

The role of phonation and tone in TAM in Yateé Zapotec

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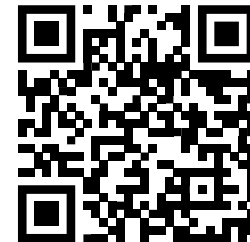
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Slides and sound at: <https://doi.org/10.17605/OSF.IO/C69VD>



Yateé Zapotec (yate1242; zty)

- Otomanguenan:Northern Core Zapotec;

San Francisco Yateé
Around 480 speakers in 2017















Los Angeles region
Diaspora community



- Field research (remote 2020 – 2022; in person 2022 – now)
- Collected recordings around 90 hours

Tone and phonation system in Yateé Zapotec

(1)	Modal	Rearticulated	Checked
Low	 şná <xna> “red”	 şnáʔà <xnaʔa> “my mother”	 tşàʔ <chaʔ> “clay pan”
High	 lá <la> “hot”	 ʒíʔí <lliʔi> “sit.3rd.PROG”	 şáʔ <xaʔ> “my father”
Rising	 gǎ <ga> “nine”	 wèʔé <weʔe> “get drunk”	 gǎʔ <gaʔ> “basket”
Falling	 kwâ <kwa> “corn flour dough”	 záʔà <zaʔa> “corn”	 kâʔ <kaʔ> “like that”

Interaction between morphology and phonation & tone in Yateé Zapotec

- In the language, pronominal subject can be marked by a **checked vowel** as a clitic attached to the end of verb stem. Imperative mood is not marked for person.
 - “I listened.” **b**-zênàg=áʔ
 - “Listen!” **b**-zênàg
- When the verb ends in **vowel**, could the difference between imperative and completive be purely **suprasegmental** difference?

Roadmap

- Aspect and person marking in Sierra Norte Zapotec
- Aspect and person marking in Yateé Zapotec
- Phonation and tone contrast between imperatives and completives
- Interspeaker variations in the realization of phonation and tone
- Social significance of the phenomenon

TAM and person marking in Sierra Zapotec

- Pronominal person is marked by clitics in Zoogocho Zapotec (Sonnenschein, 2004)

(2)

Singular

Plural

1st chizxghw=**a**' "my tortilla"

zoalao=**dxo** "we.incl begin"

2nd sh-daa=tont=**o**' "you are walking"

gu-ditgh=**le** "you played"

3rd che=**be**' "his/her"

che=**gak=be**' "them"

TAM and person marking in Sierra Zapotec

- Aspects are marked by prefixes, suppletions, and/or tone change (Sichel & Toosarvandani, 2020) on verbs.

(3)	CONT	COMP	POT
“sing” (Sierra Zapotec) (Sichel & Toosarvandani, 2020)	dzul ⁴	bil ⁴	gul ¹
“get” (Zoogocho) (Sonnenschein, 2004)	dx -eyalh	b -eyalh	y -eyalh












Sichel, Ivy, and Maziar Toosarvandani. 2023. “The Featural Life of Nominals.” *Linguistic Inquiry*, August, 1–96.

Sonnenschein, Aaron Huey. 2004. “A Descriptive Grammar of San Bartolomé Zoogocho Zapotec.” PhD diss., Los Angeles, California: University of Southern California.

Person marking in Yateé Zapotec

- Similar to other Sierra Zapotec varieties, pronominal person is marked by clitics in Yateé Zapotec. Imperative is not marked by subject.

(4) Die

	singular	plural
1 st	gót= á ? 	
1 nd inclusive		gót= 3ó ? 
1 nd exclusive		gót= tó ? 
2 nd	gót= ó ? 	gót= lé ? 
3 rd informal	gót= bé ? 	gót= ák=bé ? 
3 rd formal	gót= é ? 	gót= ák=é ? 
3 rd animal	gót= bá ? 	gót= ák=bá ? 

