

## I. What's a clitic?

- An affix is usually sensitive to the part of speech onto which it attaches.

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happen-ed verbal tense suffix
sing-er-s agentive suffix (applies to verbs)
    and plural suffix (applies to nouns)
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- A clitic, on the other hand, is usually more promiscuous in where it attaches.
the [child]'s book the [man with the yellow hat]'s monkey $\neq$ monkey of hat


## Classic work on clitics

- Classic work on clitics examined how English negation functions as a clitic (Zwicky \& Pullum 1983).

I can't go $\quad=\quad$ I can not go
Can't you go? $=\quad *$ Can not you go?
(Can you not go?)
Wouldn't you? $=\quad$ Would not you?

## Other types of clitics

## Romance clitics in Spanish

(1) $[\mathrm{Da}]=\mathbf{m e}=\mathbf{l o}$
give.INDIC $=1 \mathrm{~S} . \mathrm{IO}=3 \mathrm{~S} . \mathrm{DO}$
'give it to me'
*Da a Juan=lo (Dálo a Juan)
give.INDIC to Juan=3s.DO
'give it to Juan'
(2) $\mathbf{T e}=\mathbf{l} \mathbf{o}=[\mathrm{iba}$ a decir $]$ antes.
$2 \mathrm{~S} . \mathrm{IO}=3 \mathrm{~s} . \mathrm{DO}=$ go.IMP to tell before
'I was going to tell it to you before.'

## What do these things have in common?

- They need to attach to a word - they can not occur in isolation
syntax/morphology
- They are mostly prosodically-deficient (non stress-bearing)
phonology
- The ordering of the stem and clitic might be different than the ordering found with the matching non-clitic form.
morphology/syntax
- Unlike affixes, they are non-selective in what they attach to.
morphology/syntax


## Is it about their syntax or their phonology?

- Phonologists

Oh, I don't know how you would characterize these. Ask the syntacticians. Oh look! There's neat assimilation and tone and...

- Syntacticians

It boils down to the phonology.
(Haspelmath 2023, J.P. Koenig, last week)

## Clitics in Otomanguean languages

- Pronominal clitics are a huge topic in Otomanguean phonology, morphology, and syntax. They are clitics or clitic-like in most Otomanguean languages and often cause phonological changes on stems.
- Macaulay argues that the Chalcatongo Mixtec pronouns are clitics (or phrasal affixes), contra earlier descriptions by Pike $(1944,1949)$ who argued that they were simply phonologically-reduced versions of full pronouns (Macaulay 1987).
- Her analysis is based on the observation that the bound pronouns attach either to verbs or to post-verbal adverbial modifiers (non-selectivity).
- Marlett (1993) argues that one must distinguish between prosodic and syntactic independence in the categorization of Zapotec pronouns.
- Those which are prosodically independent may appear in several positions, such as in isolation. Prosodically independent pronouns are always syntactically-independent.
- Those which are syntactically independent are permitted to occur after nonpronominal subjects.
- Hollenbach's work on Copala Trique (1984) is more inconclusive as to the status of bound pronouns. Phrase-final pronouns are argued to be simple clitics that apply late in the stages of word derivation, but appear similar to affixes.


## So, it's morphosyntax?

Morphosyntactic arguments for clitic-hood appear in work on Tataltepec Chatino (Sullivant, 2015), Zacatepec Eastern Chatino (Villard, 2015), Teotepec Eastern Chatino (McIntosh, 2016), Zenzontepec Chatino (Campbell, 2014), Betaza Zapotec (Teodocio Olivares, 2009), Guienagati Zapotec (Benn, 2021), Zoochina Zapotec (López Nicolas, 2016), and Chocho (Mock, 1982).

Yet, it is the prosodic criteria for clitic-hood that are highlit in many other sources on Otomanguean languages.

## Or phonology?

- All else being equal, we expect stems with affixes to comprise a prosodic domain smaller than that of the cliticized word (Nespor and Vogel, 1986; Vogel, 2009).
- The prosodic word can be iterative and the clitic group comprises the largest grouping here (Anderson 2005).


