Demonstratives in San Cristóbal Lachirioag Zapotec

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1 Introduction

- In this talk, I will describe and (begin to) analyze the demonstrative system in San Cristóbal Lachirioag Zapotec (SCL) Zapotec, based on data collected through elicitation with a native speaker.[1]
- SCL Zapotec has six bimorphemic demonstratives: *nhí*, *ngâ*, *nhà*, *dí*, *dgâ*, and *dà*. I will show that the first three are determiners and the latter three are pronouns. Additionally, I will argue that SCL Zapotec's three-demonstrative system (based on roots) is distance-based—including a proximal, medial, and distal demonstrative—despite complexity in the nominal domain that can obscure this.

Background on demonstratives

- Demonstratives are deictic (pointing) elements that refer to and distinguish between entities (Dixon 2003; Diessel 1999).
- Demonstratives may modify a lexical noun, appear with anaphoric *one*, or appear independently (1a). They may also be anaphoric to an abstract referent in the discourse (1b).

(1) a. **This** (bathmat/one) is my cat's favorite place to nap.

b. **That**'s such a good idea.

- Diessel (1999) distinguishes four grammatical categories of demonstratives: pronouns, determiners, adverbs, and identifiers (demonstratives in copular clauses).
- Demonstratives are often related to locative adverbs, sometimes called demonstrative adverbs (Dixon 2003; Diessel 1999).
- Many languages have a two- or three-demonstrative system (Dixon 2003; Diessel 1999).
  - Two-demonstrative systems are organized into two levels of nearness with respect to the speaker (e.g., English).

[1]Thank you to Julio Dominguez for generously sharing his language with me, to my classmates from UCLA Field Methods '23 for their collaboration, and to Ben Eischens and Jessica Rett for their guidance and support.

- Three-demonstrative systems show more variability (Dixon 2003; Diessel 1999).
  - distance-based: three levels of nearness with respect to the speaker
  - person-based: near speaker, near addressee, far from both
    * Japanese, Basque, Quechua, Swahili, and Thai are examples of this type (Dixon 2003).
  - some combination of these
- Many function words often develop from demonstratives crosslinguistically, such as complementizers and relative pronouns from demonstrative pronouns or temporal adverbs from demonstrative adverbs/locatives (Diessel 1999).

Background on SCL Zapotec and methodology

- SCL Zapotec is a Northern Zapotec language spoken in the Villa Alta district of Oaxaca, Mexico (~1000 speakers), and in Southern California (~100–150 speakers) (Solá-Llonch and Xu 2022). The default word order is VSO.
- Unless noted otherwise, the SCL Zapotec data in this paper were provided by language consultant Julio Dominguez.
  - Most of the data was collected during the 2023 graduate Field Methods course at UCLA.
  - Elicitation sessions occurred during class, small group, or one-on-one. Julio sometimes answered follow-up questions on WhatsApp and consulted with other speakers.
  - During December 2023, I conducted additional one-on-one sessions over Zoom.
- Elicitation tasks included translations, acceptability judgments, and (more recently) storyboards and mini-comics.
- The literature on SCL Zapotec is limited. It includes several recent talks and proceedings papers (e.g., Liu 2021; Solá-Llonch and Xu 2022), a thesis (Sola-Llonch 2021), and a dissertation (Booth 2023) but, to the best of my knowledge, no articles published in peer-reviewed journals.
  - This project contributes to the continued documentation of SCL Zapotec and provides a basis for further work on the SCL Zapotec nominal domain. I hope it will positively impact both SCL Zapotec-speaking communities and linguists studying Zapotec languages.

A note on orthography

- The orthographic symbols that do not correspond to their IPA counterparts are shown in Table 1. Accents indicate tone: é (high), è (low), ê (falling), ě (rising), e (mid or unknown).

orth.	i	e	r	rr	nh	n	sh	zh	x	xh	ch	dj	y	h
IPA	i, ɪ, ə	e, ɛ, ə	ɾ	r	ɾ̃	n, ŋ	ʃ	ʒ	ʂ	ʐ̩	tʃ	dʒ	j, ʝ	ʾ

Table 1: Working orthography

Introducing the SCL Zapotec demonstrative inventory

- Demonstratives in SCL Zapotec are formed from two morphemes: a demonstrative root and a prefix.
  - The three roots are /-i/, /-gɑ/, and /-ɑ/.
    - Demonstratives with the roots /-i/ and /-gɑ/ are typically translated as 'this' or 'here'. Demonstratives with the root /-ɑ/ are typically translated as 'that' or 'there'.
  - The roots combine with an initial nasal (/n-/ or /ɾ̃-/) or an initial /d-/ to form a complete demonstrative.
    - Based on their prefixes, I call these two groups of demonstratives "n-demonstratives" (2) and "d-demonstratives" (3).

