^3$ $a^a_1^1$ $h^a_1^1$ $b^a_1^3$  
   \text{PERF-pass.1s back three house}  
   ‘I passed behind three houses.’

b. $K^a_4^4 c^a_1^1$ $b^a_1^1$ $h^a_1^1$ $c^a_1^3$ $r^a_1^3$ $a^a_1^1$ $b^a_1^3$  
   \text{PERF-pass.1s three back house}  
   ‘I passed behind three houses.’

(24) But the problem is that you can also do this with the non-body-part locatives that have no nominal reading. So, perhaps this word order change is not targeting nominals.

a. $K^a_4^4 c^a_1^1$ $r^a_3^3$ $k^a_1^3$ $b^a_1^1$ $h^a_1^1$ $b^a_1^3$  
   \text{PERF-pass.1s behind three house}  
   ‘I passed behind three houses.’

b. $K^a_4^4 c^a_1^1$ $b^a_1^1$ $h^a_1^1$ $r^a_3^3$ $k^a_1^3$ $b^a_1^3$  
   \text{PERF-pass.1s three behind house}  
   ‘I passed behind three houses.’

a. $N^a_3^3 s^a_1^3$ $t^a_1^2$ $n^a_1^1$ $b^a_1^1$ $h^a_1^1$ $b^a_1^3$  
   \text{sit} = 3M middle.of three house  
   ‘He is sitting in the middle of three houses.’

b. $N^a_3^3 s^a_1^3$ $b^a_1^1$ $h^a_1^1$ $t^a_1^2$ $n^a_1^1$ $b^a_1^3$  
   \text{sit} = 3M middle.of house  
   ‘He is sitting in the middle of three houses.’
Perhaps there is just a cline of adpositionality? Some things like 'face' are clearly prepositions - body-parts that, when used in locative expressions, change their part of speech. Others remain more or less nominal.

<table>
<thead>
<tr>
<th>Preposition</th>
<th>Denominal preposition</th>
<th>Some prepositional characteristics</th>
<th>Locative noun</th>
</tr>
</thead>
<tbody>
<tr>
<td>che³cheh²</td>
<td>rian³²</td>
<td>ri³³ki³</td>
<td>ka³tin¹</td>
</tr>
<tr>
<td>'outside of'</td>
<td>'face; to, toward, on'</td>
<td>'stomach; under'</td>
<td></td>
</tr>
<tr>
<td>ru³⁴ku⁴</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>'behind'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ta²nin²</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>'in the middle of'</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

We also perhaps need better criteria. For now, it seems like Triqui has things that are more prototypically prepositional and things that remain locative nouns.

II. Adjectives

Itunyoso Triqui has three types of things that one might call "adjectives" and two overlapping types of things that one might "adverbs."

Adjectival types

(a) There are post-nominal words that appear in noun phrases and which appear to be adjective-like.
(b) There are post-nominal words that resemble the group in (a) but which are stative predicates.
(c) There are words that appear after the auxiliary ba² 'be' which, together, function as a stative predicate, but independently might be adjectives.

What about the first set in (a)?

a. cchej³² ka³tin¹
   road narrow
   'the narrow road'

b. sinh³ li⁴³
   child small
   'the small child'

c. beh³ xi³
   house big
   'the big house'
This class of words can appear in expressions with quantifiers, suggesting that they are within a noun phrase.

Actually that POT.come one road narrow small face house.of=3P

‘Actually, a small, narrow road would come out in front of their house.’

(Line 46; Cuento de señora que engaño a su esposo; 06/10/2015; Marcelino Hernández Pérez and Wilfrido Cruz Martínez)

Within class (b), we have stative predicates. These appear before or after the noun if the noun is fronted due to focus.

(a) Na³chanh³ re³to³² be.folded blanket
   'the blanket is folded'

(b) re³to³² na³chanh³ Focus construction blanket be.folded
   'the folded blanket' = 'the blanket (that) is folded'

Now, (31b) looks an awful lot like the examples in (29). Yet, if this set of stative predicates were truly adjectives, we'd expect them to appear in larger phrases with quantifiers, like we get in (30).

