Demonstratives in ʔayʔaǰuθəm[1]

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Abstract: In this paper, we provide a first detailed description and analysis of the demonstrative system in ʔayʔaǰuθəm (a.k.a. Comox-Sliammon; ISO 639-3: coo), a Coast Salish language spoken along the northern Strait of Georgia in British Columbia, Canada. Drawing from previous research (Boas 1890; Davis 1978; Harris 1981; Watanabe 2003) and original fieldwork with five speakers, we set out to (i) map the demonstrative inventory, (ii) survey the syntactic distribution of the individual forms, and (iii) examine their semantics and pragmatics. We will show that the demonstratives in ʔayʔaǰuθəm not only encode deictic distance, but also evidentiality, gender, and number. The distribution of the different paradigms also tracks whether or not joint attention has been established between the speech participants. Particularly, the latter notion is of interest as it requires the incorporation of gesture into the analysis. The insights presented in this paper will hopefully both prove useful to language learners navigating the remarkably rich demonstrative system of ʔayʔaǰuθəm and also draw attention to the role of gesture in communication — a field of research which has not previously figured in the Salish literature (though see Webb [this volume]).

Keywords: demonstrative, evidentiality, gesture, deixis, ʔayʔaǰuθəm (Comox-Sliammon)

1 Introduction

This paper provides a first detailed survey of the demonstrative system in ʔayʔaǰuθəm (a.k.a. Comox-Sliammon; ISO 639-3: coo), a Coast Salish language spoken along the northern Strait of Georgia in British Columbia, Canada. Demonstratives are words that allow the speaker to identify an entity or a location, such as *this*, *that*, *here*, and *there* in English. As we will show, the demonstrative system of ʔayʔaǰuθəm is significantly richer in forms than the English one, allowing speakers to make more fine-grained distinctions. Based on original fieldwork data as well as previous descriptions (Boas 1890; Davis 1978; Harris 1981; Watanabe 2003), we have identified 17 different demonstrative forms that are used by speakers today.[2] These forms not only encode the relative distance between the speaker and the referent, as the English forms do, but also evidential distinctions, as well as gender and number. In addition, the distribution of the different demonstrative forms is sensitive to whether joint attention between the speech participants is established. Particularly, the latter point is of interest as it requires us to look at the co-speech gestures that often accompany demonstratives.

In Section 2, we will provide an introduction to demonstratives in ʔayʔaǰuθəm, drawing on previous literature. Section 3 will then outline the syntactic distribution of the individual demonstrative forms. Section 4, in turn, is dedicated to their semantics and pragmatics. We will

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[2] For reasons of space, we limit ourselves primarily to demonstratives that point out singular referents. However, preliminary evidence indicates that plural referents might require different demonstrative forms. Thus, the number of demonstratives in the language might actually be higher than 17.

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show how co-speech gestures and contextual salience split the demonstrative inventory into two (§4), as well as discuss other grammatical distinctions encoded by each form. More specifically, we will present data illustrating that the demonstratives in ʔayʔaǰuθəm encode deictic distance (§5), evidentiality (§6), and gender and number (§7). We will then present a semantic analysis for the demonstratives, incorporating ideas from Roberts (2002, 2015), Schwarz (2009), Speas (2010), Kalsang et al., (2013), Grosz (2019), Diessel and Coventry (2020), and Ebert et al. (2020), among others (§8). An overview of some remaining questions as well as potential directions for future research on demonstratives concludes this paper (§9).

2 Background

This section serves to introduce the reader to some of the terminology and background information that we will come back to throughout this paper. After a brief, general introduction to demonstratives (§2.1), we will provide an overview of the previous research on this topic in ʔayʔaǰuθəm (§2.2). We will then introduce the demonstrative forms we have encountered in our own work, organize them into paradigms, and compare them to other word classes in the language (§2.3). A short discussion of our methodology will conclude the background section (§2.4).

2.1 What are demonstratives?

Demonstratives have been a popular topic in linguistic research since at least the 1930s, when Bühler (1934) published his seminal work on what he called **pointing words**. Just like way markers and street signs, he argued, these words help speech participants navigate through a conversation. In English, the category of pointing words encompasses items like *here*, *there*, *this*, and *that*, but also expressions like *I*, *you*, *he*, *she*, *it*, and *they*. The former are generally known as **demonstratives**, the latter as **anaphoric pronouns**. What these words have in common is that their meaning is always context dependent. Just as the meaning of *I* in an utterance like *I'm tired* depends on *who* the speaker is, the meaning of words like *here* depends on *where* the speaker is when they make the utterance. In a sentence like *It's really hot here*, the demonstrative *here* would point to Vancouver if the utterance was made in Vancouver, but it would refer to Kamloops if the utterance was made in Kamloops.

In this paper, we will focus primarily on the demonstratives. These pointing words are often accompanied by **co-speech gestures** (i.e., manual pointing gestures, gazes, head nods, etc.) that help the speaker pick out an entity or a location in the external world (Bühler 1934; König & Umbach 2018; Ebert et al. 2020). The entity or location that the speaker is pointing at is often called the **referent**.

Selecting a referent via pointing is only one facet of the meaning of demonstratives, though. Demonstratives often also convey additional information regarding the speaker, the addressee, the referent, or the relationship between the three. In languages like English, for example, demonstratives also encode **deictic distance**, i.e., the relative distance between the speaker and the referent. For instance, words like *here* and *this* indicate that the speaker considers the referent to be close, or to use linguistic jargon, **proximal**, whereas *there* and *that* are used when the referent is regarded as farther away, or **distal**. The distance is usually measured from the speaker at the time and the place of the utterance, or as Bühler (1934) calls it, the **I-now-here-origo**.

English demonstratives do not encode much more than deictic distance. In other languages, the picture may look different. For instance, as we will show in this paper, demonstratives in ʔayʔaǰuθəm mark much more information. Apart from deictic distance, they also encode the **gender**

of the referent, the type of **evidence** the speaker has for the existence of the referent, or whether or not the speaker and the addressee are both already paying **joint attention** to the referent (cf. Diessel 2006:465).

Obviously, much more could be said about demonstratives, but for the purposes of this paper, we will leave it at that and refer interested readers to Diessel and Coventry (2020)'s comprehensive interdisciplinary review of the demonstrative literature.

2.2 Previous descriptions of ʔayʔaǰuθəm demonstratives

Despite a long history of documentation, the demonstrative system of ʔayʔaǰuθəm has received relatively little attention and remains not well understood. Yet, some important insights can be found in the brief descriptions that have been published in some form or other over the years — most notably by Boas (1890), Davis (1978), Harris (1981), and Watanabe (2003). In the following paragraphs, we will briefly summarize what has been said about the demonstratives in the language so far.

A first list of demonstratives can be found in the materials compiled by Boas (1890), who spent several weeks in the Comox settlement in November 1886, gathering traditional narratives as well as word lists. In a German manuscript (Mss.497.3.B63c), he identifies six different demonstrative forms, and categorizes them in terms of gender (feminine vs. masculine) and number (singular vs. plural). The inventory, as listed by Boas, is presented in (1) below.[3,4]

(1) Demonstratives listed in Boas (1890):

a.	*θiθa*	*¢ē'e¢a*	'jene' ≈ 'those'	FEM. PL.
b.	*tita*	*tē'eta*	'jene' ≈ 'those'	MASC. PL.
c.	*łaṅ*	*tlā'en*	'jene' ≈ 'that one'	FEM. SG.
d.	*taṅ*	*tā'en*	'jener' ≈ 'that one'	MASC. SG.
e.	*kʷšin*	*k'ŝēn*	'jener' ≈ 'that one'	MASC. SG.
f.	**kʷθin*	*k'θēn*	'jene' ≈ 'that one'	FEM. SG.

Almost 90 years after Boas, Davis (1978:235) expanded the inventory to ten demonstratives. While his descriptions do not go beyond a simple listing of forms, his glosses reveal the novel observation that many of the demonstratives can be used locatively (e.g., 'here', 'there') as well as nominally (e.g., 'this', 'that').

(2) Demonstratives listed in Davis (1978:235):

a.	*taʔa*	/taʔa/	'that / there'
b.	*tɛʔɛ*	/tiʔi/	'this / here'
c.	*θɛʔɛ*	/θiʔi/	'this / that'
d.	*taṅ*	/taṅ/	'that one'

[3] The first column shows the forms in the current orthography, while the second column shows the orthography that Boas used. The third column provides Boas's German translation of the forms, with their approximate English translation. The final column shows the labels that Boas used to classify the individual demonstratives.

[4] The feminine singular form *k'θēn* which Boas lists in (1f) remains unattested in modern ʔayʔaǰuθəm. Based on analogy with other forms, it would probably look like **kʷθiṅ* in the modern orthography.

e.	*łaṅ*	/łaṅ/	‘this / that one’
f.	*kʷaṅ*	/kʷaṅ/	‘that one’
g.	*tiṅ*	/təyṅ/	‘this / here’
h.	*šiṅ*	/šəyṅ/	‘that / there’
i.	*tita*	/təytə/	major topic (also: male as opposed to female)
j.	*θiθa*	/θiθa/	minor topic (also: female as opposed to male)

Harris (1981:92–93), who documented the Island dialect, finds three demonstrative forms, as shown in (3). Unfortunately, it is not entirely clear what forms they would correspond to today, as indicated by the ?? in the column representing the current orthography.[5]

(3) Demonstratives listed in Harris (1981:92–93):

a.	?? *ʔə t̓ɛʔ*	[ʔʌt’eʔ]	‘this one’
b.	?? *ʔə taʔ*	[ʔʌtaʔ]	‘that one’
c.	?? *ʔə tanɛ*	[ʔʌtani]	‘that one over there’

While he does not say much about their use, Harris (1981) can be credited with first noticing the evidential contribution of the demonstratives, which we will explore in more detail in Section 6. More specifically, he notes that the forms **kʷθin* [*k’θēn*] and *kʷšin* [*k’ŝēn*], as found in Boas (1890), occur with referents that are ‘not present’.

Just like his predecessors, Watanabe (2003:79) begins his overview of the demonstrative system by stating that further investigations will be necessary to understand the system. Despite the brevity of his description, he makes two important points. On the one hand, he notes that the label ‘feminine’ that he uses to describe some of the demonstratives is probably an oversimplification — which is indeed the case, as we will show in Section 7. On the other hand, he also points out that the *-ṅ* final forms (e.g., *kʷaṅ*, *šiṅ*) seem to be reduced variants of longer demonstrative forms (e.g., *kʷaʔiṅ, šiʔiṅ*).[6] The forms listed by Watanabe are reproduced in (4).[7]

(4) Demonstratives listed in Watanabe (2003:79):

a.	*tɛʔɛ*	/tiʔi/	‘this’
b.	*θɛʔɛ*	/θiʔi/	‘this (feminine)’
c.	*taʔa*	/taʔa/	‘that’
d.	*tiṅ*	/tiṅ/	‘this’
e.	*łaṅ*	/łaṅ/	‘this (feminine)’

[5] The forms in (3a) and (3b) strongly resemble certain demonstrative constructions found in Sechelt, namely *ʔe tí* (‘here’; ‘at/in/to this place’) and *ʔe tá* (‘there’; ‘at/in/to that place’) (Beaumont 2011:212–213). We, however, have not come across these constructions in ʔayʔaǰuθəm.

[6] A look at the original forms listed in Boas (1890) and their modern equivalents supports this observation (e.g., compare [*tā’en*] with *taṅ*).

[7] The ten demonstratives that Watanabe (2003) lists in his description of the system are exactly the ten forms that can also be found in Davis (1978), though he reworked some of the glosses. Throughout his grammar book, Watanabe also mentions a handful of additional demonstratives, such as *kʷaʔa* (p. 160), *kʷiʔkʷa* (p. 560), *kʷuši* (p. 560), and the plural forms *jaʔihiw* (p. 82) and *təy̓tihiw* (p. 165). He further speculates that the habitual marker *taʔat* might also lead a second life as a demonstrative in some cases (2003:90). However, as far as we can tell, all these instances seem to be no more than misinterpreted uses of the habitual marker.

f.	*taṅ̓*	/taṅ̓/	‘that’
g.	*kʷaṅ̓*	/kʷaṅ̓/	‘that one’
h.	*šiṅ̓*	/šiṅ̓/	‘that / there’
i.	*tita*	/təy̓tə/	‘this’
j.	*θiθa*	/θəy̓θa/	‘this (feminine)’

2.3 Organizing the inventory

Based on our own fieldwork with five speakers of ʔayʔaǰuθəm, the inventory of demonstratives totals at least 17 different forms. We divide them into two paradigms: **gesture demonstratives** (GDEMs) and **salience demonstratives** (SDEMs). We will argue that gesture demonstratives identify a location or entity through an accompanying co-speech gesture, while salience demonstratives encode reference to a location or entity that is already in joint attention (and thus, these forms do not require gesture). In both paradigms, we find distinctions of proximity for at least some forms, and evidential distinctions throughout. CDE stands for current direct evidence, which is typically visual evidence for the referent at the time of speaking. PDE stands for previous direct evidence, which is also typically visual evidence for the referent, but in this case the evidence is no longer available at the time of speaking. A subset of demonstratives in both paradigms also encodes that the referent is feminine and singular.

Table 1: The gesture demonstratives (GDEMS)

		Proximal	Near-Distal	Distal
CDE	Gender/Number-Neutral	*tɛʔɛ*	*tita*	*taʔa*
CDE	Feminine Singular	***θɛʔɛ***	***θiθa***	— [8]
Evidence-Neutral	Gender/Number-Neutral	*kʷɪši* [9]	*kʷikʷa*	*kʷaʔa*

[8] From a strictly analogical point of view, the form expected here should be **θaʔa* — however, our speakers do not recognize this demonstrative.

[9] Based on the composition of the other demonstratives, we would expect **kʷɛʔɛ* here, not *kʷɪši*. However, this form remains unattested in the literature and the speakers we work with do not recognize it either. In Sechelt, a cognate of *kʷɪši* still exists, namely *(ʔe) kʷe shí* (‘here’, unseen by speaker, listener, or both) (Beaumont 2011:213), which contrasts with *(ʔe) kʷe shá* (‘there’, unseen by speaker, listener, or both) (Beaumont 2011:468). The latter does not seem to have a cognate in ʔayʔaǰuθəm. One hypothesis is that the language originally had two paradigms, which eventually collapsed, resulting in the picture we see today. More specifically, it looks like *kʷɪši* filled the gap that the absence of **kʷɛʔɛ* left, but **kʷɪša* was lost because *kʷikʷa* had already occupied the only position it could go (i–ii).

(i) Reconstruction of original paradigms:

Paradigm 1: *kʷɪši* *kʷɪša*

Paradigm 2: ~~**kʷɛʔɛ*~~ *kʷikʷa* *kʷaʔa*

(ii) Collapse of the paradigms:

Paradigm 1: ~~*kʷɪši*~~ ~~*kʷɪša*~~

↓ ↓

Paradigm 2: *kʷɪši* *kʷikʷa* *kʷaʔa*

Table 2: The salience demonstratives (SDEMs)

		Proximal	Distal	Distance-Neutral
CDE	Gender/Number-Neutral	*tiṅ* [10]	*taṅ*	—
CDE	Feminine Singular	*θiṅ*	*łaṅ* [11]	—
PDE	Gender/Number-Neutral	—	—	*šiṅ*
PDE	Feminine Singular	—	—	*łɛṅ*
Evidence-Neutral	Gender/Number-Neutral	—	—	*kʷšiṅ*
Evidence-Neutral	Feminine Singular[12]	—	—	*kʷłɛṅ*
Discourse Demonstrative		—	—	*kʷaṅ*

The demonstrative paradigms proposed here bear striking resemblance to the paradigm of determiners in the language, shown in Table 3 below. The determiners likewise encode evidential distinctions, but do not make distinctions of deictic distance or joint attention.

Table 3: ʔayʔaǰuθəm determiners (Reisinger et al. [in press]).

CDE	Gender/Number-Neutral	*tə*
CDE	Feminine Singular	*łə*
PDE	Gender/Number-Neutral	*šɛ*
PDE	Feminine Singular	*ɬ*
Evidence-Neutral	Gender/Number-Neutral	*kʷ*

[10] At least one of our consultants occasionally also produces *tinɛ* (iii), which we suspect might be an older variant of *tiṅ*.

(iii) *Context: My younger sister hasn't been to Tla'amin in a long time and she's grown up a lot since you last saw her. I'm not sure if you will recognize her. I bring her over to see you and ask:*

yɛχatačxʷ	**tinɛ**	sałtxʷ?
yaẋ-á-t-a=čxʷ	tina	sałtxʷ
remember-CTR\STAT-Ǫ-2SG.SBJ	DEM	woman

'Do you remember this woman?' (vf | FL/2021/02/21)

It resembles the demonstrative *təʔinə* 'this' in Musqueam, which Suttles (2004:352) recognizes as a transparent relative clause construction, consisting of the determiner *tə*, the predicate *ʔi* 'be here', and a reduced form of the existential marker *ṅa*. Together these components mean something like: 'the one who/that exists here'.

[11] The use of *łaṅ* as a CDE form is surprising, as the consonant *θ*-, and not *ɬ*-, is usually associated with this evidential category (cf. Section 4). Thus, we would expect **θaṅ* to take its place in Table 2, and *łaṅ* to contrast with *łɛn* in the PDE row. Perhaps, this idiosyncrasy is the result of a partial collapse of the system.

[12] We've encountered *kʷłɛṅ* rarely and so have not had the opportunity to test whether the restriction to singular referents holds for *kʷłɛṅ* as for the other feminine demonstratives, but we assume it does in parallel to the rest of the paradigm.

The demonstratives are also clearly related to a set of particles known as clausal demonstratives (Huijsmans & Reisinger [in press (b)]). These particles encode whether the speaker has CDE for the event described by the proposition and also information about the event's temporal proximity.

Table 4: Clausal demonstrative paradigm (Huijsmans & Reisinger [in press]).

	Proximal	Distal
CDE	*ti*	*ta*
Evidence-Neutral	*kʷi*	*kʷa*

Throughout these four paradigms, *t*-initial forms are associated with CDE, while *kʷ*-initial forms are evidence neutral, and *š*-initial forms encode PDE. Feminine forms are *ɬ*- or *θ*-initial with the exception of *kʷɬɛn̓*. Where deictic distinctions are made, *a* is associated with distal forms, while *i* is associated with proximal forms.

2.4 Methodology

The findings reported in this paper are the result of a number of different fieldwork methods. Most commonly, we presented a verbal context and then either asked our consultant to provide the correct ʔayʔaǰuθəm utterance to fit that context or provided a sentence and asked our consultant to judge whether it was a good fit to the context (i.e., felicitous); these are both standard methods of semantic fieldwork (e.g., Matthewson 2004). While we often presented the contexts in English, the target example was sometimes placed within an ʔayʔaǰuθəm dialogue or in a multi-sentence ʔayʔaǰuθəm utterance in order to make it easier for the speaker to think and judge within the language. When obtaining minimal pairs, we typically first asked our consultant to provide an utterance fitting the context we provided, and then subsequently tested whether the volunteered demonstrative could be replaced with other demonstrative choices in the same context. Often this testing occurred on the same day, but sometimes over multiple days. We then replicated the findings with different examples showing the same contrast, typically over several sessions.

In addition to investigating examples in a verbally presented context, we also created short storyboards that manipulated whether an object was in the joint attention of two characters engaged in a dialogue. We then used the volunteered dialogues as frames to test whether other demonstratives could be used in place of those our consultant originally used. This allowed us to better compare the discourse properties of the demonstratives which were elusive without this context.

As mentioned above, we worked with five consultants on this project specifically, mostly over the last year, though demonstratives have entered into our documentation frequently over the last five years working with these speakers and a number of other speakers as well. We have found the demonstrative system largely consistent between speakers, though one speaker uses variations not found in the speech of other speakers (though clearly recognized and understood) — see footnote 10. We have also noticed that the use of feminine demonstratives is more common in the speech of older speakers.

3 Syntactic distribution

The literature on demonstratives commonly distinguishes between nominal and adverbial demonstratives (e.g., Dixon 2003; Diessel & Coventry 2020). The nominal demonstratives can either function as pronouns (i.e., the demonstrative is used instead of a noun phrase), or as determiners (i.e., the demonstrative introduces a noun phrase), as shown in (5a) and (5b), respectively. The adverbial demonstratives, on the other hand, generally act as locative adverbs, as illustrated in (5c).

(5)	a.	NOMINAL: PRONOUN	Who is [$_{DP}$ this]?
	b.	NOMINAL: DETERMINER	Who is [$_{DP}$ this [$_{NP}$ man]]?
	c.	ADVERBIAL: LOCATIVE ADVERB	It is [$_{LOC}$ here].

In English, these two categories can be easily told apart. While *this* and *that* are exclusively nominal, *here* and *there* are exclusively adverbial. In ʔayʔaǰuθəm, this division is less obvious: the same forms are used for both nominal (6a–b) and adverbial uses (6c) — though adverbial uses are typically preceded by the oblique marker *ʔə*.[13]

(6) a. NOMINAL: PRONOUN

gɛt ga	[$_{DP}$ **tɛʔɛ**]?	
gat=ga	tiʔi	
who=DPRT	DEM	
‘Who is **this**?’		(sf | EP.2021/02/26)

b. NOMINAL: DETERMINER

gɛt ga	[$_{DP}$ **tɛʔɛ** [$_{NP}$ tumš]]?	
gat=ga	tiʔi	tumiš
who=DPRT	DEM	man
‘Who is **this** man?’		(sf | EP.2021/03/27)

[13] The abbreviations used in this paper are: 1 = first person, 2 = second person, 3 = third person, ACT = active, CAUS = causative transitive, CDE = current direct evidence, CHAR = characteristic reduplication, CLDEM = clausal demonstrative, CLF = cleft, COMP = complementizer, COP = copula, CTR = control transitive, DEM = demonstrative, DET = determiner, DIM = diminutive, DISC = discourse, DIST = distal, DP = determiner phrase, DPRT = discourse particle, EPEN = epenthetic consonant, ERG = ergative, EX = exclamation marker, EXCL = exclusive marker, F = feminine, FUT = future, GDEM = gesture demonstrative, HAB = habitual, INFER = inferential, INSTR = instrument, INT = intensifier, INTR = intransitive, LOC = locative, MDL = middle marker, NCTR = non-control transitive, NDIST = near-distal, NEG = negative, NMLZ = nominalizer, NP = noun phrase, OBJ = object, OBL = oblique, QUEX = quexistential, PASS = passive, PDE = previous direct evidence, PL = plural, POSS = possessive, PRF = perfect, PROG = progressive, PROX = proximal, PST = past, Q = question particle, RC = relative clause, REL = relational marker, RPT = reportative, SBJ = subject, SBJV = subjunctive, SDEM = salience demonstrative, SG = singular, STAT = stative, TR = transitivizer, VP = verb phrase.

A hyphen (-) is used to mark an affix, an equal sign (=) a clitic, a tilde (~) a reduplicant, a backslash (\) a suprasegmental morpheme (in this paper a pitch accent), and angle brackets (< >) for infixation into the root; + is used where two or more morphemes are fused.

The top line of each example is orthographic, the second line provides underlying forms and morpheme breaks, the third line is the gloss, and the fourth line gives the translation.

In the source information, “sf” marks forms suggested by the authors, and “vf” marks volunteered forms by the consultants.

c. ADVERBIAL: LOCATIVE ADVERB

niš	[LOC **ʔə <u>tɛʔɛ</u>**].	
niš	ʔə=tiʔi	
be.here	OBL=here	
‘It’s over **here**.’		(vf | EP.2021/02/19)

Below, we illustrate these uses for each of the demonstratives in the system and identify gaps where certain forms may not be used.

3.1 Nominal uses

First, we explore for which demonstratives nominal uses are available. First, we explore for which demonstratives nominal uses are available. As we will show, only *some* of the GDEMs, but *all* of the SDEMs can be used as pronouns and determiners.

