

# Constituency and Convergence in Yaminawa

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## Yaminawa and its speakers

- Yaminawa is a large dialect complex in the Panoan family
- part of "Central Panoan Assemblage" in Mainline branch (Fleck 2013)
- Varieties spoken in Brazil, Peru, and Bolivia
- Around 2500 speakers total
  
- This talk focuses on the Peruvian varieties known as Yaminahua (Sepahua River dialect) and Nahua (AKA Yora); around 550 speakers collectively.
- High mutual intelligibility with Peruvian Sharanahua, but less with Yuruá River Yaminahua and Brazilian varieties
- Sepahua River Yaminahua has few fluent speakers under age 50. Nahua is still learned by children, but shift to Spanish is becoming apparent.

## Typological profile

- Prosody: combines tone, stress, morpheme-level nasality
  - Lots of metrical phonological processes!
- Morphology: agglutinating, almost entirely post-posed bound morphology
  - Pre-posed: body part prefixes and reduplication
  - Some fusion, mostly involving plurality or transitivity
- Dependent-marking, verb-final, morphologically split-ergative but syntactically nominative-accusative (Neely 2019)
  
- Compared to Chácobo (Panoan, see Tallman 2018, Tallman 2020), Yaminawa verbs have more morphosyntactic convergence of diagnostics, but plenty of mismatches with phonological diagnostics!

## The Yaminawa verbal complex

- Most verbal forms in naturalistic speech are composed of just a single root and a single suffix as in (1)

- (1) búdúi  
*búdú-i*  
dance-IPFV  
‘is/was dancing’

- But we also find highly complex forms as in (2)

- (2) rétéàkèwúwàwáwáiwáiwùdù  
*rété-ake-wúwàd-wáwáid-wí = ai = wu = du*  
kill-AM:circular-AM:go.about.doing.TR-CONT-FRUST = IPFV.SUB = PL = DS  
‘Even though they went around in all directions killing people continuously...’ (TN.MRR.Xukuxuku Ñũshĩwu.0141.line 52)

## Planar structure of the verbal complex/clause

Position	Type	Elements
1	ZONE	Focused NP {A,S,O,Oblique}, adverbials, PP, or clause
2	ZONE	NP {A,S,O,Oblique}, adverbials, PP
3	SLOT	reduplicant (REP, DISTR, or FREQ)
4	SLOT	body part prefix
5	SLOT	root
6	SLOT	verbalizer
7	ZONE	lexical class derivation / valency changing
8	ZONE	affective suffixes
9	ZONE	associated motion
10	SLOT	circadian temporal indicators
11	ZONE	DIM and INTENS
12	SLOT	nonfinite negation

## Planar structure continued

13	SLOT	modal
14	SLOT	future imperfective
15	SLOT	plural imperfective
16	SLOT	tense & aspect 1
17	SLOT	tense & aspect 2
18	SLOT	auxiliary verb 'go' + TAM
19	SLOT	3rd person plural
20	SLOT	negation
21	SLOT	switch reference, sequence, utterance type
22	SLOT	evidential
23	ZONE	mirative, other information structure marking

## Planar structure of the noun phrase

Position	Type	Elements
1	SLOT	demonstrative
2	SLOT	possessor NP
3	SLOT	resumptive possessive NP
4	SLOT	adjective
5	ZONE	head noun (root, compound, or lexified complex structure)
6	ZONE	affective morphology (DIM, AUG, INTENS)
7	ZONE	adjectives and apposite noun modifiers
8	ZONE	affective morphology (DIM, AUG, INTENS)
9	SLOT	numeral
10	SLOT	INTENS
11	SLOT	plural
12	SLOT	case marking, postposition
13	SLOT	transitivity harmony marking (on certain PPs, adverbs)
14	SLOT	epistemic and utterance type
15	SLOT	focus and mirativity