## Two types of iterative prosodic words



Concatenative iterative prosodic word


Non-concatenative iterative prosodic word (b/c tone)

## Enter Zingler (2022) and Haspelmath (2023)

For Zingler, it is non-selectivity (morphosyntax) that is the crucial criterion for clitic-hood.

TABLE1 Differences and similarities between anti-clitics, affixes, clitics, and weak words

| Property | Anti-clitic | Affix | Clitic | Weak word |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Independent phonological word | Partly | No | No | Partly |
| Bound to a domain | Yes | Yes | Yes | No |
| Bound to a specific word class | Yes | Yes | No | No |

" 'Clitics' will be defined as morphemes that can occur with hosts from different word classes but that are dependent on that host domain in terms of at least one parameter of phonological wordhood."

## Haspelmath (2023)

- Zingler leaves open the range of patterns that could comprise a clitic, including morphemes that alter the phonological shape of their host.
- Pro/enclitics which attach to their hosts without conditioning changes.
- Endoclitic which are hard to phonologically separate from a host.
- Haspelmath argues...
"Forms are continuous segment sequences, which excludes the possibility of "tonal morphs" (Haspelmath 2020: §4). This also means that there can be no tonal clitics, as has occasionally been suggested (e.g. Van de Velde 2009)."


## What's a form?

- For Haspelmath, all true clitics must be morphs. These are forms.
- All morphs are separable from each other - they must be interpreted as concatenative (c.f. Haspelmath 2020).
- "roots by definition are segment sequences"
- This means that there are no endoclitics by Haspelmath's definition, since clitics must be analyzeable as sequences.


## So... it's phonology?

- A lot of these arguments here rest on looking at non-fusional morphology, but fusional processes can be analyzed concatenatively.

"That's not a clitic, Christian."
"Now that's a clitic, Christian."


## Where does that leave us?

- In many contexts where authors have argued that it is the phonological criteria for clitic-hood that defines them, they demonstrate that endoclitics do not have non-selectivity.
- In other words, they draw a close link between the fact that a clitic has "fused" to a stem and its now affixal behavior.
- That means we should minimally show distinct morphosyntactic and phonological properties of Triqui pronouns to demonstrate how they fit.
(or maybe just show how they work)


## Some "criteria" for clitics (Zwicky \& Pullum)

1. Clitics are non-selective in the part of speech they attach to, whereas affixes are sensitive to part of speech.
2. Affixes are more likely than clitic+host combinations to have accidental or paradigmatic gaps.
3. Affixes are more likely than clitic + host combinations to have idiosyncratic phonological shapes.
4. Affixes are more likely than clitic+host combinations to have idiosyncratic semantics.
5. Syntactic rules affect affixed words, but not clitic+host combinations.
6. Only clitics may attach to material already containing clitics.

## II. Triqui pronouns

## Triqui pronouns comprise different types

1. All speech-act participant pronouns ( $1 \mathrm{~S}, 2 \mathrm{~S}, 1 \mathrm{DU}$ ) modify the shape of the stem in some way. These are called endoclitics.
2. Remaining pronouns (1P.INCL, 1P.EXCL, 3M, 3F, 3ANIM) do not modify the shape of the stem. These are called enclitics.
3. Plural pronouns are somewhat compositional (clitic-doubling) and are also enclitics.