(2) bjĭ̈n {**n-gâ** / **nh-í** / **nh-à**} sí-à
bird N-this N-this N-that buy-1SG
'I'll buy this/that bird.'

(3) tó yàg wí {**d-gâ** / **d-ì** / **d-à**}
one tree orange D-this D-this D-that
'This/that is an orange tree.'

- Several additional morphemes can attach to or co-occur with demonstratives: the intensifier *-te*, the diminutive *-do*, *ka/k-* 'like, similar to,' and *-n*, which is a familiarity/specificity or topic marker according to Booth (2023).
- The form of locative adverbs in SCL Zapotec is identical to that of nominal n-demonstratives.

(4) to yésu-xhèn-gòrè djè {**ng-â** / **nh-i** / **nh-a**}
one pot-big-old sits N-here N-here N-there
'There's a big old pot sitting here/there.'

Roadmap

- §2 compares SCL Zapotec n-demonstratives and d-demonstratives, concluding that nominal n-demonstratives are determiners, locative n-demonstratives are adverbs, and d-demonstratives are pronouns.
- §3 compares the demonstrative roots, concluding that, when other factors that interact with demonstratives are considered, SCL Zapotec demonstratives are best characterized as a distance-based system.

2 N- and d-demonstratives

Nominal n-demonstratives

- The three nominal n-demonstratives are [ngâ] *ngâ* 'this', [ɲ̃íˀ] *nhí* 'this', and [ɲ̃àˀ] *nhà* 'that'. I will argue that they are determiners.
  - Two of these demonstratives (*ngâ* and *nhí*) are mentioned in Sola-Llonch (2021). All three are briefly discussed in Booth (2023).
  - Similar demonstrative determiners are found in related languages.
    * Ixcatec (Otomanguean, Popolocan) has a proximal demonstrative *=ri* and a distal demonstrative *=ra* (Adamou 2017).
    * Macuiltianguis Zapotec (MacZ) has three demonstrative determiners: proximal (*=ni* 'this here'), distal (*=à'/=nà'* 'that there'), and invisible (*=á/=ná* 'that far away') (Foreman 2006:205).
- N-demonstratives can modify nouns (regardless of animacy), in which case they always appear at the right edge of a DP.

(5) a. bjĭn {**n-gâ** / **nh-ì** / **nh-à**} sí-à
bird N-this N-this N-that buy-1SG
'I'll buy this/that bird.'

b. yésù {**n-gâ** / **nh-ì** / **nh-à**}
pot N-this N-this N-that
'this/that pot'

(6) shónù yésù-xhén-gòrè xhná **n-gâ**
eight pot-big-old red N-this
'these eight big old red pots'

- N-demonstratives can also modify certain anaphoric words—*ben*, *be*, and *bia*—which function as filler nouns to create DPs similar to 'this/that one' in English.[2]
  - These constructions are often used to single out one entity from a pair or group.

(7) *Context: The speaker is offering the addressee a choice between two cakes.*
á dj-ènd-ù bia **n-gâ**
Q CONT-want-2SG ANA N-this
'Do you want this one?'

- N-demonstratives and *one* anaphors also co-occur in "pointing out" contexts where there is only one relevant referent (often unfamiliar to/unnoticed by the addressee).
  - These are contexts where a standalone demonstrative could be used in English. In SCL Zapotec, a *one* anaphor is still obligatory.
  - Unlike the "singling out" contexts, this usage is only possible with animate referents.

(8) a. to doktór *(ben) **n-ga**
one doctor ANA N-this
'This is a doctor.'

b. to wash *(be / bia) **n-ga**
one lizard ANA N-this
'This is a lizard.'

c. *to yesu be / bia **n-ga**
one pot ANA N-this
'This is a pot.'

- In sum, nominal n-demonstratives require a noun of some kind to modify, supporting an analysis of these demonstratives as determiners.

Locative n-demonstratives

- Nominal n-demonstratives are identical in form to locative adverbs.

(9) to yésu-xhèn-gòrè djè {**ng-â** / **nh-i** / **nh-a**}
one pot-big-old sits N-here N-here N-there
'There's a big old pot sitting here/there.'

[2] I have glossed these words simply as ANA for "anaphor". I don't know yet if they are monomorphemic or more complex. Booth (2023) analyzes them as relative pronouns (but does not discuss the constructions I focus on here).