(5) **bléw**

	"Bend!"
bléw= à ?	"I bent."
bléw= ò ?	"You bent."
bléw= bè ?	"He.informal bent."
bléw= è ?	"He.formal bent."

TAM marking in Yateé Zapotec

- Similar to other Sierra Zapotec varieties, Yateé Zapotec marks the aspect of the verb by prefix and/or suppletion. We did not observe tonal difference between different aspects.
- Imperative mood usually shares the same prefix or suppletion form as completive aspect.

TAM marking in Yateé Zapotec

(6) Prefix

IMP	b -zênàg	Listen to the musicians!
COMP	b -zênàg=áʔ	I listened to musicians yesterday.
HAB	r -zênàg=áʔ	I listen to musicians everyday.
CONT	r -zênàg=áʔ	I am listening to musicians right now.
POT	w -zênàg=áʔ	I will listen to musicians tomorrow.

(7) Suppletion

IMP	b -élé	Only sing one song!
COMP	b -él=éʔ	He sang one song.
HAB	ʒ -ól=éʔ	He sings a song everyday.
CONT	ʒ -ól=éʔ	He is singing a song right now.
POT	g -ol=éʔ	He will sing a song tomorrow.

Imperative vs. Completive

- Imperative and completive frequently share the same prefix: **/b/-**
- Imperative is not marked by person; Completive is marked by person.
- When the verb ends in vowel (**a, o, e**), and the person marking share the same vowel quality (**=áʔ, =óʔ, =éʔ**) with the stem, would the difference between imperative and completive be purely suprasegmental difference?

Imperative vs. Completive

- When the person clitic (checked vowel) is attached to a verb stem ending in vowel, we observe a phonation change in the vowel.

(8)

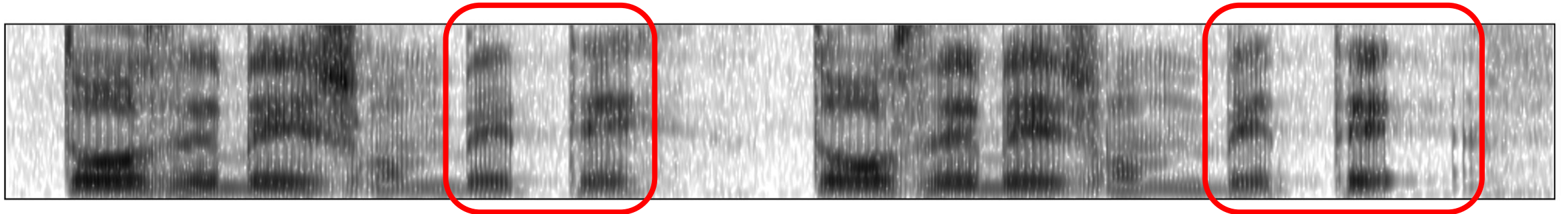
(a) $V_{\text{stem}} + V^?_{\text{person}} \rightarrow V^?_{\text{person}}$

(b) $V^?_{\text{stem}} + V^?_{\text{person}} \rightarrow V^?V_{\text{person}}$

(c) $V^?V_{\text{stem}} + V^?_{\text{person}} \rightarrow V^?V_{\text{person}}$

Imperative vs. Completive

(9) V – V' Modal vs. Checked



tó-zé bɛ̀ʒx-òn b-èté
one-FOC chicken-FOC IMP-kill

Only kill one chicken!



tó-zé bɛ̀ʒx-òn b-èté'
one-FOC chicken-FOC COMP-kill=3SG.FOR


He/she (formal) only killed one chicken.



Imperative vs. Completive

(9) V – V' Modal vs. Checked

 látè'èzé nìsèn w-è'èx^é Only drink a little bit of water!