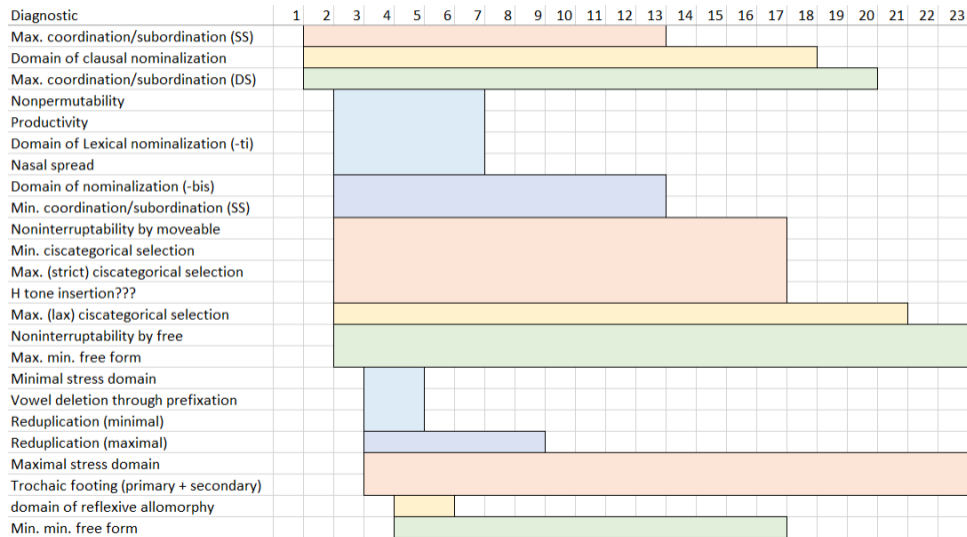
## Planar structures

- This talk focuses on the verbal complex because:
- it is a significantly larger domain in terms of planar structure,
- ... and because I don't entirely understand some of the tone phenomena inside the NP, yet

- 13 layers identified by application of 9 phonological/prosodic and 15 morphosyntactic diagnostics

Layer	Range	Tests
1	2-13	Max. coord./subord. for same subject
2	2-18	Domain of clausal nomz
3	2-20	Max.coord./subord. for different subject
4	3-7	<b>4:</b> Nonpermut., productivity, lex. nomz., nasal spread
5	3-13	<b>2:</b> domain of nomz., Min. coord./subord. (SS)
6	3-17	<b>4:</b> Noninterr. by moveable elmnt., Min. ciscat. select., H tone insertion
7	3-21	Max. lax ciscat. selection
8	3-23	<b>2:</b> Noninterr. by free elmnt., Max. min. free form
9	4-5	<b>3:</b> Min. stress domain, V deletion through prefixation, reduplication (n
10	4-9	reduplication (max.)
11	4-23	<b>2:</b> Max. stress domain, trochaic footing
12	5-6	Domain of reflexive allomorphy
13	5-17	Min. min. free form

# Layers



- Layer spans positions 2-13 (args. & obl. through modals)
- Max. domain of coordination/subordination with the same subject
- L span converges with layers 2 & 3, R span converges with layer 5

(3)  $\tilde{e}$  dapaiax, ubis

$\tilde{e}$                     *da-pai = ax*    *u-bis*

1SG.NOM die-DESID = S/A > S.PRIOR come-PRF

‘When I was very ill (lit. wanting to die), I came (back).’