Of the *t*-initial GDEMs, only *tɛʔɛ* and *tita* — but not *taʔa* — can occur as nominal demonstratives. They can be used pronominally, as in (7), as well as determiners, as in (8).

(7) Pronominal uses of the *t*-initial GDEMs:

a. *Context for* tɛʔɛ*: Introducing the man beside you.*
Context for tita*: Pointing to someone across the room.*
Context for taʔa*: Pointing to someone way across the gym.*

hɛł	{**tɛʔɛ** / **tita** / ***taʔa**}	ʔətᶿ gaqaθ.
hił	{tiʔi / təẏta / *taʔa}	ʔətᶿ=gaqaθ
COP	{DEM / DEM / DEM}	1SG.POSS=husband
‘This/that is my husband.’		(sf | BW/2020/10/20)

b. *Context: Someone asks if you recognize anyone in a picture.*

ṫogútč	{**tɛʔɛ** / **tita** / ***taʔa**}.
ṫug-út=č	{tiʔi / təẏta / *taʔa}
recognize-CTR\STAT=1SG.SBJ	{DEM / DEM / DEM}
‘I recognize this/that one.’	(sf | BW/2020/10/20)

(8) Determiner uses of the *t*-initial GDEMs:

Context: Someone asks if you recognize anyone in a picture.

ṫogotč	{**tɛʔɛ** / **tita** / ***taʔa**}	tumiš.
ṫug-út=č	{tiʔi / təẏta / *taʔa}	tumiš
recognize-CTR\STAT=1SG.SBJ	{DEM / DEM / DEM}	man
‘I recognize this/that man.’		(sf | BW/2020/10/20)

The *θ*-initial GDEMs, *θɛʔɛ* and *θiθa*, exhibit the same distribution. That is, they can be used either as pronouns, as shown in (9), or as determiners, as shown in (10).

(9) Pronominal uses of the *θ*-initial GDEMs:

a. *Context for* θɛʔɛ*: Introducing the woman beside you.*
Context for θiθa*: Pointing to someone across the room.*
hɛł **{θɛʔɛ / θiθa}** ʔətᶿ sałtu.
hił {θiʔi / θəẏθa} ʔətᶿ=sałtəw
COP {DEM / DEM} 1SG.POSS=wife
'This/that is my wife.' (sf | EP/2021/05/29)

b. *Context: Someone asks if you recognize any woman in a picture.*
ṫogotč **{θɛʔɛ / θiθa}**.
ṫug-út=č {θiʔi / θəẏθa}
recognize-CTR\STAT=1SG.SBJ {DEM / DEM}
'I recognize this/that one.' (sf | EP/2021/06/05)

(10) Determiner uses of the *θ*-initial GDEMs:

Context: Someone asks if you recognize anyone in a picture.
ṫogotč **{θɛʔɛ / θiθa}** sałtxʷ.
ṫug-út=č {θiʔi / θəẏθa} sałtxʷ
recognize-CTR\STAT=1SG.SBJ {DEM / DEM} woman
'I recognize this/that woman.' (sf | BW/2020/10/20)

The *kʷ*-initial GDEMs, on the other hand, appear not to be compatible with the nominal uses. Despite repeated efforts, we have not been able to elicit cases where the demonstratives *kʷɪši*, *kʷikʷa*, or *kʷaʔa* function as pronouns or determiners, as illustrated in (11) and (12).

(11) Unavailable pronominal uses of the *kʷ*-initial GDEMs:

a. *Context: I'm asking you to pass me something that's behind me.*
* maʔamθ gi **kʷɪši**!
maʔam-θ=gi kʷəši
pass-1SG.OBJ=DPRT DEM
Intended: 'Pass me this!' (sf | EP.2021/06/04)

b. *Context for* kʷɪši*: I have two sets of cutlery and I always use the ones in the kitchen. I point to the drawer that they're in and tell you:*
Context for kʷikʷa*: I have two sets of cutlery and I always use the ones in the kitchen. We're in the living room and I tell you, gesturing towards the kitchen.*
* hɛł **{kʷɪši / kʷikʷa}** ʔə payɛʔ yiyq̇ašɛn.
hił {kʷəši / kʷəẏkʷa} ʔə=payaʔ yə~yq̇-aš-an
COP {DEM / DEM} CLF=always PROG~USE-TR-1SG.ERG
Intended: 'These/Those are the ones I always use.'
(sf | EP.2021/06/04 & sf | EP.2021/06/12)

c. *Context: I have a couple of wheelbarrows. One is rather rickety and leant against the shed close by. I also have a good, sturdy one, but it is hidden in the trees at the back of my property where I was doing some work. You want to borrow one, and I want you to take the good one, so I tell you:*

* hɛɬ **kʷaʔa** ʔə payɛʔ yiyq̇ašɛn.
hiɬ kʷaʔa ʔə=payaʔ yə~yq̇-aš-an
COP DEM CLF=always PROG~use-TR-1SG.ERG
Intended: 'The one back there is the one I always use.' (sf | EP.2021/06/12)

d. *Context: You wanted to meet my brother, but he wasn't at the gathering at my house yet when you arrived...*
For kʷikʷa*: ...Later, a man walks past us and disappears around the corner. I tell you:*
For kʷaʔa*: ...We were watching a child playing at the far end of the gym when we noticed a man walk past the child and disappear out the door at the far side of the gym. I tell you:*

***** oh, hɛɬ {**kʷikʷa** / **kʷaʔa**} ʔətᶿ qɛχ.
oh, hiɬ {kʷəy̓kʷa / kʷaʔa} ʔətᶿ=qix̱
oh COP {DEM / DEM} 1SG.POSS=younger.sibling
Intended: 'Oh, that is my brother.' (sf | BW.2020/11/03)

(12) Unavailable determiner uses of the *kʷ*-initial GDEMs:

a. *Context: I see you struggling with a blunt pair of scissors. Indicating the cupboard behind me, I tell you:*

* maʔt ga **kʷɪši** **ḳ̇ɪpayɛ**. ʔiynɛs.
maʔ-t=ga kʷəši ḳ̇əpaya ʔəy-nis
get-CTR=DPRT DEM scissors good-tooth
Intended: 'Get these scissors. They're sharp.' (sf | EP.2021/07/10)

b. *Context: I have two sets of cutlery, and I always use the ones in the kitchen. We're in the living room and I tell you, gesturing towards the kitchen.*

* hɛɬ **kʷikʷa** **čɛʔaw** ʔə payɛʔ yiyq̇ašɛn.
hiɬ kʷəy̓kʷa čaʔaw ʔə=payaʔ yə~yq̇-aš-an
COP DEM tools/cutlery CLF=always PROG~use-TR-1SG.ERG
Intended: 'Those are the ones I always use.' (sf | EP.2021/07/02)

c. *Context: I'm pointing towards my shed and there's a good wheelbarrow behind the shed. There's also a rickety one closer. I want you to borrow the good wheelbarrow for the work you need to do.*

* hɛɬ **kʷaʔa** **siksik** matax^{w}.
hiɬ kʷaʔa siksik maʔ-t-ax^{w}
COP DEM wheelbarrow get-CTR-2SG.ERG
Intended: 'Take the wheelbarrow over there.' (sf | EP.2021/0702)

A typical repair strategy for these cases is to create a headless or head-final relative clause introducing the demonstrative as a locative. In these structures, the demonstrative forms a predicate

along with the locative *nɛʔ*, while the head of the relative clause is either a silent third-person pronoun *pro* (13a–c)[14] or a final NP (13d–e) (e.g., Davis 2010).

(13) Repairs using relative clauses:

a. *Context: I have two sets of cutlery, and I always use the ones in the kitchen. I point to the drawer that they're in and tell you:*
hɛɬ [$_{DP}$ šɛ nɛʔ **kʷɪ̓ši** *pro*$_i$] ʔə payɛʔ yiyq̓ašɛn.
hiɬ šə=niʔ kʷə̓ši *pro*$_i$ ʔə=payaʔ yə~yq̓-aš-an
COP DET=be.there DEM *pro*$_i$ CLF=always PROG~use-TR-1SG.ERG
'The ones$_i$ over here are the ones I always use.' (cf. 10b) (vf | EP.2021/06/05)

b. *Context: I have two sets of cutlery, and I always use the ones in the kitchen. We're in the living room and I tell you, gesturing towards the kitchen:*
hɛɬ [$_{DP}$ šɛ nɛʔ **kʷikʷa** *pro*$_i$] ʔə payɛʔ yiyq̓ašɛn.
hiɬ šə=niʔ kʷəy̓kʷa *pro*$_i$ ʔə=payaʔ yə~yq̓-aš-an
COP DET=be.there DEM *pro*$_i$ CLF=always PROG~use-TR-1SG.ERG
'The ones$_i$ over there are the ones I always use.' (cf. 10c) (vf | EP.2021/06/05)

c. *Context: I have a couple of wheelbarrows. One is rather rickety and leant against the shed close by. I also have a good, sturdy one, but it is hidden in the trees at the back of my property where I was doing some work. You want to borrow one, and I want you to take the good one, so I tell you:*
hɛɬ [$_{DP}$ šɛ nɛʔ **kʷaʔa** *pro*$_i$] ʔə payɛʔ yiyq̓ašɛn.
hiɬ šə=niʔ kʷaʔa *pro*$_i$] ʔə=payaʔ yə~yq̓-aš-an
COP DET=be.there DEM *pro*$_i$ CLF=always PROG~use-TR-1SG.ERG
'The one$_i$ over there is the one I always use.' (cf. 10d) (sf | EP.2021/06/12)

d. *Context: I see you struggling with a blunt pair of scissors. Indicating the cupboard behind me, I tell you:*
maʔt ga [$_{DP}$ šɛ nɛʔ **kʷɪ̓ši k̓ɪ̓payɛ**]. ʔiynɛs.
maʔ-t=ga šə=niʔ kʷə̓ši k̓əpaya ʔəy-nis
get-CTR=DPRT DET=be.there DEM scissors good-tooth
'Get the scissors here. They're sharp.' (cf. 11a) (sf | EP.2021/07/10)

e. *Context: I'm pointing towards my shed, and there's a good wheelbarrow behind the shed. There's also a rickety one closer. I want you to borrow the good wheelbarrow for the work you need to do.*
hɛɬ [$_{DP}$ šɛ nɛʔ **kʷaʔa siksik**] matax^{w}.
hiɬ šɛ=niʔ kʷaʔa siksik maʔ-t-ax^{w}
COP DET=be.there DEM wheelbarrow get-CTR-2SG.ERG
'Take the wheelbarrow over there.' (cf. (11b)) (sf | EP.2021/07/02)

[14] Here we represent *pro* as final in parallel to the corresponding examples where the NP head is overt. The structure of headless relative clauses still needs investigation, however. See Davis (2010) for detailed discussion of the structure of headless relative clauses in St'át'imcets.

In contrast to the GDEMs, *all* of the SDEMs can be used as pronouns or determiners, as shown in the examples (14) through (23).

(14) Pronoun uses of *tiṅ* and *taṅ:*

a. *Context: At a bazaar, I see my friend holding several knitted hats likely bought at different stalls. Pointing to one I particularly like, I ask:*
hɛkʷčɛ θ maʔaxʷ **tiṅ**?
hiɬ+kʷ=ča θ=maʔ-əxʷ tiṅ
COP+DET=where 2SG.POSS=get-NCTR DEM
'Where did you buy this?' (vf | EP.2021/04/16)

b. *Context: We're at a florist's looking at a few bouquets, deciding which to get for a friend. I don't like what I'm seeing, but then I notice one I quite like.*
hɛsəm **tiṅ** šuʔotən.
hiɬ+səm tiṅ šuʔ-ut-an
COP+FUT DEM choose-CTR-1SG.ERG
'I'll choose this one.' (vf | EP.2021/04/16)

c. *Context: Daniel and Marianne are at a florist getting flowers for Gloria for her birthday, and Daniel points out some flowers he thinks Gloria would like:*
»qʷayın hɛɬ tita«, hot Daniel. »qʷayın ʔistom Gloria **taṅ**.
qʷayin hiɬ təẏta hut Daniel qʷayin ʔəẏ-st-um Gloria taṅ
maybe COP DEM say Daniel maybe good-CAUS-PASS Gloria DEM
hɛ səm **taṅ** yəqtat.«
hiɬ+səm taṅ yəq-t-at
COP+FUT DEM buy-CTR-1PL.ERG
'»Maybe those«, says Daniel. »I think Gloria will like those. We'll buy those.«'
(vf | EP.2021/04/23)

(15) Determiner uses of *tiṅ* and *taṅ:*

a. *Context: We're looking at a display of baskets. You've been identifying the uses of the different baskets. Having already identified the baby basket, you later point back again at it and tell me:*
hɛɬ tᶿ čičiyɛʔoɬ ʔəsnaʔ ṗaṗɛm **tiṅ** χaʔṗ.
hiɬ tᶿ=či~čiya-ʔuɬ ʔəsnaʔ ṗaṗim tiṅ χaʔṗ
COP 1SG.POSS=DIM~grandmother-PST be.owner work DEM baby.basket
'This baby basket is my late grandmother's work.' (sf | EP.2021/04/16)

b. *Context: I'm showing my brother the church where our parents got married.*
hɛɬ **tiṅ** čɛhamawtxʷ ʔəxʷ=malyɛʔos šums ƛaχƛaχ.
hiɬ tiṅ čah-am-awtxʷ ʔə=xʷ=malya-ʔuɬ+s šə=ms=ƛaχƛaχ
COP DEM pray-MDL-building OBL=NMLZ=marry-PST+3POSS DET=1PL.POSS=parent
'It's this church where our parents got married.' (vf | EP.2021/03/05)

c. hɛɬ Gail ʔəsnaʔ ṗaṗɛm **taṅ** χaʔṗ.
hiɬ Gail ʔəsnaʔ ṗaṗim taṅ x̣aʔṗ
COP Gail be.owner work DEM baby.basket
'That baby basket is Gail's work.' (vf | EP.2021/04/16)

d. *Context: As we are boating about, you point out a small island to me from among the other islands. You tell me:*
payɛ ʔot qaχ tə ʔasxʷ ʔə **taṅ** kʷʊθays.
payaʔ=ʔut qəx̣ tə=ʔasxʷ ʔə=taṅ kʷəθays
always=EXCL lots DET=seal OBL=DEM island
'There's always a lot of seals on that island.' (vf | EP.2021/04/16)

(16) Pronoun uses of *θiṅ* and *łaṅ:*

a. *Context: My brother and I are looking through an old picture album that my parents have. I have it in my lap. There's a picture of a woman I kind of recognize but can't quite place. I ask* ṫogutačxʷ θɛʔɛ? *'Do you recognize this (woman)? …'*
qʷayɪn hɛɬ **θiṅ** ʔəms ǰɛʔǰɛ.
qʷayin hiɬ θiṅ ʔəms=ǰaʔǰa
maybe COP DEM 1PL.POSS=relative
'I think she's our relative.' (sf | EP.2021/06/05)

b. *Context: You see a lady walking by and are wondering who she is.*
gɛt č̣ɛ ga **łaṅ**?
gat=č̣a=ga łaṅ
who=INFER=DPRT DEM
'I wonder who that woman is?' (vf | EP.2021/0710)

(17) Determiner uses of *θiṅ* and *łaṅ:*

a. *Context: I bring a picture of a lady to show you.*
gɛt ga **θiṅ** sałtxʷ?
gat=ga θiṅ sałtxʷ
who=DPRT DEM woman
'Who is this lady?' (sf | EP.2021/06/12)

b. *Context: A lady gets up to speak at a meeting, and I'm not sure who she is. I ask:*
gɛt ga? ṫogútačxʷ **łaṅ** sałtxʷ?
gat=ga ṫug-út=a=čxʷ łaṅ sałtxʷ
who=DPRT recognize-CTR\STAT=Ǫ=2SG.SBJ DEM woman
'Who is she? Do you recognize that woman?' (vf | EP.2021/06/12)

(18) Pronoun uses of *šiṅ́* and *łɛṅ́:*

a. *Context: At a gathering, someone was very disruptive and then left. After the man left, Freddie asks me:*

ṫogútačxʷ	šɛ tumɪš?	hɛł	**šiṅ́**	čuʔołoł	ʔətᶿ siksik.
ṫug-út=a=čxʷ	šə=tumiš	hił	šiṅ	čuʔuł-uł	ʔətᶿ=siksik
recognize-CTR=Ǫ=2SG.SBJ	DET=man	COP	DEM	steal-PST	1SG.POSS=wheelbarrow

'Did you recognize that man? He was the one that stole my wheelbarrow.'
(sf | BW.2020/10/06)

b. *Context: There's a bag hanging from my doorknob. When I open the door, it is there, and Freddie tells me he saw Gail leaving the driveway when he came. I say:*

hiya	**łɛṅ́**	ʔə qʷol	ṫaq̇ašoł?
hił+a	łiṅ	ʔə=qʷəl̓	ṫəq̇-aš-uł
COP+Ǫ	DEM	come	deliver-TR-PST

'Was it her that brought it to the door?' (vf | EP.2021/02/26)

(19) Determiner uses of *šiṅ́* and *łɛṅ́:*

a. *Context: At a gathering, someone was very disruptive and then left. After the man left, Freddie asks me:*

gɛt ga	**šiṅ́**	tumɪš?
gat=ga	šiṅ	tumiš
who=DPRT	DEM	man

'Who was that man?' (sf | EP.2020/10/02)

b. *Context: When we are at the lodge, a lady shows up that I don't know. Everyone else seems to know her, so I'm embarrassed to ask who she is. After she leaves, I ask:*

gɛt ga	**łɛṅ́**	sałtxʷ?
gat=ga	łiṅ	sałtxʷ
who=DPRT	DEM	woman

'Who was that woman?' (sf | EP.2020/06/12)

(20) Pronoun uses of *kʷšiṅ́* and *kʷłɛṅ́:*

a. *Context: I hear a male voice outside at night. I say to Daniel:*

čiyítč	kʷ tumɪš	ʔəkʷ ʔasqič.	gɛt čɛ	**kʷšiṅ́**?
čiy-ít=č	kʷ=tumiš	ʔə=kʷ=ʔasqič	gat=ča	kʷšiṅ
hear-CTR\STAT=1SG.SBJ	DET=man	OBL=DET=outside	who=INFER	DEM

'I hear a man outside. Who could that be?' (sf | EP.2021/02/26)

b. *Context: Someone tells you a new lady has been hired at the band office, and she heard it's a relative of Freddie's. You wonder out loud who that would be.*

gɛt čɛ ga	**kʷłɛṅ́**?
gat=ča=ga	kʷłiṅ
who=INFER=DPRT	DEM

'I wonder who that is? (sf | EP.2021/07/02)

(21) Determiner uses of *kʷšiṅ* and *kʷɬɛṅ:*

a. *Context: Listening to a CD.*
hɛhɛwč ʔismot **kʷšiṅ** wuwʊmtən.
hihiw=č ʔəẏ-sxʷ-mut kʷšiṅ wuw-əm-tən
really=1SG.SBJ good-CAUS-INT DEM sing-MD-INSTR
'I really like this song.' (vf | EP.2021/01/08)

b. *Context: Someone tells you a new lady has been hired at the band office, and she heard it's a relative of Freddie's. You wonder out loud who that would be.*
gɛt čɛ̇ ga **kʷɬɛṅ** sałtxʷ?
gat=čɛ̇=ga kʷɬiṅ sałtxʷ
who=INFER=DPRT DEM woman
'I wonder who that woman is?' (sf | EP.2021/07/02)

(22) Pronoun uses of *kʷaṅ:*

a. *Context: Wrapping up a story.*
hɛł **kʷaṅ**!
hił kʷaṅ
COP DEM
'That's it!' (Watanabe 2021:103)

b. *Context: Daniel mentions that Gloria found someone to give a talk at a linguistics gathering, but not who it is. I stop him and ask:*
gɛt ga **kʷaṅ**?
gat=ga kʷaṅ
who=DPRT DEM
'Who is that?' (sf | EP.2021/03/27)

(23) Determiner uses of *kʷaṅ:*

a. *Context: From an instructional narrative on first pregnancies.*
ʔot ga qʷoł ʔiʔ **kʷaṅ** čuẏ ʔi naʔa maʔaxʷčxʷ hiyt.
ʔut=ga qʷəl̇ ʔəẏ kʷaṅ čuẏ ʔiy naʔa maʔ-əxʷ=čxʷ=hiyt
if=DPRT come good DEM child and FILLER obtain-NTR=2SG.SBJ=PRF
'If that child is well, then you are well on your way.' (Watanabe 2021:100)

b. ʔiščɛn **kʷaṅ** nan.
ʔəẏ-sxʷ=čan kʷaṅ nan
good-CAUS=1SG.SBJ DEM name
'I like that name.' (sf | EP.2021/06/12)

Tables 5 and 6 summarize which of the demonstratives have nominal uses. While all of the SDEMs can be used as pronouns or determiners, the picture emerging for the GDEMs is less

uniform. As indicated by the bolded rows in Table 5, we have been unable to find nominal uses for *taʔa, kʷɪši, kʷikʷa,* and *kʷaʔa*.

Table 5: Nominal uses of the GDEMs

	Pronoun	Determiner
tɛʔɛ	✓	✓
tita	✓	✓
taʔa	—	—
θɛʔɛ	✓	✓
θiθa	✓	✓
kʷɪši	—	—
kʷikʷa	—	—
kʷaʔa	—	—

Table 6: Nominal uses of the SDEMs

	Pronoun	Determiner
tiṅ	✓	✓
taṅ	✓	✓
θiṅ	✓	✓
ɬaṅ	✓	✓
šiṅ	✓	✓
ɬɛṅ	✓	✓
kʷšiṅ	✓	✓
kʷɬɛṅ	✓	✓
kʷaṅ	✓	✓

3.3.2 Locative uses

The boundary between nominal and locative uses is not clearly delimited semantically since locations are frequently entities (e.g., *the mountain, the park, the bench*). By *locative use*, we refer specifically to adverbial uses of the demonstratives that pick out locations.

We begin by examining the *t-* and *kʷ*-initial GDEMs (the gender-neutral forms) which can all be used locatively (24). There are two syntactic environments where the demonstratives are clearly used locatively: where the demonstrative appears in an oblique phrase (preceded by the oblique marker *ʔə*) and in oblique clefts, since the clefting of a locative or temporal oblique phrase triggers nominalization of the remnant clause. Example (24a) illustrates an oblique cleft, where the remnant is introduced by the oblique marker *ʔə* and the oblique nominalizer *xʷ*, while the subordinate subject is realized with a possessive clitic. Example (24b) illustrates a demonstrative appearing in an oblique phrase.

(24) Locative uses of the gender-neutral GDEMs:

a. *Context: Planning where our guests will sit for dinner. I point to the chair in front of me.*

hɛ səm	**tɛʔɛ**	ʔəxʷ nišs	Gloria.
hiɬ=səm	tiʔi	ʔə=xʷ=niš=s	Gloria
COP=FUT	DEM	OBL=OBL.NMLZ=be.here=3POSS	Gloria

‘Gloria will be here.’ (vf | EP.2021/02/19)

b. *Context: The police are interviewing me as a witness after a minor car accident. They're trying to reconstruct what happened and ask me where I was standing when the accident happened. I point a little ways down the sidewalk and say:*

nɛč	k̓ʷɛʔɛšitoɬ	ʔə {**tita** / **taʔa**}.
niʔ=č	k̓ʷiʔiš-ít-uɬ	ʔə={tita / taʔa}
be.there=1SG.SBJ	stand-STAT-PST	OBL={DEM / DEM}

'I was standing there / over there.'
*Consultant: "[*tita*] if it was closer to you, like 10 ft away."* (sf | EP.2021/04/02)

c. *Context: My purse is hanging on the back of my chair.*

nɛʔ	šɛtᶿ talahayɛ	ʔə **kʷɪ̓ši**.
niʔ	šə=tᶿ=talahaya	ʔə=kʷəši
be.there	DET=1SG.POSS=purse	OBL=DEM

'My purse is right here (behind me).' (vf | EP.2021/02/19)

d. *Context: I was always told there was a lake way back in the woods behind my place. I've never hiked back there to see. One day, we're talking about the area, and I point towards the woods behind my place and tell you:*

nɛʔ k̓ʷa	kʷ θɛθaʔyɛɬ	ʔə **kʷikʷa**,	nɛʔɛtəm.
niʔ=k̓ʷa	kʷ=θ<iθ>ay̓aɬ	ʔə=kʷikʷa	niʔ-it-əm
be.there=RPT	DET=lake<DIM>	OBL=DEM	say-CTR-PASS

'There's a little lake over there, it's said.' (vf | EP.2021/02/26)

e. *Context: Daniel and I are on a hiking trail. When I did the hike before, another hiker told me that there is a river a little ways off the trail. I've never explored it, though. When we get to that point, I point towards where the river is supposed to be and tell Daniel:*

nɛʔ k̓ʷa	kʷ q̓ʷaq̓ʷtɛm	ʔə {**kʷikʷa / kʷaʔa**}.
niʔ=k̓ʷa	kʷ=q̓ʷa<q̓ʷ>t<i>m	ʔə={kʷikʷa / kʷaʔa}
be.there=RPT	DET=river<DIM>	OBL={DEM / DEM}

'I hear there's a river (over) there.'
Consultant: "[kʷaʔa] *could be a mile away, a little further."* (vf | EP.2021/02/26)

The gender-neutral SDEMs can all be used locatively as well, as shown in (25).