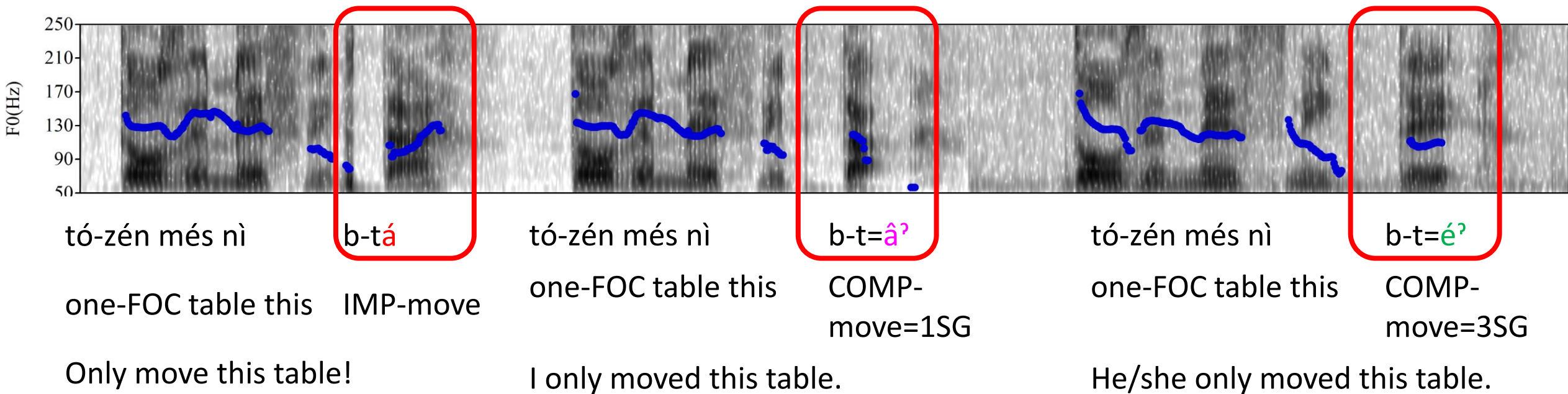
 látè'èzé nìsèn w-è'èx=^{é'} He/she (formal) only drank a little bit of water.

 gânázé b-lú^à Only sweep there!

 gânàzè b-lú=^{à'} I only swept there.

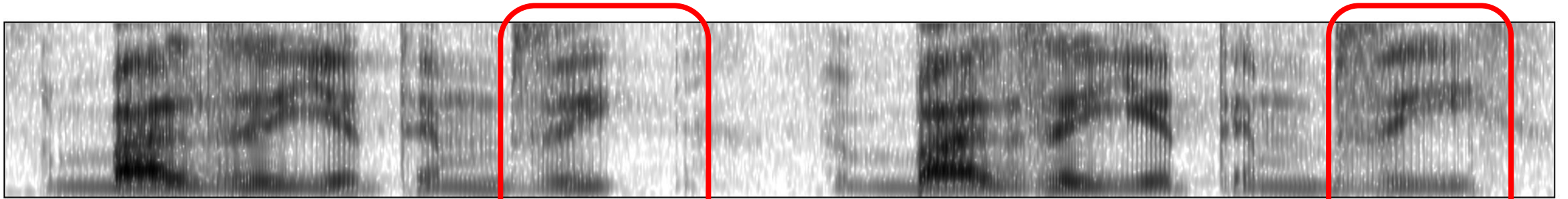
Imperative vs. Completive

(10) **V – V'** Modal vs. Checked & Tone change – Falling tone for the completive aspect.



Imperative vs. Completive

(11) $V^?$ – $V^?V$ Checked vs. Rearticulated



bál-zé

jèt-èn

b-zí[?]

a few-FOC

tortilla-FOC

IMP-buy

Only buy a few tortillas!



bál-zé

jèt-èn

b-z=i'í'

a few-FOC

tortilla-FOC







COMP-buy=3SG

He/she (formal) only bought a few tortillas.