| Form |
| :---: |
| $\mathrm{a}^{3} \mathrm{ne}^{32}$ |
| $\mathrm{a}^{4} \mathrm{neh}^{4}$ |
| $\mathrm{a}^{3} \mathrm{ne} \mathrm{P}^{3}$ |
| $\mathrm{a}^{3} \mathrm{ne}^{32}=\tilde{u} \mathrm{~h}^{4}$ |
| $\mathrm{a}^{3} \mathrm{ne}^{32}=\mathrm{ne}^{4}$ |
| $\mathrm{a}^{3} \mathrm{ne}^{1}=r e{ }^{1}$ |
| $\mathrm{a}^{3} \mathrm{ne}^{32}=\operatorname{sih}^{3}$ |
| $\mathrm{a}^{3} \mathrm{ne}^{32}=\mathrm{u}^{3}{ }^{3}$ |
| $\mathrm{a}^{3} \mathrm{ne}^{32}=\mathrm{t} \int u \mathrm{~h}^{3}$ |
| $\mathrm{a}^{3} \mathrm{ne}^{32}\left(\mathrm{a}^{3}\right) \mathrm{ni}^{2} 2 \mathrm{if}{ }^{4}=r e \mathrm{P}^{1}$ |
| $\sim \mathrm{a}^{3} \mathrm{ne}^{5}=$ hre $^{1}$ |
| $\mathrm{a}^{3} \mathrm{ne}^{32}\left(\mathrm{a}^{3}\right) \mathrm{ni}^{2} \mathrm{Pi}^{3}=\operatorname{sih}^{3}$ |
| $\mathrm{a}^{3} n{ }^{32}\left(\mathrm{a}^{3}\right) n i^{2} \mathrm{Pi}^{3}=\tilde{u} \mathrm{~h}^{3}$ |
| $\mathrm{a}^{3} \mathrm{ne}^{32}\left(\mathrm{a}^{3}\right) \mathrm{ni}^{2} \mathrm{Pi}^{3}=t \int \mathrm{l}^{3}$ |

Gloss
Pronoun Category
'to bathe (oneself)'
'I am bathing myself'
'we (DU) bathe ourselves'
'we (EXCL) bathe ourselves'
'we (INCL) bathe ourselves'
'you bathe yourself'
'he bathes himself'
'she bathes herself'
'it bathes itself'
'you (pl) bathe yourselves'
'you (pl) bathe yourselves'
'they (masc) bathe themselves'
'they (fem) bathe themselves'
'they (anim) bathe themselves'

1s
1DU
1.EXCL
1.INCL

2
3.MASC
3.FEM
3.ANIM

PL=2
$\mathrm{PL}=2$
$\mathrm{PL}=\mathrm{MASC}$
$\mathrm{PL}=\mathrm{FEM}$
$\mathrm{PL}=\mathrm{ANIM}$
endoclitic endoclitic enclitic enclitic endoclitic enclitic enclitic enclitic compositional enclitic compositional compositional compositional

### 2.1 Forms of the plural

- Several types of indefinite quantifiers can occur where "plural" occurs.

neh $^{3}$<br>( $\mathrm{a}^{3}$ )ni? ${ }^{2}$ plural<br>$n u^{1} k^{w}{ }^{2} h^{1} \quad$ dual/' pair of ${ }^{\prime}$<br>ni $^{2}{ }^{2}$ rua $^{43}$ many/much

## Are plural pronouns clitics or independent pronouns?

(3) $\quad \mathrm{Kã}^{3}$ ?ãh ${ }^{2}=$ neh $^{3}=\operatorname{sih}^{3}$

PERF.leave $=\mathrm{PL}=3 \mathrm{M}$
'They left' ~ 'They have left.'
(4a) $\quad \mathrm{Neh}^{3}=\operatorname{sih}^{3} \mathrm{kã}^{3} \mathrm{a}$ ãh ${ }^{2}$
$\mathrm{PL}=3 \mathrm{M} \quad$ PERF.leave
'They left'
(4b) Juan kã ${ }^{3}$ ª̃h ${ }^{2}$
Juan PERF.leave
'Juan left.'

## Or are they pro-clitics?

(5) neh ${ }^{3} \operatorname{sĩ}^{3}$ kã3 ${ }^{3}$ ãh ${ }^{2}$

3P child PERF.go
'The children left' ~ '(It was) the children (who) left.'
(6) ${ }^{*}$ neh $^{3}$ kãa ${ }^{3}$ Pãh ${ }^{2}$

3P PERF.go
'They left' ~ '(It was) they (who) left.'

### 2.2 Non-selectivity in pronouns

- To demonstrate non-selectivity in the pronoun system, we will want to both look at
- how pronouns attach to different parts of speech
- how so-called clitics differ from other full noun phrases
- The second sub-criterion is important if we want to claim that a clitic is essentially a syntactic element just like a full NP is.