(25) Locative uses of the gender-neutral SDEMs:

a. *Context: Walking into a store, you say:*

hɛɬ	**tiṅ**	ʔətᶿ yəqtoɬ	ʔətᶿ q̓əsnay.
hiɬ	tiṅ	ʔə=tᶿ=yəqt-ʔuɬ	ʔətᶿ=q̓əsnay
COP	DEM	OBL=1SG.POSS=buy-PST	1SG.POSS=shirt

'This is where I bought my dress.' (vf | EP.2021/02/19)

b. *Context: We're getting off the boat on an island, and you tell me that you used to stay here often.*

hɛɬ	**tiṅ**	ʔəms=taʔat	niš	ƛ̓əmɛsoɬ.
hiɬ	tiṅ	ʔə=ms=taʔat	niš	ƛ̓əm<i>s-ʔuɬ
COP	DEM	OBL=1PL.POSS=HAB	be.here	dwell<STAT>-PST

'We used to stay here often.' (vf | EP.2021/02/26)

c. *Context: There are houses scattered over the island that we are going past on a boat. Pointing to one high up on a hill, I say:*

hɛɬ	**taṅ**	ʔəxʷ nɛs	ʔɛʔanaʔoɬ
hiɬ	taṅ	ʔə=xʷ=niʔ-s	ʔiʔana-ʔuɬ
COP	DEM	OBL=OBL.NMLZ=be.there-3POSS	born-PST

šɛtθ qɛχ.
šə=tθ=qiχ
DET=1SG.POSS=younger.sibling

'My brother was born there.' (vf | EP.2021/04/02)

d. *Context: Someone mentions the Value Village on Hastings St. I tell her:*

hɛɬ	**šiṅ**	ʔətθ maʔaxʷoɬ	tθ kʷʊsɛmʊkʷt.
hiɬ	šiṅ	ʔətθ=maʔ-əxʷ-uɬ	tθ=kʷəsimukʷt
COP	DEM	1SG.POSS=get-NCTR-PST	1SG.POSS=jeans

'That's where I got my jeans.' (sf | EP.2021/06/19)

e. *Context: Someone mentions Germany. Daniel says:*

hɛɬ	**kʷšiṅ**	ʔətθ tuwa.	
hiɬ	kʷšiṅ	ʔətθ=tuwa	
COP	DEM	1SG.POSS=from	

'That's where I'm from.' (vf | EP.2021/06/12)

f. *Context: Someone mentions Germany. I say:*

hɛ k̓ʷa	**kʷaṅ**	ʔəxʷ	tuwas	Daniel.
hiɬ=k̓ʷa	kʷaṅ	ʔə=xʷ	tuwa=s	Daniel
COP=RPT	DEM	OBL=OBL.NMLZ	from=3POSS	Daniel

'That's where Daniel is from.' (vf | EP.2021/06/12)

The *θ*- and *ɬ*-initial GDEMs and SDEMs (the feminine forms) can also be marginally used locatively — but only when the location is an object considered small, as shown in (26) and (27), respectively.[15]

[15] We have not checked the feminine SDEM *kʷɬɛṅ* as a locative, since it is quite restricted even in its nominal use, for reasons we cover in Section 4.5. While it may be possible to find a context where *kʷɬɛṅ* could be used locatively, we believe such uses would be extremely rare.

(26) Locative uses of the feminine GDEMs with small referents:

Context: We're preparing a gathering and we have a cute little table set for the children. I ask you where to put a plate of cookies, and you point to that little table …
For *θɛʔɛ*: *… which you happen to be standing right beside and tell me to put it there.*
For *θiθa*: *… a short distance away and tell me to put it there.*

hɛsx^{w}	**{θɛʔɛ / θiθa}**	ʔəθ k^{w}aʔt.
hiɬ-sx^{w}	{θiʔi / θiθa}	ʔə=θ=k^{w}aʔ-t
COP-CAUS	{F.DEM / F.DEM}	OBL=2SG.POSS=put-CTR

'Put it here/there.' (sf | EP.2021/06/19)

(27) Locative uses of the feminine SDEMs with small referents:

a. *Context: We're planning where our guests will be sitting. Pointing to the dainty little chair I'm standing beside, I say:*

q^{w}ayın	ʔistom	Gloria	θɛʔɛ	θuk^{w}načtən.	hɛɬ səm	**θiṉ**
q^{w}ayin	ʔəẏ-stu-m	Gloria	θiʔi	θək^{w}načtən	hiɬ=səm	θiṉ
maybe	good-CAUS-PASS	Gloria	DEM	chair	COP=FUT	F.DEM

ʔəx^{w} nišs.
ʔə=x^{w}=niš=s
OBL=OBL.NMLZ=be.here=3POSS
'I think Gloria will like this chair. She will be here.' (sf | EP.2021/06/12)

b. *Context: We're planning where our guests will be sitting. Pointing to the dainty little chair at the other end of the table, I say:*

q^{w}ayın	ʔistom	Gloria	θiθa	θuk^{w}načtən.	hɛɬ səm	**łaṉ**
q^{w}ayin	ʔəẏ-stu-m	Gloria	θiθa	θək^{w}načtən	hiɬ=səm	łaṉ
maybe	good-CAUS-PASS	Gloria	DEM	chair	COP=FUT	F.DEM

ʔəx^{w} nɛʔs.
ʔə=x^{w}=niʔ=s
OBL=OBL.NMLZ=be.there=3POSS
'I think Gloria will like that chair. She will be there.' (sf | EP.2021/06/12)

c. *Context: We're setting up for where our guests will sit at a gathering. I'm wondering where Gloria is going to sit and ask:* hɛ səm k^{w}čɛ ʔəx^{w} nɛʔs Gloria k^{w}anáč? *'Where will Gloria sit?' You tell me:*

nɛʔ	ɬ titol	θɪθk^{w}anačtən	ʔasq.	hɛ səm	**łɛṉ**	ʔəx^{w}
niʔ	ɬ=tituḷ	θ<iθ>k^{w}načtən	ʔasq	hiɬ=səm	łiṉ	ʔə=x^{w}
be.there	DET=small	chair<DIM>	outside	COP=FUT	F.DEM	OBL=OBL.NMLZ

nɛʔs Gloria.
niʔ=s Gloria
be.there=3POSS Gloria
'There's a little chair outside. Gloria will be there.' (sf | EP.2021/07/02)

However, for regularly sized or large objects serving as location, or locations that are not obviously objects, the feminine demonstratives cannot be used (28). How exactly size and femininity are linked will be discussed in more detail in Section 7.

(28) Unavailability of locative uses with referents that are not small:

a. *Context: We're preparing a gathering and we have several fairly large tables set up. I ask you where to put a plate of cookies, and you point to one of the tables …*
For θɛʔɛ/tɛʔɛ*: … which you happen to be standing right beside and tell me to put it there.*
For θiθa/tita/taʔa*: … a little further away and tell me to put it there.*

hɛsxʷ	{**#θɛʔɛ** / **tɛʔɛ** / **#θiθa** / **tita** / **taʔa**}	ʔəθ kʷaʔt.
hił-sxʷ	{#θiʔi / tiʔi / #θəy̓θa / təy̓ta / taʔa}	ʔə=θ=kʷaʔ-t
COP-CAUS	{F.DEM / DEM / F.DEM / DEM / DEM}	OBL=2SG.POSS=put-CTR

'Put it here / there / over there.' (sf | EP.2021/06/19)

b. *Context: I sort of recognized someone at a gathering and I went to ask you about her before, but then I couldn't see her. Now I notice her again and I nudge you and say:*

ṯogútačxʷ	łə salтxʷ	nɛʔ	ʔə={**tita** / **#θiθa**}?
ṯog-út=a=čxʷ	łə=salтxʷ	niʔ	ʔə={tita / #θəy̓θa}
recognize-CTR\STAT=Ǫ=2SG.SBJ	DET=woman	be.there	OBL={DEM / F.DEM}

'Do you recognize the woman there?' (sf | EP.2020/10/30)

Tables 7 and 8 show that virtually all forms can serve as locative adverbs if combined with an oblique marker — even feminine demonstratives like *θɛʔɛ, θiθa*, *θiṅ, łaṅ*, and *łɛṅ*, and the discourse demonstrative *kʷaṅ*. Yet, it should be noted that the locative use of these latter forms is somewhat marginal, as indicated by the parentheses in the tables. As for *kʷłɛṅ*, locative uses currently remain unattested, though we suspect that they should be available as well in some, probably rather unusual, contexts.

Table 7: Locative uses of the GDEMs

	Locative
tɛʔɛ	✓
tita	✓
taʔa	✓
θɛʔɛ	(✓)
θiθa	(✓)
kʷɪši	✓
kʷikʷa	✓
kʷaʔa	✓

Table 8: Locative uses of the SDEMs

	Locative
tiṅ	✓
taṅ	✓
θiṅ	(✓)
łaṅ	(✓)
šiṅ	✓
łɛṅ	(✓)
kʷšiṅ	✓
kʷłɛṅ	??
kʷaṅ	✓

3.3.3 Exceptions and repair strategies

Above we showed that the GDEMs *taʔa*, *kʷɪši*, *kʷikʷa*, and *kʷaʔa* cannot generally be used as determiners, but only as locative adverbs. However, there seems to be an exception to this rule. If the noun (e.g., *tree*) is part of a locative oblique phrase (e.g., *in the tree there*), these demonstratives can be felicitously used as determiners, as exemplified in (29a–e) below.

(29) Exceptional determiner uses in oblique phrases

a. *Context: I take you out for a walk in the fields. To our left, in the distance, there's a lonesome tree. I point to it and say:*

nɛʔ	šɛ ǰɪməns	χɛχnɛq	[OBL	ʔə	[DP **taʔa**	[NP	ǰɛʔǰɛ]]].
niʔ	šə=ǰəmən-s	x̣ix̣niq		ʔə=	taʔa		ǰaʔǰa
be.there	DET=nest-3POSS	owl		OBL=	DEM		tree

'There's an owl nest in the tree over there.' (sf | EP.2021/03/05)

b. *Context: We're out on a boat, and I point out to you the point where Mink was standing and taunting everyone in the Mink and Wolf story.*

hɛ k̓ʷa	[DP **taʔa**	[NP sɛʔɛqʷ]]	ʔəxʷ nɛʔs	
hiɬ=k̓ʷa	taʔa	siʔiqʷ	ʔə=xʷ=niʔ=s	
COP=RPT	DEM	point	OBL=OBL.NMLZ=be.there=3POSS	
k̓ʷɛʔɛšitoɬ		qayχ.		
k̓ʷiʔ-iš-it-uɬ		qayx̣		
stand-INTR-STAT-PST		Mink		

'It's the point over there where Mink was standing.' (vf | EP. 2021/04/09)

c. *Context: We're out on a boat and you point out an island in the distance.*

nɛʔ	šɛ ƛ̓əms-tən	[OBL ʔə	[DP **taʔa**	[NP kʷʊθays]].	
niʔ	šə=ƛ̓əms-tən	ʔə=	taʔa	kʷəθays	
be.there	DET=dwell-INSTR	OBL=	DEM	island	

'There's a shelter on the island over there.' (sf | EP.2021/07/10)

d. *Context: From the story of Mink and Grizzly.*

ho k̓ʷa səm	layiš	[OBL	ʔə	[DP **kʷikʷa**	[NP	θohɛqʷ]]].
hu=k̓ʷa=səmɬay-iš			ʔə=	kʷəẏkʷa		θu-h-iqʷ
go=RPT=FUT	come.ashore-INTR		OBL=	DEM		go-EPEN-point

'They are going to pull in around the point (there).' (Watanabe 2003:560)

e. *Context: My boat is beached around a point in the distance. I wave in that direction and tell you*:[16]

nɛʔ	[OBL (ʔə)	[DP **kʷaʔa**	[NP θohɛqʷ]]]	šɪtᶿ nuxʷɛɬ.	
niʔ	ʔə	kʷaʔa	θu-h-iqʷ	šə=tᶿ=nəxʷiɬ	
be.there	OBL=	DEM	go-EPEN-point	DET=1SG.POSS=boat	

'My boat is on the other side of the point over there.' (vf | EP.2021/07/16)

[16] The oblique marker is frequently elided before demonstratives following the locative predicates *nɛʔ* and *niš*. Here it was initially elided but judged to be felicitous when re-inserted in follow-up elicitation.

As will be discussed in Section 8.2, these demonstratives have an affinity for identifying locations, allowing them to have determiner uses when the resulting DP identifies a location rather than an atomic entity such as a person or object.

3.3.4 Summary

Tables 9 and 10 summarize the results of our syntactic survey. Our data show that virtually all of the GDEMs and SDEMs can function as locative adverbs — with the exception of *kʷɬɛn̓*, which yet remains to be tested (see footnote 15). For the nominal uses, the picture looks less homogenous. While all SDEMs can serve as pronouns or determiners, the GDEMs appear to be somewhat restricted in their nominal uses. Specifically, *taʔa* and the *kʷ*-initial forms *kʷɪši*, *kʷikʷa*, and *kʷaʔa* cannot be used as pronouns or determiners, unless they appear in an oblique phrase. We believe the semantic contribution of these demonstratives plays a role in this restriction, and we will return to this issue in sections 5 and 6.

Table 9: Uses of the GDEMs

	Pron.	**Det.**	**Loc.**
tɛʔɛ	✓	✓	✓
tita	✓	✓	✓
taʔa	—	— / ✓OBL	✓
θɛʔɛ	✓	✓	(✓)
θiθa	✓	✓	(✓)
kʷɪši	—	— / ✓OBL	✓
kʷikʷa	—	— / ✓OBL	✓
kʷaʔa	—	— / ✓OBL	✓

Table 10: Uses of the SDEMs

	Pron.	**Det.**	**Loc.**
tin̓	✓	✓	✓
tan̓	✓	✓	✓
θin̓	✓	✓	(✓)
ɬan̓	✓	✓	(✓)
šin̓	✓	✓	✓
ɬɛn̓	✓	✓	(✓)
kʷšin̓	✓	✓	✓
kʷɬɛn̓	✓	✓	??
kʷan̓	✓	✓	✓

4 Gesture vs. salience

While the previous section examined the syntactic distribution of the demonstratives, we now shift our focus to their semantic and pragmatic contributions. In this section, we will explore the difference between the GDEMs and SDEMs. As we will show, the concept of **joint attention** lies at the core of this distinction. Briefly speaking, this term refers to the communicative requirement that both the speaker and the addressee jointly focus their attention on the same referent (cf. Diessel 2006:465).

4.1 Creating joint attention with the GDEMs

We propose that the GDEMs are used to *create* joint attention between the speech participants, i.e., they occur when the speaker wants to direct the addressee's attention to a new referent. To make sure that the addressee focuses on the desired referent, these demonstratives have to be accompanied by co-speech gestures (cf. Bühler 1934; Diessel 2006). These are usually realized as manual pointing gestures, but can also take on the form of head movements or gazes (cf. König & Umbach 2018). An example where a GDEM is used together with a gesture to draw the addressee's attention to a new referent is given in (30).

(30) Introducing a new referent:

Context: There's a lot of cooking ware left at the gym, and I know some is Gail's, but I'm not sure which ones. I ask you about one of the items.

nasa	Gail	**tɛʔɛ**?
naʔ-s=a	Gail	tiʔi
belong-3POSS=Ǫ	Gail	DEM

'Is this Gail's?' [lifting or pointing to an object] (vf | EP.2020/07/07)

The GDEMs are also commonly used when there is more than one salient referent in the discourse and the speaker is contrasting one with the other, using gesture to direct the listener's attention from one to the other (cf. Diessel 2006:470). This is exemplified in (31).

(31) Contrasting multiple referents:

Context: I'm holding two paint chips that are different colours in my hand. I ask you:

hɛkʷ čɛ	kʷɛhɛt	ʔistayɛgataxʷ?	hiyas	**tɛʔɛ**	kʷʊnəs
hiɬ+kʷ=ča	kʷihit	ʔəy̓-st-ayag-at-axʷ	hiɬ+as	tiʔi	kʷən=as
COP+DET=where	more	good-CAUS-?-CTR-2SG.ERG	COP+3SBJV	DEM	COMP=3SBJV

ʔaǰu	hɛɬ	**tɛʔɛ**?
ʔaǰu	hiɬ	tiʔi
also	COP	DEM

'Which one do you like more? Do you like **this** one or **this** one?' [pointing to or lifting one object after the other] (vf | EP.2021/05/21)

Since the GDEMs combine language with gesture, we find them primarily in exophoric contexts, i.e., in contexts where the speaker picks out a concrete referent in the external world (cf. Diessel 2006:470; Grosz 2019:565). On the other hand, they are rarely found in stories, except in direct speech contexts.

4.2 Assuming joint attention with the SDEMs

The SDEMs, in contrast, do not *create*, but *assume* joint attention. They generally occur when the speaker talks about a referent that is already unique and salient in the context and, consequently, in

the shared attentional focus of the speech participants.[17] Example (32) illustrates such a context. Here, the speaker first draws the addressee's attention to the boy in the picture via a GDEM with a pointing gesture, but then refers back to the now salient referent with the SDEM *tiṅ*.

(32) Salient referents:

Context: I ask while <u>pointing at a picture</u> of a young boy that I'm holding:

gɛt č̓ɛ ga	tɛʔɛ?	hiya č̓ɛ	Freddie	**tiṅ**?
gat=č̓a=ga	tiʔi	hiɬ+a=č̓a	Freddie	tiṅ
who=INFER=DPRT	GDEM	COP+Q=INFER	Freddie	SDEM

'Who might this be? Could this be Freddie?' (vf | EP.2021/02/26)

While the SDEMs occasionally occur with co-speech gestures, they do not require them. This becomes particularly clear in contexts where the referent is not a concrete entity in the external world. For instance, the SDEMs can also be used to refer to abstract referents, such as temporal concepts (e.g., 'afternoon', 'day', etc.), as in (33), propositions, as in (34), or even discourse segments, as in (35).[18] The referent in these cases cannot be picked out by gesture.

(33) Temporal concepts:

a. *Context: The weather forecast says that there's a strong windstorm coming this afternoon, and everyone is preparing for it.*

saymot k̓ʷa səm	puʔəm	**tiṅ**	kʷʊtayɪtən.
say-mut=k̓ʷa=səm	puʔ-əm	tiṅ	kʷətayitən
strong-INT=RPT=FUT	wind-MDL	DEM	afternoon

'There's going to be strong wind this afternoon.' (vf | EP.2021/05/16)

b.

yɛχátołč	**šiṅ**	t̓ᶿok̓ʷ	ʔətᶿ qʷol		hɛwtoł.
yaχ-át-uɬ=č	šiṅ	t̓ᶿuk̓ʷ	ʔətᶿ=qʷəl̓		hiwt-uɬ
remember-CTR\STAT-PST=1SG.SBJ	DEM	day	1SG.POSS=come		get.home-PST

'I remember the day I came home.' (sf | EP.2021/03/14)

(34) Propositions:

Context: A guest staying with us comments on our neighbour who's already out gardening early in the morning: k̓ʷʊt gi, ti nɛʔ p̓apɛm ʔə tə ʔasq̓. *'Look, he's out gardening already.' I reply:*

hɛɬ	**taṅ**	ʔəxʷ naṁs.
hiɬ	taṅ	ʔə=xʷ=nəṁ-s
COP	SDEM	CLF=NMLZ=be.like-3POSS

'That's how he is.' (vf | EP.2021/05/07)

[17] Other Coast Salish languages, like Island Halkomelem (Gerdts & Hukari 2004:9), Musqueam (Suttles 2004:353), and Klallam (Montler 2007:420–423), appear to have similar demonstratives (containing *-nił* or *-ʔ̓a*, respectively). These have often been associated with 'definiteness'.

[18] We will return to the use of *kʷaṅ* in more detail in Section 4.6.

(35) Discourse segments:

a. *Context: At the end of an instruction about pregnancy.*

natuwʊm̓oł	ʔəkʷ **kʷan̓**	taʔat.
na-t-uw-əm-ʔuł	ʔə=kʷ=kʷan̓	taʔat
say-CTR-1PL.OBJ-PST	OBL=DET=SDEM	HAB

'They used to say that to us.' (Watanabe 2021:102)

b. *Context: Introducing the topic of an upcoming narrative…*

naʔs	kʷʊθ hɛhɛw	mənmənʔəm	**kʷan̓**.
naʔ-s	kʷə=θ=hihiw	mənmənʔəm	kʷan̓
possess-3POSS	DET=2SG.POSS=first	have.babies	SDEM

'This is about when you first have a baby.' (Watanabe 2021:96)

c. *Context: Wrapping up a story.*

hɛł	**kʷan̓**!
hił	kʷan̓
COP	SDEM

'That's it!' (Watanabe 2021:103)

In contrast to the GDEMs, the SDEMs occur quite frequently in narratives outside of direct speech contexts.

4.3 Comparing SDEMs and GDEMs

Table 11 summarizes the main uses of the GDEMs and SDEMs, and their compatibility with concrete and abstract referents.

Table 11: Comparing GDEMs and SDEMs

	GDEMs	SDEMs
Introducing a new referent via gesture	✓	—
Contrasting multiple salient referents	✓	—
Referring back to an already unique & salient referent	—	✓
Compatible with concrete entities in the external world	✓	✓
Compatible with abstract entities (temporal terms, etc.)	—	✓

Since GDEMs and SDEMs pattern quite differently, it is not hard to find contexts where one of them is felicitous and the other isn't, and vice versa. For instance, GDEMs are felicitous when a gesture is required to single out an entity from a group, as shown in (36). The use of an SDEM is infelicitous here since the referent is not already salient in the context.

(36) Singling out an entity:

Context: Pointing to one man in a picture of a men's soccer team.
gɛt=ga {**tɛʔɛ** / #tiṅ} tumıš?
gat=ga {tiʔi / #tiṅ} tumiš
who=DPRT {GDEM / SDEM} man
'Who is this?' (sf | EP.2021/03/27)

Similarly, GDEMs can be used when contrasting two referents, while SDEMs cannot be used in these contexts. This is due to the fact that such contexts require shifting joint attention from one referent to another, rather than relying on previously established joint attention. Gesture is used to direct the addressee's attention in these cases.