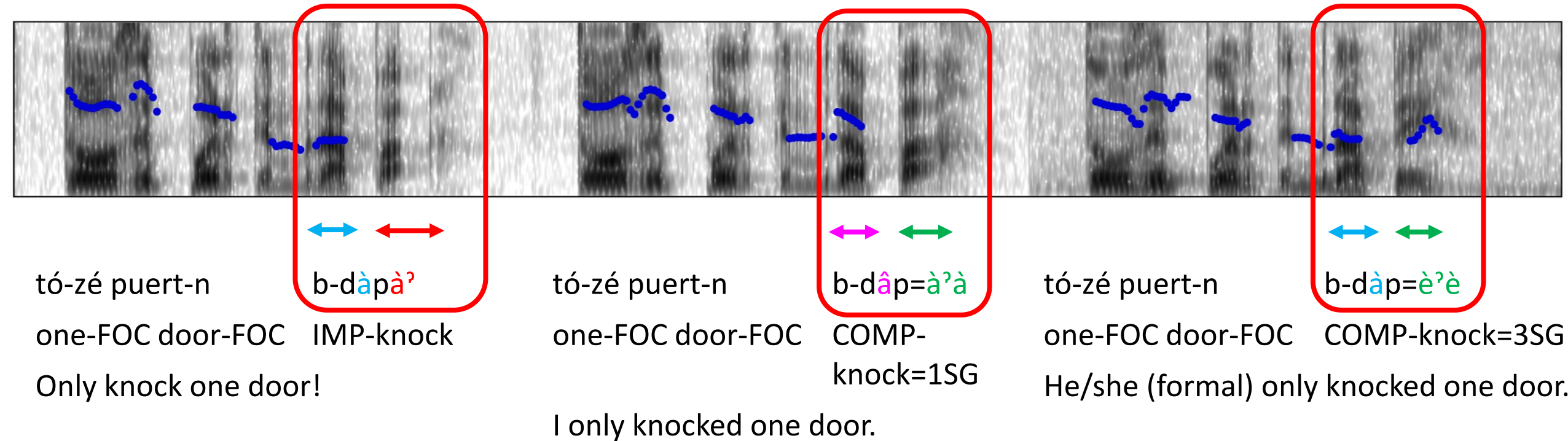
Imperative vs. Completive

(11) V[?] – V[?]V Checked vs. Rearticulated

 bálzè jètèn b-ét ^é ʔ	Only sell a few tortillas!
 <u>bálzè jètèn b-ét=^éʔé</u>	He.respect only sold a few tortillas.
 tózé şkwétŋ b-i ^á ʔ	Only carry one basket!
 <u>tózé şkwétŋ b-i=^áʔá</u>	I only carried one basket.
 tózé zàjénàn b-tşítş ^è ʔ	Only press my shoulder!
 tózé zàjénàn b-tşítş= ^è ʔé	He.resp only pressed my shoulder.