## Both endoclitics and enclitic apply at the right edge.

(7) $\mathrm{ki}^{3}-\mathrm{ni}^{3} \mathrm{Ph} h^{5}$

PERF-know/see.1S
'I knew (it)'
(8) $\mathrm{ki}^{3}-\mathrm{nir}^{2} \mathrm{Tl}^{3}=\mathrm{sih}^{3}$

$$
\text { PERF-know } / \mathrm{see}=3 \mathrm{M}
$$

'He knew (it)'

## But an adverb can intervene after the verb!

(9) $\mathrm{ki}^{3}-\mathrm{nir}^{3} \mathrm{ri}^{3}$

$$
\text { ni }^{2 ?} \text { rua }^{43}=\operatorname{sih}^{3}
$$

PERF-know/see much $=3 \mathrm{M}$
'He knew/saw a lot'
(10) $\mathrm{ki}^{3}-\mathrm{nir}^{2}{ }^{3} \mathrm{ni}^{3} \quad \mathrm{ni}^{2 \mathrm{r}} \mathrm{ruah}^{4}$

PERF-know/see much.1s
'I knew/saw a lot'

The adverb now has the endoclitic.

## These are all verbs though...

The same exact pronouns apply to nouns.
(11) $\mathrm{ra}^{3} \mathrm{Rah}^{5}$
hand.1s
'my hand'
(12) $\quad \mathrm{ra}^{3}{ }^{3} \mathrm{a}^{3}=\operatorname{sih}^{3}$
hand $=3 \mathrm{M}$
'his hand'
(13) $\mathrm{si}^{3}-\mathrm{ku}^{43}$
POSS'D-bone.1s
'my bone'
(14) $\mathrm{si}^{3}-\mathrm{kuh}^{5}=\operatorname{sih}^{3}$
POSS'D-bone $=3 \mathrm{M}$
'his bone'

## ...and to prepositions

(15) $\mathrm{tfi}^{3} \mathrm{Pih}^{5}$ about.1s
'about me'

$$
\text { (16) } \quad \begin{array}{ll} 
& \mathrm{f}^{3} \mathrm{i}^{4}=\mathrm{sih}^{3} \\
& \text { about }=3 \mathrm{M} \\
& \text { 'about him }
\end{array}
$$

(17) ${ }^{\mathrm{g}} \mathrm{gah}^{1}$
with.1s
'with me'
(18) ${ }^{\mathrm{g}} \mathrm{ga}^{1}=\operatorname{sih}^{3}$
with $=3 \mathrm{M}$
'with him'
N.B. All $3^{\text {rd }}$ person pronouns look identical to 3 M here.

## ...and even to numbers

(19) ${ }^{\mathrm{y}} \mathrm{go}^{2}=\mathrm{unh}^{3}$
(20) ${ }^{\mathrm{y}} \mathrm{go}^{2}$
one $=3 \mathrm{~F}$
'one of them (fem)'
one.1DU
'one of us two'
(21) ${ }^{\mathrm{g}} \mathrm{go}^{2}=\tilde{u}^{4}$
one $=1 . \mathrm{EXCL}$
'one of us (not including you)'

### 2.3 Independence in pronouns

- None of the pronouns are permitted to occur in isolation, but we can only determine this if we look at fronted noun phrases.
- When an entity is under focus, it occurs in the pre-verbal position. Instead of the typical VSO word order in Triqui, we get SVO or OVS.

$\mathrm{Ku}^{3}-\mathrm{t} \mathrm{u}^{4} \mathrm{ma}^{43}$ Basi ni ${ }^{3} \mathrm{kjã}{ }^{5}$<br>PERF-arrive Basi Tlaxiaco<br>'Basileo arrived in Tlaxiaco.'<br>VSO - normal word order

(23) Basi ku ${ }^{3}-t \int u^{4} \mathrm{mã}^{43} \mathrm{ni}^{3} \mathrm{kjã} \mathrm{~h}^{5}$

Basi PERF-arrive Tlaxiaco
'Basi arrived in Tlaxiaco.'
SVO - answer to ‘who arrived?’