(CN.MML.Contacto de los Nahuatl: 30:58.2)

- Layer spans positions 2-18 (args. & obl. through aux.) – or to 20 (neg)?
- Domain of clausal nominalization
- L span converges with layers 1 & 3, R span does not converge

(4) *nã dashi kaari, aris ãã*

*nã*                      *dashi-i*      *ka = a = ari*                      *a = ari = s*

DEM.ANA.ABS bathe-IPFV go = SUB.PFV = LOC.DIR 3SG = LOC.DIR = only

*ãã-i*

see-IPFV

‘In the direction that she had gone to bathe, it was looking only in that direction.’ (TN.MML.Ñūsĩ Tsũũika: 05:25.5)

- Layer spans positions 2-20 (args. & obl. through negation)
- Max. domain of coordination/subordination with diff. subj.
- L edge converges with layers 1 & 2, R edge does not converge

(5) *ese tiempo awa tsũã tãpĩabadu ...*

*ese tiempo awa tsua = N tãpĩ = a = ba = du*

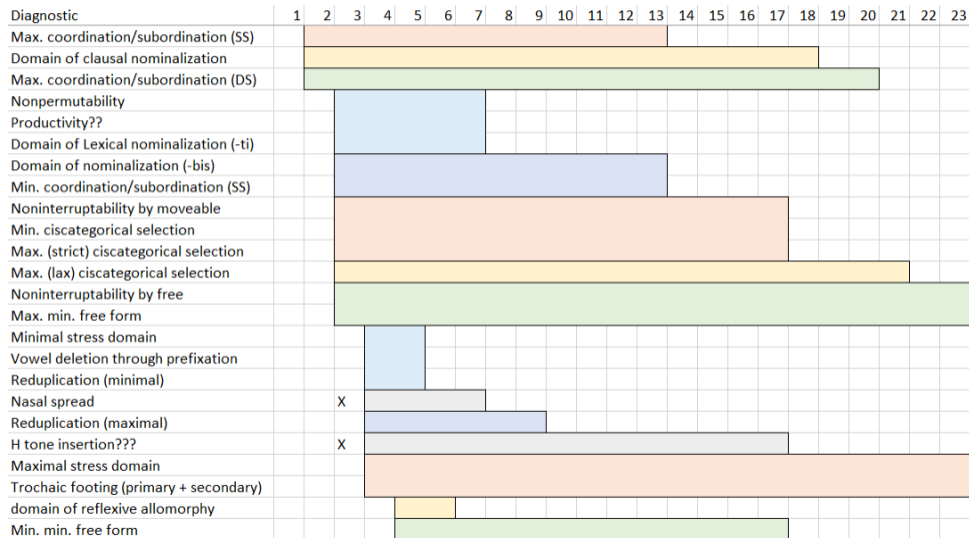
back.then nothing no.one = ERG know = PFV.SUB = NEG = DS.PRIOR

‘Back then when no one knew anything...’ (CN.TYW.Mishahua Ari:  
21:06.9)

## Layers 4-8: Overview

- Layers 4-8 all have the same left edge: position 3, the reduplicant
- This is a convergence of 13 diagnostics on the same left edge
- But since this edge is the reduplicant, are the phonological diagnostics ( $n = 2$ ) meaningful?

# Dismissing the phon. diagnostics for REDUP:





- Layer spans positions 3-7 (redup. through derivation)
- L edge converges with layers 5-8, R edge does not converge
- Diagnostics:
  - non-permutability
  - productivity (?)
  - domain of instrumental nominalization (-ti)
  - \*nasal spread

- Non-permutability: all of the elements in positions 3-7 are fixed, except within zone 7 (Take my word for it!)
- Productivity: ??
- Domain of lexical nominalization w/ *-ti*

(6) péwétì  
*pé-wé-ti*  
upper.back-bring-NOMZ.INSTR  
'tump line'

(7) xéábàtì  
*xéá-bad-ti*  
swallow-CAUS-NOMZ.INSTR  
'fish hook'

- The lone phonological diagnostic: Nasal spread
- No reason to believe this is actual spread, rather copying of the phonological form as the reduplicant.

(8) pǎ̀wàpǎ̀wàdàìtù ...