They do appear in such phrases, but as relative clauses (most probably). Note that words like 'be.folded' or 'be.prickly' also take aspectual prefixes, so there is stronger evidence to consider them verbal.

Moreover, this class of stative predicates can not take the auxiliary when used predicatively. This means that these are verbal.

*Ba³² na³chanh³ re³to³² be be.folded blanket
   'the blanket is folded'

The class in (a) usually appear with ba²/ba³², 'to be', as adjectival predicates. Though, complicating matters is that, in the imperfective, you can omit the auxiliary altogether. Why does this complicate things? Compare (29a) to (36a). It looks like we shift from a stative verb to an adjective just based on the relative ordering.
(37) Auxiliary dropping is not possible when a perfective/potential reading is required though, so I believe this is something that just makes it appear that the part of speech is determined by a simple word order shift.

(38) The examples like we see in (36) illustrate the group in (28c). More examples are given here. Is there a rhyme or reason to the auxiliary omission? There does not appear to be.

<table>
<thead>
<tr>
<th>Ba$^2$ is optional</th>
<th>Gloss</th>
<th>Ba$^2$ is required</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>cha$^4$kan$^4$=sij$^3$</td>
<td>'he is tall'</td>
<td>ba$^2$ ya$^1$ko$^2$=sij$^3$</td>
<td>'he is poor'</td>
</tr>
<tr>
<td>ya$^1$h$^1$yi$^1$=sij$^3$</td>
<td>'he is heavy'</td>
<td>ba$^2$ na$^1$ka$^1$ ra$^1$sun$^3$</td>
<td>'the thing is new'</td>
</tr>
<tr>
<td>cceh$^2$=sij$^3$</td>
<td>'he is short'</td>
<td>ba$^2$ ya$^3$h$^3$manh$^3$=sij$^3$</td>
<td>'he is fat'</td>
</tr>
<tr>
<td>sah$^1$=sij$^3$</td>
<td>'he is good'</td>
<td>ba$^2$ me$^1$te$^1$=sij$^3$</td>
<td>'he is skinny'</td>
</tr>
<tr>
<td>si$^1$k$^1$h$^1$ cchrun$^1$</td>
<td>'the wood is hard'</td>
<td>ba$^2$ h$^1$bi$^1$ k$^1$kan$^3$</td>
<td>'the squash is raw'</td>
</tr>
<tr>
<td>so$^2$h$^1$o$^1$=sij$^3$</td>
<td>'he is deaf'</td>
<td>ba$^2$ cha$^2$na$^1$ ne$^1$h$^1$e$^1$j$^3$</td>
<td>'the baby is cute'</td>
</tr>
<tr>
<td>bi$^1$h$^1$i$^1$=sij$^3$</td>
<td>'he is light-haired'</td>
<td>ba$^2$ xi$^3$=sij$^3$</td>
<td>'he is big'</td>
</tr>
<tr>
<td>bba$^1$ chi$^1$lu$^{43}$</td>
<td>'the knife is sharp'</td>
<td>ba$^2$ li$^{43}$=sij$^3$</td>
<td>'he is small'</td>
</tr>
<tr>
<td>bbe$^1$=sij$^3$</td>
<td>'he is brave'</td>
<td>ba$^2$ ma$^2$re$^2$=chuj$^3$</td>
<td>'the animal is red'</td>
</tr>
<tr>
<td>ka$^1$rah$^1$ ccej$^{32}$</td>
<td>'the road is wide'</td>
<td>ba$^2$ ma$^2$re$^{43}$=chuj$^3$</td>
<td>'the animal is green'</td>
</tr>
<tr>
<td>ku$^1$nun$^1$ bbej$^{32}$</td>
<td>'the cave is deep'</td>
<td>ba$^2$ tta$^3$=chuj$^3$</td>
<td>'the animal is blue'</td>
</tr>
<tr>
<td>na$^1$ko$^1$ a$^4$sij$^4$</td>
<td>'the clothes are dry'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>n$^2$ki$^3$=sij$^3$</td>
<td>'he is poor'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>nne$^1$=sij$^3$</td>
<td>'he is naked'</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(39) **Adjectives** (a) There are post-nominal words that appear in noun phrases and which appear to be adjective-like.