- Locative n-demonstratives are distinct from nominal n-demonstratives despite their form; they are adverbs, not determiners.
- In addition to the (obvious) syntactic differences, nominal and locative n-demonstratives behave differently when co-occurring with *ka* 'like, similar to.'
  - With non-locative n-demonstratives, [k-] attaches to the demonstrative and the initial nasal consonant becomes a tap: [kɾgâ] 'like this', [kɾí] 'like this', [kɾà] 'like that'.
  - The resulting forms function as manner adverbials.

(10) *Context: The speaker is painting the addressee's portrait.*

a. **k-r-gá** uzé
like-N-this stand
'Stand like this.'

b. kwi kwí **k-r-a** **k-r-gá**
no NEG like-N-that like-N-this
'No, not like that. Like this.'

- With locative *ngâ* and *nhí*, /kɑ/ appears as a distinct word. The co-occurrence of locative *nhà* with /kɑ/ has the same form of its non-locative counterpart.[3]
- The resulting forms retain their locative meaning.

(11) *Context: The speaker is comparing two towns.*
k-r-á-teks nhàk n-gà
like-N-there-exactly exist N-here
'Here is like there.'

(12) ka {**n-ga** / **nh-í**}
like N-here N-here
'similar to here'

D-demonstratives

- D-demonstratives are more constrained than n-demonstratives, and I will show that they are pronouns, not determiners.

[3]The form [kɑ ɾ̃à] also exists but means 'time past'. This is consistent with the crosslinguistic fact that demonstrative adverbs often grammaticalize into temporal adverbs (Diessel 1999).

- They cannot modify a lexical noun (13) or a *one* anaphor (14), and they do not have a locative function (15).

(13) yésù {**n-gâ** / ***d-gâ**} za-n syítà
pot N-this D-this come.from-FAM Mexico
'This pot is from Mexico.'

(14) gàyù dólàr zàkà be {**nh-í** / ***d-í**}
five dollar cost ANA N-this D-this
'This one/these ones cost(s) $5.'

(15) ya g-azhdu-n {**n-gâ** / ***d-gâ**}
let's IRR-plant-FAM N-here D-here
'Let's plant them here.'

- D-demonstratives are only acceptable when the demonstrative appears independently and the referent is inanimate.

(16) gàyù dólàr zàkà {**d-í** / **d-gâ** / **d-à**}
five dollar cost D-this D-this D-that
(shopping for house plants) 'This/that costs $5.'

(17) dòktór **d-gâ**
doctor D-this
'This is a doctor.' (✓ if illustration, # if real person)

- These facts are consistent with an analysis of d-demonstratives as pronouns. As additional evidence, the SCL Zapotec distal d-demonstrative has the same form as the complementizer *da* and the relative pronoun *da*.
  - Demonstrative pronoun to complementizer/relative pronoun is a common grammaticalization process crosslinguistically (Diessel 1999).

Interim summary

- I have shown that there are two types of n-demonstratives, which function as determiners and locative adverbs. D-demonstratives are demonstrative pronouns.
- Dixon (2003) observes that languages may have the same or different forms for these same types of demonstratives: independent pronouns or full DPs, demonstratives that modify a noun or pronoun, and locative adverbs.

- SCL Zapotec patterns with the Austronesian language Mangap-Mbula.

independent	modifies noun	locative	language
celui-ci	ce ... -ci	ici	French
iŋgi	ti		Mangap-Mbula
di/dga	**nhí/nga**		**SCL Zapotec**
this		here	English
yai			Boumaa Fijian

Table 2: Typology of proximal demonstrative forms, adapted from Dixon (2003)

3 SCL Zapotec demonstrative roots

Distal demonstratives

- The distal demonstratives *nha* 'that, there' and *da* 'that' are fairly straightforward in terms of their root.
- They mark relative, not absolute, distance.

(18) *Context: The speaker is an announcer for a baking show where contestants make cakes that look like everyday objects. The cakes are getting progressively more ridiculous.*

a. tó pastél {**d-à** / **d-gâ**}
one cake D-that D-this
(referring to a lamp on the other side of the room) 'That is a cake!'

b. tó pastél {**d-à** / ***d-gâ**}
one cake D-that D-this
(referring to a hat stand in another room) 'That is a cake!'

- There is no invisible demonstrative (as in MacZ), but the intensifier *-te* can be used to increase distance (literally with *nhà*, metaphorically with *da*).

(19) a. jésù-n djè **nh-à-te**
pot-N sits N-that-INT
'that (far-away) pot'

b. *Context: You offend someone and ask how to make it up to them. They say, "Bring me a gemstone from an active volcano."*
á **d-a-tè** dj-ènd-ù
q D-that-INT CONT-want-2SG
'You want me to go to those lengths?!'