*pǎ̀wǎ̀-pí-ã-wad = ai = tũ*

REDUP.REP-eat-MAL-AM:come.do.&.leave = IPFV.SUB = S > O.SIMULT

‘When it (the paca) repeatedly came to eat (the pumpkins) (to my husband’s detriment)...’ (TN.MML.Adu ñũshĩwu.line 55)

(9) púsètírú

*pú- \*se-Î-tiru*

arm-cut-MAL-POT

‘can take (away) the arm (e.g., of a game animal)’

- Layer spans positions 3-13 (redup through modals)
- L edge converges with layers 4, 6-8, R edge does not converge
- Diagnostics are agentive nominalization with *-bis* and the domain of minimal coordination/subordination of clauses with the same subject
- We saw the Max. domain of coordination/subordination in Layer 1, so take my word on the minimum
- Agentive nominalization:

(10) wìchìpáí**bìs**

*wìchì-pai-bis*

catch.sight.of-DESID-NOMZ.AGT

‘romantic crush’ (lit. ‘one who wants to see’)

- Layer spans positions 3-17 (redup. through TAM)
- L edge converges with layers 4-5, 7-8, R edge converges with Layer 13
- Diagnostics include:
  - Non-interruptability by a moveable element
  - Min. cis-categorical selection
  - Max. strict cis-categorical selection
  - \*Domain of H tone insertion rule

- Non-interruptability by a moveable element generally holds, but how to handle the diminutive and intensifier?
- DIM and INTENS are very promiscuous and occur on virtually every word class and in multiple positions (zones 8 & 11) in the verb

(11) upishtai  
*u-pishta-i*  
come-DIM-IPFV  
‘was coming  
(affectionate)’

(12) warekebewāishtakadi  
warekebe-waid-pishta-kad-i  
escape-AM:do.&.go-DIM-PL.IPFV-IPFV  
‘were running escaping (affectionate)’

- Note: domain of alternation between *-pishta* and *-shta* concerns the first two metrical feet (see Layer 11)

- All bound morphs from 13 to 17 (with the exception of DIM & INTENS) attach to verbs and only verbs.
- Again, I am not sure on how to handle these two morphemes since they have different semantics in the verb than elsewhere.
- If we remove them from the span, only the right edge is affected, resulting in more convergence on position 7 as the limit.

## Layer 6 – H tone insertion

- High tone insertion following Low tone verbal roots/stems:
- This process is not well understood at this time – there is a lot of variation!
- If a L root is followed by a toneless suffix, a H tone is inserted on the penult, as in (13).
- If this suffix is multi-moraic, the H tone spreads within it, as in (14).

(13) wàdái  
wàdà-i  
SOW-IPFV  
'is sowing'

(14) wàdàtírú  
wàdà-tiru  
SOW-POT  
'can sow'



## Layer 6 – H tone insertion

- But it turns out that maybe the pattern is just alternating L and H?

- (15) wàdàtúshíkàdì  
*wàdà-tushi-kad-i*  
sow-AM:do.on.arrival-PL-IPFV  
‘were sowing on arrival’
- (16) wádátùshìkádí  
*wádá-tushi-kad-i*  
sing-AM:do.on.arrival-PL-IPFV  
‘were singing on arrival’

- Layer spans positions 3-21; L edge shared with 4-6 & 8, R edge does not converge
- Defined by Max. lax ciscategorical selection
- Expanded from the strict to include bound elements that are hosted by a predicate (not necessarily a verbal one), including negation and switch reference
- We're gonna skip this one for time, but I am happy to answer questions

- Layer spans positions 3-23
- Shares the L edge with 4-7; Shares the R edge with Layer 11 (stress phenomena)
- Defined by 2 diagnostics:
  - Non-interruptability by free elements
  - Maximal minimal free form
- We are also gonna skip these for time...