## What's an independent pronoun?

- In certain languages with clitic pronouns, there may be separate independent words that are free morphemes and not clitics, e.g. Zacatepec Mixtec (Towne et al 2011).
Ndē'0 ra.
vimos:nosotros él
Ndē'e ra yo.
vio él nosotros
Él nos vio.
Rakan ndē'e yo.
ése vio nosotros
Ese señor nos vio.
- Itunyoso does not have independent pronouns. If you wish to place the pronoun under focus, the clitics must attach to the word for 'self' $/$ mã $^{2}\left\{\tilde{a}^{3} /\right.$, e.g. mã $\tilde{a}^{2} \tilde{a}^{3}=\operatorname{sih}^{3}$ 'He ~ he, himself.'

Any attempt to make the clitic independent results in the mã ${ }^{2}$ Páa construction being used, as these examples show.
(26) $\mathrm{se}^{4} \quad$ mã2 $\mathrm{an}^{5} \mathrm{ki}^{3}-r a ̃ h^{3}, \quad x w \tilde{a}^{43} \mathrm{ki}^{3}-\mathrm{rãh}{ }^{3} \quad \mathrm{t} \int \mathrm{u}^{3} \mathrm{t} \mathrm{Se}^{32}$
neg.exist self.1s perf-buy, Juan Perf-buy chicken
'It wasn't me who bought (it), Juan bought the chicken.'
(27) $\mathrm{se}^{4}$

$$
\text { mã }^{2} R a ̃ h^{5} \mathrm{k}^{\mathrm{w}} \mathrm{eh}^{3} \quad \text { riã }{ }^{32} \mathrm{t} \int \mathrm{i}^{3 n} \mathrm{ga}^{4}, \text { mã }^{2} R \tilde{a}^{4}=\mathrm{re} ?^{1} \mathrm{k}^{\mathrm{w}} \mathrm{eh}^{3}
$$

$$
\text { riãa }^{32}
$$

NEG.EXIST self.1s Perf.jump face fence, self=2s PERF.jump face $t \int i^{3 \mathrm{~B}} \mathrm{a}^{4}$ fence
'It wasn't me who jumped over the fence, you jumped over the fence.'
(28) ${ }^{*} \operatorname{sih}^{3} \mathrm{ki}^{3}-\mathrm{Pjah}{ }^{3} \mathrm{ttu}^{2} \quad \mathrm{t} \mathrm{a}^{3} \mathrm{kah}^{5}$
3S PERF-do thievery pig
'He stole the pig.'
(29) mã ${ }^{2}$ Pã $\tilde{a}^{3}=\operatorname{sih}^{3} \mathrm{ki}^{3}-\mathrm{Pjah}{ }^{3} \mathrm{ttu}^{2} \quad \mathrm{t} \int \mathrm{a}^{3} \mathrm{kah}^{5}$ self=3S PERF-do thievery pig
'He stole the pig.'

## Clitics can attach to topic markers too

$$
\begin{aligned}
& \text { (30) } \beta^{5}{ }^{5} \text { kã } 2 \text { ãh }{ }^{2} \mathrm{ka}^{2}-\text { Rna1 }{ }^{2} \\
& \text { TOP.1s POT.go POT-come }
\end{aligned}
$$

'As for me, I will go and return.'
(31) $\quad \mathrm{e}^{4}=\operatorname{sih}^{3} \mathrm{ki}^{3}-\mathrm{Pj}^{2} \mathrm{~h}^{3} \mathrm{ttu}^{2} \quad \mathrm{t} \int \mathrm{a}^{3} \mathrm{kah}^{5}$ TOP $=3 \mathrm{~s}$ PERF-do thievery pig
'It was him who stole the pig.'

## Pronouns are always dependent and non-selective

- The examples here demonstrate that pronouns are always dependent on a host in Triqui, regardless of where they occur.
- They are also always non-selective - there are no constraint on the type of constituent which they may apply to.
- What other criteria might be important for "clitic-hood"?