(37) Contrasting multiple referents:

Context: Marianne and Daniel have picked out some flowers for Gloria for her birthday. Then, before they've taken the flowers to the till to pay for them, Marianne notices some others that she thinks are better.
»oh«, hotk̇ʷa Marianne, »qʷayın xʷaʔ, hɛ səm **tita** ṫaṫᶿɛm qʷasəm.
oh hut=k̇ʷa Marianne qʷayin xʷaʔ hiɬ=səm təẏta ṫaṫᶿim qʷasəm.
oh say=RPT Marianne maybe NEG COP=FUT GDEM red flower
qʷayın hɛɬ taṅ k̇ʷɛhɛt ʔi.«
qʷayin hiɬ taṅ k̇ʷihit ʔəẏ
maybe COP DEM more good
'»Oh«, says Marianne, »Maybe not, let's get those red flowers. I think those are better.«'

»xʷaʔ,ʔi ʔot {**tɛʔɛ** / #tiṅ}«, hotk̇ʷa Daniel, »hɛ səm tiṅ
xʷaʔ ʔəẏ=ʔut {tiʔi / #tiṅ} hut=k̇ʷa Daniel hiɬ+səm tiṅ
NEG good=EXCL {GDEM / SDEM} say=RPT Daniel COP+FUT DEM
ʔə matat.«
ʔə=maʔ-t-at
CLF=get-CTR-1PL.ERG
'»No, these are good«, says Daniel, »we'll get these.«' (vf | EP.2021/04/23)

In contrast, SDEMs are felicitous when talking about abstract referents, like temporal concepts, propositions, or discourse segments. Here, GDEMs cannot be used since such referents cannot be identified by gesture.

(38) Propositional referents:

Context: A guest staying with us comments on our neighbour who's already out gardening early in the morning: k̇ʷɔt gi, ti nɛʔ ṗaṗɛm ʔə tə ʔasq̇. *'Look, he's out gardening already.' I reply:*
hɛɬ {**taṅ / #tita**} ʔəxʷ naṁs.
hiɬ {taṅ / #tita} ʔə=xʷ=nəṁ-s.
COP {SDEM / GDEM} CLF=CLF.NMLZ=be.like-3POSS
'That's how he is.' (vf | EP.2021/05/07)

(39) Temporal referents:

Context: Late at night, I come in from outside and say to you:

hɛhɛw	čɯ̓mčɯ̓mmot	{**tiɲ̓** / #tɛʔɛ}	nanat.
hihiw	čəm̓~čəm-mut	{tiɲ̓ / #tiʔi}	nanat
really	cold~CHAR-INT	{SDEM / GDEM}	night

'It's really cold tonight.' (lit.: 'This night is really cold.') (sf | FL.2021/02/08)

4.4 The storyboard test

Perhaps the best way to illustrate the contrast in use between the GDEMs and the SDEMs is with a short dialogue. We used a number of short storyboards to elicit dialogue using the demonstratives. We designed these to have referents initially picked out of a group by gesture, referred back to anaphorically, and placed in contrast with one another. One of these dialogues is shown in (44). The dialogue shows that GDEMs, but not SDEMs, are felicitous when introducing a new discourse referent via gesture (and thereby placing it in joint attention), while SDEMs, and not GDEMs, are felicitous when using a demonstrative to subsequently refer back to the same referent. Note also the use of *kʷaɲ̓* to refer anaphorically back to the discourse segment *hɛ səm tiɲ̓ ʔə maʔtat* 'We'll get this one'.

(40) *Preamble: Marianne and Felipe go to a garage sale to buy a new pot…*

F:	»čɯ̓ ga	{**tɛʔɛ** / #tiɲ̓}?	ʔɛnɛtegənčxʷ?	ʔisxʷačxʷ?«
	čəm̓=ga	{tiʔi / #tiɲ̓}	ʔinit-igan=čxʷ	ʔəẏ-sxʷ=a=čxʷ
	QUEX=DPRT	{GDEM / SDEM}	say.what-inner.self=2SG.SBJ	good-CAUS=ɋ=2S.SBJ

'»How about this one? What do you think? Do you like it?«'

M: »qʷayɪgən xʷaʔ, hɛł {**tɛʔɛ** / #tiṅ} ʔə k̓ʷɛhɛt ʔistayɛgatən.«
qʷayigan xʷaʔ hił {tiʔi / #tiṅ} ʔə=k̓ʷihit ʔəy̓-st-ayag-at-an
maybe NEG COP {GDEM / SDEM} OBL=more good-CAUS-??-CTR-1SG.ERG
'»I don't think so, I prefer this one.«'

M: »qʷayɪn hɛ səm {**tiṅ̓** / #tɛʔɛ} ʔə matat.«
qʷayin hiɬ+səm {tiṅ / #tɛʔɛ} ʔə maʔ-t-at
maybe COP+FUT {SDEM / GDEM} CLF=get-CTR-1PL.ERG
'»I think we'll get this one.«'

F: »qʷayɪn ʔi ʔot **kʷaṅ̓**«, hotk̓ʷa Felipe.
qʷayin ʔəy̓=ʔut kʷaṅ hut=k̓ʷa Felipe
maybe good=EXCL SDEM say=RPT Felipe
'»I think that's good«, says Felipe.'

M: »k̓ʷɛnos ga {**tɛʔɛ** / ?tiṅ}«, hotk̓ʷa Marianne, gayɛtəs sałtxʷ.
k̓ʷinus=ga {tiʔi / ?tiṅ} hut=k̓ʷa Marianne gay-at-as sałtxʷ
how.much=DPRT {GDEM / SDEM} say=RPT Marianne ask-CTR-3ERG woman
'»How much is this?«, says Marianne, she asks the lady.

E: »qʷayɪgən paẇus«, hotk̓ʷa sałtxʷ.
qʷayigan paẇus hut=k̓ʷa sałtxʷ
maybe one.dollar say=RPT woman
'»I think one dollar«, said the lady.'

M: »ʔi ʔot«, hotk̓ʷa Marianne, »hɛ səm {**tiṅ̓** / #tɛʔɛ} yɛqtat.«
ʔəy̓=ʔut hut=k̓ʷa Marianne hiɬ+səm {tiṅ / #tiʔi} yəq-t-at
good=EXCL say=RPT Marianne COP+FUT {SDEM / GDEM} buy-CTR-1PL.ERG
'»Oh good«, says Marianne, »we'll buy this.«' (vf | EP.2021/04/23)

4.5 The special case of *kʷšiṅ̓*

In Section 4.3, we proposed that the SDEMs are used when there is a unique and salient referent that is already in the joint attention of both speech participants — and indeed, this generalization seems to hold for most of the forms in the paradigm. However, when we look at *kʷšiṅ̓*, we run into some problems with this definition.

In some cases, *kʷšiṅ̓* patterns exactly as expected, i.e., it is used to refer back to a salient referent that both speech participants are already paying attention to. A few examples for this use are given in (41). Here, the demonstrative refers to a specific entity, and speakers usually translate it with 'this' or 'that'.

(41) SDEM uses of *kʷšiṅ:*

a. *Context: I hear a male voice outside at night. I say to Daniel:*

čiyítč	kʷ tumıš	ʔəkʷ ʔasqič.	gɛt čɛ	**kʷšiṅ**?
čiy-it=č	kʷ=tumiš	ʔə=kʷ=ʔasqič	gat=ča	kʷšiṅ
hear-CTR=1SG.SBJ	DET=man	OBL=DET=outside	who=INFER	DEM

'I hear a man outside. Who could **that** be?' (sf | EP.2021/02/26)

b. *Context: Listening to a CD.*

hɛhɛwč	ʔismot	**kʷšiṅ**	wuwʊmtən.
hihiw=č	ʔəẏ-sxʷ-mut	kʷšiṅ	wuw-əm-tən
really=1SG.SBJ	good-CAUS-INT	DEM	sing-MD-INSTR

'I really like **this** song.' (vf | EP.2021/01/08)

c. *Context: Someone mentions Germany. Daniel says:*

hɛł	**kʷšiṅ**	ʔətᶿ tuwa.
hił	kʷšiṅ	ʔətᶿ=tuwa
COP	DEM	1SG.POSS=from

'**That**'s where I'm from.' (vf | EP.2021/06/12)

However, occasionally, *kʷšiṅ* also shows up in contexts where there is no salient referent in the context at all. Consider, for instance, the examples in (42). In each of these cases, the speaker is not referring to anyone in particular, but to some unidentified individual (i.e., 'someone'). In other words, *kʷšiṅ* acts like an indefinite, and not like a typical demonstrative.[19] This, in turn, calls into question how a concept like joint attention would even apply for such uses of *kʷšiṅ*. In (42a), for instance, the speaker worries that a reckless child on a bicycle might hurt a hypothetical, not yet realized passerby at some point in the future; and in (42d), the demonstrative is used for an entity asserted not to exist. But how could joint attention exist between both speech participants for a hypothetical individual or one that does not exist?

[19] Traditionally, demonstratives have been associated with 'definiteness'. However, Deichsel (2015:190) argues that 'demonstrativity' and '*in*definiteness' are not necessarily conflicting concepts, but can interact, as illustrated in the example below.

(iv) 'You won't believe what happened to me. Yesterday in the pub, **this** guy started talking to me. He was really nice and we realized that he's from the same village as I am.' (Deichsel 2015:1)

In this case, she argues, *this* functions not only as a referential expression (like a demonstrative), but also introduces a discourse-new referent (like an indefinite). At least for *kʷšiṅ*, not even the referential part appears to be necessary.

(42) Indefinite uses of *kʷšiṅ́:*

a. *Context: My child is careening around the field on his new bike. So far no one has been around, but I'm worried that, if someone comes, he could hurt them.*
hɛhɛwč̓ ƛ̓ašiganmɛt. ǰɛqaʔ ʔɛɬagʊxʷəs **kʷšiṅ́**.
hihiw ƛ̓ašigan-mi-t ǰaqaʔ ʔiɬag-əxʷ-as kʷšiṅ
really worry-REL-CTR EX get.hurt-NCTR-3ERG DEM
'I'm really worried about it. He might hurt **someone**.' (sf | EP.2021/07/02)

b. *Context: When I go for a walk, I find a $20 bill outside the lodge. When I come back, I tell Gloria and Daniel:*
θiyičč̓ɛn ʔə tə tala. č̓ɛ xʷʊt̓mɛnom ʔə **kʷšiṅ́**.
θiyič=čan ʔə=tə=tala č̓a xʷʊt̓m-i-nu-m ʔə=kʷšiṅ
find=1SG.SBJ OBL=DET=money INFER drop-?-NCTR-PASS OBL=DEM
'I found some money. **Someone** must have dropped it.' (vf | EP.2020/10/02)

c. *Context: I hear someone in the front room at the lodge, but Gloria is with me at the table and we didn't know anyone else was there.*
nɛʔ č̓ɛ **kʷšiṅ́** **ʔəkʷ** θohna.
niʔ=č̓a kʷšiṅ ʔə=kʷ=θuhna
be.there=INFER DEM OBL=DET=other.room
'**Someone** is in the other room.' (sf | EP.2021/07/24)

d. *Context: Daniel and I thought we'd heard someone talking outside, but when we went to see, there was no one there. When we come in, we tell Gloria:*
xʷukʷt **kʷšiṅ́**. qʷayın hɛł kʷ puʔəm ʔə č̓iyıtət.
xʷukʷt kʷšiṅ qʷayin hił kʷ=puʔəm ʔə=č̓iy-it-at
not.exist DEM maybe COP DET=wind CLF=hear-CTR-1PL.ERG
'There's **no one** there. Maybe it was the wind that we heard.' (sf | EP.2021/07/30)

An explanation for the unusual behavior of *kʷšiṅ́* might be found in its formation history. Morphologically speaking, it appears to be comprised of the indefinite determiner *kʷ* and the demonstrative *šiṅ́*. As highlighted by Huijsmans et al. (2020:172) and Reisinger et al. [in press], *kʷ* introduces indefinite DPs in a variety of contexts: it is used for entities asserted not to exist (43a) or not known to exist (43b), as well as where the speaker generalizes over a group (43c).

(43) Indefinite uses of the *kʷ* determiner:

a. *Context: Marianne is about to start weaving a basket with Betty, but she doesn't have an awl. She tells Betty:*
xʷukʷt **kʷ**ʊtᶿ χʷoχʷp̓.
xʷukʷt kʷ=ətᶿ=x̱ʷux̱ʷp̓
not.exist DET=1SG.POSS=awl
'I don't have an awl.' (Huijsmans et al. 2020:172)

b. nɛʔa **kʷʊθ** ʔayšɛʔəm?
ni=a kʷ=əθ=ʔayša=ʔəm
be.there=ǫ DET=2SG.POSS=change
'Do you have any change?' (Huijsmans et al. 2020:172)

c. *Context: At a ring shop, I walk up to a display case with the type of thing I want and tell the salesperson:*
ʔətθ χaƛ̓ tθ yəqʔəm ʔə**kʷ** t̓θagateqʷoǰɛtən.
ʔətθ=χaƛ̓ tθ=yəq-ʔəm ʔə=kʷ=t̓θagatiqʷuǰatən
1SG.POSS=desire 1SG.POSS=buy-ACT.INTR OBL=DET=ring
'I want to buy one of these rings.' (Reisinger et al. [in press])

We therefore hypothesize that the indefinite semantics of *kʷšiṅ* arise due to the *kʷ* element, and that the contribution of *šiṅ* itself is lost in this combination. This suggests that the entire element has been lexicalized as a unit with the semantics of the *kʷ* determiner — but in contrast to the *kʷ* determiner, which requires a following NP, it is able to function as a DP on its own, like a demonstrative.

While it is tempting to assume that *kʷɬɛn̓*, as the feminine counterpart of *kʷšiṅ*, patterns the same, preliminary evidence suggest that this is not the case. More specifically, our data indicate that it does not seem to share the same indefinite semantics. At this point, the examples we have found where it is felicitous all involve reference to an entity previously mentioned in the discourse, as shown in (44a–b), whereas it cannot be used for hypothetical entities (44c) or for those that do not exist (44d). It seems that *kʷɬɛn̓*, then, can be treated as a more canonical SDEM requiring joint attention for felicitous use.

(44) SDEM uses of *kʷɬɛn̓:*

a. *Context: I hear a woman's voice outside my house at night.*
č̓iyítč kʷ sałtxʷ. gɛt č̓ɛ **kʷɬɛn̓**?
č̓iy-ít=č kʷ=sałtxʷ gat=č̓a kʷɬiṅ
hear-CTR=1SG.SBJ DET=woman who=INFER DEM
'I hear a woman. Who could **that** be?' (sf | EP.2021/03/27)

b. *Context: Someone mentions a name of a woman you don't know and are not familiar with, but whose name you heard in the context of the election of a neighbouring nation. You inform that person:*
hɛł k̓ʷa **kʷɬɛn̓** (ʔə) kʷa šuʔotəm.
hiɬ=k̓ʷa kʷɬiṅ ʔə kʷa šuʔ-ut-əm
COP=RPT DEM CLF CLDEM choose-CTR-PASS
'**That**'s the one that was elected.' (vf | EP.2021/07/09)

(45) Infelicitous indefinite uses of *kʷɬɛn̓*

a. *Context: I come to the lodge and see someone's purse and weaving project on the table. I say:*

nišoł čɛ	χʷoχʷopɛʔɛč	{#**kʷɬɛn̓** / kʷšin̓}.
niš-uɬ=čɛ	χʷu~χʷupiʔič	{#kʷɬin̓ / kʷšin̓}
be.here-PST=INFER	PROG~weave	{DEM / DEM}

'**Someone** must have been weaving here.' (sf | EP.2021/07/10)

b. *Context: A maternity nurse is assigned a new patient at the hospital. She goes to check on her for the first time and doesn't find anyone in the room. She goes back to the other nurses and says:*

i. # xʷukʷt **kʷɬɛn̓.**
xʷukʷt kʷɬin̓
not.exist DEM
'There was **no one**.'

ii. # xʷač kʷ̓ʊnʊxʷən **kʷɬɛn̓**.
xʷaʔ=č kʷ̓ən-əxʷ-an kʷɬin̓
NEG=1SG.SBJ see-NCTR-1SG.ERG DEM
'I didn't see **anyone**.'

(sf | EP.2021/07/30)

4.6 The discourse demonstrative *kʷan̓*

Another exceptional SDEM is *kʷan̓*. This demonstrative is best described within the realm of discourse deixis, or text deixis, as it is sometimes called (cf. Levinson 1983; Marmaridou 2000). Briefly speaking, *kʷan̓* is used when the speaker wants to refer to some portion of the previous or upcoming discourse. That is, it does not refer to some referent in the external world, but to a linguistic expression (i.e., a word, phrase, utterance, or even the entire discourse). In (46a), for instance, *kʷan̓* does not point to the concrete person that will give the linguistics talk, but to the words that Daniel used in the preceding discourse to talk about that person. Likewise, in (46b), *kʷan̓* does not refer to certain pregnancy-related practices in the external world, but to the preceding discourse segment that described these practices.

(46) Discourse deixis with kʷan̓

a. *Context: Daniel mentions that Gloria found someone to give a talk at a linguistics gathering, but not who it is. I stop him and ask:*

gɛt ga	{**kʷan̓** / #kʷšin̓}?
gat=ga	{kʷan̓ / #kʷšin̓}
who=DPRT	{DISC.DEM / DEM}

'Who is that?' (sf | EP.2021/03/27)

b. *Context: At the end of an instruction about pregnancy.*

natuwʊm̓oł	ʔəkʷ **kʷan̓**	taʔat.
na-t-uw-əm-ʔuł	ʔə=kʷ=kʷan̓	taʔat
say-CTR-1PL.OBJ-PST	OBL=DET=DISC.DEM	HAB

'They used to say that to us.' (Watanabe 2021:102)

While the uses of *kʷan̓* seem to involve reference to a segment of discourse that is salient and therefore fit our characterization of SDEMs as involving previously established joint attention, they

are exceptional for a demonstrative in that they do not involve reference to an entity in the external world and, therefore, cannot involve the spatial notions typically encoded by demonstratives.

5 Deictic distance

In many languages, demonstratives also encode whether the speaker considers the referent to be close (= proximal) or far (= distal) from the deictic center — or the *I-now-here-origo*, as Bühler (1934) calls it. In the traditional account, the deictic center can be equated to the speaker at the time and place of the utterance. Accordingly, in English, the demonstratives *this* and *here* are usually used for referents that are close to the speaker at the time of speaking, while *that* and *there* are used for more distant referents — though such purely distance-based accounts have been called into question in recent years (cf. Kemmerer 1999; Piwek et al. 2008; Peeters et al. 2015; among others).

The proximal/distal distinction has been described as a language universal by Diessel (1999), and consequently, it is not surprising that we also find it in the demonstrative system of ʔayʔaǰuθəm. For the GDEM paradigm, we observe a three-way split between proximal, near-distal, and distal forms; for the SDEM paradigm, a three-way split between proximal, distal, and distance-neutral forms.

Table 12: Deictic distance in the demonstrative paradigms of ʔayʔaǰuθəm

	GDEMs	SDEMs
Proximal	/t**i**ʔ**i**/, /θ**i**ʔ**i**/, /k^wə**š i**/	/t**i**n̓/, /θ**i**n̓/
Near-distal	/təy̓t**a**/, /θəy̓θ**a**/, /k^wəy̓k^w**a**/	—
Distal	/t**a**ʔ**a**/, /k^w**a**ʔ**a**/	/t**a**n̓/, /ɬ**a**n̓/
Distance-neutral	—	/ɬin̓/, /šin̓/, /k^wšin̓/, /k^wɬin̓/, /k^wan̓/

In both paradigms, as shown in Table 12, the proximal forms tend to be associated with the vowel /i/ (e.g., /tiʔi/, /tin̓/), while the distal forms tend to be associated with the vowel /a/ (e.g., /taʔa/, /tan̓/). The connection between these particular vowels and the concept of deictic distance is not only well attested in other corners of ʔayʔaǰuθəm,[20] but also on a cross-linguistic scale (cf. Diessel 2014:126).[21]

[20] Huijsmans and Reisinger [in press (b)] note that deictic distance is reflected in the same way in the phonetic forms of the clausal demonstratives (e.g., *ti* ['PROX'], *ta* ['DIST']).

[21] This generalization obviously does not apply to the distance-neutral forms. While most of these forms contain the vowel /i/ and, consequently, look like proximal demonstratives, their potential distal counterparts with the vowel /a/ (e.g., **šan̓*, **k^wšan̓*, **k^wɬan̓*) remain unattested. We hypothesize that the SDEM paradigm in ʔayʔaǰuθəm partially collapsed at some point, leading to the disappearance of the distal forms, and resulting in the emergence of these distance-neutral demonstratives. This assumption is primarily driven by the fact that the proximal/distal distinction is quite well attested for these demonstratives in other Coast Salish languages. In Sechelt, for instance, the cognate for *šin* (i.e., SE *shitl'um;* short: *shim*), contrasts with another, similar looking form (i.e., SE *shatl'um*; short: *sham*) in terms of deictic distance:

(v) *shatl'um* (short: *sham*) (female or non-female: unidentified, **farther away than *shítl'úm***)
[Beaumont 2011:464]

Yet, what exactly counts as proximal or distal is not always easy to say. As Diessel and Coventry (2020) point out, these categories are in general heavily dependent on the context and on how the speaker conceptualizes the speech situation. Consider, for instance, the following uses of the proximal demonstrative *here* in English.

(47) a. Here in my hand.
b. Here in my room.
c. Here in Vancouver.
d. Here in the Pacific Northwest.
e. Here on planet Earth.

We find this same context dependence in ʔayʔaǰuθəm. For instance, while proximal forms are typically used to refer to something that's within the speaker's reach, as in (48a), they can also be used for entities that are far beyond the reach of the speaker (48b).

(48) Context dependence for deictic distance:

a. *Context: Holding a picture of a small boy, I ask:*
gɛt ga **tɛʔɛ** čuẏ?
gat=ga tiʔi čuẏ
who=DPRT PROX.DEM child
'Who is that child? (sf | EP.2021/07/24)

b. *Context: We pull up into the parking lot in front of a sushi restaurant.*
hɛł **tɛʔɛ** ʔɛɬtənawtxʷ ʔəms payɛʔ qʷɛʔɛqʷoḷ.
hił tiʔi ʔiɬtən-awtxʷ ʔəms=payaʔ qʷi<ʔi><qʷ>əḷ
COP PROX.DEM eat-building 1PL.POSS=always come<PL><DIM>
'We always come to this restaurant.' (sf | EP.2021/07/16)

Despite this context dependence, the language offers ways to establish whether a demonstrative counts as proximal or distal. The most useful tool to test the deictic distance of demonstratives is their compatibility with the deictic verbs *niš* ('be here') and *nɛʔ* ('be there'). While the former only occurs with proximal referents, the latter only occurs with distal referents.[22] Using these deictic verbs as a diagnostic, we can easily identify the distance contrasts.

The only form in Sechelt, which seems to be inherently distance-neutral is the cognate for the discourse demonstrative *kʷaṅ* (i.e., SE *kwam*; cf. Beaumont 2011:464).

[22] A caveat needs to be made for *kʷɪši*, which co-occurs with the distal deictic predicate *nɛʔ* (vi) as well as the proximal deictic predicate *niš* (49c), perhaps because what counts as proximal for a non-visible referent is less constrained.

(vi) *Context: You ask to borrow a pair of scissors. Indicating the cupboard behind me, I tell you:*
nɛʔ **kʷɪši**.
niʔ kʷəši
be.there DEM
'They're in there.' (vf | EP.2021/07/10)

5.1 The proximal demonstratives

The set of proximal demonstratives includes the GDEMs *tɛʔɛ*, *θɛʔɛ*, and *kʷɪši,* and the SDEMs *tiṅ* and *θiṅ*. Usually, they occur in contexts where the referent is within reach of the speaker. Below, we provide some contexts illustrating their use, and present negative evidence showing that the use of their near-distal or distal counterparts is not licensed in these scenarios.

