Evidentials in the nominal domain: a Speasian analysis of ʔayʔaǰuθəm determiners[1]

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Abstract. Based on novel fieldwork data, we propose a re-analysis of the determiner system of ʔayʔaǰuθəm (a.k.a. Comox-Sliammon; Central Salish; ISO 639-3: coo). Contrary to previous descriptions by Davis (1973), Harris (1981), Watanabe (2003), and Huijsmans et al. (2018), we argue that determiners in ʔayʔaǰuθəm encode evidentiality ('current direct evidence' vs. 'previous direct evidence' vs. 'evidence-neutral'). To account for this pattern, we argue that the determiners encode relations between situations, following work by Speas (2010) and Kalsang et al. (2013). This paper adds to the small but growing body of evidence that evidential notions can be expressed in the nominal domain (Hanks 2009; Gutiérrez & Matthewson 2012; Gutiérrez 2015; Rose 2017; Gambarage & Matthewson 2019). This in turn provides support for the existence of semantic atoms or 'building blocks' which recur in different parts of the syntactic structure (Hale 1986; von Fintel & Matthewson 2008).

Keywords: ʔayʔaǰuθəm, evidentiality, determiners, situation semantics, nominal domain

1. Introduction

In this paper, we examine the determiner system of ʔayʔaǰuθəm (a.k.a. Comox-Sliammon; ISO 639-3: coo), the northernmost of the Central Salish languages. Based on novel fieldwork data, we argue that the determiners in this language encode evidentiality. More specifically, the determiner paradigm distinguishes whether the speaker has current direct evidence for the existence of the referent or previous direct evidence for its existence; an evidence-neutral determiner completes the inventory.

We analyze the evidentiality encoded by these determiners as expressing relations between situations (following Speas 2010 and Kalsang et al. 2013). More specifically, we argue that the determiners encode relations between the utterance situation and the situation in which the speaker obtains evidence for the existence of a referent. The speaker has current direct evidence for the referent when the referent is present in the same situation in which the speaker is making the utterance. The speaker has previous direct evidence when the referent was present in a previous situation that the speaker witnessed but is no longer present at the time of utterance. The evidence-neutral determiner is used when the speaker has either indirect or no evidence for the existence of the referent.

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The paper is organized as follows. Section 2 provides background on the language and the determiner system. Section 3 argues that previous analyses of ʔayʔaǰuθəm determiners are not adequate to capture all uses of the determiners. Section 4 discusses the contribution of each of the determiners, while Section 5 provides our analysis. Section 6 outlines some further predictions of the analysis. Finally, Section 7 discusses the implications of the analysis and questions for future research.

2. Background on the language and the determiner system

ʔayʔaǰuθəm is traditionally spoken in the Tla'amin, Homalco, Klahoose, and K'ómoks First Nations, along the northern part of the Georgia Strait in British Columbia, Canada. According to the First Peoples' Cultural Council (2018), there are circa 47 first language speakers. Community efforts are underway to document and transmit the language to future generations. Data come from primary fieldwork by the first two authors.

The determiner system of the language consists of five forms — *tə, šə, łə, ɬ,* and *kʷ* — which are syntactically present on all arguments, and absent on predicative nominals.[2] Initial examples are given in (1–3).[3]

(1) *Context: Standing, looking at the blackberries.*
ti čɛ̓χ **tə** čɪtʊxʷən.
ti čə̓x **tə**=čətəxʷən
CLD get.ripe **CDE.DET**=blackberry
'The blackberries have gotten ripe.' [CURRENT DIRECT EVIDENCE]

(2) *Context: The cat is hiding because it doesn't want a bath.*
hɛ čɛ̓ čɛ ʔəxʷ nɛʔs kʷa:yɛ́t **šɛ** mɛmaẇ?
hiɬ=ča ča ʔə=xʷ=niʔ=s kʷay-ít **šə**=mimaẇ
COP=INFER where OBL=OBL.NMLZ=be.there=3POSS hide-STAT **PDE.DET**=cat
'Where do you think the cat is hiding?' [PREVIOUS DIRECT EVIDENCE]

(3) xʷukʷt **kʷ**ʊms ʔaxʷǰumɛn.
xʷukʷt **kʷ**=əms=ʔaxʷǰumin
not.exist **DET**=1PL.POSS=leftovers
'We don't have any leftovers.' [EVIDENCE-NEUTRAL]

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[2] While determiners are always syntactically present on arguments, they may be phonetically elided, as observed in previous literature (e.g., Kroeber 1991:91–92, 171–172; Watanabe 2003:379; Huijsmans et al. 2018:330). Determiners can always be re-inserted where phonetically elided and we therefore take a determiner to be always underlyingly present on arguments even when unpronounced.