**Verbs** (b) There are post-nominal words that resemble the group in (a) but which are stative predicates.

**Adjectives** (c) There are words that appear after the auxiliary ba$^2$ 'be' which, together, function as a stative predicate, but independently might be adjectives.
So, it seems like we have a good analysis here so far, but it's worth noting that many adjectives in group (c) above can never appear in contexts like (a), post-nominally.

a. Ki³-ni³hinj⁵ ngwi³¹ cha¹na¹ ba² chi¹ni¹
   PERF-see/know.1s person female be drunk
   ‘I saw the woman (who) was drunk.’

b. *Ki³-ni³hinj⁵ ngwi³¹ cha¹na¹ chi¹ni¹
   PERF-see/know.1s person female drunk
   ‘I saw the drunk woman.’

c. Ki³-ni³hinj⁵ ngwi³¹ cha¹na¹ li⁴³
   PERF-see/know.1s person female small
   ‘I saw the short woman.’

But there's an overlap here - note that li⁴³ can occur with ba² in the table in (38), meaning that it is in group (a) and group (c). Is this usage in (40c) just another example of ba² omission? If so, everything is a verb and perhaps there are no adjectives at all!

You might also notice that there is a strong tendency for many post-nominal modifiers to be tone /1!/ Historically, in Mixtecan, there was a process of forming adjectives via tone change. We do not observe many pairs in the Triqui lexicon, but a few.

<table>
<thead>
<tr>
<th>mmin¹</th>
<th>'unbaptized'</th>
<th>(adjective)</th>
</tr>
</thead>
<tbody>
<tr>
<td>mmin⁴</td>
<td>'unbaptized person'</td>
<td>(noun)</td>
</tr>
<tr>
<td>na¹ko¹</td>
<td>'dry'</td>
<td>(adjective)</td>
</tr>
<tr>
<td>na¹ko⁴</td>
<td>'to get dry (intr)'</td>
<td>(verb)</td>
</tr>
</tbody>
</table>

III. Adverbs (and also, more adjectives)

Just like with adjectives, there are a few types of things that could be interpreted as adverbs in Itunyoso Triqui.

(a) Pre-verbal elements that are external to the main clause.
(b) Post-verbal elements that modify the verb in some way.
(c) Things that fall into both (a) and (b)

Considering (a), there are many words which appear to modify the clause in some way and which may consist of a phrase as well with a conventionalized meaning.

Ba² ta²ha{j²} a³kin⁴³ =sij³
be/exist times call.1s=3s
‘Sometimes I call him.’ ~ ‘There are times (that) I call him.’
There are several words which appear only in the pre-verbal position: group (a)

<table>
<thead>
<tr>
<th>Word (a)</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>a³baj³</td>
<td>rápidamente</td>
</tr>
<tr>
<td>a³kwanh³</td>
<td>ahora</td>
</tr>
<tr>
<td>ba¹</td>
<td>ya</td>
</tr>
<tr>
<td>ba² nga¹</td>
<td>todavía</td>
</tr>
<tr>
<td>be⁴ eche³</td>
<td>cómodamente</td>
</tr>
<tr>
<td>che³</td>
<td>muy</td>
</tr>
<tr>
<td>kkaj¹³</td>
<td>perfectamente</td>
</tr>
<tr>
<td>kwih³</td>
<td>tempranamente</td>
</tr>
<tr>
<td>ngo²</td>
<td>completamente</td>
</tr>
<tr>
<td>ra³ran³²</td>
<td>fuertemente</td>
</tr>
<tr>
<td>ta³haj²</td>
<td>a veces</td>
</tr>
<tr>
<td>ta³neh³</td>
<td>simplemente</td>
</tr>
<tr>
<td>ta⁴ru³ku¹</td>
<td>últimamente</td>
</tr>
<tr>
<td>ta⁴yun¹</td>
<td>necesariamente</td>
</tr>
<tr>
<td>taj¹³</td>
<td>apenas</td>
</tr>
<tr>
<td>ti⁴tin⁴</td>
<td>quietamente</td>
</tr>
<tr>
<td>to⁴toh¹</td>
<td>poco a poco</td>
</tr>
</tbody>
</table>