(49) Proximal GDEMs (vs. near-distal GDEMs):

a. *Context: A and B are seated at the kitchen table. A asks B for the salt, which is in front of B. B says:*
niš {**tɛʔɛ** / #tita}.
niš {tiʔi / #təẏta}
be.here {PROX.DEM / NDIST.DEM}
'Here it is.' (sf | EP.2021/03/14)

b. *Context: I'm asking who a lady is in a picture that I'm holding in my hand.*
gɛt ga **{θɛʔɛ** / #θiθa}?
gat=ga {θiʔi / #θəẏθa}
who=DPRT {PROX.DEM / NDIST.DEM}
'Who is this (woman)?' (sf | EP.2021/07/16)

c. *Context: As we're leaving the house, I ask Gloria whether she's got the keys. She lifts her handbag and says:*
niš {**kʷɪši** / #kʷikʷa}.
niš {kʷəši / #kʷəẏkʷa}
be.here {PROX.DEM / NDIST.DEM}
'They're here.'
*Comments: "*kʷikʷa *is away from you."* (sf | EP.2021/03/14)

(50) Proximal SDEMs (vs. distal SDEMs):

a. *Context: My brother and I are looking through an old picture album that my parents have. I have it in my lap. There's a picture of a guy I kind of recognize but can't quite place. I ask* ṫogutačxʷ tɛʔɛ? *"Do you recognize this (man)? …"*
qʷayɪn hɛł {**tiṅ** / #taṅ} ʔəms ǰɛʔǰɛ.
qʷayin hił {tiṅ / #taṅ} ʔəms=ǰaʔǰa
maybe COP {PROX.DEM / DIST.DEM} 1PL.POSS=relative
'I think he's our relative.' (sf | EP.2021/07/10)

A contrast between the proximal GDEM *kʷɪši* and the near-distal GDEM *kʷikʷa* can still be found with respect to their compatibility with the deictic predicates, however, since *kʷikʷa* is not compatible with the proximal *niš* (see 56c).

b. *Context: My brother and I are looking through an old picture album that my parents have. I have it in my lap. There's a picture of a woman I kind of recognize but can't quite place. I ask* ṫogutačxʷ θɛʔɛ? *"Do you recognize this (woman)?"*

qʷayın	hɛɬ	{**θiṅ** / #łaṅ}	ʔəms ǰɛʔǰɛ.
qʷayin	hiɬ	{θiṅ / #łaṅ}	ʔəms=ǰaʔǰa
maybe	COP	{PROX.DEM / DIST.DEM}	1PL.POSS=relative

'I think she's our relative.' (sf | EP.2021/06/05)

5.2 The near-distal demonstratives

The near-distal category encompasses the GDEMs *tita*, *θiθa*, and *kʷikʷa*. They are typically used for locations or entities out of reach but within a space adjacent to the area occupied by the speaker. For *tita* and *θiθa*, which require the location or entity to be visible, this typically means across the room, yard, road, etc. from where the speaker is. For *kʷikʷa*, which is used for locations that are not visible, this typically means in the next room, around the next point, behind the fence, etc. In contexts like these, neither their proximal (51) nor their distal counterparts (52) can be used instead.

(51) Near-distal GDEMs (vs. proximal GDEMs):

a. *Context: A and B are seated at the kitchen table. A has forgotten where she left her purse. A says, thinking out loud "I wonder where I left my purse." B replies pointing to a purse on the kitchen counter:*

nɛʔ	{**tita** / #tɛʔɛ}.
niʔ	{təẏta / #tiʔi}
be.there	{NDIST.DEM / PROX.DEM}

'There it is.' (sf | EP.2021/03/14)

b. *Context: I'm asking about a lady who is standing across the gym.*

gɛt ga	{**θiθa** / #θɛʔɛ}?
gat=ga	{θəẏθa / #θiʔi}
who=DPRT	{NDIST.DEM / PROX.DEM}

'Who is that (woman)?'
*Consultant: "*θɛʔɛ *is right in front of you."* (sf | EP.2021/07/16)

c. *Context: Felipe and I are packing for a camping trip. I was going to get some cutlery from the kitchen, but Felipe stops me because he wants to take some old cutlery we have stored in the attic. He points to the entry to the attic and says:*

hɛ səm	šɛ nɛʔ	{**kʷikʷa** / ??kʷɪši}	qəmɛs
hiɬ=səm	šə=niʔ	{kʷəẏkʷa / ??kʷəši}	qəm<i>s
COP=FUT	DET=be.there	{NDIST.DEM / PROX.DEM}	put.away<STAT>

ʔə yɛq̇ašɛt.
ʔə=yəq̇-aš-at
OBL=use-TR-1PL.ERG

'We'll use the ones that are put away up there.'
Consultant: "[For kʷɪši*], it has to be in your general area."* (sf | EP.2021/07/10)

(52) Near-distal GDEMs (vs. distal GDEMs):

a. *Context: We're sitting at the table. I ask you where the salt is. You point to the end of the table and tell me:*
nɛʔ {**tita** / #taʔa}.
niʔ {təẏta / #taʔa}
be.there {NDIST.DEM / DIST.DEM}
'It's there.' (sf | FL&HT.2021/07/26)
*Consultant: "*taʔa *would be over on the counter, further [away]."*

b. *Context: As we're walking by a fence, we hear ducks on the other side. I know the area well, so I explain to you:*
nɛʔ ʔə {**kʷikʷa** / #kʷaʔa} šɛ θɛθaẏɛɬ.
niʔ ʔə={kʷəẏkʷa / #kʷaʔa} šə=θ<iθ>aẏaɬ
be.there OBL={NDIST.DEM / DIST.DEM} DET=lake<DIM>
'There's a little pond there.' (sf | EP.2021/07/24)

c. *Context: I'm helping you in your yard and I want to clean up some fallen leaves so I ask:* čɛ kʷ nɛs θ łiči̓omɪxʷtən? *'Where is your rake?' It's just leaning against the wall inside the shed that is just beside us, so I tell you [pointing]:*
nɛʔ {**kʷikʷa** / #kʷaʔa}.
niʔ {kʷəẏkʷa / #kʷaʔa}
be.there {NDIST.DEM / DIST.DEM}
'It's there.'
Consultant: "[kʷaʔa] *means it's further away."* (sf | EP.2021/07/24)

5.3 The distal demonstratives

Finally, the set of distal forms — including the GDEMs *taʔa* and *kʷaʔa*, and the SDEMs *tan̓* and *łan̓* — are used for anything beyond the previously discussed categories. Particularly, in the GDEM paradigm, they usually refer more vaguely to a general area or direction. In (53), we show how the distal forms contrast with the near-distal forms in the GDEM paradigm; in (64), how they contrast with the proximal forms in the SDEM paradigm.

(53) Distal GDEMs (vs. near-distal GDEMs):

a. *Context: You're pointing me in the general direction of Freddie's house. We can't see his house from here, but we're looking towards the general area.*
nɛʔ {**taʔa** / #tita} šɛ ʔayɛʔs.
niʔ {taʔa / #təẏta} šə=ʔayaʔ-s
be.there {DIST.DEM / NDIST.DEM} DET=house-3POSS
'His house is over there.' (sf | EP.2021/07/16)

b. *Context: You're pointing me in the general direction of Freddie's house. We can't see his house from here because it is behind a hill.*

nɛʔ	{**kʷaʔa** / #kʷikʷa}	šɛ ʔayɛʔs	Freddie.
niʔ	{kʷaʔa / #kʷəy̓kʷa}	šə=ʔayaʔ-s	Freddie
be.there	{DIST.DEM / NDIST.DEM}	DET=house-3POSS	Freddie

'Freddie's house is over there.'
Consultant: "If the house was just on the other side of a big fence or a big hedge, then you could use kʷikʷa*."* (sf | EP.2021/07/16)

c. *Context: My boat is beached around a point in the distance. I wave in that direction and tell you:*

nɛʔ	ʔə {**kʷaʔa** / #kʷikʷa}	θohɛqʷ	štt^{θ} nuxʷɛł.
niʔ	ʔə={kʷaʔa / #kʷəy̓kʷa}	θu-h-iqʷ	šə=t^{θ}=nəxʷił
be.there	OBL={DIST.DEM / #NDIST.DEM}	go-EPEN-point	DET=1SG.POSS=boat

'My boat is on the other side of that point.' (sf | EP.2021/07/16)

(54) Distal SDEMs (vs. proximal SDEMs):

a. *Context: We're hiking and looking out for a good place to picnic. I spot a sunny clearing through the trees. I point in that direction and say:*

hɛ səm	{**taṅ** / #tiṅ}	ʔaʔǰiyukʷ	ʔəms θo	kʷanačɯm.
hił+səm	{taṅ / #tiṅ}	ʔaʔǰiyukʷ	ʔəms=θu	kʷanač-əm
COP+FUT	{DIST.DEM / PROX.DEM}	clearing	1PL.POSS=go	sit-MDL

'We'll go sit in that clearing.' (sf | EP.2021/07/02)

b. *Context: Talking about someone at the other side of the room at a gathering.*

qʷayɯn	hɛł	{**łaṅ** / #θiṅ}	tuwa	qoχomɯš.
qʷayin	hił	{łaṅ / #θiṅ}	tuwa	qʷuχ̱ʷumiš
maybe	COP	{DIST.DEM / PROX.DEM}	from	Sḵwx̱wú7mesh

'I think she's from Squamish.'
Consultant: "[You use] θiṅ *if she is sitting beside you or a few seats away — it's the distance."* (sf | EP.2021/07/16)

5.4 The distance-neutral demonstratives

The demonstrative system is completed by a handful of SDEMs which do not encode deictic distance at all, and which we consequently label *distance-neutral*. This group encompasses the forms *šiṅ*, *łɛṅ*, *kʷšiṅ*, *kʷłɛṅ*, and *kʷaṅ*. As we will show in Section 6, what these demonstratives have in common is that the referent is not visible to the speaker at the time of utterance and, consequently, they often cannot be located.[23] Consider, for instance, the examples in (55).

[23] Of course, if the referent is a static entity that never changes its location (e.g., a store, a country), as in (vii), and the speaker is familiar with it from a prior occasion, they could theoretically classify it as proximal or distal. However, such cases form the exception, not the rule, and, since these forms are not split into proximal and distal counterparts, they will not vary according to whether such fixed entities are near or far.

(55) Distance-neutral SDEMs:

a. *Context: When I go for a walk, I find a $20 bill outside the lodge. When I come back, I tell Gloria and Daniel:*
θiyiččɛn ʔə tə tala. č̓ɛ xʷʊṫmɛnom ʔə **kʷšiṅ̓**.
θiyič=čan ʔə=tə=tala č̓a xʷʊṫm-i-nu-m ʔə=kʷšiṅ
find=1SG.SBJ OBL=DET=money INFER drop-?-NCTR-PASS OBL=DEM
'I found some money. **Someone** must have dropped it.' (vf | EP.2020/10/02)

b. *Context: Someone tells you a new lady has been hired at the band office, and she heard it's a relative of Freddie's. You wonder out loud who that would be.*
gɛt č̓ɛ ga **kʷɬɛn̓**?
gat=č̓a=ga kʷɬiṅ
who=INFER=DPRT DEM
'I wonder who that is? (sf | EP.2021/07/02)

c. *Context: At the end of an instruction about pregnancy.*
natuwʊṁoł ʔəkʷ **kʷaṅ̓** taʔat.
na-t-uw-əm-ʔuł ʔə=kʷ=kʷaṅ taʔat
say-CTR-1PL.OBJ-PST OBL=DET=DEM HAB
'They used to say that to us.' (Watanabe 2021:102)

5.5 Beyond space

In all examples discussed so far, the deictic distance between the speaker and the referent has been measured on a spatial level. However, in some exceptional cases, we find that certain demonstratives also seem to measure **temporal distance**. This is particularly relevant for referents that cannot be located in space, like temporal referents, as shown in (56). In these cases, the proximity indicates that the time span referred to (e.g., night, evening, morning, etc.) is part of the day the speaker is temporally located within.

(vii) a. *Context: Someone mentions the Value Village on Hastings St. I tell her:*
hɛł **šiṅ̓** ʔətθ maʔaxʷoł tθ kʷʊsɛmʊkʷt.
hił šiṅ ʔətθ=maʔ-əxʷ-uł tθ=kʷəsimukʷt
COP DEM 1SG.POSS=get-NCTR-PST 1SG.POSS=jeans
'That's where I got my jeans.' (sf | EP.2021/06/19)

b. *Context: Someone mentions Germany. Daniel says:*
hɛł **kʷšiṅ̓** ʔətθ tuwa.
hił kʷšiṅ ʔətθ=tuwa
COP DEM 1SG.POSS=from
'That's where I'm from.' (vf | EP.2021/06/12)

(56) Temporal distance:

Context: Late at night, I come in from outside and say to you:

hɛhɛw	c̓um̓c̓ummot	**tiṅ**	nanat.
hihiw	c̓əm̓~c̓əm-mut	tiṅ	nanat
really	cold~CHAR-INT	PROX.DEM	night

'It's really cold tonight.' (lit.: 'This night is really cold.') (sf | FL.2021/02/08)

6 Evidentiality

Unlike English demonstratives, the demonstratives in ʔayʔaǰuθəm also mark **evidentiality**. In other words, they encode what kind of evidence the speaker has for the existence of the referent. While such demonstratives are fairly rare cross-linguistically (though see Rose 2017 for Mojeño), their existence in ʔayʔaǰuθəm is hardly surprising since the determiner system of the language has also been found to be evidential (Huijsmans et al. 2020; Reisinger et al. in press).

As we will show, each of the demonstrative forms falls into one of three categories — though the complexity of the evidential system is not even for the GDEMs and the SDEMs, as illustrated by Table 13. While our data point to a two-way evidential distinction for the G-DEMs (i.e., current direct evidence ↔ evidence-neutral), the SDEMs encode a three-way distinction (i.e., current direct evidence ↔ previous direct evidence ↔ evidence-neutral).

Table 13: Evidentiality in the demonstrative system of ʔayʔaǰuθəm

	GDEMs	**SDEMs**
Current direct evidence	***t**ɛʔɛ, **t**ita, **t**aʔa, **θ**ɛʔɛ, **θ**iθa*	***t**iṅ, **t**aṅ, **θ**iṅ, **ɬ**aṅ*
Previous direct evidence	—	***š**iṅ, **ɬ**ɛṅ*
Evidence-neutral	***k**ʷiši, **k**ʷikʷa, **k**ʷaʔa*	***k**ʷšin, **k**ʷɬɛṅ, **k**ʷaṅ*

In practice, the evidence-neutral forms are dispreferred whenever the speaker has sufficient evidence to use a more specified form in the paradigm. Within the GDEM paradigm, for instance, CDE demonstratives will be preferred over their evidence-neutral counterparts whenever the context supports the use of the former, even though the evidence-neutral forms should also be compatible with the context. We believe this is a case of pragmatic competition — since the CDE forms are more informative, they should be chosen whenever the context supports their use (e.g., Grice 1975; Heim 1991; Bochnak 2016). The same observation holds for the SDEMs. We discuss this further in Section 8.6.

6.1 The current direct evidence demonstratives

The *t*- and *θ*-initial forms mark **current direct evidence** (CDE): these demonstratives indicate that the speaker has direct evidence for the referent at the utterance time. Usually, this evidence is visual, that is, the speaker can see the referent at the time of speaking. The form *ɬaṅ* is exceptional in being the only *ɬ*-initial demonstrative to encode CDE — probably a result of a partial collapse of the paradigm (cf. footnote 11). The following examples illustrate the use of these forms. The PDE and evidence-neutral forms are not felicitous in these contexts.

(57) Current direct evidence uses:

a. *Context: A and B are seated at the kitchen table. A asks B for the salt, which is in front of B. B says:*
niš {**tɛʔɛ** / #kʷɪši}.
niš {tiʔi / #kʷəši}
be.here {CDE.DEM / DEM}
'Here it is.' (sf | EP.2021/03/14)

b. *Context: A and B are seated at the kitchen table. A has forgotten where she left her purse. A says, thinking out loud, "I wonder where I left my purse." B replies pointing to a purse on the kitchen counter:*
nɛʔ {**tita** / #kʷikʷa}.
niʔ {təẏta / #kʷəẏkʷa}
be.there {CDE.DEM / DEM}
'There it is.' (sf | EP.2021/03/14)

c. *Context: My boat is beached on a point in the distance (on the near side of the point). We can't really make out my boat from here, but we can see the beach where it is. I tell you:*
nɛʔ {**taʔa** / #kʷaʔa} sɛʔɛqʷ šɛtᶿ nuxʷɛɬ.
niʔ {taʔa / #kʷaʔa} siʔiqʷ šə=tᶿ nəxʷiɬ
be.there {CDE.DEM / DEM} point DET=1SG.POSS=boat
'My boat is beached over on that point.' (sf | EP.2021/07/16)

d. *Context: My brother and I are looking through an old picture album that my parents have. I have it in my lap. There's a picture of a guy I kind of recognize but can't quite place.*
A: ṫogútačxʷ **tɛʔɛ**? B: xʷaʔ. A: qʷayɪn hɛɬ
ṫug-út=a=čxʷ tiʔi xʷaʔ qʷayin hiɬ
recognize-CTR\STAT=Q=2SB.SBJ CDE.DEM NEG maybe COP
{**tiṅ** / #šiṅ} ʔəms ǰɛʔǰɛ.
{tiṅ / #šiṅ} ʔəms=ǰaʔǰa
{CDE.DEM / PDE.DEM} 1PL.POSS=relative
A: 'Do you recognize this guy?' B: 'No.' A: 'I think he's our relative.'
(sf | EP.2021/07/10)

e. *Context: We're hiking and looking out for a good place to picnic. I spot a sunny clearing through the trees. I point in that direction and say:*
hɛsəm {**taṅ** / #šiṅ / #kʷšiṅ / #kʷaṅ} ʔaʔǰiyukʷ ʔəms θo kʷanačɯm.
hiɬ=səm {taṅ / šiṅ / #kʷšiṅ / #kʷaṅ} ʔaʔǰiyukʷ ʔəms=θu kʷanač-əm
COP=FUT {CDE.DEM / PDE.DEM / DEM / DISC.DEM} clearing 1PL.POSS=go sit-MD
'It's clear over there. That's where we will sit.' (sf | EP.2021/07/02)

f. *Context: My brother and I are looking through an old picture album that my parents have. I have it in my lap. There's a picture of a woman I kind of recognize but can't quite place.*

A:	ṫogútačxʷ	**θɛʔɛ**?	B:	xʷaʔ	A:	qʷayın	hɛł
	ṫug-út=a=čxʷ	θiʔi		xʷaʔ		qʷayin	hił
	recognize-CTR\STAT=Q=2SB.SBJ	CDE.DEM		NEG		maybe	COP
	{**θiṅ** / #łɛṅ}	ʔəms ǰɛʔǰɛ.					
	{θiṅ / #łiṅ}	ʔəms=ǰaʔǰa					
	{CDE.DEM / PDE.DEM}	1PL.POSS=relative					

A: 'Do you recognize this woman?' B: 'No.' A: 'I think she's our relative.'
(sf | EP.2021/06/05)

g. *Context: Pointing at a picture of a young girl on the wall.*

gɛt ga	**θiθa**?	hiya	Gail	{**łaṅ** / #łɛṅ / #kʷłɛṅ}?
gat=ga	θəẏθa	hił+a	Gail	{łaṅ / #łiṅ / #kʷłiṅ}
who=DPRT	CDE.DEM	COP=Q	Gail	{CDE.DEM / PDE.DEM / DEM}

'Who is this? Is it Gail?' (sf | EP.2021/06/05)

6.2 The previous direct evidence demonstratives

In the SDEM paradigm, we also find two demonstratives — *šiṅ* and *łɛṅ* — that encode **previous direct evidence** (PDE). These forms encode that the speaker had direct evidence for the referent at a time prior to the utterance time, but crucially can no longer see the referent at the time of speaking. In (58), for instance, the speaker could use the CDE form when the referent ("someone") is still visible, but they would have to switch to the PDE form once the referent is out of view. After this point, it is not felicitous to use a CDE form, and it is likewise dispreferred to use an evidence-neutral form since the speaker does have PDE.

(58) Previous direct evidence uses:

a. *Context: Someone shows up at the lodge that I don't know but everyone else does. After he gets in his car and leaves, I take advantage of a break in the conversation to ask:*

gɛt ga	{**šiṅ** / #tiṅ / #kʷaṅ / #kʷšiṅ}?
gat=ga	{šiṅ / #tiṅ / #kʷaṅ / #kʷšiṅ}
who=DPRT	{PDE.DEM / CDE.DEM / DISC.DEM / DEM}

'Who was that?'
Comment for tiṅ*: "If he's still standing out the door, you can see him."*
Comment for kʷaṅ*: "Someone is talking about some individual, you have no idea who it is."* (sf | EP.2021/02/26)

b. *Context: Someone shows up at the lodge that I don't know but everyone else does. After she gets in her car and leaves, I take advantage of a break in the conversation to ask:*
gɛt ga {**łɛn̓ /** #kʷłɛn̓}?
gat=ga {łin̓ / #kʷłin̓ }
who=DPRT {PDE.DEM / DEM}
'Who was that?' (sf | EP.2021/03/19)

c. *Someone drops by that you don't know and chats with me for a minute before taking off again. I see you looking puzzled, so I tell you:*
ʔətᶿ qɛχ **{łɛn̓** / #łan̓}.
ʔətᶿ=qix̌ {łin̓ / #łan̓}
1SG.POSS=younger.sibling {PDE.DEM / CDE.DEM}
'That was my sister.' (vf/sf | EP.2021/05/29)

The PDE forms can be suffixed with the past tense suffix *-oł* in order to refer to a deceased individual that was known to the speaker (59).[24]

(59) Previous direct evidence uses:

a. *Context: My mom mentions an old family friend who passed on when I was young...*
A: yɛχátačxʷ ɬ Malehoł?
yax̌-át=a=čxʷ ɬ=Mali-ʔuł
remember-CTR\STAT=Q=2SG.SBJ DET=Mary-PST
'Do you remember the late Mary?'

B: ʔɛ, yɛχátč. hɛł **łɛn̓oł** ʔə θo
ʔiʔ yax̌-át=č hił łin̓-ʔuł ʔə=θu
yes remember-CTR\STAT=1SG.SBJ COP PDE.DEM-PST CLF=go
qaqmɛtanoł ƛ̓aƛ̓aławum ʔə taʔat.
qə~qm-mi-t-an-ʔuł ƛ̓a~ƛ̓aławum ʔə=taʔat
PROG~accompany-REL-CTR-1SG.ERG-PST PROG~gather.berries OBL=HAB
'Yes, I remember her. She's the one that would take me gathering berries.'
(sf | EP.2021/07/30)

6.3 The evidence-neutral demonstratives

Finally, all the *kʷ*-initial forms are **evidence neutral**, i.e., these demonstratives do not encode evidentiality at all. In the GDEM paradigm, this category encompasses the forms *kʷɪ́ši*, *kʷikʷa*, and *kʷaʔa*. Since evidentiality is not marked for these forms, they can be used fairly flexibly. In (60), for instance, they occur in a context where the speaker has PDE for the referent, while in (61), they

[24] Proper names are not usually preceded by a determiner in ʔayʔaǰuθəm (see Huijsmans et al. 2020, fn. 2), but this example shows that when speaking of deceased individuals, a determiner is used preceding the name and the past tense suffix also appears on the name.

are used in contexts where the speaker relies on hearsay. Crucially, in all of these cases, the use of the CDE demonstratives is infelicitous.[25,26]

(60) Evidence-neutral GDEMs in PDE contexts:

a. *Context: As we're leaving the house, I ask Gloria whether she's got the keys. She lifts her handbag and says:*
niš {**kʷɪ̱ši** / #tɛʔɛ}.
niš {kʷəši / #tɛʔɛ}
be.here {DEM / CDE.DEM}
'They're here.'
*Consultant: "*tɛʔɛ *would be good if she's holding it in her hand."*
(sf | EP.2021/03/14)

b. *Context: My sister-in-law is looking for my niece who is playing hide-and-seek. I'm working in the garden in my front yard and saw my niece go behind the house to hide, so I point towards the back of the house and tell my sister-in-law:*
nɛʔ {**kʷikʷa** / #tita}.
niʔ {kʷəy̓kʷa / #tita}
be.there {DEM / CDE.DEM}
'She's over there.' (sf | EP.2021/03/14)

c. *Context: My boat is beached around a point in the distance. I wave in that direction and tell you:*
nɛʔ {**kʷaʔa** / #taʔa} θohɛqʷ šɪtᶿ nuxʷɛɬ.
niʔ {kʷaʔa / #taʔa} θu-h-iqʷ šə=tᶿ=nəxʷiɬ
be.there {DEM / #CDE.DEM} GO-EPEN-point DET=1SG.POSS=boat
'My boat is on the other side of that point.' (sf | EP.2021/07/16)

[25] Considering this, one might be tempted to simply call these forms *non-CDE demonstratives* instead of *evidence-neutral demonstratives.* After all, this label would even better describe their distribution. We're not going down this route, primarily because the consonant *kʷ-* has been associated with evidence-neutral forms in other corners of the language, such as the determiner system and the clausal demonstrative system (cf. Huijsmans & Reisinger [in press (b)], Reisinger et al. [in press]). By calling these demonstratives *evidence neutral*, we can keep a uniform analysis for the *kʷ-* element throughout the language.