[3] The first line of each example is given in the orthography, the second line is a roughly phonemic representation showing morpheme breaks, the third line provides glosses, and the fourth line gives the translation. Infelicitous examples are marked with a hashtag (#), and marginal uses are marked with a superscripted question mark (ˀ). Abbreviations follow the Leipzig Glossing Rules, with the following additions: ACT 'active intransitivizer', CDE 'current direct evidence', CLD 'clausal demonstrative', CTR 'control transitivizer', DEIC 'deictic', DIM 'diminutive', DPRT 'discourse particle', EXIS 'assertion of existence', INFER 'inferential', INT 'intensifier', NCTR 'non-control transitive', NTS 'non-topical subject', PDE 'previous direct evidence', RPT 'reportative', SENS.NON.VIS 'sensory non-visual' (sensory evidence which cannot include direct visual evidence), STAT 'stative'. Affixes are marked by a hyphen '-', clitics by an equal sign '=', infixes by angle brackets '< >', and fused morphemes that cannot be segmented by a '+'.

3. Previous discussions of ʔayʔaǰuθəm determiners

Not much has been written about determiners in ʔayʔaǰuθəm, apart from brief descriptions by Davis (1973), Harris (1981), Watanabe (2003), Huijsmans et al. (2018), and Davis (2020). Davis (1973:10) presents a paradigm in which the determiners distinguish 'visibility', 'nonvisibility', and 'remoteness', as well as minor vs. major 'importance'.[4]

Table 1: The ʔayʔaǰuθəm determiner paradigm in Davis (1973)

	Visible	**Nonvisible**	**Remote**
Minor Importance	*ɬ*	*ɬ*	—
Major Importance	*tə*	*kʷ*	*šə*

For the Island dialect of the language, Harris (1981:92) describes *tə* as 'present', *kʷə* as 'non-present', and *šə* as 'former'; he does not find the *ɬ* determiner, though he reports it in material from Boas. Watanabe (2003:79) describes the ʔayʔaǰuθəm determiners as encoding distinctions of referentiality, with *tə* and *łə* being referential, *kʷə* being 'nonreferential', and *šə* 'remote'. However, he says the details of the system "still need to be worked out" (fn. 77).

Our consultants often characterize use of the determiners in terms of visibility, and Huijsmans et al. (2018), like Davis (1973), analyze the system along these lines, as in Table 2. Huijsmans et al. also note an additional distinction between *łə* and *ɬ,* which is not found in previous work.

Table 2: The ʔayʔaǰuθəm determiner paradigm in Huijsmans et al. (2018)

		Deictic		**Nondeictic**
		Visible	**Nonvisible**	
Feminine	**SG**	*łə*	*ɬ*	*kʷə*
	PL	*tə*	*šə*	*kʷə*
Non-Feminine	**SG**	*tə*	*šə*	*kʷə*
	PL	*tə*	*šə*	*kʷə*

However, none of these previous analyses are able to explain all the data. For instance, a visibility-based account runs into problems because the 'visible' determiner *tə* is sometimes used for referents that cannot be seen, as in (4a). Characterizing *šə* as 'former' or 'remote' does not capture uses of *šə* for referents that are present but non-visible (4b). Referentiality also does not adequately predict the distribution of the determiners, since referential DPs do not always allow *tə* and *łə*; this is illustrated in (4c), where the DP refers to an individual in the actual world, but the *tə* determiner is infelicitous.