Proximal demonstrative(s?)

- The demonstrative roots *-ga* and *-i* are often—but not always—interchangeable.
- Booth (2023) translates *ngâ* as 'this (in hand, underneath)' and *nhí* as 'this (near, beside).'
  - In my elicitations, Julio more often used *nhí* for referents in immediate proximity to the speaker.
  - *Nhi* was also more frequently associated with the speaker drawing the addressee's attention to something in their hands.

(20) a. *yésù nhí* 'this/these pot(s)' (close enough to touch)

b. *yésù ngâ* 'this/these pot(s)' (pointing)

(21) *Context: A deer is eating out of the speaker's hand.*
à-ù nhi
Q-2SG N-this
'Do you see this?'

- Animacy in SCL Zapotec is not a strict, static category. Entities are often promoted (e.g., a favorite toy) or demoted (e.g., an annoying child).
- Julio tended to prefer *-ga* demonstratives with "less" animate referents.

(22) pèlikùla {**n-gà** / ***nh-i**} dj-shèb-n nhàdá
movie N-this N-this PRS-scare-3INAN me
'This movie scares me.'

(23) a. xhdàndó dj-un beku {**nga** / **nhi**}
nicely CONT-make dog N-this N-this
(real dog) 'This dog is friendly.'

b. xhdàndó dj-un beku {**nga** / ?**nhi**}
nicely CONT-make dog N-this N-this
(puppet or actor) 'This dog is friendly.'

- There are also morphosyntactic differences between *-i* and *-ga* demonstratives: the acceptability of *-i* often improves when it is sentence-initial, and the marker *-n* can attach to *-ga* but is typically marginal with *-i*.

- Booth (2023) argues that SVO word order in SCL Zapotec is topicalization—postverbal clitic pronouns (obligatory in SVO sentences) are the true subjects.
- Booth (2023) treats *-n* as two different markers: a definiteness/familiarity marker and a topic marker.

(24) a. bíà nzi {**d-gà** / ?**d-i**}
cactus called D-this D-this
'This is called a cactus.'

b. {**d-gà** / **d-i**} bíà nzi
D-this D-this called cactus

(25) *bi* ***nga-n*** */ ?bi* ***ni-n*** 'this girl/guy right here'[4]

- It is important to control for *one* anaphors when looking at nominal n-demonstratives. These data appear contradictory and require further study, but familiarity seems relevant.

(26) a. to besérr bia **n-ga**
one bee ANA N-this
'This is a bee.' (the speaker isn't used to bees)

b. to besérr be **n-ga**
one bee ANA N-this
'This is a bee.' (the speaker sees bees often)

(27) *Context: The speaker is offering the addressee a choice between two cakes.*

a. á dj-ènd-ù bia **n-gâ**
Q CONT-want-2SG ANA N-this
'Do you want this one?' (the speaker baked the cake, feels connected to it like a pet)

b. á dj-ènd-ù be **n-gâ**
Q CONT-want-2SG ANA N-this
'Do you want this one?' (the speaker did not bake it)

[4]The *wh*-word *bi* 'what' also functions as a relative pronoun and quantifier. It is not a *one* anaphor; for example, *bi dga* is acceptable.

Interim summary

- Excluding sentence-initial demonstratives, *-n*, and *one* anaphors, calling SCL Zapotec demonstratives a distance-based system—proximal *-i*, medial *-ga*, distal *-a*—seems very reasonable.
  - Recall that *-ga* sometimes alternates with *-a*, as well as with *-i*.

(28) tó pastél {**d-à** / **d-gâ**}
one cake D-that D-this
(referring to a lamp on the other side of the room) 'That is a cake!'

- The data on demonstratives with the *-n* suffix and demonstratives appearing sentence-initially suggest that topics prefer *-i* over *-ga*.
  - Perhaps one pragmatic use of demonstratives in SCL Zapotec is to mark topicality.
  - Diessel (1999) notes that demonstrative identifiers are often used to introduce new discourse topics and anaphoric demonstratives are often used to track a topic after its first mention, particularly in languages that without a definite article.

4 Conclusion

- Demonstratives in SCL Zapotec are distinguished on two dimensions. Their prefix determines their syntactic function (determiner/adverb or pronoun) and is sensitive to animacy.
- Their root relates to the relative distance of their referent from the speaker, and perhaps also to pragmatic topic-marking purposes.
- These patterns may be obscured by other elements of the nominal domain that demonstratives interact with, such as the *one* anaphors and topicalization.
- Future work could further clarify the semantic features and pragmatic use of SCL Zapotec demonstratives and investigate related languages for similar patterns.

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