## Other criteria

2. Affixes are more likely than clitic+host combinations to have accidental or paradigmatic gaps. OK
3. Affixes are more likely than clitic+host combinations to have idiosyncratic phonological shapes.

OK
4. Affixes are more likely than clitic+host combinations to have idiosyncratic semantics. WEIRD
5. Syntactic rules affect affixed words, but not clitic+host combinations.

UNCLEAR (prefix vs "suffix")
6. Only clitics may attach to material already containing clitics.

OK

## On the weird criteria

- Since the only other affixes in Triqui are possessed prefixes on nouns and verbal prefixes, it is rather odd to compare prefixal morphology with what might be suffixal.
- The clitics do not appear to have any idiosyncratic semantics - they are always just marking person.
- This differs a little from the causative/iterative derivational prefixes on verbs, but the inflectional (aspect) or possessed (nominal) prefixation also lacks idiosyncratic semantics.


## Some idiosyncratic derivational morphology

- Some of the derivational prefixes (/tu-/ for causatives, /n(a)-/ for iteratives) result in idiosyncratic meanings.

| Underived verb |  | Derived verb |  |
| :---: | :---: | :---: | :---: |
| $a^{4}$ Pnĩh ${ }^{4}$ | 'to open, uncover' | $\mathrm{n}-\mathrm{a}^{4}$ Pnĩh ${ }^{4}$ | 'to revive (a person)' |
| $\mathrm{ci}^{32}$ | 'to take out, to get' | $n a^{3}-\mathrm{ri}^{32}$ | 'to draw or print' |
| $\mathrm{t} \mathrm{i}^{3}$ Pnã ${ }^{2}$ | 'to reproduce, have sex' | $t u^{3}-\mathrm{t} \mathrm{i}^{3}$ ?nã ${ }^{2}$ | 'to overplay/copy (music, forms)' |
| $\mathrm{a}^{4} \mathrm{tuh}^{4}$ | 'to enter' | $t u^{3}-\mathrm{k}^{\mathrm{w}} \mathrm{a}^{4} \operatorname{tuh}^{4}$ | 'to sneak someone in' |
| $\mathrm{a}^{3} \mathrm{k}^{\mathrm{w}} \mathrm{ah}^{4}$ | 'to yell' | $t u^{3}-k a^{3} \mathrm{k}^{\mathrm{w}} \mathrm{ah}^{4}$ | 'to honk at (in a car)' |

(32) $\quad \operatorname{ta}^{3}-\mathrm{ni}^{43}=\left({ }^{1}\right) \mathrm{so}^{1}$
$\left[\mathrm{ta}^{3} \mathrm{ni}^{41} \mathrm{sol}^{1}\right]$
CAUS-lower. $1 \mathrm{~s}=2 \mathrm{~s} . \mathrm{OBJ}$
'I lowered you (down).'

## What about clitic doubling?

Only pronouns appear to be able to attach to words with clitics.

This would suggest that these are indeed clitics instead of affixes.
(34) $\quad$ ta $^{3}-$ nih $^{3}=\operatorname{sih}^{3}=\tilde{u}^{3}$

CAUS-lower $=3 \mathrm{M}=3 \mathrm{~F}$
'He lowered her (down).'

## And idiosyncratic phonology?

- There is a lot of idiosyncratic phonology associated with the endoclitics in Itunyoso Triqui (to come next week).
- At least for the things labelled "enclitic", they seem to pass the "clitic test" and would be considered proper clitics.
- The category of endoclitic is tougher though.


## Summary of criteria for clitic-hood

| Criterion | Endoclitics | Enclitics | Expectations |
| :--- | :--- | :--- | :--- |
| Non-selectivity | yes | yes | yes |
| Prosodic independence | no | no | no |
| Syntactic independence | no | no | no |
| Paradigmatic gaps | no | no | no |
| Idiosyncratic phonology | yes | no | no |
| Clitic doubling | yes | yes | yes |
| Idiosyncratic semantics | no | no | no |
| Sensitive to syntactic rules | $?$ | $?$ | no |

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