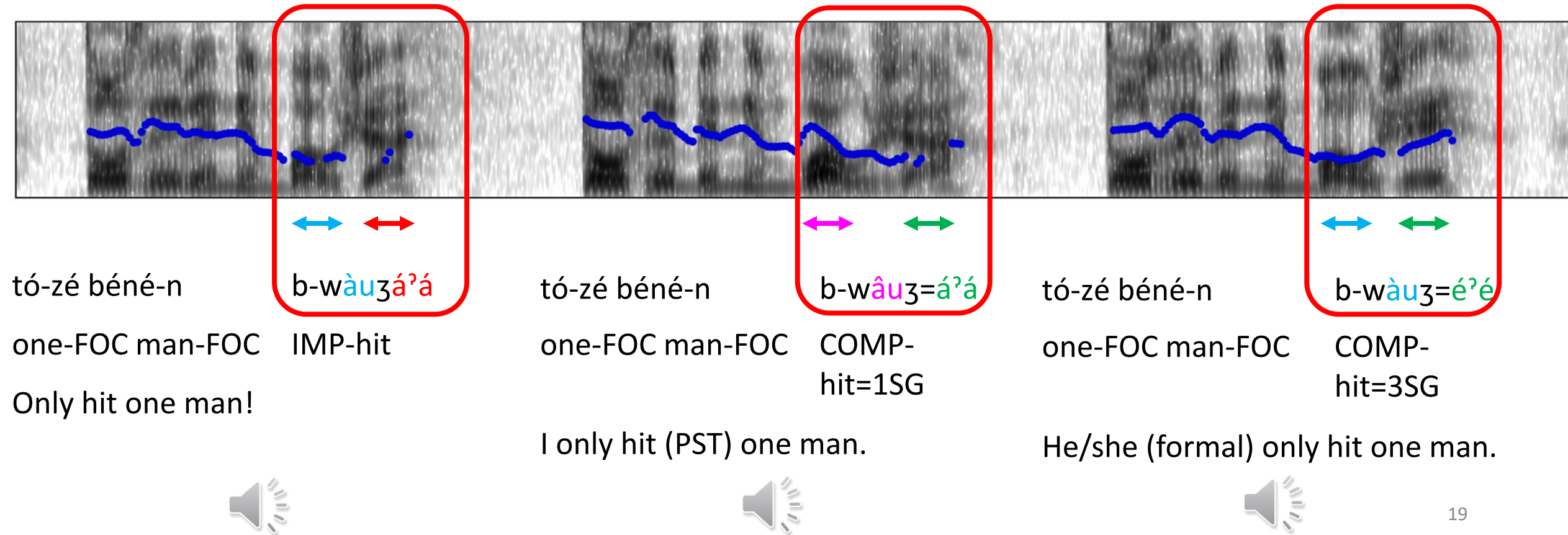
Imperative vs. Completive

(12) **V[?] – V[?]V Checked vs. Rearticulated + tone change** – The penultimate syllable has falling tone for the completive case.



Imperative vs. Completive

(13) **V²V – V²V Rearticulated vs. Rearticulated + tone change** – The penultimate syllable has falling tone for the completive case.















Summary

- When the verb ends in vowel, imperative and completive could differ in phonation, tone, or a combination of phonation and tone.

Verb stem	V	V ^ʔ	V ^ʔ V
Imperative	V	V ^ʔ	V ^ʔ V
Completive	V ^ʔ	V ^ʔ V	V ^ʔ V
Tonal difference	possible; lexicalized	possible; lexicalized	mandatory

Variation in phonation and tone production

(14)

	Spk 1	Spk 2
Only kill one chicken!	 tòzè bèzɔ̀n bèté	 tòzè bèzɔ̀n bèté
He (respectful) only killed one chicken.	 tòzè bèzɔ̀n bètéʔé	 tòzè bèzɔ̀n bètéʔ
Only sweep there!	 gânáze blúàʔ	 gânáze blúà
I only swept there.	 gânáze blúàʔ	 gânáze blúàʔ
Only break one pot!	 tózé jésõn bláʔá	 tózé jésõn bláʔ
I only broke one pot.	 tózé jésõn bláʔá	 tózé jésõn bláʔá

Social impact

- The realization of phonation has many variations among speakers.
 - The variation could be due to various demographic and social reason.
 - An accurate description of imperative mood and completive aspect can be evidence for language change and sociolinguistic implication of creaky phonation in Yateé Zapotec.
- Online dictionary of Yateé Zapotec is under construction.



<https://livingdictionaries.app/san-francisco-yatee-zapo/entries/list>

Social impact

- Future directions
 - Collect more production results from multiple speakers spanning from different age group and gender group.
 - Conduct perception study to test when there are multiple cues distinguish imperative from completive (tone and phonation), which cue(s) do listeners rely on more when identifying the mood or aspect of the sentence.

xhoxkenle'