[26] As noted in Section 4, the GDEMs require gesture. For these evidence-neutral forms, the gesture obviously does not pick out the actual referent, but the area it would be located in. Here, Bühler (1934)'s distinction between the **demonstratum** (≈ what is pointed at) and the **referent** (≈ what is actually meant) becomes relevant.

(61) Evidence-neutral GDEMs in hearsay contexts:

a. *Context: I was always told there was a lake way back in the woods behind my place. I've never hiked back there to see. One day, we're talking about the area, and I point towards the woods behind my place and tell you:*

nɛʔ ḵʷa	kʷ θɛθaʔyɛɬ	ʔə **kʷikʷa**,	nɛʔɛtəm.
niʔ=ḵʷa	kʷ=θ<iθ>aẏaɬ	ʔə=kʷəẏkʷa	niʔ-it-əm
be.there=RPT	DET=lake<DIM>	OBL=DEM	say-CTR-PASS

'It's said there's a little lake over there.' (vf | EP.2021/02/06)

b. *Context: Daniel and I are on a hiking trail. When I did the hike before, another hiker told me that there is a river a little ways off the trail. I've never explored it though. When we get to that point, I point towards where the river is supposed to be and tell Daniel:*

nɛʔ ḵʷa	kʷ q̇ʷaq̇ʷtɛm	ʔə **kʷaʔa.**
niʔ=ḵʷa	kʷ=q̇ʷa<q̇ʷ>t<i>m	ʔə=kʷaʔa
be.there=RPT	DET=river<DIM>	OBL=DEM

'I heard there's a little river over there.' (vf | EP.2021/02/06)

The SDEM paradigm also encompasses some evidence-neutral forms. These are in particular the forms that we identified as special cases in Section 4.5, namely *kʷšiṅ* and *kʷɬɛṅ*. We treat these demonstratives as evidence neutral as they can be used (i) when the speaker has only indirect evidence for the referent, as in (62),[27] and (ii) when the speaker relies on hearsay evidence, as in (63). The form *kʷšiṅ* can also be used (iii) when the speaker has absolutely no evidence at all for the referent, as in the indefinite case given in (64a) and under negation (64b), as noted previously in Section 4.5.

(62) Evidence-neutral SDEMs in inferential contexts:

Context: I hear a male voice outside at night. I say to Daniel:

čiyítč	kʷ tumıš	ʔəkʷ ʔasqič.	gɛt čɛ
čiy-it=č	kʷ=tumiš	ʔə=kʷ=ʔasqič	gat=ča
hear-CTR=1SG.SBJ	DET=man	OBL=DET=outside	who=INFER

{**kʷšiṅ** / #kʷaṅ / #taṅ / #šiṅ}?
{kʷšiṅ / #kʷaṅ / #taṅ / #šiṅ}
{DEM / DEM / CDE.DEM / PDE.DEM}

'I hear someone outside. Who could that be?' (sf | EP.2021/02/26)

[27] It should be noted that the notion of direct evidence seems to follow some very strict rules in ʔayʔaǰuθəm. For instance, hearing a male voice, as in (62), does not count as direct evidence for the referent (i.e., the man outside the window). Rather, it would only count as direct evidence for the sensory stimuli that is directly perceived (i.e., the male voice). The conceptual jump from 'male voice' to 'the man outside the window' requires inference, and so, the speaker would only have indirect evidence for the actual referent. Cf. Huijsmans et al. (2020) and Reisinger et al. [in press] for the same phenomenon in the determiner system.

(63) Evidence-neutral SDEMs in hearsay contexts:

a. *Context: Someone tells you a new lady has been hired at the band office, and she heard it's a relative of Freddie's. You wonder out loud who that would be.*
gɛt č̓ɛ ga {**kʷɬɛn̓** / #ɬɛn̓}?
gat=č̓a=ga {kʷɬin̓ / #ɬin̓}
who=INFER=DPRT {DEM / PDE.DEM}
'I wonder who that is?' (sf | EP.2021/07/02)

b. *Context: Someone mentions a name of a woman you don't know and are not familiar with, but whose name you heard in the context of the election of a neighboring nation. You inform that person:*
hɛɬ k̓ʷa **kʷɬɛn̓** (ʔə) kʷa šuʔotəm.
hiɬ=k̓ʷa kʷɬin̓ ʔə=kʷa šuʔ-ut-əm
COP=RPT DEM CLF=CLDEM choose-CTR-PASS
'She's the one that was elected.' (vf | EP.2021/07/09)

(64) Evidence-neutral SDEMs in non-referential contexts:

a. *Context: My child is careening around the field on his new bike. So far no one has been around, but I'm worried that, if someone comes, he could hurt them.*
hɛhɛwč̓ λ̓ašiganmɛt. j̓ɛqaʔ ʔɛɬagʊxʷəs {**kʷšin̓** / #šin̓ / #kʷan̓}.
hihiw λ̓ašigan-mi-t j̓aqaʔ ʔiɬag-əxʷ-as {kʷšin̓ / #šin̓ / #kʷan̓}
really worry-REL-CTR EX get.hurt-NCTR-3ERG {DEM /PDE.DEM / DISC.DEM}
'I'm really worried about it. He might hurt someone.' (sf | EP.2021/07/02)

b. *Context: Daniel and I thought we'd heard someone talking outside but when we went to see there was no one there. When we come in, we tell Gloria.*
xʷukʷt **kʷšin̓**. qʷayın hɛɬ kʷ puʔəm ʔə č̓iyıtət.
xʷukʷt kʷšin̓ qʷayin hiɬ kʷ=puʔəm ʔə=č̓iy-it-at
not.exist DEM maybe COP DET=wind CLF=hear-CTR-1PL.ERG
'There's no one there. Maybe it was the wind that we heard.' (sf | EP.2021/07/30)

As noted previously in Section 4.5, *kʷɬɛn̓* does not seem to have parallel non-referential uses. It cannot be used scoping under negation (65a) or when the speaker is only guessing about the existence of a female referent (65b).

(65) Unavailability of *kʷɬɛn̓* in non-referential contexts:

a. *Context: A maternity nurse is assigned a new patient at the hospital. She goes to check on her for the first time and doesn't find anyone in the room. She goes back to the other nurses and says:*

i. #xʷukʷt **kʷɬɛn̓.**
xʷukʷt kʷɬin̓
not.exist DEM
'No one was there.'

ii. # xʷač k̓ʷʊnʊxʷən **kʷɬɛn̓**.
xʷaʔ=č k̓ʷən-əxʷ-an kʷɬin̓
NEG=1SG.SBJ see-NCTR-1SG.ERG DEM
'I didn't see anyone.'
(sf |EP.2021/07/30)

b. *Context: I come to the lodge and see someone's purse and weaving project on the table.*

nišoł čɛ̓	χʷoχʷopɛ̓ʔɛč	{#**kʷɬɛn̓** / kʷšiṅ}.
niš-uɬ=čɛ̓a	χ̣ʷu~χ̣ʷupi̓ʔič	{#kʷɬiṅ / kʷšiṅ}
be.here-PST=INFER	PROG~weave	{DEM / DEM}

'Someone must have been weaving here.' (sf | EP.2021/07/10)

In addition to *kʷšiṅ* and *kʷɬɛn̓*, the discourse demonstrative *kʷan̓*, which we discussed in Section 4.6, also falls into the category of evidence-neutral forms. To revisit what we said earlier, this demonstrative does not refer to some referent in the external world, but to a linguistic segment, like a word, phrase, sentence, etc. Since it can not only anaphorically refer to prior discourse segments (66a), but also cataphorically to upcoming and not yet realized discourse segments (66b), we treat it as evidence neutral as well.

(66) Evidence-neutral uses of the discourse demonstrative *kʷan̓*:

a. *Context: Daniel mentions that Gloria found someone to give a talk at a linguistics gathering, but not who it is. I stop him and ask:*

gɛt ga	{**kʷan̓** / #kʷšiṅ}?
gat=ga	{kʷaṅ / #kʷšiṅ}
who=DPRT	{DISC.DEM / DEM}

'Who is that?' (sf | EP.2021/03/27)

b. *Context: Introducing the topic of an upcoming narrative…*

naʔs	kʷʊθ hɛhɛw	mənmənʔəm	**kʷan̓**.
naʔ-s	kʷə=θ=hihiw	mənmənʔəm	kʷaṅ
possess-3POSS	DET=2SG.POSS=first	have.babies	DISC.SDEM

'This is about when you first have a baby.' (Watanabe 2021:96)

7 Gender and number

Some of the demonstratives in ʔayʔaǰuθəm further encode the gender and the number of the referent. More specifically, speakers distinguish between *feminine singular* demonstratives and *gender- and number-neutral* demonstratives — a distinction that has also been observed in the determiner system of the language (cf. Huijsmans et al. 2020; Reisinger et al. in press), as well as in the determiner and demonstrative systems of other Coast Salish languages (cf. Gillon 2006 for Squamish, Montler 2007 for Klallam, Beaumont 2011 for Sechelt, Gerdts 2013 for Halkomelem).[28]

[28] The use of the term *gender-neutral* in the Coast Salish literature goes at least as far back as Gillon (2006)'s work on the Squamish determiner system. Montler (2007) further notes for Klallam that the term *gender-neutral* should not be understood as *non-feminine*. Gerdts (2013), on the other hand, uses the terms *masculine* and *feminine* to describe the gender distinction in Halkomelem, though these labels seem problematic.

Table 15: The gender and number distinction

	GDEMs	SDEMs
Gender- & number-neutral	*tɛʔɛ, tita, taʔa, kʷɪši, kʷikʷa, kʷaʔa*	*tiṅ, taṅ, šiṅ, kʷšiṅ, kʷaṅ*
Feminine singular	***θɛʔɛ, θiθa***	***θiṅ, ɬaṅ, ɬɛṅ, (kʷɬɛṅ)***[29]

Just like in the determiner system, the gender information of the demonstratives is encoded by the consonants. All the *t-*, *kʷ-*, and *š*-initial forms are gender- and number-neutral and can be used with all kinds of referents. They can occur with sexless referents, i.e., referents that lack a natural gender (e.g., 'island' in 67), as well as biologically male referents (e.g., 'man' in 68). They can even occur, at least to some extent, with biologically female referents. While the use of *tita* for singular female referents (e.g., 'woman' in 69) is only marginally acceptable, it is the only acceptable option for plural female referents (e.g., 'women' in 70). This suggests that the label 'gender-neutral' is more appropriate to describe these demonstratives than the label 'non-feminine'.[30]

(67) Use of a gender-neutral demonstrative for a sexless referent:

Context: Standing at the beach and pointing at an island:

taʔatačxʷ	nɛʔoł	ʔə **tita**	kʷʊθays?
taʔat-a=čxʷ	niʔ-uł	ʔə=təẏta	kʷəθays
HAB-Q=2SG.SBJ	be.there-PST	OBL=DEM	island

'Did you stay on that island?' (vf | EP.2020/10/30)

(68) Use of a gender-neutral demonstrative for a male referent:

Context: Someone asks if you recognize anyone at a gathering. Identifying someone a short distance away, you say:

ṫogutč	**tita**	tumiš.
ṫug-út=č	təẏta	tumiš
recognize-CTR\STAT=1SG.SBJ	DEM	man

'I recognize that man.' (sf | BW.2020/10/20)

(69) Use of a gender-neutral demonstrative for a single female referent:

Context: Pointing to someone across the room.

hɛł	{ʔ**tita** / θiθa}	ʔətᶿ sałtu.
hił	{ʔtəẏta / θəẏθa}	ʔətᶿ=sałtəw
COP	{DEM / F.SG.DEM}	1SG.POSS=wife

'That is my wife.' (sf | EP/2021/05/29)

[29] As first noted in footnote 12, it still remains to be tested whether the number restriction also holds for *kʷɬɛṅ*. For now, we assume it patterns like all the other feminine forms.

[30] The examples in (67) to (70) all involve *tita*, which we picked purely for illustrative purposes. The other gender- and number-neutral demonstratives exhibit exactly the same distribution.

(70) Use of a gender-neutral demonstrative for plural female referents:

Context: I see a little group of women standing together and am wondering who they are...

gigɛt ga	{**tita** / #θiθa}	nəgəptey?
gi~gat=ga	{təy̓ta / #θəy̓θa}	nəgəptəy
PL~who=DPRT	{DEM / F.SG.DEM}	women

'Who are those women?' (sf | EP.2021/07/02)

The *θ-* and *ɬ*-initial forms, on the other hand, are used to introduce biologically female referents, but only if they are singular (e.g., 'woman', 'doe', etc.), as illustrated in (71) and (72).[31]

(71) Use of the feminine demonstratives with singular female referents:

a. *Context: My brother and I are looking through an old picture album that my parents have. I have it in my lap. There's a picture of a woman I kind of recognize but can't quite place.*

A:	ṯogutačxʷ	**θɛʔɛ**?	B:	xʷaʔ.	A:	qʷayın	hɛł
	ṯug-ut=a=čxʷ	θiʔi		xʷaʔ		qʷayin	hił
	recognize-CTR=ɋ=2SB.SBJ	F.SG.DEM		NEG		maybe	COP

θiṉ	ʔəms ǰɛʔǰɛ.
θiṉ	ʔəms=ǰaʔǰa
F.SG.DEM	1PL.POSS=relative

A: 'Do you recognize this woman?' B: 'No.' A: 'I think she's our relative.'
(sf | EP.2021/06/05)

b. *Context: Talking about someone at the other side of the room at a gathering.*

A:	ṯogutačxʷ	**θiθa**?	B:	xʷaʔ	A:	qʷayın	hɛł
	ṯug-ut=a=čxʷ	θəy̓θa		xʷaʔ		qʷayin	hił
	recognize-CTR=ɋ=2S.SBJ	F.SG.DEM		NEG		maybe	COP

ɬaṉ	tuwa	qʷoχomıš.
ɬaṉ	tuwa	qʷuχ̣ʷumiš
F.SG.DEM	from	Sḵwx̱wú7mesh

A: 'Do you recognize that lady?' B: 'No.' A: 'I think she's from Squamish.'
(sf | EP.202107/16)

[31] The existence of *θ*-initial demonstratives highlights a peculiar gap in the determiner system of the language. While most of the closely related Coast Salish languages have both one *θ-/ts*-initial and one *ɬ*-initial feminine determiner (cf. Gillon 2006:15 for Squamish: *tsi* vs. *lha*; Montler 2007:411 for Klallam: *tsə* vs. *łə*; Beaumont 2011:466: *tse* vs. *lhe*; Gerdts 2013:418 for Halkomelem: *θə* vs. *łə*), ʔayʔaǰuθəm has no *θ*-initial determiner, but two *ɬ*-initial determiners. We speculate that there was *θ*-initial feminine CDE determiner **θə* at some point, which subsequently must have fallen out of use. To fill the resulting gap in the system, the *ɬ*-initial feminine determiner then must have split into two separate forms, the feminine CDE determiner *łə* and the feminine PDE determiner *ɬ*, giving rise to the determiner system we see today.

c. *Context: Someone drops by that you don't know and chats with me for a minute before taking off again. I see you looking puzzled, so I tell you:*

ʔətᶿ qɛχ	**ɬɛṅ**.
ʔətᶿ=qiχ	ɬiṅ
1SG.POSS=younger.sibling	F.SG.DEM

'That was my sister.' (vf | EP.2021/05/29)

d. *Context: I notice a pregnant deer in my backyard.*

hɛhɛw	pəpɛgən	**θiθa**	qaqaθegən.
hihiw	pəpigan	θəẏθa	qaqaθigan
really	pregnant	F.SG.DEM	doe

'That doe is really pregnant.' (sf | EP.2020/11/06)

(72) Unavailability of the feminine demonstratives with plural female referents:

a. *Context: I'm asking my brother about a picture of two women in my parents' picture album.*

ṫoṫgutačxʷ	{#**θɛʔɛ** / tɛʔɛ}?
ṫu<ṫ>g-ut=a=čxʷ	{#θiʔi / tiʔi}
recognize<PL>-CTR=Q=2SG.SBJ	{F.SG.DEM / DEM}

'Do you recognize these women?' (sf | EP.2021/0619)

b. *Context: I see a group of women standing together and am wondering who they are...*

gigɛt ga	{#**θiθa** / tita}	nəgəptey?
gi~gat=ga	{#θəẏθa / təẏta}	nəgəptəy
PL~WHO=DPRT	{F.SG.DEM / DEM}	women

'Who are those women?' (sf | EP.2021/07/02)

c. *Context: I find a picture of a couple of ladies in my parents' photo album. I ask my brother:*

ṫoṫgútačxʷ	tɛʔɛ	nəgəptey?	qʷayın	hɛyʔɛw
ṫu<ṫ>g-út=a=čxʷ	tiʔi	nəgəptəy	qʷayin	hiɬ-iw
recognize<PL>-CTR=Q=2SG.SBJ	DEM	women	maybe	COP-PL

{#**θiṅ** / tiṅ}	ʔəms ǰɛʔajɛ.	
{#θiṅ / tiṅ}	ʔəms=ǰaʔajɛ	
{F.SG.DEM / DEM}	1PL.POSS=relatives	

'Do you recognize these women? I think these are our relatives.'
Consultant: "You don't use θiṅ *for a group, it's for one person."*
(sf | EP.2021/07/02)

d. *Context: I find a picture of a couple of ladies in a collage of pictures on my parents' wall. I ask my brother:*

ṫoṫgutačxʷ	tita	nəgəptey?	qʷayın	hɛyʔɛw
ṫu<ṫ>g-ut=a=čxʷ	tita	nəgəptəy	qʷayin	hił-iw
recognize<PL>-CTR=Q=2SG.SBJ	DEM	women	maybe	COP-PL

{#**łaṅ** / taṅ} ʔəms ǰɛʔajɛ̌.
{#łaṅ / taṅ} ʔəms=ǰaʔajɛ̌
{F.SG.DEM / DEM} 1PL.POSS=relatives

'Do you recognize those women? I think those are our relatives.'

(sf | EP.2021/07/02)

e. *Context: When we arrived at the gym, there were a couple of ladies standing outside the door. I know we were expecting some ladies from Squamish. I wait till we are inside and then ask you:*

ṫoṫgutačxʷ		šɛ nəgəptey	nɛʔ	kʷ ʔasq?
ṫu<ṫ>g-ut=a=čxʷ		šə=nəgəptəy	niʔ	kʷ=ʔasq
recognize<PL>-CTR=Q=2SG.SBJ		DET=women	be.there	DET=outside
qʷayın	hɛyʔɛw	{#**łɛṅ** / šiṅ}	kʷ tuwa	Squamish.
qʷayin	hił-iw	{#łiṅ / šiṅ}	kʷ=tuwa	Squamish
maybe	COP-PL	{F.SG.DEM / DEM}	DET=from	Squamish

'Did you recognize those ladies? I think they are from Squamish.'

(sf | EP.2021/07/02)

Considering these data, we propose that the feminine demonstratives also encode number. The rest of the paradigm, however, is number-neutral and can consequently be used with both singular and plural referents (cf., e.g., 67, 68, and 70).

One striking peculiarity of the feminine demonstratives is that they can — under special circumstances — also be used for sexless referents, namely if these are small (e.g., 'a small basket', 'a small dress'). This is exemplified in (73). Links between female gender and diminutives occur in numerous other languages, leading Jurafsky (1996) to propose that there is a cross-linguistically common conceptual metaphor linking SMALL THINGS with WOMEN.

(73) Use of the feminine demonstratives with small sexless referents:

a. *Context: I'm holding a small, cute basket and say:*

ʔɛʔaǰitɛnmot	**θɛʔɛ**	pıpču.
ʔiʔaǰitin-mut	θiʔi	p<ip>ču
cute-INT	F.SG.DEM	basket<DIM>

'This little basket is so cute.' (sf | EP.2020/11/06)

b. *Context: There's a little child's dress hanging in a closet.*

hɛhɛw	ʔaǰumıšmot	**θiθa**	q̣ɛq̣snay.
hihiw	ʔaǰ-umiš-mut	θəẏθa	q̣<iq̣>snay
really	good-appearance-INT	F.SG.DEM	dress<DIM>

'That little dress is really pretty.' (sf | EP.2020/11/06)

In contrast, the feminine demonstratives in ʔayʔaǰuθəm cannot be used for regularly-size sexless referents, as illustrated by the contrast between (74a) and (74b), nor for small male referents, as in (74c).

(74) Unavailability of feminine demonstratives for regularly sized referents:

a. *Context: We're preparing a gathering and we have a cute little table set for the children. I ask you where to put a plate of cookies, and you point to that little table...*
For θɛʔɛ*: ... which you happen to be standing right beside and tell me to put it there.*
For θiθa*: ... a short distance away and tell me to put it there.*
hɛsxʷ {**θɛʔɛ** / **θiθa**} ʔəθ kʷaʔt.
hił-sxʷ {θiʔi / θəẏθa} ʔə=θ=kʷaʔ-t
COP-CAUS {F.SG.DEM / F.SG.DEM} OBL=2SG.POSS=put-CTR
'Put it here/there.' (sf | EP.2021/06/19)

b. *Context: We're preparing a gathering and we have several fairly large tables set up. I ask you where to put a plate of cookies, and you point to one of the tables …*
For θɛʔɛ/tɛʔɛ: *...which you happen to be standing right beside and tell me to put it there.*
For θiθa/tita/taʔa: *… a short distance away and tell me to put it there.*
hɛsxʷ {#**θɛʔɛ** / tɛʔɛ / #**θiθa** / tita / taʔa} ʔəθ kʷaʔt.
hił-sxʷ {#θiʔi / tiʔi / #θəẏθa / təẏta / taʔa} ʔə=θ=kʷaʔ-t
COP-CAUS {F.SG.DEM / DEM / F.SG.DEM / DEM / DEM} OBL=2SG.POSS=put-CTR
'Put it here/there.' (sf | EP.2021/06/19)

c. *Context: Holding at a picture of a small boy, I ask:*
gɛt ga {#**θɛʔɛ** / tɛʔɛ} čuẏ?
gat=ga {#θiʔi / tiʔi} čuẏ
who=DPRT {#F.SG.DEM / DEM} child
'Who is that child?'
Consultant: "[You don't use θɛʔɛ*] unless it's a girl."* (sf | EP.2021/07/24)

This parallels the behaviour of the feminine determiners in ʔayʔaǰuθəm which can likewise be used for small referents (cf. Huijsmans and Reisinger [in press (a)]). The use of feminine determiners and demonstratives to describe small things is also found in other Salish languages, such as Halkomelem (Suttles 2004:341; Gerdts 2013:423).

8 Towards an analysis

As highlighted by the previous sections, the demonstratives in ʔayʔaǰuθəm encode much more information than the English demonstratives. In this section, we will attempt to formalize all of the semantic components that give rise to this intricate demonstrative system. First, we will show how the contribution of gesture and joint attention can be incorporated into the formalism (§8.1), and then use this to motivate the uneven syntactic distribution of the GDEMs that we observed earlier (§8.2). Once this has been done, we will provide an account for the evidential component (§8.3), for the deictic component (§8.4), and finally for all the other remaining categories, such as gender

and number (§8.5). A brief section, in which we piece together all these components and give full denotations for each demonstrative concludes this section (§8.6).