Example, line 6 from *Cuento de la lagartija y la hierba*; Mario Hernández Pérez and Wilfrido Cruz Martínez, 6/10/15.

"ra³ran³² ku²-nun³²=reh¹ ni² si² ki¹-rih¹ nu³kwaj³..."

strongly POT-be.inside=2S and NEG.CMD POT-lose be.strong

a³taj³ kkoj³ rej³ mmah⁴
say herb PART.think compadre.Q

"Vigilantly stay inside and don't lose hope", says the herb, supposedly, compadre.

There are also many words, in group (b), which modify the meaning of the verb and appear post-verbally before subject marking.

a. A³kinj³ nu²kwi³²=sij³=yunj¹ call all.day=3M=1S.OBJ 'He calls me all day long.'

b. A³kinj³ nu²kwih⁵=sij³ call all.day.1S=3M 'I call him all day long.'

Note that endoclitics apply to the post-verbal modifier here, not to the verb. So, speakers/listeners must also know tonal derivations for these.
Complicating things is the observation that many of these post-verbal modifiers may also occur pre-verbally with no apparent change in meaning.

A few from this set obligatorily only occur in post-verbal position: *ke⁴* 'keep doing', *yun⁴* 'only, just', *nun³²* 'for a while.' These can not occur pre-verbally.

Complicating matters is the fact that some of the same words appear in all types of contexts.

Are words like *sah⁴* just adjectives that can be used adverbially?

**Positional hypothesis:** Words which appear pre-verbally or post-verbally are adverbs which have sentential scope/meaning. Both post-nominal modifiers and words appearing with an auxiliary are adjectives. Some words fall into both categories.

This hypothesis does not help us to distinguish between those modifiers that appear only pre-verbally or only post-verbally though. Both would be types of adverbs.

Another hypothesis is that there are no true adjectives in the language - all adjectives are stative predicates, but some do not require the auxiliary when used in nominal expressions.
(56) What might be the argument for this? Note that you mostly can not include more than one adjective in a noun phrase.

(57) a. Sinj⁵ ya¹ko³ ku³-chu*man⁴³
man poor PERF-arrive
'The poor man arrived.'

b. Sinj⁵ li⁴³ ku³-chu*man⁴³
man poor PERF-arrive
'The small man arrived.'

c. *sinj⁵ li⁴³ ni² ya¹ko³ ki³-sij⁴
man small and poor PERF-arrive
'The poor, small man arrived.'

d. *sinj⁵ li⁴³ ya¹ko³ ki³-sij⁴
man small poor PERF-arrive

e. Sinj⁵ li⁴³ ba² ya¹ko³ ku³-chu*man⁴³
man small be poor PERF-arrive
'The small man, who is poor, arrived.'

f. Sinj⁵ li⁴³ ni² ya¹ko³ ba³2=sij³, ku³-chu*man⁴³=sij³.
man small and poor be=3M, PERF-arrive=3M.
'The man who is small and poor, he arrived.'

(58) So, there is no way to say "the small, yellow dog" in Triqui except to say "the big dog that is yellow." Is this a behavior we expect with adjectives? Or something we expect with stative predicates (verbs)?

(59) For some words like xi³ 'big', you can in fact string two modifiers together. However, it seems to only be possible with a few modifiers.

(60) Chu*be³ ma*ru³¹xi³ ki³-chi*hyanj⁴
dog black big PERF-bark
'The big black dog barked.'

References: