

Chapter 7

Pilagá determiners and demonstratives: Discourse use and grammaticalisation

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Guaykuruan languages of the South American Chaco have rich sets of classifiers and demonstratives, marking deictic, visibility, postural, and recognitional meanings. There is lack of consensus in the Guaykuruan literature about determiner and demonstrative elements, even across closely related dialects. This chapter explores them in Pilagá, including their structure, discourse profile, extension into the tense-evidentiality domain, and grammaticalisation as subordinators. Corpus data show that *mʔe* is best viewed as ‘distance neutral’, contrasting with *hoʔ* ‘proximal’ (which also has adverbial uses), *tʃaʔa* ‘distal visible’, *maʃa* ‘unseen’, and *naqae* ‘recognitional’. *Mʔe* is dominantly endophoric and has grammaticalised as a relativiser. The ‘vertical’ classifying determiner *daʔ* has grammaticalised as a general subordinator.

1 Introduction

Pilagá (ISO 639-3: plg) is an endangered Guaykuruan language, spoken by around 5,000 people in Formosa, northeastern Argentina, in the South American Gran Chaco.¹ Guaykuruan languages have rich sets of determiners. Nearly all nouns require one, so they are ubiquitous in discourse. Pilagá determiners include forms that also function demonstratively, pronominally, or adverbially. They can have incipient nominal tense and evidential functions, and two have developed clausal

¹Authors are listed in alphabetical order and the chapter is fully co-authored.



subordination functions. Some determiners are simple, involving only what we call classifiers (CLF),² highlighted in (1); others are demonstrative word-level constructions, highlighted in (2).³

- (1) (190Verbos2 165)⁴
 s-anem **he-ʔn** nsedaʃanaʃat **daʔ** ya-qaya-di-pi
 A1-give M-CLF:near pole CLF:VER POS1-brother-PAUC-COL
 ‘I give the pole to my brothers.’
- (2) (Vidal 2001: 123)
ha-da=ča-lo yawo-ʔ
 F-CLF:VER=DEM1:DIST.VIS-PL woman-PAUC
 ‘those women (standing)’

This chapter addresses the morphosyntax, meaning, and discourse uses of simple and complex Pilagá determiners and demonstratives.⁵ The study is based on a corpus of over 70 texts plus elicited data. §2 discusses definitions and terminology, and presents the three paradigms of key morphemes that figure in determiner and demonstrative constructions. Sections 3 through 6 focus on the morphosyntax and semantics of the constructions, supporting the claim that three distinct paradigms of key morphemes are involved. §7 discusses extensions into tense-evidentiality, and grammaticalisation of both the ‘neutral’ demonstrative root *mʔe* as a relativiser and of the ‘vertical’ CLF *daʔ* as a more general subordinator. Throughout, issues of semantics and function are addressed, including how interaction among morphemes may affect interpretation. A conclusion is in §8.

²Classifiers are usually pro- or enclitics. We write them with the clitic boundary = as part of demonstrative constructions, but as separate orthographic words before a noun in accord with Pilagá orthographic practice. Some nouns with possessor prefixes lack determiners, though they can co-occur.

³Examples use a modified IPA representation with <y> for IPA /j/, <ñ> for /ɲ/, <ç> for /tʃ/, <ɸ> for the bilabial fricative allophone of /w/; <λ> represents a palatal lateral sonorant. These are adaptations to the practical orthography.

⁴All data were collected by Alejandra Vidal with Pilagá native speakers in Formosa, between 1988 and the present. Data citations like “190Verbos2 165” refer to line “165” in file or text number “190” in our Pilagá FLEx database. The database contains narrative and expository texts, and some elicited material. Examples with no citation are elicited and not in the database.

⁵Previous studies of determiners and demonstratives in Guaykuruan discourse have focused on Toba, especially Carpio (2012) on Western Toba (which Vidal assesses as very close to Pilagá), González (2015) on an eastern variety of Toba, and Messineo & Cúneo (2019) on Toba generally.

2 Classifier and demonstrative roots

There is lack of consensus in the Guaykuran literature about what are called “demonstratives”. The issues concern terminology for cognate forms and the inventory of relevant elements and complex structures, which may vary by dialect and language (Vidal 1997; 2001; Carpio 2012; González 2015; Messineo et al. 2016; Cúneo 2016). We thus first clarify key terms as used in this work.

- CLASSIFIER (CLF): Any of the six deictic or posture/shape clitics in Table 1.
- DEMONSTRATIVE ROOT (DEM1, DEM2): Any of the morphemes in Table 2 and Table 3, which have deictic, pointing-out, or joint-attention functions.
- DEMONSTRATIVE CONSTRUCTION (DEM): A word-level construction that contains a deictic or joint-attention establishing root **other than** just a classifier. All but one demonstrative construction contain a classifier; may function adnominally, pronominally, and in one case adverbially; and may be endophoric or exophoric to the discourse.⁶
- DETERMINER (DET): Any classifier or demonstrative construction **when functioning adnominally**. All determiners syntactically allow the noun (phrase) they accompany to function as a syntactic argument and/or as a referring expression in discourse. They may or may not be deictic.⁷

As the first two bullet points above suggest, we distinguish what we call classifiers (CLFs) from two sets of demonstrative roots (Table 1–3). Simple CLFs are the default determiner form in discourse (§3). Aside from a demonstrative construction with adverbial function (§4), all demonstrative constructions include a CLF. What we call DEM1 roots are preceded by a CLF (§5), while the DEM2 root is followed by a CLF (§6).

All the sets in Table 1–3 have some deictic semantics, and CLFs and DEM1 roots include visibility contrasts. The deictic overlaps might lead one to consider all three sets to be demonstrative morphemes. But there are functional reasons to distinguish classifiers from demonstrative roots. It would be unusual for a language to require every nominal to have a demonstrative, and this is one reason

⁶For Pilagá, we use “demonstrative root” to designate a root from Table 2 or Table 3, and “demonstrative” to designate a demonstrative construction.

⁷Diessel (1999: 57) uses “demonstrative determiner” for adnominal demonstratives not found in other syntactic contexts. In Pilagá, all demonstratives that function adnominally can also function pronominally. CLFs also (but rarely) function pronominally.

not to consider the default and ubiquitous classifier determiners to be demonstratives. The two sets of demonstrative roots are stronger orienting devices, pointing the hearer's attention to a participant, place, or time, usually (but not always) via deixis or visibility features.

Table 1 presents the Pilagá singular classifiers. Underlyingly they contain glottals, but they often surface with weak to no glottalisation. Classifiers with /a/ and /i/ often undergo vowel harmony alternation to /o/. For instance, *di?* has allomorphs *dyo* and *do?*.⁸ *So?* may undergo vowel harmony to *sa?*, and sometimes we find *eso?*. We write the variations where they surface. The plural counterparts lengthen the vowel (Vidal 2001), though this is optional (especially when there is a plural affix on a noun).

Table 1: Pilagá singular classifier (CLF) clitics

Deictic direction/Visibility		Posture/Shape	
<i>na?</i>	'near'; 'coming' to the reference point	<i>di?</i>	'horizontally extended' (line or plane)
<i>so?</i>	'far'; 'departing' from the reference point; 'past'	<i>da?</i>	'vertically extended'; 'abstract'
<i>ga?</i>	'unseen, absent'; 'unknown, generic, non-referential'; 'irrealis/future'	<i>ñi?</i>	'non-extended, bunched up, sitting'

As Table 1 shows, the CLF paradigm has two semantic subsets (they are not contrastive in morphosyntactic distribution). Guaykuruan cognates of these morphemes have fascinated scholars due to the relatively unusual combination of their meanings, both basic and metaphorical (Klein 1979; Messineo et al. 2016). Relative to the physical world, the first semantic subset has deictic and/or visibility features, and in some contexts allows inference of motion semantics. The deictic meanings fit with Diessel's (1999) definition of demonstrative elements, which leads some researchers to refer to all Table 1 morphemes as "demonstratives" for related languages (Messineo et al. 2016).⁹ Carpio (2012) refers to the Western Toba cognates as "demonstrative roots" (she also identifies a distinct set

⁸Also note that *do(?)* is a dialect variant of *da?* 'vertical; abstract'.

⁹Messineo et al. (2016) do not mention cognates of the demonstrative roots we present in Table 2 and Table 3.

of morphemes – cognate with what we call “demonstrative roots” – to which the CLF cognates can attach). González (2015: 153) rejects calling the cognate Eastern Toba morphemes “classifiers” because, though they communicate a certain kind of nominal classification, a given nominal can occur with one or another according to the speaker’s perspective. (See also discussion in Messineo (2003: 145), who nevertheless uses the term “nominal classifier”.) However, in many classifier languages, classifier choice can be sensitive to varying speaker conceptions of the configuration of a concept. In Yagua, for example, ‘water’ can be conceptualised as long+horizontal or as round; ‘wood’ can be conceptualised as upright or as short+small (Payne 1986).

The second semantic subset most concretely indicates salient shape or postural configuration of a referent. For instance, *daʔ* in its concrete sense indicates vertically extended items like upright trees and people. It is also used for abstract nouns and has grammaticalised as a general subordinator (§7.3). The shape semantics lead Klein (1979), Vidal (1997; 2001), and Messineo & Cúneo (2019) to call all six “classifiers”. Our primary point here is not to argue that these six morphemes are (not) classifying or are (not) deictic in nature as the paradigm clearly has both types of semantic features. Rather, we wish to clarify that these comprise a distinct paradigm from what we call “demonstrative roots”, to which we now turn.

Pilagá demonstrative roots divide into two paradigms based on how they combine with classifiers: DEM1 roots follow CLFs, but the DEM2 root precedes CLFs. The DEM1 roots are deictic, indicating ‘proximal’, ‘distal’, and possibly ‘medial’ distinctions relative to a reference point, as well as visibility contrasts. To give an initial sense of their differing discourse profiles, Table 2 and Table 3 show the frequency of each demonstrative root in the corpus (whether as part of complex demonstrative constructions or not).

The DEM1 roots can function exophorically. This is most common for *hoʔ* ‘proximal’, which is dominantly exophoric and neutral for visibility, and for *čaʔa* (variant *čʔa*) ‘distal visible’.¹⁰ The exophoric uses optionally occur with pointing gestures. In contrastive elicitation contexts, *mʔe* can indicate exophoric referents medially distant between those marked with *hoʔ* and *čaʔa*. *Maʔa* refers to something unseen; the referent may be inferred or something about it is uncertain.

Demonstratives with *hoʔ* can also function endophorically to refer to discourse-

¹⁰For Western Toba, Carpio (2012: 47–49) identifies *-ha* ‘non-visible exophoric’ as a suffix on what we call CLFs. A possibly cognate Pilagá form surfaces in the frozen combination *hoʔ daha* ‘there, a place very far away’. We do not treat *-ha* further here but note its analogous position to *hoʔ*. *Čaʔa* (variant *čʔa*) comes from a motion verb and sometimes carries ‘itive’ and ‘ventive’ directionals that are characteristic of verbs, as in (38) and (39).

Table 2: Pilagá deictic and visibility demonstrative roots (DEM1)

DEM1 Root	Major Senses	Instances in Corpus
<i>hoʔ</i>	exophoric adverbial; ‘proximal’ (PROX); current discourse topic	363
<i>mʔe</i>	exophoric ‘medial visible’; endophoric ‘neutral’ (NEUT)	241
<i>čaʔa</i>	‘distal visible’ (DIST.VIS)	18
<i>maʕa</i>	‘unseen (NVIS)’; ‘inferential, uncertain’	6

anaphoric referents. Endophoric use is also possible for *čaʔa*, but the referent is not considered close to the speaker or reference point. *Mʔe* is primarily endophoric, either anaphoric or cataphoric. Especially in its endophoric distribution, *mʔe* is best viewed as ‘distance neutral’ (Himmelman 1996: 211) since it can occur with all the CLFs to mark referents as ‘proximal/(coming) in the visual field’, ‘distal/(going) out of the visual field’, ‘never seen’, or depending on the particular classifier to refer to ‘horizontal’, ‘vertical’, or ‘bunched up’ referents. It is not accompanied by pointing gestures. It has also grammaticalised as a relativiser (§7.4).

The DEM2 set contains just the root *naqae* (Table 3). It takes CLFs as enclitics, unlike the DEM1 roots which take CLFs as proclitics. We analyse it as a ‘recognitional’ (RCG) demonstrative root, but in some contexts it may function more emphatically or mark unexpected information (§6).

Table 3: Pilagá recognitional demonstrative root (DEM2:RCG)

DEM2 root	Major sense	Instances in corpus
<i>Naqae</i>	‘this/that familiar but previously inactive; recognitional (RCG)’	84

Having now introduced the CLFs and demonstrative roots in Table 1–3, §3–§6 will discuss the morphosyntax and functions of four constructions that employ them. In anticipation, Table 4 surveys the grammatical functions of the basic classifier (BCLF), simple demonstrative (SDEM), deictic demonstrative (DDEM), and

recognitional demonstrative (RDEM) constructions. A dash in Table 4 indicates the morpheme in the first column lacks the adverbial function.

Table 4: Syntactic distribution of basic classifier (BCLF) and demonstrative constructions

	Adverbial	Pronominal	Determiner	Other
<i>ho?</i> DEM1 'proximal/ unspecified'	SDEM, DDEM	SDEM (rare), DDEM	DDEM	
<i>m?e</i> DEM1 'medial visible'; 'neutral'	–	DDEM	DDEM	relativiser
<i>ča?a</i> DEM1 'distal visible'	–	DDEM	DDEM	
<i>maša</i> DEM1 'non-visible'	–	DDEM	DDEM	
<i>naqa(e)</i> DEM2 'recogni- tional'	–	DDEM	RDEM	
<i>da?</i> CLF 'vertical; abstract'	–	BCLF	BCLF	subordinator
Other CLFs	–	BCLF (rare)	BCLF	

Across languages, demonstrative morphemes may have differing syntactic functions (Diessel 1999: 4; Krasnoukhova 2012). For example, in one language a single paradigm might function as demonstrative pronouns for participants or abstract concepts, as adnominal demonstratives, and as demonstrative adverbs for location or time. The Pilagá morpheme *ho?* distributes like this, though the particular construction it appears in (SDEM or DDEM) matters for syntactic function. In another language, a given demonstrative paradigm may have only a subset of functions. In English, for instance, *here/there* are adverbial demonstrative proforms

for locations,¹¹ and *now/then* are adverbial demonstrative proforms for time. But *this/that/these/those* function as both demonstrative participant pronouns and as demonstrative determiners.¹² The DEM1 roots and the DEM2 root distribute like these last English morphemes when in particular constructions. Classifiers in the BCLF construction function primarily as determiners, and more rarely as pronouns.

3 Basic classifier construction

In Pilagá discourse, determiners most frequently have the structure in (3). We call this the basic classifier construction (BCLF). The only required element is one of the six clitics in Table 1, or a plural counterpart. BCLFs functioning as determiners are highlighted in (1) above and in the examples below.

- (3) Basic classifier construction (BCLF)
(GENDER-)CLASSIFIER

The BCLF construction is illustrated in (4)–(6) with the posture/shape CLFs.

- (4) (028SanMartin2 1.5)
di? naʔa-ik
 CLF:HOR road-M
 ‘road’
- (5) (190Verbos2 565)
 da=mʔe yi-la-ʔa **da?** epaq
 CLF:VER=DEM1:NEUT A3-find-OBJ.SG CLF:VER tree
 ‘She/He sees a tree.’
- (6) (028SanMartin2 1.2)
 se-bide-wʔo **ñi?** tamnaʔa-ki
 A1-arrive-LOC:outward CLF:NO.EXT religion-place
 ‘I arrive at the church.’

¹¹This sets aside uses like *this here dog*, where *here* doubles *this* as a proximal determiner.

¹²Diessel (1999: 90) also discusses presentational (what some call “predicational” or “identificational”) and other functions of demonstratives.

Examples (7)–(8) illustrate vowel-lengthened plural CLFs. *Saaʔ* occurs in (8), rather than *sooʔ*, due to vowel harmony with the following noun. Recall that the plural CLF forms are optional (especially when the noun is marked for plurality).

- (7) **naaʔ** y-ʔaiʔte
 CLF:near.PL POS1-eyes
 ‘my eyes’

- (8) (008ZorroPato 1)
 qančʔe yi-laeyʔa-lo **saaʔ** taʔaʔni k'oqte-l
 then 3-see.ahead-PL CLF:far.PL rosy.billed.duck offspring-PL
 ‘He suddenly saw some rosy-billed ducklings.’

Examples (9)–(11) show the BCLF with gender prefixes. Masculine is usually unmarked (formally and functionally), but an overt prefix *ho-/(h)e-* can be added for clarity.

- (9) **ho-gaʔ** emek
 M-CLF:absent house
 ‘that (unknown) house’

- (10) (011Kitilipi 1.20)
 qačʔe qo-i-law-lo **ho-ʔn** l-ʔaiʔte ekey
 CONJ SBJ.INDF-A3-see-PL M-CLF:near POS3-eye.PL INTJ
 qo-d-ʔoya-lo **soʔ** l-ʔaiʔte
 SBJ.INDF-A3-fear-PL CLF:far POS3-eye.PL
 ‘They saw the eyes (coming) and they got scared.’

- (11) (005ZorroAvispa 1.1)
 yi-la-ʔa **ha-soʔ** waʔatʔo
 A3-find-OBJ.SG F-CLF:far wasp
 ‘They found a wasp (in the forest).’

Members of the deictic/visibility CLF subset in Table 1 can express metaphorical or cognitive distance, and sometimes a kind of evidentiality (§7).¹³ Example (12) describes customary actions. No particular mothers or carandillo palm leaves are

¹³Messineo et al. (2016) observe similar uses for the Toba cognates.

physically near the narrator, yet the ‘near’ CLF *naʔ* occurs. Example (13) is the first line of a folktale in which the participants are not departing from view within the world of discourse, though they are apparently conceptualised as distal and hence coded with the ‘far’ CLF *soʔ*.

(12) (039Artesania 1.1)

naʔ qad-atʔe-l-pi daʔ set-ake d-ʔoʃo-n-aʃan
 CLF:near POS1PL-mother-PL-COL SUB want-DES A3-weave-NPROG-CAUS
 načʔe wʔae-ñe yi-lake **naʔ** laqata l-awa
 then be.first-COMPL A3-look.for CLF:near carandillo POS3-leaf

‘When our mothers want to weave (make handicrafts), first they look for carandillo (*trithrinax schizophylla*) leaves.’

(13) (003Zorro Paloma 1.1)

wʔo **soʔ** n-loʔ **soʔ** waʃayaqalʔačiyi qataʃa **soʔ**
 EXIST CLF:far POS.INDF-day CLF:far fox and CLF:far
 doqotoʔ
 dove

‘There was a day the fox and the dove met each other.’

Similarly, (14) and (15) are the initial sentences of two different explanations of fishing customs. They seem to be situationally identical in objective deictic/visibility features, but in (14) generic ‘people’ who go fishing take the ‘far’ CLF, while in (15) generic ‘people’ who go fishing take the ‘near’ CLF *naʔ*. Presumably they are conceptualised differently within the world of discourse.

(14) (013Pesca2 1.1)

soʔ siyafa-di-pi daʔ set-ake di-yʔako
 CLF:far person-PAUC-COL SUB want-DES A3-fish

‘When **the people** want to go to fish, ...’

(15) (14Pesca4 1.1)

daʔ ni-yʔakoʃo-k daʔ čʔe n-piyae-yi daʔ di-yʔako **naʔ**
 SUB B3-fish-M SUB suddenly B3-gather-PL SUB A3-fish CLF:near
siyafa-di-pi
 person-PAUC-COL

‘When it is fishing (time), when **the people** spontaneously gather to go hunter-gather (in general, lit. ‘fish’), ...’

The CLFs can also show psychological deixis in the sense of empathy or point-of-view. For instance, in (16) from a folktale, the skunk beats both the peccary (by killing the peccary with its odour and then eating it) and the fox (by outsmarting the fox). With one exception, the poor peccary is consistently referred to with the ‘near’ CLF in the story, while the skunk and the fox who eat or attempt to eat the peccaries are referred to with the ‘far’ CLF.

- (16) (004 ZorrinoZorro 1.4)
 načʔe daʔ yi-lew **naʔ** owaqae, načʔe **soʔ** koñem ya-lik
 then SUB A3-die CLF:near peccary then CLF:far skunk A3-eat
ha-na=mʔe owaqae
 F-CLF:near=DEM1:NEUT peccary
 ‘When the peccary dies, then the skunk eats this peccary.’

The third member of the deictic/visibility CLF subset is *gaʔ* ‘absent, unseen’. Its meaning ranges from ‘unseen now’ (i.e. absent, remote) to ‘never seen’ and hence ‘unknown’. Thus, it can indicate nonidentifiability or nonreferentiality, as in (17).¹⁴

- (17) (013Pesca2 1.1)
 yi-kʔataʔa-som-ʔa **gaʔ** lačiyaʔge
 A3-go-LOC:down-OBJ.SG CLF:absent stream
 ‘They (prepare to) go to a/some stream.’

Finally, a diminutive *tʔae(?)* can intervene between a CLF and a noun. As we will see below, this diminutive is becoming morphologised as part of demonstrative constructions.

- (18) (001ZorroPichi 2.10)
 soʔ **tʔae** napam
 CLF:far DIM armadillo
 ‘the distant little armadillo’

We now turn to demonstrative constructions employing the roots in Table 2 and Table 3.

¹⁴Also, some interrogative roots take the CLF *gaʔ* ‘unseen’, as in (22).

4 Simple demonstrative construction

The simple demonstrative (SDEM) construction contains only a demonstrative root and functions as an adverbial proform (cf. Table 4). This construction is limited to the ubiquitous DEM1 root *ho?*. Our understanding is that it is primarily used to draw the hearer's attention to something in the context, much as a pointing gesture does. In fact, the SDEM is often, but not always, accompanied by a physical gesture. As a simple demonstrative, *ho?* mostly functions as an exophoric adverbial locative, as in (19)–(21). *Ho?* is often translated as *aquí* ('here') but also as *allí* ('there') in Spanish. As an attention drawing form, it allows some locational range; but it is primarily proximal, so we gloss it consistently as 'proximal' to reflect this dominant use.¹⁵

- (19) (006ZorroCompanero 1.8)

a-wʔaʔa-nyi **ho?** na? yi-če
 A2-HIT-LOC:MIDDLE DEM1:PROX CLF:NEAR POS1-LEG
 'Hit **here** (on) my leg!'

- (20) (107Ethno26Grasa 3)

he-ʔn četa ho-ga-mʔe siyak qanačʔe
 M-CLF:near grease M-CLF:absent-DEM1:NEUT animal then
 qo-y-ača-n-yi **ho?** ha-gaʔ alewanʔoʔona
 SBJ.INDF-A3-put-NPROG-LOC DEM1:PROX F-CLF:absent vessel
 'Then the fat of whatever animal they put **there** in an (earthenware) vessel (*alewanʔoʔona*).'

- (21) (007ZorroWaqaw 1.8)

čʔe Ø-ek **ho?** de-mače-tape-get soʔ=n-egaʔa-wa
 soon A3-go DEM1:PROX A3-hear-PROG-VEN CLF:far=POS.INDF-friend-HUM
 waqaʔw
 bird.species
 'Then, he (Fox) went away **there** [indicating the place where Waqaw was; not necessarily far or close], he heard his friend Waqaw (bird species) coming.'

Ho? can also have a temporal function, as in (22). (It also occurs in *ho(?)kalʔio?* meaning 'before, long ago'.)

¹⁵*Heʔn*, as in (20), is a common contraction from *he-naʔ*; the two forms are equivalent in meaning.

(22) (001ZorroPichi 1.7)

qančʔe naeʔ=gaʔ aw-men **hoʔ** ñ-egaʔa-wa
 then INTG=CLF:absent A2-sell DEM1:PROX POS1-companion-HUM
 ‘So what will you sell **now**, my companion?’

Though the sDEM with *hoʔ* is primarily exophoric, it can be endophoric. In (23), it functions as a discourse anaphoric form, referring back to the act of being authorised to show a particular document.

(23) (067ToribiaAcosta.46–48)

- a. hayem kaʔ sepa čʔe algún documento daʔ daʔ
 1SG before seem.to.me then some document SUB SUB
 Ø-ek-a soʔ saʔa-nek
 3-go-LOC:specific CLF:far chief-AGENT
 ‘I believed that, that the chief came back with the document’
- b. daʔ qomiʔ y-aloʔo-na-lo
 SUB 1PL 3-show-NPROG-PL
 ‘so that he could show us.’
- c. daʔ kaʔ epaʔa autorisaw **hoʔ** eta-t
 SUB before it.seems authorised DEM1:PROX say-PROG
 ‘He was saying that he seems authorised for **this**.’

In the more complex demonstrative construction next discussed in §5, we find *hoʔ* in both adverbial and non-adverbial functions.

5 Deictic demonstrative construction

Pilagá has a complex deictic demonstrative (dDEM) construction involving the DEM1 roots (Table 2) plus the CLFs (Table 1). The elements of complex demonstratives show dialect and idiolect variation and may vary by speaker’s age. As noted in §2, some elements can undergo vowel harmony. The ‘near’ CLF *naʔ* often reduces to (*ʔ*)*n*, and the ‘neutral’ DEM1 root *mʔe* often reduces to (*ʔ*)*m*. There is considerable variation in the text corpus especially for *mʔe*. For instance, *hogamʔe*, *hogamʔoʔ*, and *hoganʔe* all contain *mʔe* and are alternative forms of ‘that absent/unknown’. *Hoʔn* is a contraction from *ho-naʔ=mʔe* (M-CLF:near=DEM1:NEUT). According to the consultant Ignacio Silva, some of the variant forms are “old words”, rarely heard now. All these factors result in a great variety of surface forms.

The deictic demonstrative (DDEM) construction has the structure in (24).

- (24) Deictic demonstrative construction (DDEM)
 (GENDER-)CLASSIFIER=(diminutive=)DEM1(-plural)

The gender markers in the DDEM are *ha-* ‘feminine’ and *(h)e-/ho-/∅* ‘masculine’, illustrated in (25)–(28). Sometimes the masculine is left unmarked for gender. We do not write the zero form in examples. Plural can be marked by lengthening the CLF vowel, and some DDEMs add *-lo* or *-wa* ‘plural’.

- (25) (004ZorrinoZorro 1.4)
ha-na=m?e owaqae
 F-CLF:near=DEM1:NEUT peccary
 ‘**this** peccary’
- (26) (136ethnograph55 6)
 naqae=ga **ho-ga=maŋa** piy?oŋonaq
 DEM2:RCG=CLF:absent M-CLF:absent=DEM1:NVIS shaman
 ‘(Death could result from the action of) **some/any** shaman.’
- (27) (001ZorroPichi 2.14)
 yeči ki hora da? **ho-da=maŋa** y-em
 evident what hour SUB M-CLF:VER=DEM1:NVIS A3-end
 ‘(I don’t know) what time **that** (the story) ends...’
- (28) (032ColoniaEnsanchez 1.3)
ñi=maŋa ñi? qan-salaŋa-nek
 CLF:NO.EXT=DEM1:NVIS CLF:NO.EXT POS1PL-chief-M
 ‘**that** our chief’ (not present at the time of utterance)¹⁶

‘Shape’ (rounded) or ‘size’ appears as a semantic extension of ‘feminine’ gender. However, not all nominals in Pilagá are marked for a particular gender distinction, regardless of their shape, nor is such marking synchronically predictable. As (24) indicates, a diminutive can occur between the CLF and demonstrative root, as in (29)–(30). The diminutive is acceptable after a DEM1 root only

¹⁶A native speaker said this text line sounded redundant, apparently due to both the DDEM and the separate BCLF before ‘our chief’.

if the diminutive is preceded by a CLF (as if the diminutive morpheme is nominal); compare (31)–(32). The diminutive can communicate that one is feeling sorry for a referent.

- (29) $\tilde{n}i\tilde{?}=t\tilde{?}ae=m\tilde{?}e$
 CLF:NO.EXT=DIM=DEM1:NEUT
 ‘that little rounded/sitting one’ (I may be seeing it or not)

- (30) $da\tilde{?}=t\tilde{?}ae=\check{c}a\tilde{?}a$
 CLF:VER=DIM=DEM1:DIST.VIS
 ‘that far little one’ (I see it)

- (31) $\tilde{n}i\tilde{?}=m\tilde{?}e$ $\tilde{n}i\tilde{?}$ $t\tilde{?}ae$
 CLF:NO.EXT=DEM1:NEUT CLF:NO.EXT DIM
 ‘that little rounded/sitting one’ (I may be seeing it or not)

- (32) $*da\tilde{?}=\check{c}a\tilde{?}a$ $t\tilde{?}ae$
 CLF:VER=DEM1:DIST.VIS DIM

All members of the DEM1 paradigm (Table 2) occur in the DDEM construction. We illustrate this in combination with the ‘horizontal’ CLF *di?*. In (33), *ho?* indicates the object is close to the speaker and visible at the time of utterance. *M?* is neutral in (34) about whether the object is visible at speech time. *Ča?* in (35) requires that the object be visible at speech time. *Ma?* in (36) indicates the object is not present/visible to the speaker at speech time.

- (33) $yi-la\tilde{?}a$ **di=ho?** $siya\tilde{?}awa$
 A3-see CLF:HOR=DEM1:PROX person
 ‘She/He saw **this** person lying down/asleep/dead.’ (The person is visible now and close; but need not currently be horizontal/dead.)

- (34) $yi-la\tilde{?}a$ **di=m?** $siya\tilde{?}awa$
 A3-see CLF:HOR=DEM1:NEUT person
 ‘She/He saw **a/that** person lying/sleeping/dead.’ (The person may or may not be in sight at the time of speaking.)

- (35) *yi-laʔa di=čaʔa* *siyaʔawa*
 A3-see CLF:HOR=DEM1:DIST.VIS person
 ‘She/He saw **that** far-away lying-down/asleep/dead person.’ (The person is visible now and far away; pointing to the person.)
- (36) *yi-laʔa di=maʔa* *siyaʔawa*
 A3-see CLF:HOR=DEM1:NVIS person
 ‘She/He saw **that** person lying down/asleep/dead.’ (The person is not visible to the speaker.)

Though all DEM1 roots occur in the DDEM construction, there are some co-occurrence restrictions with particular CLFs to avoid semantic clashes. This is particularly relevant for the deictic/visibility CLFs, as the posture/shape CLFs do not lend deictic information to the overall meaning of the demonstrative construction (as seen in (33)–(36) with *diʔ* ‘horizontal’).

Čaʔa ‘distant visible’ only occurs with CLFs that allow interpretation of a visible referent, i.e. *naʔ* ‘near, coming’, *soʔ* ‘far, departing’, and the posture/shape CLFs, as in (37)–(41). Examples (37)–(38) have a distal+visible referent, marked by *čaʔa*. The fact that it is approaching the reference point (potentially communicated by *naʔ*) may be communicated with or without the ‘ventive’ suffix *-get* on *čaʔa*. The ‘itive’ *-ge(ʔ)* is not possible with *naʔ=čaʔa*, but the ‘itive’ is possible with *soʔ=čaʔa*, as in (39).

- (37) *naʔ=čʔa*
 CLF:near=DEM1:DIST.VIS
 ‘far referent coming near’
- (38) *naʔ=čʔa-get*
 CLF:near=DEM1:DIST.VIS-VEN
 ‘far referent coming near’
- (39) *soʔ=čaʔa-geʔ*
 CLF:far=DEM1:DIST.VIS-IT
 ‘far referent going away’
- (40) *do=čaʔa*
 CLF:VER=DEM1:DIST.VIS
 ‘that upright far referent’

- (41) *ña=čʔa-lo*
 CLF:NO.EXT=DEM1:DIST.VIS-PL
 ‘those sitting there’

The three examples sets between (42) and (52) illustrate additional combinations of the deictic/visibility CLFs with the more frequent DEM1 roots. The specific interpretation of a combination may depend on pragmatic context. Examples (42)–(44) carry the ‘near, coming’ CLF *naʔ*. In (44), the ‘distal’ feature of the DEM1 root *čaʔa* overrides any ‘near, proximal, coming’ meaning that might otherwise be associated with *naʔ*; this suggests that *naʔ* may be bleaching of its spatial semantics. Along with a wave of the hand, (44) could serve as an answer to the question ‘Where is José?’

- (42) *noʔ=hoʔ* *naʔ* *tʔae*
 CLF:near=DEM1:PROX CLF:near DIM
 ‘this little one’ (right here beside me and I see it)

- (43) *naʔ=mʔe* *naʔ* *tʔae*
 CLF:near=DEM1:NEUT CLF:near DIM
 ‘this little one’ (the item may be present or not; the expression could refer to something I have been talking about)

- (44) *naʔ=čaʔa* *naʔ* *tʔae*
 CLF:near=DEM1:DIST.VIS CLF:near DIM
 ‘(he’s) that little one’ (there, not moving)

Examples (45)–(49) combine *soʔ* with DEM1 roots. Our consultant found (45) unacceptable, explaining that it contradictorily combines *soʔ* ‘far’ with *hoʔ* ‘proximal’ (we return to this combination further below). When *soʔ* combines with ‘neutral’ *mʔe*, as in (46), the result indicates a visible or identifiable referent departing from the deictic center; thus with *mʔe*, the CLF yields the primary deixis/visibility meaning. In (47) with *čaʔa* ‘distal visible’ plus the ‘itive’ *-geʔ*, the overall reading is of an already distal but visible participant moving away. Without the ‘itive’ (48), one consultant finds *soʔ* incompatible with *čaʔa*. This is because *soʔ* can sometimes be interpreted as ‘(going) out of view’, while *čaʔa* specifically indicates ‘visible’; but the combination was acceptable in (39). In (49) with *maʔa* ‘non-visible’, the speaker could possibly know the non-visible referent, though there is something uncertain about it in the speaker’s mind.

- (45) *soʔ=tʔae=hoʔ
 CLF:far=DIM=DEM1:PROX
- (46) soʔ=tʔae=mʔe
 CLF:far=DIM=DEM1:NEUT
 ‘that small visible/identifiable departing referent’
- (47) soʔ=tʔae=čaʔa-ge
 CLF:far=DIM=DEM1:DIST.VIS-IT
 ‘that small visible far-away departing referent’
- (48) *soʔ=tʔae=čaʔa
 CLF:far=DIM=DEM1:DIST.VIS
- (49) soʔ=tʔae=maʔa
 CLF:far=DIM=DEM1:NVIS
 ‘that little (stationary) unseen referent’ (perhaps I know it)

Possible interpretations of the ‘absent’ CLF *gaʔ* include unknown, non-specific, and non-referential readings, as in (50)–(53). It may combine with the ‘proximal’ and ‘neutral’ DEM1 roots, but not with *čaʔa* ‘distal+visible’, as shown by (50)–(52). This restriction is due to the semantic clash between the ‘visible’ feature of *čaʔa* and the ‘absent’ feature of *gaʔ*. The perhaps surprising example in this set is (50), as it might seem that the ‘absent’ feature of *gaʔ* should conflict with *hoʔ*. However, its acceptability reveals the expanding semantic domain of polysemous *hoʔ*; in particular, with a CLF, *hoʔ* can be used endophorically for a participant currently under discussion. In this use, it participates in topic marking. Example (51) shows that with the ‘neutral’ DEM1 root, the semantic features of the CLF again become especially evident.

- (50) *gaʔ=tʔae=hoʔ*
 CLF:absent=DIM=DEM1:PROX
 ‘**this** little one’ (referring to something/somebody under discussion that is far or I do not remember well)
- (51) *gaʔ=tʔae=mʔe*
 CLF:absent=DIM=DEM1:NEUT
 ‘**that** little one’ (**not in view**, never seen, or unknown, but I remember it)

- (52) *gaʔ=taʔe=čaʔa
CLF:absent=DIM=DEM1:DIST.VIS

If under the scope of negation, *gaʔ* plus *mʔe* may indicate ‘nothing, nobody’, as in (53).

- (53) Qaya gaʔ=mʔe
NEXIST.HUM CLF:absent=DEM1:NEUT
‘There is **nobody**.’

In (44), we saw that the meaning of DEM1 *čaʔa* overrides the spatial meaning that CLF *naʔ* might otherwise carry. However, in some situations the meaning of a CLF can override that of a DEM1 root. Thus, (54)–(57) were said to mean “basically the same” in terms of spatial/visibility deixis. They all carry the CLF *soʔ* ‘far, departing (potentially to the point of being absent)’, regardless of choice of the demonstrative root. Notably, (55) was judged as fine, while (45) with the same key elements was rejected. We analyse the variability in speakers’ judgments as reflecting the polysemous nature of *hoʔ*: on one occasion its exophoric ‘proximal’ feature is conceptually prominent and thus it is viewed as conflicting with *soʔ*, but on another – as in (55) – *hoʔ* is interpreted endophorically to indicate the participant under discussion in the discourse, so there is no spatial deixis conflict. The DEM2 root in (57) is discussed in §6.

- (54) soʔ y-alek
CLF:far POS1-son
‘my son (distant/absent)’

- (55) so=hoʔ y-alek
CLF:far=DEM1:PROX POS1-son
‘**that** my son (departing)’

- (56) so=mʔe y-alek
CLF:far=DEM1:NEUT POS1-son
‘**that** my son (distant/absent)’

- (57) naqae=soʔ y-alek
DEM2:RCG=CLF:far POS1-son
‘**that** (is) my son’ (understood to not be present)

The preceding discussion has focused on structure of the DDEM and meanings of composing morphemes. We now more explicitly address grammatical and discourse functions of this construction (cf. Table 4). DDEM constructions serve as adverbial and participant proforms or as determiners. The proform function is illustrated in (58)–(60) with the root *ho?*. The two senses of (58) show the adverbial exophoric locative function of the DDEM with *ho?*, and its participant reference function. In (59), the DDEM refers exophorically to an inanimate entity. In (60), it refers exophorically to a location.

- (58) **so=ho?**
 CLF:far=DEM1:PROX
 ‘there’ (Spanish *allá*) / ‘one (who is) departing’
- (59) **ha-n=ho?** mate
 F-CLF:near-DEM1:PROX mate(drink)
 ‘This is a mate (container).’
- (60) (060TrabajoMadera 12)
 maʎaʎa qaga **ha-ño=ho?** naʎa na-ñ-ʔa
 yet NEXIST F-CLF:NO.EXT=DEM1:PROX now B3-sit-OBJ.SG
 dyo=ho? Campo
 CLF:HOR=DEM1:PROX place.name
 ‘This [pointing to the location of the community] did not yet exist
 (which) is now (the spread-out community of) Estanislao del Campo.’

Example (59) is a zero-copula equational clause and the DDEM is not in the same phrase as *mate*. The pronominal DDEM with *na?* ‘near’ plus *ho?* indicates an item close enough to touch. The feminine gender prefix occurs due to the rounded shape of the container. In (60), *ha-ño=ho?* indicates a non-extended referent, pointing to the particular location (rather than extended shape) of the community.

Deictic demonstrative constructions with DEM1 roots other than *ho?* function only pronominally and as determiners (not adverbially; cf. Table 4). In (61), *he-n=m?* functions as a text-internal anaphoric pronominal. It refers to the story the speaker is in the midst of relating. (*He-n=ho?* with the ‘proximal’ DEM1 root in this context would mean ‘here, the place where I, the speaker, am’.)

(61) (001ZorroPichi 2.13)

he-n=m?e huw!

M-CLF:near=DEM1:NEUT wow

‘**this** (story), wow!’ (meaning ‘this story I am telling you’)

In (62), the highlighted DDEM functions as a cataphoric pronominal. *M?e* carries the ‘vertical’ CLF *da?*, but in this context it designates a propositional event which, as a whole, is an abstract concept.

(62) (048RecoleccionMiel 1.1)

a. so=m?e siya?a-di-pi da?=m?e
 CLF:far=DEM1:NEUT person-PAUC-COL CLF:VER=DEM1:NEUT

qo-ila-?a so? kon’aya?apolo?

SBJ.INDF-see-OBJ.SG CLF:far bee.hive

‘When the men find the bee hive,

b. nač’e w’ae-ñe **da?=m?e**
 soon be.first-COMPL CLF:VER=DEM1:NEUT

‘they first do **this**:’

c. qo-ya-lo-n so? dole?
 SBJ.INDF-A3-stir-NPROG CLF:far fire

‘they stir up the fire.’

A DDEM with *ča?a* may function exophorically or endophorically. The exophoric function is dominant, but in (63d), from a story about competition between Fox and Toad, *ñi?=ča?a* is endophoric, referring to the toad. Line (63d) also shows the pronominal DDEM *so?=t?ae=m?e* functioning anaphorically.

(63) (002SapoZorro 1.11–1.14)

a. degesow eso wayqal’āciyi yači ena?aye-ik
 quickly CLF:far fox certain dusty-AUG

‘Quickly, it is clear/certain that the fox stirred up a lot of dust.’

b. so? qololo da? Ø-wenot qanač?e yita?a ne-no?o-segem so?
 CLF:far toad SUB A3-jump then again B3-move-upward CLF:far

qololo l-qaya

toad POS3-sibling

‘But when the toad jumped, another toad appeared.’

- c. ta Ø-wenot ta ne-noŋo-segem so? qololo l-qaya
 AGAIN A3-jump again B3-move-upward CLF:far toad POS3-sibling
 ye-dʔ-a-ta
 A3-arrive-OBJ.SG-other.side
 ‘He jumped again, and another toad (appeared until) it reached the finish.’
- d. qančʔe soʔ=tʔae=mʔe qančʔe yeči, n-selka-pe-get
 then CLF:far=DIM=DEM1:NEUT then certain B3-see-PROG-VEN
 ñiʔ=čaʔa=w ñiʔ n-qomit-aʔa-wa
 CLF:NO.EXT=DEM1:DIST.VIS=INTSF CLF:NO.EXT B3-compete-NMLZ-HUM
 ñiʔ yači yi-weʔen
 CLF:NO.EXT certain A3-laugh
 ‘He (Fox) certainly keeps looking for that far-distant one (toad) coming towards him and so he (toad, referenced throughout by *ñiʔ*) certainly/evidently laughs at the competitor (Fox).’

Examples (64)–(65) show pronominal DDEMs with the ‘nonvisible’ root *maʔa*.

- (64) (032ColoniaEnsanchez 1.1)
diʔ=maʔa diʔ-ae qad-ʔačaqa? le-naʔat Colonia
 CLF:HOR=DEM1:NVIS CLF:HOR-F POS1PL-community POS3-name Colonia
 Ensanchez Ø-naʔa-ge na? seʔw
 Ensanchez A3-be-it CLF:near north
 ‘This our community, its name (is) Colonia Ensanchez, is towards the north.’ (Context: The speaker is in a workshop talking about his far-distant community, probably looking at a map.)
- (65) (032ColoniaEnsanchez 1.3)
ñiʔ=maʔa ñiʔ qan-saʔaʔa-nek l-sek
 CLF:NO.EXT=DEM1:NVIS CLF:NO.EXT POS1PL-chief-M POS3-neighbor
 ha-ñiʔ tamnaʔa-ki
 F-CLF:NO.EXT religion-LOC
 ‘That (far away house) (that I’m talking about from memory) of our chief is between the church (and the school).’

We now briefly comment on adnominal DDEM uses. In (66), *dʔo=hoʔ* refers exophorically to a concrete participant. In (67), *he-n=hoʔ* refers to a time.

- (66) **dyo=ho?** pioq če?eda weta-ñ-?a kali?o
 CLF:HOR-DEM1:PROX dog be.first be-LOC:below-OBJ.SG long.ago
 ‘This dog (present, that I am signaling) has been (lying) here a long time.’

- (67) (077Sent09Cantidad 2)
 so? l-aqaya setae? na-paʃagen-a da? paʃagentanaʃaik
 CLF:far POS2-brother want B3-learn-OBJ.SG SUB teacher.M
he-n=ho? wo?e
 M-CLF:near=DEM1:PROX year
 ‘Your brother wants to study teaching (to be a teacher) **this** year.’

Adnominal *DDEMS* with *m?e* often mark already-mentioned participants, as in (16). But this is not always the case. In (68), *di?=m?e* occurs on the first mention of ‘garden/field’; the consultant expressed the view that the sentence would mean essentially the same thing if a *BCLF* with just *di?* occurred instead.

- (68) (035Linea 1.4)
 da? set-ake a-e-ye **di?=m?e** qad-an-aʃan-qa?
 SUB want-DES A3-go-in.line CLF:HOR=DEM1:NEUT POS1PL-plant-CAUS-LOC
 qanač’e o-ket’a-ge di? na?a-ik Ø-leka?a-ege
 then A2-continue-IT CLF:HOR road-M 3A-be.big-forward
 ‘If you want to get to our vegetable garden, you have to continue along the wide path.’

In (69), *m?e* combines with the ‘absent’ *CLF ga?*, to determine the nonreferential phrase ‘our thought’

- (69) (001ZorroPichi 1.1)
 čaqaga da? **ga?=m?e** qad-enat-aʃak
 what SUB CLF:absent=DEM1:NEUT POS1PL-think-NMLZ
 ‘What (is) our thought? (i.e. ‘What shall we do?’)

6 **Recognitional demonstrative construction**

A second demonstrative construction has not, to our knowledge, been noted in previous Guaykuruan literature. We call this a recognitional demonstrative (*RDEM*) construction. In it, the root *naqae* co-occurs with a *CLF*, but *naqae* differs from the *DEM1* set in taking the *CLF* as an enclitic, yielding the structure in (70).

- (70) Recognitional demonstrative construction (RDEM)
 DEM2.root=CLASSIFIER(-plural)

Naqae indicates that the speaker anticipates the hearer already knows or is familiar with the identity of the referent (whether or not it has already been mentioned in the discourse), but wishes to activate it in the hearer’s mind. There may be an assumption of shared knowledge about the referent, but there may be doubt or even disbelief that the hearer is currently attending to it, so the speaker is activating it for the hearer. This is similar to what Himmelmann (1996) and Diessel (1999) call a “recognitional” demonstrative. We consider *naqae* to be a demonstrative root as it orients the hearer’s attention to a participant.

Though consultants specifically comment that *naqae* means the hearer knows the referent, in some contexts we think *naqae* would be better characterized as indicating a familiar concept, as it can also be used for non-referential mentions. Speakers suggest it sometimes indicates a note of surprise or unexpectedness about a known but previously inactive referent, as if something has just activated it in the mind of the speaker. This is the case in (71), which stacks *naqae=ñi* together with *ho?* and *ñi?*. Here, *ho?* is verbally signalling (verbally “pointing”) to the person, who is sitting.

- (71) *naqae=ñi ho? ñi? siyaʔawa*
 DEM2:RCG=CLF:NO.EXT DEM1:PROX CLF:NO.EXT person
 ‘Ah, **that/this** is the person!’ (I see him/her, sitting)

The RDEM construction is attested in pronominal and adnominal functions (cf. Table 4). In (72), *naqae=na-wa* functions pronominally.¹⁷ *Naqa=ñi* is also pronominal in (73). However, *naqae=na?* in (73) appears to be adnominal. In the discourse just prior to (73), the fox is annoyed by a wasp and says, “Why are you always in my path? I’m going to hit you.” Fox then utters (73). Here, *naqaena?* indicates some emotiveness or unexpectedness.

- (72) (017Pesca1 1.4)
qataʔa da? an-awa-ʔ-n naa? l-ʔawaʔak-o
 and SUB B2-watch-PL-NPROG CLF:near.PL POS3-water.channel-PL
naqae=na-wa *naa? n-aya-pe-egʔa-lo*
 DEM2:RCG=CLF:near-PL CLF:near.PL B3-leave-PROG-LOC:specific-PL

¹⁷The second instance of the CLF *naa?* in (72) functions like a relativiser to introduce a clause modifying *naqae=na-wa*.

he-n ñiyaq-pi
M-CLF:near fish-COL

‘Also to watch the water channels, **these** are where from the fish emerge.’

(73) (005ZorroAvispa 1.2)

lʔeʔ **naqae=ñi** y-ʔata-ʔnyi **naqae=naʔ**
why DEM2:RCG=CLF:NO.EXT A3-move-LOC:middle DEM2:RCG=CLF:near
y-adik
POS1-path

‘Why does **this one** move (be) in **this** my path?’

The RDEM construction can be anaphoric. In (74d), *naqae=na-wa* refers back to ‘the place where the fish pass’ mentioned in (74b).

(74) (017Pesca1 1.1–104)

a. wʔae-ñi qomi qo-ya-paʔage-nek-e daʔ
be.first-COMPL 1PL SBJ.INDF-A3-teach-AGENT-PL SUB
qo-y-eʔet naʔ čikena
SBJ.INDF-A3-prepare CLF:near arrow

‘First they taught us to prepare the arrows’

b. qataʔa naʔ Ø-wapiñʔa-lo qataʔa naʔ
and CLF:near 3-be.place-PL and CLF:near
n-ae-ya-pe-ege-ʔa naʔ ñiyaqa-pi
B3-go-IPFV-opposite-OBJ.SG CLF:near fish-COL

‘and (to know) the places and where the fish pass by.’

c. qataʔa qomi qo-ya-paʔage-nek-e daʔ
and 1PL SBJ.INDF-A3-teach-AGENT-PL SUB
qo-ya-ye-n naʔ ñiyaq
SBJ.INDF-A3-throw-NPROG CLF:near fish

‘Also they taught us how to stab a fish’

d. qataʔa daʔ an-awa-ʔ-n naaʔ l-ʔawaʔako
and SUB B2-watch-pl-nprog CLF:near.PL POS3-caudal
naqae=na-wa naaʔ n-aya-p-ege-lo
DEM2:RCG=CLF:near-PL CLF:near.PL B3-go-PROG-opposite-PL
he-ʔn ñiyaqa-pi
M-CLF:near fish-COL

‘and how to watch the flow where the fish come out.’

Finally, (26) suggests that Pilagá allows stacking of RDEM and DDEM.

7 Further grammaticalisation: Nominal TAM and subordination

7.1 Overview

Having now discussed the morphosyntax and basic functions of CLFS and demonstratives, we turn to extended uses for nominal tense, mood/evidentiality, and clausal subordination. Pilagá adds to the body of data showing how demonstratives and determiners can further grammaticalise (Diessel 1999; 2003; Gildea 1993; Aikhenvald 2015).

7.2 Incipient nominal tense, mood, and evidentiality

Like other Guaykuruan languages, Pilagá lacks grammatical tense forms. However, some CLFS and DEM1 roots implicate temporal meanings in certain contexts, and visible versus inferred source of evidence or (un)certainly. The temporal and evidentiality/modality meanings sometimes relate to evaluation of a nominal referent and sometimes to the proposition. Pilagá thus pertains to the set of languages having nominal TAM (Nordlinger & Sadler 2004). The role of CLFS in conveying temporal, modal, and evidential meanings in Guaykuruan has been discussed in other works (Messineo et al. 2016; Messineo & Cúneo 2019), including for Pilagá (Vidal & Klein 1998; Vidal & Gutiérrez 2010). Here we also note the role of DEM1 roots in marking these concepts.

In Pilagá, temporal use of CLFS and DEM1 roots is pragmatic rather than fully grammaticalised, and interpretations interact with person and lexical meanings. First, (75)–(76) reveal the possible present-time interpretation of posture/shape CLFS versus the past-time effect of *so?* ‘far, departing’. *Da?* is the CLF for abstract nouns like *lasook* ‘custom’, as well as for vertical ‘person’. The overall interpretation in (75) is present time. In (76), *so?* occurs with both nouns. Given the abstract concept of ‘custom’, *so?* cannot be interpreted as meaning that *lasook* is spatially distant or moving away, so a space-to-time metaphorical inference yields the understanding of a ‘distant’ or past time situation. This likely also affects the use and interpretation of *so?* with ‘person’.

- (75) eta ho? da? lasook da? siyaʔawa
it.is.said DEM1:PROX CLF:VER custom CLF:VER person
‘This is the custom of the person.’ (present)

- (76) eta ho? so? lasook so? siyafa-di-pi
 it.is.said DEM1:PROX CLF:far custom CLF:far person-PAUC-COL
 ‘This was the custom (of) the people.’

To more clearly see the possible temporal effect of *so?* when applied to concrete objects, consider (77). *Ho?* occurs in *so?=ho?* because ‘my son’ is in the speaker’s vicinity at the time of utterance. Since ‘my son’ is locally present, *so?* ‘far’ can only be interpreted as indicating a temporally distant or past event. In this instance the CLF has propositional/event-scope, while the DEM1 root has nominal scope related to the speech time.

- (77) (052RelatoAnciana 62)
 n-oye-tak naʔa so?=ho? y-alek n-woʔom da?
 B3-cry-PROG now CLF:far=DEM1:PROX POS1-son B3-feel CLF:VER
 l-qowaʔa
 POS3-hunger
 ‘My son here/now was crying because he felt hunger.’

So? does not obligate a past-time propositional interpretation if contextual factors indicate otherwise. Because of *qomle* ‘later’ in (78), *so?* is interpreted as applying to the past-time of the events involving ‘our ancestors’ and not to the event of telling.

- (78) (Vidal & Gutiérrez 2010: 1353)
 qomle s-aqtanaʔan so? qadetalpi
 later A1-tell CLF:far our.grandparents
 ‘I’m going to tell you about our ancestors.’

In contrast to *so?*, the CLF *ga?* ‘unseen’ pragmatically allows that the “event in which it is embedded is an expression of the ignorance, the desires, or the intentions of the speaker, rather than a realized event” (Vidal & Klein 1998: 176). *Ga?* often occurs in clauses with conditional, obligation, or prospective meaning, as in (79).

- (79) (025EspirituSuri 1.3)
 awa-wʔo-e ga? ade-wo ...
 A2-make-PL CLF:absent POS2-clothes
 ‘you have to make your costumes ...’

Temporal interpretation is affected by pragmatic interaction between person, proximity of a referent to the speaker versus other referents, and the semantics

of lexemes, CLFs and DEM roots. In (80)–(82), the speaker and the grammatical subject are the same person. *Taqa* ‘talk’ plus *ño=ho?* ‘non.extended=proximal’ implies a present-time action because the first-person speaker can talk ‘now’ to someone who is physically near.

- (80) se-taqa-tap-ege **ño=ho?** siyaʔawa
 A1-talk-PROG-IT CLF:NO.EXT=DEM1:PROX person
 ‘I am talking to **a/this** person (sitting next/close to me).’

In (81) with ‘talk’, the ‘neutral’ DEM1 root *mʔe* with a posture/shape CLF allows a present or past interpretation. In (82), ‘distal+visible’ *čaʔa* implies a past event because – ignoring telephones – one cannot talk ‘now’ to someone far away.

- (81) se-taqa-tap-ege **ñi=mʔe** siyaʔawa
 A1-talk-PROG-IT CLF:NO.EXT=DEM1:NEUT person
 ‘I am talking now to **a/that** person (who is sitting).’ /
 ‘I talked to **that** person (who is now sitting).’

- (82) se-taqa-tap-ege **ñi=čaʔa** siyaʔawa
 A1-talk-PROG-IT CLF:NO.EXT=DEM1:DIST.VIS person
 ‘I was talking to **that** person now sitting (far from me).’ (Since he/she is far away, it is impossible to be talking to him/her right now.)

DEM1 roots also play a role in expressing a speaker’s (un)certainty. Compare (83)–(84), which show that *maʔa* is a marker of uncertainty compared to *mʔe*.

- (83) eta **ho-da=maʔa** lasook
 it.is.said M-CLF:VER=DEM1:NVIS custom
 ‘It is said **that** is how the custom must have been.’ /
 ‘**That** seems to have been (how) the custom (was).’

- (84) eta **ho-da=mʔe** lasook
 it.is.said M-CLF:VER=DEM1:NEUT custom
 ‘It is said **this** is what the custom is (like).’ (speaker is certain)

7.3 *Daʔ* as clausal subordinator

Elements of the determiner and demonstrative systems have become markers of subordination (Vidal 2001). The CLF *daʔ* ‘vertically extended’ introduces clauses

with a variety of adverbial, complement, and nominal-modifying functions. This needs more exposition than can be taken up here, but we note that it introduces readings of at least adverbial ‘when’ in (15)–(16), ‘conditional’ in (68), and ‘purpose’ in (85). In (77), *da?* occurs before an abstract nominal ‘hunger’, but the phrase with *da?* communicates an adverbial ‘because’ notion. The complement function is illustrated in (23c), (74c), and (86), and a nominal-modifying (i.e. relative) function surfaces in (27) and (87).

- (85) (004ZorrinoZorro 1.1)
 so? koñem w?o so? maeč?e la-wa-nañanqa? da?
 CLF:FAR skunk exist CLF:far own POS3-trap-NMLZ:place SUB
 na-wa-n na? owaqae
 B3-trap-NPROG CLF:near peccary
 ‘The skunk had his own trapping place **in order to** trap the peccary.’

- (86) (015Pesca3 1.2)
 wač?e qo-d-?oya da? ne-matae-yi ga=m?
 because SBJ.INDF-A3-fear SUB B3-puncture-PL CLF:absent=DEM1:NEUT
 n-oñonek
 POS.INDF-fish
 ‘Because they feared **that** the fish would damage it.’

- (87) (003ZorroPaloma 1.2)
 yi-pit-etpa-lo sa-wa l-?ai?te so? doqoto? da? toñomaqčiglo
 A3-want-PROG-PL CLF:far-PL POS3-eyes CLF:far dove SUB be.red
 ‘He wanted dove eyes **that** were red.’