8.1 Gesture and joint attention

We propose an analysis where gesture is crucial to the contribution of GDEMs, as it is used to identify the referent of the demonstratives and to draw the addressee's attention towards it. The opposite is true for the SDEMs. These require there to be a salient referent in the context that is uniquely identified by the demonstrative, but do not require co-speech gesture.

For GDEMs, the gesture identifies an individual: the gesture referent. Before we show how gesture can be incorporated into the formalism, it is necessary to first address the nature of the gesture referent. We assume that the gesture referent itself is *always* an entity. It may be clearly bounded and identify an atomic individual, such as a person, tool, or animal (75). However, the gesture referent may also be less clearly delineated, like a point of land (where the boundary between the point and larger land mass is not obvious), a region lying in a certain direction, an area of the kitchen counter, etc. (76). For these uses, the gesture referent doesn't have an intrinsic boundary, but we can still adequately identify it by pointing.

(75) Atomic individuals:

a. *Context: Introducing the man beside you.*
hɛɬ **tɛʔɛ** ʔət$^{\theta}$ gaqaθ.
hiɬ tiʔi ʔət$^{\theta}$=gaqaθ
COP DEM 1SG.POSS=husband
'**This** is my husband.' (sf | BW/2020/10/20)

b. *Context: Looking at a display of woven baskets, you give me some background on their functions [pointing to one of the baskets]:*
čɛʔagayɛ **tita**.
čaʔag-aya təẏta
tool-container DEM
'**That** one is for storing things.' (vf | EP.2021/04/16)

c. *Context: You see a dog across the road. Pointing to it, you say:*
hɛɬ **tita** čɛn̓o ʔaq̓aθoɬ.
hiɬ təẏta čan̓u ʔaq̓-aθ-ʔuɬ
COP DEM dog chase-CTR+1SG.OBJ-PAST
'It's **that** dog that chased me.' (vf | KG.2018/12/04)

(76) Non-atomic individuals:

a. *Context: We're getting off the boat on an island, and you tell me that you used to camp often here growing up.*
hɛɬ **tɛʔɛ** ʔəms taʔat niš ƛ̓əmɛsoɬ.
hiɬ tiʔi ʔəms=taʔat niš ƛ̓əmis-ʔuɬ
COP DEM 1PL.POSS=HAB be.here dwell-PST
'We used to stay **here** often.' (sf | EP.2021/02/26)

b. *Context: A and B are seated at the kitchen table. A has forgotten where she left her purse. B, pointing to where the purse is located on the kitchen counter, tells A:*

nɛʔ	**tita**	*pro*$_i$.
niʔ	təẏta	*pro*$_i$.
be.there	DEM	*pro*$_i$

'It$_i$ is **there**.' (sf | EP.2021/03/14)

c. *Context: You're pointing me in the general direction of Freddie's house. We can't see his house from here, but we're looking towards the general area.*

nɛʔ	{**taʔa** / #tita}	šɛ ʔayɛʔs.
niʔ	{taʔa / #təẏta}	šə=ʔayaʔ-s
be.there	{DIST.DEM / NDIST.DEM}	DET=house-3POSS

'His house is over **there**.' (sf | EP.2021/07/16)

The use of co-speech gestures is necessary in all of these cases. After all, it is the gesture that helps the speaker establish joint attention with the addressee. To incorporate gesture, we adapt the analysis developed by Ebert et al. (2020),[32] where the gesture referent is a rigid designator ⌜ ☛ *I* ⌝, and where the entity *x* denoted by the demonstrative is the unique entity identified by the gesture (see also Roberts 2002 for a similar approach). Since this entity may be atomic or non-atomic, the gesture may vary accordingly (e.g., lifting or pointing to an atomic object vs. waving towards an area; cf. Bangerter 2004). A truncated denotation — not yet including any evidential or deictic components — is given below for the GDEM *tɛʔɛ* 'this'. We assume a null NP pronoun in the absence of an overt NP.

(77) Denotation for the GDEM *tɛʔɛ:*

presupposition: there is a unique entity in the context which is identical to the gesture referent and meets the description of the demonstrative

a. $[\![tɛʔɛ]\!]$
POINTING TO ***x***

b. $\lambda N_{\langle e,t\rangle}\, \iota x\, .\, \ulcorner \text{☛ } I \urcorner = x \wedge N(x)$

The SDEMs require a different approach. We adopt a semantics for the SDEMs following Roberts (2002)'s treatment of pronouns in English and Schwarz (2009)'s treatment of anaphoric definites in German. Roberts's analysis of pronouns involves a presupposition with two components: (i) there is a discourse referent *i* familiar and salient in the context, (ii) this discourse referent is the most salient discourse referent satisfying the descriptive content of the pronoun (for gender, person, and number). The pronoun then refers to the individual associated with this index. We adopt this approach to account for the anaphoric nature of the SDEMs, adapting the second part

[32] The main difference between our analysis and theirs is that for them the gesture referent is an atomic entity rather than a region of space. Since they are analyzing English and German demonstratives, they are not dealing with a system where the same demonstrative can be used locatively or to refer to an atomic entity, unlike in ʔayʔaǰuθəm where the GDEMs seem to primarily refer to locations but allow identification of atomic entities with the proximal and near-distal CDE forms *tɛʔɛ* and *tita*, and their feminine counterparts *θɛʔɛ* and *θiθa*.

of the presupposition so that the discourse referent satisfies the descriptive content of the demonstrative and any following NP.[33] We then need some mechanism to introduce the index into the denotation. For this, we turn to Schwarz's analysis of anaphoric definites in German.

Under Schwarz's analysis, an anaphoric definite will include an index argument, which is syntactically represented but null, essentially a null pronoun. This is shown for *tiṅ* in (78a). The demonstrative itself will have an extra individual argument *y* equated with the unique individual denoted by the demonstrative (78b). The index saturates this extra argument, as in (78c). The discourse referent represented by this index must belong to the set of discourse referents that are salient in the context Sal_C and be assigned by the assignment function to an individual that meets the description of the NP;[34] it must furthermore be the most salient discourse referent in the context that is assigned to an individual meeting the description of the NP: for any discourse referent *n* that is also salient in the context and meets the description of the NP, *n* must be less salient than *y* or be *y*. If defined, the demonstrative will refer to the individual that the assignment function assigns to *y*. Once again, we assume a null NP pronoun where there is no overt NP following the demonstrative.

(78) a. Syntactic representation of SDEMs:
[1 [SDEM [NP]]]

b. Denotation for the SDEM *tiṅ*:
$[\![tiṅ]\!]^{c,g} = \lambda N.\lambda y.\, y \in Sal_C \wedge N(g(y)) \wedge \forall z\, [z \in Sal_C \wedge N(g(z)) \rightarrow z <_{sal} y \; or \; z = y]\, .\, g(y)$

c. Adding the index:
$[\![1\ tiṅ]\!]^{c,g} = \lambda N.1 \in Sal_C \wedge N(g(1)) \wedge \forall n\, [n \in Sal_C \wedge N(g(n)) \rightarrow n <_{sal} 1 \; or \; z = 1]\, .\, g(1)$

[33] The presupposition that the discourse referent is *familiar* requires closer examination. We have yet to fully explore whether use of the SDEMs places restrictions on hearer knowledge. If it did, this would be counter the claim that presuppositions in Salish do not place restrictions on the Common Ground (Matthewson 2006). Determiners in ʔayʔaǰuθəm do not presuppose familiarity (Huijsmans et al. 2020, fn. 14; Reisinger, et al. [in press], fn. 12), and we suspect that pronouns also do not, since they are sometimes used cataphorically. It would therefore be somewhat surprising if demonstratives did. It may be that 'familiarity' only tracks the speaker considers in a certain discourse context without tracking what the speaker believes familiar to the hearer. This requires further investigation.

[34] Formally, the context $C = \langle Sat_C, Dom_C \rangle$:

> Where *Dom* ∈ *N* (the set of natural numbers) is the Domain of *C*, the set of familiar discourse referents, and,
> Where *Sat WxG*, the satisfaction set for *C*, = {<w,g>: for all i Dom, g(i) is an individual which verifies in w all the information the interlocuters share about i}. (Roberts 2002:18)

As stated, Dom is the set of *familiar* discourse referents. We do not wish to claim at this point that the SDEMs place restrictions on the common ground, so this notion of familiarity should not be assumed to be as in English. See footnote 33.

The set of discourse referents in the context will typically be those previously mentioned, capturing the anaphoric nature of *tiṅ*, and the fact that *tiṅ* is not dependent on gesture to identify a unique referent. The other SDEMs except for *kʷšiṅ* behave in parallel.

We can illustrate how this works with a concrete example, such as (79). A discourse referent with an index 1 is established through use of the GDEM *tɛʔɛ* in the first sentence (80a). The SDEM *tiṅ* in the second sentence carries this index (80b). The value assigned by the assignment function to the index 1 associated with *tiṅ* in the second sentence will therefore be the referent established by the GDEM in the first. The presuppositions of the SDEM are met since the discourse referent associated with the index 1 is the most salient discourse referent in the context, being just previously established. As a result, the referent of the demonstrative *tiṅ* in the second sentence will be equated with the man identified by *tɛʔɛ* in the first (in turn identified through gesture). For simplicity, we represent the null NPs with the NP pronoun *one*.

(79) *Context: My brother and I are looking through an old picture album that my parents have. I have it in my lap. There's a picture of a guy I kind of recognize but can't quite place.*

A:	ṫogutačxʷ	**tɛʔɛ₁**?	B:	xʷaʔ.	A:	qʷayın	hɛł
	ṫug-ut=a=čxʷ	tiʔi		xʷaʔ		qʷayin	ḥił
	recognize-CTR=Q=2SB.SBJ	DEM		NEG		maybe	COP

[1 **tiṅ**] ʔəms ǰɛʔǰɛ.
tiṅ ʔəms=ǰaʔǰa
CDE.DEM 1PL.POSS=relative

A: 'Do you recognize this guy?' B: 'No.' A: 'I think he's our relative.'

(sf | EP.2021/07/10)

(80) a. $[\![tɛʔɛ_1\ NP_{pro}]\!]^{c,g[x/1]} = \iota x\ .\ \ulcorner$ ☛ *I* $\urcorner = x \wedge one(x)$
POINTING TO ***x***

b. $[\![1\ tiṅ\ NP_{pro}]\!]^{c,g} = \lambda N.1 \in Sal_C \wedge N(g(1)) \wedge \forall n\,[n \in Sal_C \wedge N(g(n)) \rightarrow n <_{sal} 1\ or\ n = 1]\,.\,g(1)$

There are certain uses of the SDEMs where previous mention is not necessary, notably the use of *tiṅ* in temporal expressions such as *tiṅ ṫ'ᵒθok̓ʷ* 'today' (81).

(81) *Context: I come in from outside and say to you:*

hɛhɛw	čɯm̓čɯmmot	**tiṅ**	**ṫ'ᵒθok̓ʷ**.
hihiw	čəm̓~čəm-mut	tiṅ	ṫ'ᵒθuk̓ʷ
really	cold-CHAR-INT	DEM	day

'It's really cold today.' (vf | FL.2021/02/08)

Under Robert's (2002, 2015) approach, these uses can be accommodated since the referents for indexicals like *today* are in the common ground and therefore are associated with a discourse referent even without previous mention.[35] Roughly, the contribution of the phrase *tiṅ ṫ'ᵒθok̓ʷ* 'this

[35] Alternatively, we could assume that the pronominal element in the DP need not be an index but could instead take the form of an indexical in a Kaplan-type system (Kaplan 1977) — that is, a function from context to content — such as: TODAY(*c*). This element contains a function TODAY, which will return an

day' would be as in (82) where 2 is the index of the day in which the speaker and addressee are located. We presume that the current day generally meets the criteria of being the most salient day by virtue of being the day the speaker and addressee are located within.[36]

(82) $[\![2\ tin\dot{}\ i\dot{}^{\theta}ok\dot{}^{w}]\!]^{c,g} = 2 \in Sal_C \wedge day(g(2)) \wedge \forall n\,[n \in Sal_C \wedge day(g(n)) \rightarrow n <_{sal} 2\ or\ n = 2]\,.\,g(2)$
where 2 is the index associated with the *day* in which the speaker and addressee are located

Obviously more needs to be said about the temporal semantics of such phrases, but this would take us too far afield for the purposes of this paper.

8.2 Gesture and the distribution of the GDEMs

As we showed in Section 3, the GDEMs do not pattern uniformly. While all demonstratives of this paradigm can be used locatively, only some also allow nominal uses. We believe that the mechanics of gesture play a role in this uneven distribution.

If the gesture referent is (relatively) nearby and visible, it is not uncommon for it to be an atomic entity, like a baby basket. In such circumstances then, the proximal and near-distal CDE GDEMs (i.e., *tɛʔɛ*, *tita*, *θɛʔɛ*, and *θiθa*) can easily be used nominally. Consider, for instance, the pronoun use of *tɛʔɛ* in (83).

(83) *Context: There's a display of woven baskets. <u>You point to one</u> and give me some background.*
χaʔp̀ **tɛʔɛ**.
x̣aʔp̀ tiʔi
baby.basket DEM
'**This** is a baby basket.'

This utterance will be true if the unique gesture referent *x* belongs to the set of entities which are baby baskets (84c).

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individual when applied to the context parameter *c*. This individual would then be equated with the individual denoted by the demonstrative. Either of the two systems would be sufficient for our purposes.

[36] If nothing more is said, allowing unmentioned individuals to be associated with discourse referents would predict SDEMs to be able to appear when there is only one individual that is salient in the discourse context meeting the description of the NP. However, determiners are preferred over SDEMs in such contexts.

(viii) *Context: Daniel and I get to Gloria's house. She goes to get us something to drink and we're standing around her table where there is a lovely vase of flowers. I remark:*
hɛhɛw ʔaǰumıšmot {tə / #tiǹ / #tɛʔɛ} qʷasəm.
hihiw ʔaǰ-umiš-mut {tə= / #tiǹ / #tiʔi} qʷasəm
really good-appearance-INT {DET= / #SDEM / #GDEM} qʷasəm
'These flowers are really beautiful.' (sf | EP.2021/07/30)

We have also found cases where null pronouns are preferred to SDEMs, namely where reference is made to a previously mentioned individual. We suspect that SDEMs require that there is an element of contrast involved (cf., Grosz 2019), which sets their use apart from determiners and null pronouns. Fully determining the differences in the distribution of the SDEMs vs. determiners and null third person pronouns is a matter for future research, however.

(84) a. $[\![tɛʔɛ\ NP_{pro}]\!]^{c,g} = ιx\ .\ ⌜ ☛\ I\ ⌝ = x \wedge one(x)$
POINTING TO ***x***
b. $[\![χaʔp̓]\!] = λy.$ baby-basket(y)
c. $[\![χaʔp̓]\!]([\![tɛʔɛ\ NP_{pro}]\!]) = 1$ iff $ιx\ .\ ⌜ ☛\ I\ ⌝ = x \wedge$baby-basket($x$)

As we have seen in Section 3, the proximal and near-distal CDE GDEMs can also act as determiners when followed by an NP, such as *θukʷnačtən* 'chair' (85). In this case, the referent of the DP must be equivalent to the gesture referent and meet the description of the NP (86a). The resulting truth conditions for (85) are given in (86c): the utterance will be true only if the unique gesture referent *x*, a chair, is very squeaky.

(85) *Context: Speaking of the chair you're sitting in...*
qɛq̓ɛmot **tɛʔɛ** θukʷnačtən.
qiq̓imut tiʔi θəkʷnačtən
squeaky-INT DEM chair
'**This** chair is really squeaky.' (vf | EP.2019/06/29)

(86) a. $[\![tɛʔɛ]\!]([\![θukʷnačtən]\!]) = ιx\ .\ ⌜ ☛\ I\ ⌝ = x \wedge$ chair(x)
POINTING TO ***x***
b. $[\![qɛq̓ɛmot]\!] = λy.$ very-squeaky(y)
c. $[\![qɛq̓ɛmot]\!]([\![tɛʔɛ]\!]([\![θukʷnačtən]\!])) = 1$ iff very-squeaky($ιx\ .\ ⌜ ☛\ I\ ⌝ = x \wedge$ chair(x))

However, gestures can also pick out a wider, vaguer region around the speaker. These uses are typically locative, as exemplified in (87), but need not be: in (87), for instance, *tɛʔɛ gʉ̆ɛ* is the absolutive argument of the possessive predicate *naʔs* 'be their own'.[37] Regardless, for both these cases, the gesture identifies a larger entity without clear boundaries — an area — which is then the referent of the demonstrative.

(87) *Context: A little dog escaped from its owner. I've found it and it's running about around me in the field. I yell:*
niš *pro*$_i$ [LOC **ʔə <u>tɛʔɛ</u>**].
niš *pro*$_i$ ʔə=tiʔi
be.here *pro*$_i$ OBL=here
'It's over **here**.' (vf | EP.2021/02/19)

(88) naʔs **tɛʔɛ** gʉ̆ɛ.
naʔ-s tiʔi gəja
own-3POSS DEM land
'**This** land is theirs.' (sf | EP.2021/01/08)

Locative uses, as in (86), are generally introduced by the oblique marker *ʔə*, which acts as an all-purpose preposition. A simple denotation for *ʔə* is given in (89). The function *L* covers a range of locative relations, including those for which *in*, *at*, and *to* would be used in English.

[37] See Davis et al. (2020) for an analysis of the argument structure of these possessive constructions.

(89) $[\![ʔə]\!] = \lambda x\, \lambda y\, .\, L(x)(y)$

The oblique marker combines with a demonstrative to create a one-place predicate. For our purposes, we assume that this one-place predicate can combine with the VP via predicate modification (Heim & Kratzer 1998).

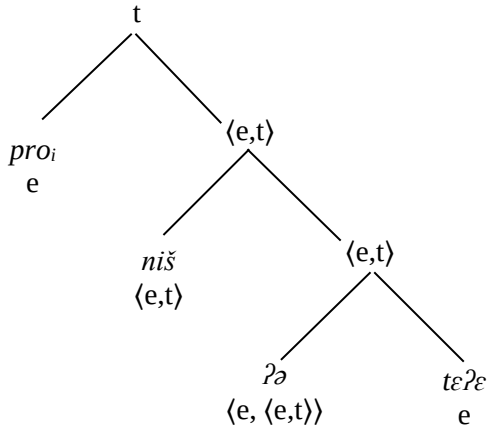
For (87), for example, *tɛʔɛ* picks out an entity — a region proximal to the speaker — via gesture. The oblique marker *ʔə* takes *tɛʔɛ* as its complement to create a one-place locative predicate (90b), which requires its argument to stand in a locative relation with the entity *x* identified by the demonstrative.

(90) presupposition: there is a unique entity in the context located by the gesture referent

a. $[\![ʔə]\!]([\![tiʔi]\!])$
POINTING TO ***x***

b. $\lambda y.\, L(\, \iota x\, .\, ⌜ ☛ I ⌝ = x)(y)$

c.



d. $[\![(86)]\!] = 1$ iff be.here(pro_i) $\wedge\, L(\iota x\, .\, ⌜ ☛ I ⌝ = x)(pro_i)$

As shown in (90c), the oblique phrase (of type ⟨e,t⟩) combines with the main predicate (also of type ⟨e,t⟩), in this case a locative predicate *niš* 'be here', to create a larger one-place predicate (of type ⟨e,t⟩). This combines with the null pronoun *pro*, i.e., the subject of the sentence, and — abstracting away from other components of the proposition, such as tense and aspect — the entire proposition will be true if the individual referred to by *pro* satisfies the description of the main predicate, i.e., it is proximal, and is located at the region designated by *tɛʔɛ* (90d).

Unlike the proximal and near-distal CDE GDEMs, the distal demonstrative *taʔa* is almost exclusively used locatively, and rarely occurs in nominal contexts (see Section 3). We believe this is tied to the relationship between distance and gesture (cf. Cooperrider 2016). A distant region picked out by a gesture — even a precise gesture like pointing — cannot typically equate a distant atomic entity such as a man or basket, even if the referent is visible in the distance. This is because entities are smaller towards the horizon, while gestures are necessarily centered around the speaker. As a result, gestures necessarily encompass wider areas relative to distal entities, as visualized in Figure 1. Figure 1 illustrates how a pointing gesture can directly identify a visible near distal man,

but not a visible far distal man. The region which the far distal man occupies is instead identified. Since the referent of a GDEM is equated with the gesture referent, the near distal CDE GDEM *tita* can be used to identify the near distal man, but the distal CDE GDEM *taʔa* cannot be used to directly identify the far distal man. The distal CDE GDEM *taʔa* can be used locatively instead because locations are generally larger and vaguer and therefore do not pose a challenge for equivalence with the gesture referent.

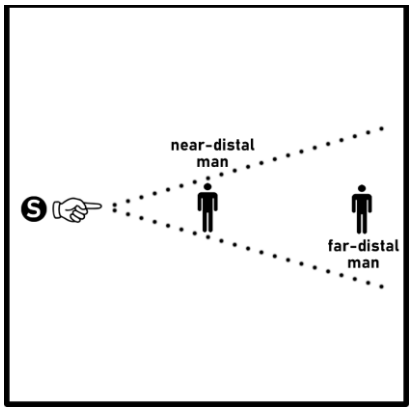


Figure 1: Visualization of the correlation between deictic distance and pointing precision. In the near-distal context, the gesture referent can be fairly easily equated with the man; in the far-distal context, the gesture is not precise enough and will pick out a vague area, in which the man is located.

Obviously, this line of thinking predicts that nominal uses of *taʔa* should be okay for very large distal referents, particularly where these do not necessarily have clear boundaries. We have found the results for these cases somewhat variable, but such nominal uses are at least sometimes accepted, as shown in (91):

(91) *Context: From the North Shore, I see a big cloud formation over the city of Vancouver. I point to it and tell you:*

kʷʊ̀t gi	**taʔa**	t̓ᶿamqʷɬ!	hɛhɛw	ʔaǰumıš.
kʷə(n)-t=gi	taʔa	t̓ᶿamqʷɬ	hihiw	ʔaǰ-umiš
see-CTR=DPRT	DIST.DEM	cloud	really	good-appearance

'Look at the clouds over there! They're very beautiful.' (sf | EP.2021/0714)

The GDEM *taʔa* also has nominal uses in DPs referring to locations in oblique phrases (see Section 3.3.3).

The evidence-neutral GDEMs (i.e., *kʷıši*, *kʷikʷa*, and *kʷaʔa*) exhibit a similar behavior to *taʔa*, occurring exclusively in locative constructions. As noted earlier, these forms are used to identify referents that are not visible. When gesturing towards an entity in another room or within a cupboard, or otherwise hidden from view, the gesture referent cannot precisely identify the entity. It can, however, indicate the area within which an entity is located. The referent of the evidence-neutral GDEMs will therefore also typically be a region, typically standing in some relation to another entity. This relation is once again supplied by the oblique marker. In (92), then, the oblique phrase *ʔə kʷikʷa* is a one-place predicate that puts an entity *y* into a locative relation with the gesture referent *x*, the not-visible region of space indicated by the gesture (93b). We then get the truth conditions in (94) such that the entity referred to by *šɛ θɛθay̓ɛɬ* 'the little lake/pond' is in a distal

place and this place is a not-visible region of space identified by the gesture (these truth conditions abstract away from the semantics of the DP *šɛ θɛθaɣ̓ɛɬ* for ease of exposition).