## Layers 9-11: Overview

- These layers share pos. 4 (body part prefixes) as L edge
- 6 diagnostics converge on the L edge
- These diagnostics all concern stress/metrical structure or reduplication

- Layer spans positions 4-5, body part prefixes and roots
- L edge converges with Layers 10-11; R edge does not converge
- Diagnostics include
  - Minimal stress domain
  - Metrical vowel deletion through prefixation
  - Minimal form of the reduplicant

## Layer 9 – Min. stress domain & V deletion

- Primary stress is always assigned to the body part prefix (if present), else it is assigned to the first syllable of the root
- Note: body part prefix + verb root combinations are not all fully productive!
- One of the more productive combos deletes a root vowel to create a disyllabic stem:

(17) *xátéà*  
*xáté-a*  
cut-PFV  
'cut (it)'

(18) *úxtéà*  
*ú-xáté-a*  
foot-cut-PFV  
'cut (off) its foot'

(19) *báxtéà*  
*bá-xáté-a*  
head-cut-PFV  
'cut (off) its head'

## Layer 9 – Min. reduplicant

- This layer is also the domain of the minimal reduplicant:

(20) péwépéwétìàdí

*péwé-pé-wé-tiad-i*

REDUP.FREQ-back-bring-always-IPFV

‘was always carrying (it) on (his/her) back’

(21) pípítìàdí

*pí-pí-tiad-i*

REDUP.FREQ-eat-always-IPFV

‘was constantly eating’

- Layer 10 spans positions 4-9 (body part prefix through associated motion)
- Maximal domain of reduplication
- L edge converges with Layers 9 & 11; R edge does not converge

(22) *dàshìtádàshìtádì*

*dàshìtá-dàshì-tad-i*

REDUP.FREQ-bathe-AM:go.do.&.return-IPFV

‘was constantly coming from having gone to bathe’

- Note: morphemes cannot be copied partially; it has to be the whole form!



- Layer 11 spans position 4 (body part prefix) through 23 (information structure enclitics)
- The L edge converges with layers 9-10, and the R edge converges with layer 8 (maximal minimal free form)
- Defined by maximal stress domain and trochaic footing, but the R edge of these is not easily evaluated.
- Strongest evidence from metrical phon. processes (in a 2 foot window) up to position 9 at most.

(23) ('á.pìʃ)(,tá.ì)  
*ák-pishtá-i*  
VTR-DIM-IPFV

‘is doing’

(24) ('á.jáʃ)(,tá.ì)  
*áyá-pishtá-i*  
drink-DIM-IPFV

‘is drinking’

(25) ('ì.kì)(,bá.pìʃ)(,tá.wì)  
*ìkì-bad-pishtá-we*  
enter-CAUS-DIM-IMPER

‘let me in (please)’

- Layer 12 spans positions 5-6 (root + verbalizer) and is the domain of reflexive allomorphy.
- Most often this allomorphy consists only of a tone change or a segment change:

(26) a. tékéà  
      ‘hurt (it)’  
      b. tékèà  
      ‘hurt (themselves)’

(27) a. rákàà  
      ‘laid (themselves) down’  
      b. rátàà  
      ‘laid (it) down’

- This layer spans pos. 5-17: the root through the T/A morphology
- The L edge converges only with layer 12; the R edge converges with that of layer 6
- This is the domain of the minimal minimal free form: every free, non-subordinated verb must minimally consist of a root and an affix from slot 17.

(28) pí:à  
*pí-a*  
eat-PFV  
'ate'

(29) búdúì  
*búdú-i*  
dance-IPFV  
'is dancing'

(30) ídìbàtírú  
*ídìbà-tiru*  
be.happy-POT  
'can be happy'

## Conclusion

- Overall the Yaminawa verbal complex is surprisingly cohesive
- This contrasts sharply with Chácobo, raising the question of how systems diverge along these dimensions
- The left edge of the layers mostly converge on the reduplicant
- Even without the two phonological diagnostics that settle on the reduplicant as the left edge, there is still a critical mass
- The right edges are less clearly identified, and sometimes vacuously by lack of evidence
- More research on tone and metrical phonology will hopefully bring in additional phonological diagnostics

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# The End