Historically, the *da?* subordinator is likely connected to the ‘abstract’ nominal determining function of *da?*. As *da?* is the CLF for abstract nominal referents, it is well-suited to mark nominalised propositions, which are typically rather abstract conceptual entities. These then come to serve as subordinate clauses.

7.4 *M?e* as a relativiser

M?e is a highly frequent demonstrative root (Table 2). We have seen that in contrastive elicitation, it allows a ‘medial’ spatial contrast between *ho?* ‘proximal’ and *ča?a* ‘distal visible’, and a visibility contrast with *maša* ‘not visible’. However, it can occur with all deictic CLFs to mark referents as ‘proximal/in the visual

field’, ‘distal/(going) out of the visual field’, or ‘never seen/absent/nonreferential’; and it occurs with all posture/shape CLFS. We also noted that *mʔe* demonstratives can be used cataphorically, as in (62), though they are usually anaphoric. Given its range of collocations and uses, we conclude that *mʔe* has developed a ‘distance/deictically neutral’ role (Himmelman 1996: 211).

Perhaps concomitant with its neutral deictic use, *mʔe* has developed as the most common relativiser. It follows a head noun to anaphorically introduce a modifying relative clause, as in (88)–(89). As a relativiser, it does not occur with classifiers or gender affixes (this is also true of the Western Toba cognate; Carpio 2012: 53). It thus diverges from the DDEM construction involving this root, which requires a classifier.

- (88) (052RelatoAnciana 52)
 ad-apenaʔ l-tʔa diʔ=m ad-apenaʔ
 POS2-grandfather POS3-father CLF:HOR=DEM1:NEUT POS2-grandfather
mʔe yi-wa
 DEM1:NEUT POS1-spouse
 ‘the father of your grandfather (deceased) **that** was (my) husband’

- (89) (071Sent03Comunidad 7)
 naegaʔ waʔa-ege nqoʔ gaʔ=nadik **mʔe** yi-lot-ʔa
 where be-opposite when CLF:absent=road DEM1:NEUT A3-see-OBJ.SG
 gaʔ=Joel
 CLF:absent=Joel
 ‘Where is the road **that** goes directly to (lit. sees) (the house of) Joel?’

Mʔe also introduces headless relative clauses, as in (90).

- (90) (013Pesca2 1.4)
 yi-laʔa-ge naʔʔe yi-loʔt-ege **mʔe** t-a-y-ʔa
 A3-see-IT soon A3-see-opposite DEM1:NEUT A3-go-inside-OBJ.SG
 ‘He follows it (a bee, with his gaze) to see (the place) **where** it goes inside (of the honeycomb).’

The relativising use of *mʔe* might at first appear to be the SDEM construction; but by itself, *mʔe* is not synchronically attested as a proform. Nevertheless, it is largely associated with discourse anaphoricity. It has become the unmarked means to refer to a just-mentioned referent. Historically, this may have come about via an adjoined clause. That is, a conceivable earlier analysis of (89) might

have been ‘Where is the road, **that one** (i.e. ‘road’) sees Joel?’ The relativiser function then developed by reanalysing the modifying clause (‘that [one] sees Joel’) as embedded. If this scenario is correct, then contra Himmelmann’s (1996) suggestion, it is not the distal member of the demonstrative paradigm which has extended its meaning to become grammaticalised as a relativiser, but the ‘middle (visible)’ and/or ‘neutral’ member of the paradigm.

8 Conclusions

This study contributes to our understanding of the typological range of determiner and demonstrative systems. It has especially highlighted the demonstrative roots, which have not received much previous study in Guaykuruan languages.

Anyone who has examined a substantive discourse sample for any language, and over that sample tried to specify “all and only” the componential semantic features that distinct demonstrative forms have, can surely attest that choice among demonstrative morphemes cannot be tied exclusively to literal spatial deixis nor to “clean” endophoric versus exophoric factors. The choice is always sensitive to the speaker’s conceptualisation of referents on particular occasions of speaking, and to assumptions about the hearer’s continually changing state of mind in the endeavour to establish joint attention. With these important cautions in mind, the following is nevertheless a summary of our understanding of the prototypical functions of the demonstrative roots presented in Table 2–3.

- *ho?* Adverbial; extended to participants when combined with CLFS; visually or conceptually proximal (e.g. in the flow of the discourse); typically exophoric
- *m?e* Cognitively activated for speaker; assumed to be already activated for hearer; mostly endophoric and anaphoric
- *ča?a* Visually distal; typically exophoric
- *maʎa* Unseen, uncertain; inferred
- *naqae* Speaker instructs hearer to activate information that is assumed be already identifiable, known, or familiar

Relative to syntactic function, both deictic demonstratives (DDEM; with all DEM1 roots) and the recognitional demonstrative (RDEM) serve as determiners

and as participant pronominals; but only combinations with *ho?* function adverbially to signal location and time. The sDEM with *ho?* and some dDEMs with *ho?* function adverbially. It has been suggested that such a system, where the number of deictic distinctions in the pronominal domain supersedes the number of distinctions in the adverbial domain, may be comparatively rare (Levinson 2018: 19). However, the Pilagá system somewhat corresponds to the most frequent type found in Krasnoukhova's (2012) South American study, namely a system in which the same demonstrative form is used in participant-pronominal and adnominal functions (i.e. the dDEM), but not in adverbial functions (which in Pilagá mostly uses the sDEM with *ho?*). Clearly, *ho?* is a versatile element, occurring in the sDEM construction as an adverbial pro-form and in the dDEM construction for participant pronominal and determiner functions. *Naqae* functions as part of a recognitional demonstrative.

In our database, the demonstrative root tokens with exophoric function outnumber the tokens with endophoric function. Anaphoric uses are much more frequently attested than cataphoric uses. Anaphora has been pointed out as a possible source for further grammaticalisation of *m?e* as a relativiser. This development suggests that it is not always the most distal (nor proximal) member of a demonstrative system that is subject to further grammaticalisation (Himmelmann 1996: 217). What appears significant in the development of *m?e* as a relativiser is its endophoric+anaphoric profile, not a distal/proximal feature. If the subordinator *da?* is historically related to the CLF *da?* 'vertically extended', the semantic pathway must be via the extension of *da?* for abstract nominal concepts.

Corpus examination shows that essentially all determiners contain a CLF. In fact, the basic determiner is just a CLF, either deictic or postural. It would be communicatively unusual for essentially every nominal in discourse to be marked by a demonstrative; therefore we conclude that CLFs do not have the typical usage profile of demonstratives.

The extension of some CLFs and demonstrative roots into temporal and evidential/certainty meanings does not appear to be a widespread cross-linguistic feature of demonstrative systems. However, it is found in nearby Nivaçle (Gutiérrez 2015) and Wichí (Nercesian 2014: 175); in Chorote (Carol 2011); and in Movima, possibly Chapacuran Wari', and some other South American languages (Krasnoukhova 2014). The postural information found in the Guaykuruan determiner and demonstrative systems is rare, but it is also attested elsewhere, for example in the demonstrative system of the Chadic language Goemai (Hellwig 2018). The evidential/(un)certainty semantics found in the Pilagá system is connected

to speaker-anchored distance/non-visibility of referents. Evidential functions of demonstratives and determiners also appear to be typologically rare. The extent to which these relatively unusual features occur in other languages of the Chaco, South America, and beyond merits further study.

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Abbreviations

A	roughly active set of verbal person markers	INTG	interrogative
AUG	augmentative	INTJ	interjection
B	roughly stative set of verbal person markers	INTSF	intensifier
BCLF	basic classifier construction	IT	itive
CAUS	causative	LOC	locative
CLF	classifier	M	masculine
COL	collective	NEUT	neutral deixis
COMPL	completive	NEXIST	non-existing
CONJ	conjunction	NMLZ	nominaliser
DEM	demonstrative	NO.EXT	non-extended
DDEM	complex deictic demonstrative	NPROG	non-progressive
DES	desiderative	NVIS	non-visible
DIM	diminutive	OBJ	object
DIST	distal	PAUC	paucal
F	feminine	PL	plural
HOR	horizontal	POS	possessive
HUM	human	PROG	progressive
INDF	indefinite/nonspecific	PROX	proximal
		RCG	recognitional
		RDEM	complex recognitional demonstrative
		SBJ	subject

SDM	simple demonstrative	VEN	ventive
SG	singular	VER	vertical
SUB	subordinator	VIS	visible

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