(92) *Context: As we're walking by a fence, we hear ducks on the other side. I know the area well, so I explain to you:*

nɛʔ	ʔə **kʷikʷa**	šɛ θɛθaɣ̓ɛɬ.
niʔ	ʔə=kʷəɣ̓kʷa	šə=θiθaɣ̓aɬ
be.there	OBL=DIST.DEM	DET=DIM~lake

'There's a little pond there.' (sf | EP.2021/07/24)

(93) presupposition: there is a unique entity in the context located by the gesture referent

a. ⟦*ʔə*⟧(⟦*kʷikʷa*⟧)
POINTING TO **x**

b. $\lambda y.\, L(\iota x.\ulcorner \text{☛} I \urcorner = x)(y)$

(94) ⟦*nɛʔ*⟧(⟦*ʔə*⟧(⟦*kʷikʷa*⟧))(⟦*šɛ θɛθaɣ̓ɛɬ*⟧) = 1 iff be.there(the.pond) ∧ $L(\iota x.\ulcorner \text{☛} I \urcorner = x)$ (the.pond)

8.3 Evidentiality

Our analysis of the evidential components, as discussed in Section 6, is couched in situational semantics. Inspired by Speas (2011) and Kalsang et al. (2013), we propose that the evidential demonstratives — just like the evidential determiners in the language (cf. Huijsmans et al. 2020; Reisinger et al. in press) — encode relations between two situations. The **information situation** (IS / s_I) constitutes the minimal, contextually salient situation in which the speaker accesses evidence for the referent's existence, and the **discourse situation** (DS / s_D) constitutes the salient situation in which the speaker utters *p*.

Positing these two situations allows us to formalize the evidential distinctions that we need, namely Current Direct Evidence (CDE) and Previous Direct Evidence (PDE). For the CDE demonstratives, the referent *x* has to be part of the IS (= direct evidence), and the DS has to be equal to or part of IS as well (= current evidence), as shown in (95a). The formula for the PDE demonstratives shares the same direct evidence component but differs in that the DS is *not* part of or equal to the IS (= previous evidence), as shown in (95b).

(95) a. $[\![\text{CDE}]\!]^{sD}(x)(s_I) = 1 \text{ iff } [(x < s_I) \wedge (s_D \leq s_I)]$

b. $[\![\text{PDE}]\!]^{sD}(x)(s_I) = 1 \text{ iff } [(x < s_I) \wedge (s_D \not\leq s_I)]$

Figure 2 attempts to visualize these formulae. The first two panels represent potential CDE contexts as, in both cases, the referent is part of the IS (i.e., $x < s_I$), and the DS is equal to or part of the IS (i.e., $s_D \leq s_I$). This guarantees that the speaker can see the referent at the time of speaking (as indicated by the eye symbol associated with the IS). They contrast with the third panel, where the referent is still part of the IS (i.e., $x < s_I$), but the DS is not equal to or part of the IS (i.e., $s_D \not\leq s_I$). In other words, the IS and the DS are separate in this scenario. Here then, the speaker saw the referent at a prior occasion, but no longer sees it at the time of speaking, thus giving rise to a PDE context.

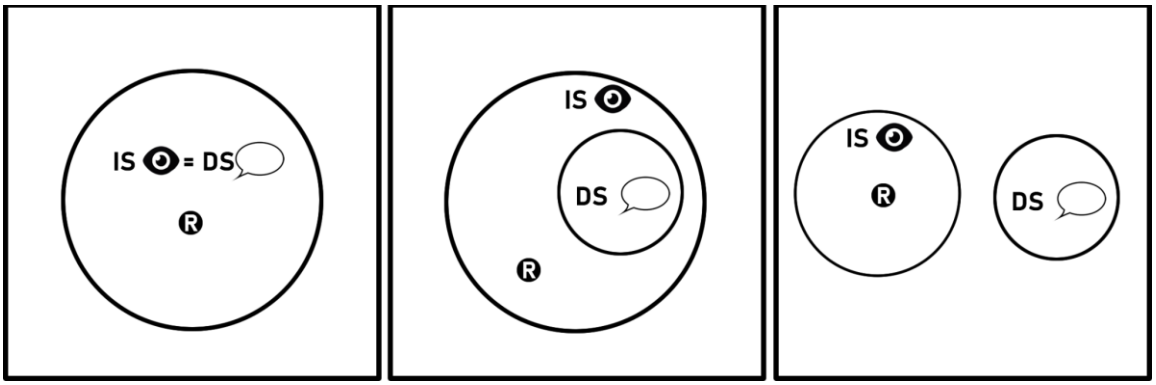


Figure 2: Visualization of CDE (panels 1 and 2) and PDE (panel 3).

As discussed in Section 6.3, we also find a handful of evidence-neutral demonstratives in the language. These, we argue, simply lack an evidential component in their denotations.

8.4 Deixis

As noted by Diessel and Coventry (2020), the concept of deictic distance also lends itself for a situational analysis. On the one hand, situations are flexible enough to explain why what counts as proximal may differ from context to context. For instance, consider the phrase ***here*** *on my leg*, where the demonstrative only picks out a small area, and compare it to the phrase ***here*** *in Canada*, where the demonstrative refers to a much larger area. On the other hand, if we assume that situations come with spatial and temporal coordinates, they also allow us to make a unified account for spatial deixis (e.g., *this chair*) and temporal deixis (*this night*).

Loosely following Diessel and Coventry (2020), we propose that for the proximal demonstratives, the referent *x* has to be part of the DS, as shown in (96a), and that it has to lie outside of the DS for the distal demonstratives (96b).

(96) a. $[\![\text{PROX}]\!]^{sD}(x) = 1 \text{ iff } (x < s_D)$
b. $[\![\text{DIST}]\!]^{sD}(x) = 1 \text{ iff } (x \not< s_D)$

For the GDEMs, where we often find a three-way split (e.g., *tɛʔɛ* vs. *tita* vs. *taʔa*) this does not suffice, however. Consequently, we introduce a third category, which we label *near-distal*. We propose that demonstratives belong to this category (i.e., *tita*, *θiθa*, and *kʷikʷa*) require the referent to be in a situation *s* immediately adjacent to the discourse situation. We capture this through introducing an additional adjacency relation ∞between situations (adopting notation from Krifka 1998).[38] A formula for this relation is given in (97).

(97) $[\![\text{ADJACENT}]\!]^{sD}(x) = 1 \text{ iff } \exists s(s \infty s_D) \wedge (x < s)$

An entity referred to with a near-distal form needs to meet *both* the distal and adjacency requirements, meaning that the near-distal forms are more complex versions of the distal forms.

[38] See Krifka (1998) for a formal definition of adjacency.

8.5 Other components

Last, to fully account for every single demonstrative, we need to introduce a few more additional components, which fortunately are less complex.

For the demonstratives that are restricted to singular feminine referents (i.e., *θɛʔɛ, θiθa, θiṅ, ɬaṅ, ɬɛṅ*, and *kʷɬɛṅ*), we need to introduce both a gender and a number component. These are given in (98) below.

(98) a. ⟦SING⟧(*x*) = 1 iff #*x* = 1 [Sauerland et al. 2005:411]
b. ⟦FEM⟧(*x*) = 1 iff *x* is feminine [Huijsmans & Reisinger in press]

For the discourse demonstrative *kʷaṅ*, we require a restriction that ensures that the referent can only be part of a discourse, and nothing else (99).

(99) ⟦DISC⟧(*x*) = 1 iff *x* is a segment of the discourse

8.6 Denotations

Now we can finally begin to formalize the individual demonstrative forms in ʔayʔaǰuθəm. We will treat the different components that we introduced in the previous sections — such as CDE, PDE, PROX, DIST, FEM, SG, and DISC — as presuppositions.[39] The demonstratives vary in the amount of information that they presuppose. For instance, the presupposition for *θɛʔɛ* comes with four components beyond the requirement that there is a unique gesture referent meeting the description of the NP (CDE, PROX, FEM, SG), *tɛʔɛ* with two (CDE, PROX), and *kʷɪši* only with one (PROX). Following Grice (1975), Heim (1991), and Bochnak (2016), we propose that this places the demonstratives in competition: more informative demonstratives — those with greater presuppositional loads — will be preferred to less informative demonstratives wherever the requirements of the more informative demonstratives are met. As we lay out the contribution of the demonstratives below, we will examine how this competition plays out among sets of demonstratives.

The CDE GDEMs are shown in (100) below. These presuppose that there is a unique entity that is equivalent with the gesture referent and meets the description of the NP for which the speaker has CDE. They vary in their deictic presuppositions. Both *tita* and *taʔa* presuppose that the entity denoted by the demonstrative is distal, i.e., not part of the discourse situation, but *tita* additionally presupposes that the entity is within a situation adjacent to the discourse situation. Since *tita* is more

[39] Though we use the term presupposition, we do not mean that these impose restrictions on the common ground, but rather that these are felicity conditions on the use of the demonstratives which determine whether the demonstrative is defined. Both the evidential and proximity components are clearly speaker-oriented, as can be demonstrated by the fact that they can be used in phone call contexts. In (ix), for instance, the location indicated by *tɛʔɛ* is only visible and proximal to the speaker.

(ix) *Context: I look out the window and see that it is snowing. I'm talking on the phone to someone in another city. I tell them.*
ʔa~ʔaxʷ **tiʔi**.
PROG~SNOW DEM
'It's snowing here.' (Huijsmans & Reisinger [in press b])

informative than *taʔa*, it will be preferred to *taʔa* wherever this condition is met. This accounts for cases where *tita* is felicitous and *taʔa* is infelicitous, even though both are distal.

(100) Formulas for the CDE GDEMs:

a. $[\![tɛʔɛ]\!]^{sD} = \lambda N \lambda s_I : !\exists y.\ulcorner \text{☛} I \urcorner = y \wedge CDE(y)(s_I) \wedge PROX(y).\ \iota x [\ulcorner \text{☛} I \urcorner = x \wedge CDE_{p*}(x) s_I \wedge PROX(x)]$

b. $[\![tita]\!]^{sD} = \lambda N \lambda s_I : !\exists y.\ulcorner \text{☛} I \urcorner = y \wedge CDE(y)(s_I) \wedge DISTAL(y) \wedge ADJACENT(y).\ \iota x [\ulcorner \text{☛} I \urcorner = x \wedge CDE_{p*}(x)(s_I) \wedge DISTAL(x) \wedge ADJACENT(x)]$

c. $[\![taʔa]\!]^{sD} = \lambda N \lambda s_I : !\exists y.\ulcorner \text{☛} I \urcorner = y \wedge CDE(y)(s_I) \wedge DISTAL(y).\ \iota x [\ulcorner \text{☛} I \urcorner = x \wedge CDE_{p*}(x)(s_I) \wedge DISTAL(x)]$

The situational relationships for the evidential and deictic components of these demonstratives is illustrated in Figure 3. For the proximal form *tɛʔɛ*, the referent will be within the discourse situation and the discourse situation will equal the information situation (schematized in the leftmost panel), ensuring that the referent is visible and proximal to the speaker at the time of the utterance. The near distal form *tita* also encodes that the referent is within the IS, but now the IS must be larger than the DS because the referent is outside of the DS – that is, it is distal. The situation in which the referent is located must be immediately adjacent to the DS however, ensuring that the referent is proximal enough to be directly located by gesture (the middle panel). The distal form *taʔa* still encodes that the referent is part of the IS, but note the IS encompasses a wider area and the referent is far enough away that a gesture can only indicate a general area (the rightmost panel).

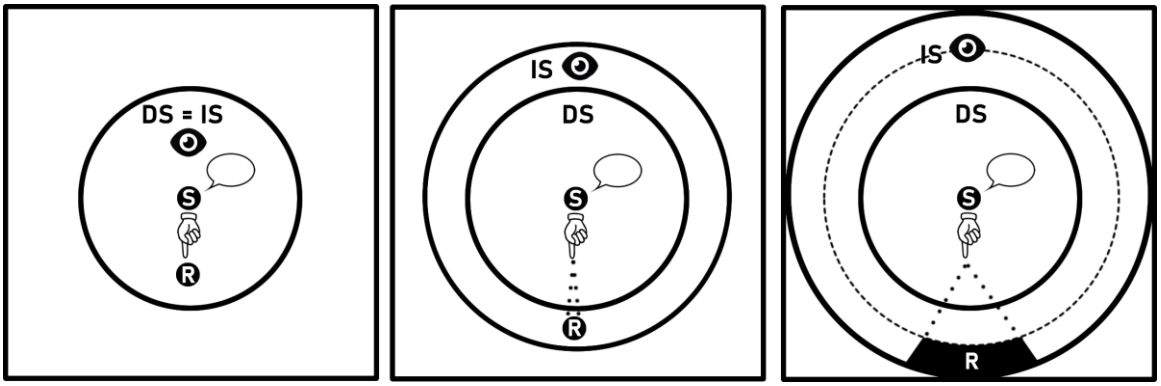


Figure 3: Schematic representation for the proximal CDE GDEM *tɛʔɛ* (left), the near distal CDE GDEM *tita* (middle), and the far distal CDE GDEM *taʔa* (right), where S represents the speaker and R the referent.

The feminine CDE GDEMs are shown in (101) below. These parallel the denotations for the gender-neutral proximal and near-distal CDE GDEMs above but carry the additional presuppositions that the referent is feminine and singular. Due to these additional presuppositions, the feminine forms will generally be preferred to the gender-neutral forms when the referent is female and singular.

(101) a. $[\![\theta\varepsilon\text{ʔ}\varepsilon]\!]^{sD} = \lambda N\lambda s_I : !\exists y.\ulcorner \text{☛} I \urcorner = y \wedge CDE(y)(s_I) \wedge PROX(y) \wedge FEM(y) \wedge SG(y)\ .\ \imath x[\ulcorner \text{☛} I \urcorner = x \wedge CDE(x) s_I \wedge PROX(x) \wedge FEM(x) \wedge SG(x)]$

b. $[\![\theta i\theta a]\!]^{sD} = \lambda N\lambda s_I : !\exists y.\ulcorner \text{☛} I \urcorner = y \wedge CDE(y)(s_I) \wedge DISTAL(y) \wedge ADJACENT(y) \wedge FEM(y) \wedge SG(y).\ \imath x[\ulcorner \text{☛} I \urcorner = x \wedge CDE(x)(s_I) \wedge DISTAL(x) \wedge ADJACENT(x) \wedge FEM(x) \wedge SG(x)]$

The denotations for the evidence-neutral GDEMs are given in (102) below. These parallel the denotations for the gender-neutral CDE GDEMs in (100) above, but have no evidential presupposition. Since these are less informative than the CDE GDEMs they will be dispreferred whenever the speaker has CDE for the referent of the demonstrative. As a result, they will be used in cases where the speaker cannot see the referent at the time utterance.

(102) a. $[\![k^w\imath\check{s}i]\!]^{sD} = \lambda N : !\exists y.\ulcorner \text{☛} I \urcorner = y \wedge PROX(y).\ \imath x[\ulcorner \text{☛} I \urcorner = x \wedge PROX(x)]$

b. $[\![k^wik^wa]\!]^{sD} = \lambda N : !\exists y.\ulcorner \text{☛} I \urcorner = y \wedge DISTAL(y) \wedge ADJACENT(y).\ \imath x[\ulcorner \text{☛} I \urcorner = x \wedge DISTAL(x) \wedge ADJACENT(x)]$

c. $[\![k^wa\text{ʔ}a]\!]^{sD} = \lambda N\lambda s_I : !\exists y.\ulcorner \text{☛} I \urcorner = y \wedge DISTAL(y).\ \imath x[\ulcorner \text{☛} I \urcorner = x \wedge DISTAL(x)]$

As with the CDE GDEMs, the near-distal form is more informative than the distal form and so will be preferred whenever the referent is located in a near-distal position.

The denotations for the CDE SDEMs are given in (103) below. These require there to be a discourse referent associated with the referent denoted by the demonstrative. They presuppose that the individual associated with this discourse referent meets the description of the NP and the demonstrative's deictic requirements and that the speaker has CDE for this individual; they further presuppose that the discourse referent is the most salient discourse referent to meet these requirements. The feminine demonstratives additionally presuppose that the individual associated with the discourse referent is singular and feminine. The deictic requirements vary between these demonstratives: they either encode that the referent is proximal or distal. These demonstratives are equally informative except for the feminine CDE SDEMs, which are more informative than the gender-neutral CDE SDEMs. Since the feminine CDE SDEMs are more highly specified than the gender-neutral CDE SDEMs, they will be preferred whenever the referent is singular and female.

(103) Formulas for the SDEMs:

a. $[\![ti\dot{n}]\!]^{sD,c,g} = \lambda N.\lambda y.\ y \in Sal_C \wedge N(g(y)) \wedge CDE(g(y)) \wedge PROX(g(y)) \wedge \forall z\,[z \in Sal_C \wedge N(g(z)) \wedge CDE(g(z) \wedge PROX(g(z)) \rightarrow [z <_{sal} y\ or\ z = y]]\ .\ g(y)$

b. $[\![ta\dot{n}]\!]^{sD,c,g} = \lambda N.\lambda y.\ y \in Sal_C \wedge N(g(y)) \wedge CDE(g(y)) \wedge DIST(g(y)) \wedge \forall z\,[z \in Sal_C \wedge N(g(z)) \wedge CDE(g(z) \wedge DIST(g(z)) \rightarrow [z <_{sal} y\ or\ z = y]]\ .\ g(y)$

c. $[\![\theta i\dot{n}]\!]^{sD,c,g} = \lambda N.\lambda y.\, y \in Sal_C \wedge N(g(y)) \wedge CDE(g(y)) \wedge PROX(g(y) \wedge FEM(g(y)) \wedge SG(g(y)) \wedge \forall z\,[z \in Sal_C \wedge N(g(z)) \wedge CDE(g(z) \wedge PROX(g(z)) \wedge FEM(g(z)) \wedge SG(g(z)) \rightarrow [z <_{sal} y \text{ or } z = y]]\,.\,g(y)$

d. $[\![ɬa\dot{n}]\!]^{sD,c,g} = \lambda N.\lambda y.\, y \in Sal_C \wedge N(g(y)) \wedge CDE(g(y)) \wedge DIST(g(y) \wedge FEM(g(y)) \wedge SG(g(y)) \wedge \forall z\,[z \in Sal_C \wedge N(g(z)) \wedge CDE(g(z) \wedge DIST(g(z)) \wedge FEM(g(z)) \wedge SG(g(z)) \rightarrow [z <_{sal} y \text{ or } z = y]]\,.\,g(y)$

The denotations for the PDE SDEMs are given in (104). Unlike the CDE SDEMs, they do not encode deixis, and presuppose that the speaker has PDE, rather than CDE, for the individual associated with the discourse referent. Once again, the feminine form is more informative than its gender-neutral counterpart and so will be preferred when its presuppositions are met.

(104) a. $[\![\check{s}i\dot{n}]\!]^{sD,c,g} = \lambda N.\lambda y.\, y \in Sal_C \wedge N(g(y)) \wedge PDE(g(y)) \wedge \forall z\,[z \in Sal_C \wedge N(g(z)) \wedge PDE(g(z)) \rightarrow [z <_{sal} y \text{ or } z = y]]\,.\,g(y)$

b. $[\![ɬɛ\dot{n}]\!]^{sD,c,g} = \lambda N.\lambda y.\, y \in Sal_C \wedge N(g(y)) \wedge PDE(g(y)) \wedge FEM(g(y)) \wedge SG(g(y)) \wedge \forall z\,[z \in Sal_C \wedge N(g(z)) \wedge PDE(g(z)) \wedge FEM(g(y)) \wedge SG(g(y)) \rightarrow [z <_{sal} y \text{ or } z = y]]\,.\,g(y)$

The evidence-neutral feminine form *kʷɬɛn̓* and the discourse demonstrative *kʷan̓* pattern with the other SDEMs, but do not have evidential or deictic presuppositions. *kʷɬɛn̓* parallels the PDE feminine SDEM *ɬɛn̓* but lacks the evidential presupposition. Therefore, *ɬɛn̓* will be preferred to *kʷɬɛn̓* whenever the speaker has PDE. Last, *kʷan̓* has its own special presupposition that the individual associated with the discourse referent is itself a segment of discourse.

(105) a. $[\![k^w ɬɛ\dot{n}]\!]^{sD,c,g} = \lambda N.\lambda y.\, y \in Sal_c \wedge N(g(y)) \wedge FEM(g(y)) \wedge SG(g(y)) \forall z\,[z \in Sal_c \wedge N(g(z)) \wedge FEM(g(y)) \wedge SG(g(y)) \rightarrow [z <_{sal} y \text{ or } z = y]]\,.\,g(y)$

b. $[\![k^w a\dot{n}]\!]^{sD,c,g} = \lambda N.\lambda y.\, y \in Sal_c \wedge N(g(y)) \wedge DISC(g(y)) \forall z\,[z \in Sal_c \wedge N(g(z)) \wedge DISC(g(z)) \rightarrow [z <_{sal} y \text{ or } z = y]]\,.\,g(y)$

Finally, we turn to *kʷšin̓*, which unlike the other demonstratives can be non-referential and function as an indefinite. We assume that *kʷšin̓* contributes a contextually provided choice function *f* (see also Gillon 2006 who proposes a choice function analysis for many of the demonstratives in Sḵwx̱wú7mesh). A choice function *CH*(*f*) applies to a set and yields a member of the set. For the present, we do not fully explore what it means to be contextually given but treat the choice function as an element of the context C, where this is a broader notion than just the set of discourse referents

and information stored about them provided by the parameter *c*, including any information available in the utterance context that is relevant to narrowing this choice. The denotation for *kʷšiṅ* in (106) specifies that the contextually provided function must be able return an individual matching both the description of the noun phrase *N* and the main predicate *P*. If the context narrows down the domain of existential quantification for the choice function sufficiently, *kʷšiṅ* can refer back to an entity mentioned in previous discourse for which the speaker has no previous direct evidence, while where the context does not narrow down the domain of existential quantification, *kʷšiṅ* will be fully indefinite. Because *kʷšiṅ* involves existential closure, it is possible to have *kʷšiṅ* taking narrow scope with respect to negation.

(106) $[\![k^{w}\check{s}i\dot{n}]\!]^{C} = \lambda N_{\langle e,t\rangle}\, \lambda P_{\langle e,t\rangle}\, \exists f \in C\, .\, [CH(f) \wedge \mathrm{f}(N) = 1 \wedge \mathrm{f}(P) = 1]$

9 Looking back, looking ahead

In this paper, we offered a first detailed investigation of the demonstratives in ʔayʔaǰuθəm — an important niche in the language which has remained largely unexplored up to this point. Drawing from original fieldwork with several speakers, we not only expanded the known inventory, but also defined the syntactic distributions of the individual forms. The most intriguing insights, however, emerged in the study of their semantics. We showed that the demonstratives in this language encode much more information than the English demonstratives. In addition to fairly common distinctions, like deictic distance, gender, or number, we found that the demonstratives in ʔayʔaǰuθəm also encode evidentiality and the status of joint attention between the speaker and the addressee. Particularly, the latter is fascinating, as it highlights the important role that gesture plays in the language — another area of research which has received far too little attention in ʔayʔaǰuθəm, let alone in the Salish literature (though see Webb (2021)'s pioneering work in this volume). To provide a formal account for the individual demonstratives, we borrowed and adapted bits and pieces from a wide range of semantic research, such as Roberts (2001, 2015), Schwarz (2009), Speas (2010), Kalsang et al. (2013), Ebert et al. (2020), and Diessel and Coventry (2020).

While this paper provides a wealth of novel empirical data, we acknowledge that this investigation is still far from a comprehensive account. For instance, almost all of the contexts we have presented here involve singular referents. However, previous research in ʔayʔaǰuθəm (e.g., Watanabe 2003) and in other Coast Salish languages (e.g., Suttles 2004; Beaumont 2011) suggests that an investigation of contexts targeting plural referents may uncover additional, yet unattested demonstratives. Likewise, a more detailed look at the interaction of demonstratives and gestures seems like a worthwhile endeavour. So far, we have primarily focussed on the use of indexical gestures, where a speaker points to the referent. However, evidence from other languages (e.g., Ebert et al. 2020) indicates that demonstratives can also occur with other types of co-speech gestures, such as iconic gestures, where the speaker illustrates a property (e.g., size, manner, etc.) of the referent with their hands.

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