(4) a. *Context: It's a hot summer day.*

łaχsxʷčɛn	{**tə** / #šɛ / #kʷ} k̓ʷas.
łəx̣-sxʷ=čan	{**tə** / #šə / #kʷ}=k̓ʷas
bad-CAUS=1SG.SBJ	{**CDE.DET** / PDE.DET / DET}=heat

'I don't like this heat.'

[4] These terms are not explicitly defined; this is generally the case for terms used in the descriptive literature.

b. *Context: A child wants to play with the cat, but it is behind your couch.*
kʷayʊmot **šɛ** mɛmaẇ.
kʷay-i-mut **šə**=mimaẇ
hide-TR-REFL **PDE.DET**=cat
'The cat is hiding.' (Huijsmans et al. 2018:335)

c. *Context: I'm at your house, telling you about a bear I encountered this morning.*
nɛʔoł {**#tə** / šɛ / ʔkʷ} mɛχał
niʔ-uł {**#tə** / šə / ʔkʷ}=miχał
be.there-PST {**CDE.DET** / PDE.DET / DET}=black.bear
ʔə šɛtᶿ ʔasq̇ič skʷiǰoł.
ʔə=šə=ətᶿ=ʔasq̇iyč skʷiǰuł
OBL=PDE.DET=1SG.POSS=outside morning
'There was a bear in my yard this morning.'

Our goal here is to provide a semantic analysis of the ʔayʔaǰuθəm determiner system. As previewed above, our main claim is that the determiners encode evidentiality. We will argue that what has previously been analyzed as 'visibility' in this system is better characterized as direct evidence (usually, but not always, visual) in the utterance situation. What has been called 'remoteness' or 'former' is actually direct evidence prior to the utterance situation, and what has been called 'non-referentiality' or 'non-deictic' is the absence of direct evidence.

4. Determiners in ʔayʔaǰuθəm encode evidentiality

Most discussions of evidentiality focus on sentence-level evidential elements. Roughly, these indicate the speaker's source of information for their assertion; see Murray (2020) for a recent overview. Two simple examples are given in (5) and (6), from the Northern Interior Salish language St'át'imcets (a.k.a. Lillooet). The sentential evidential *k'a* in (5) encodes that the speaker has made an inference from indirect evidence of any kind; *lákw7a* in (6) can only be used when the speaker has *sensory* indirect evidence of the eventuality.

(5) *Context: You are a teacher and you come into your classroom and find a nasty picture of you drawn on the blackboard. You know that Sylvia likes to draw that kind of picture.*

Nilh **k'a**	núḵun'	k Sylvia	ku metscál	ti píktsha	láku7.
níł=**ka**	núḵʷuṅ	k=Sylvia	kʷu=məč-xál	ti=píkčh=a	lákʷuʔ
FOC=**INFER**	again	DET=Sylvia	DET=write-ACT	DET =picture=EXIS	DEIC

'It must have been Sylvia who drew the picture.' (Matthewson 2012:89)

(6) *Context: You are a teacher and you come into your classroom and find a nasty picture of you drawn on the blackboard. You look around and you see that only one child has got chalk dust on her hands, Sylvia.*

Nilh	**lákw7a**	s Sylvia	ku xílhtal'i.
nił	**lákʷʔa**	š=Sylvia	kʷu=x̱íł-taḷi
FOC	**SENS.NON.VIS**	NMLZ=Sylvia	DET =do(CAUS)-NTS

'Sylvia must have done it.' (Matthewson 2012:93)

While most studies discuss sentence-level elements that encode the speaker's evidence for a proposition, here we focus on evidential determiners that encode the speaker's evidence for the existence of a nominal referent. The ʔayʔaǰuθəm determiners also encode information about the time at which the speaker has evidence for the existence of the referent.

4.1 Direct evidence determiners

We define direct evidence for the existence of a referent as evidence that entails the existence of the referent without further inference (cf. Speas 2010). For instance, if I see bear footprints, I have direct evidence for the footprints; I do not need to infer that the footprints exist. I have indirect evidence for the existence of the bear itself, however, because I must infer that a bear made the footprints, from their size and shape.

We argue that both *tə* and *łə* mark that the speaker has direct evidence for the existence of the referent at the time of utterance (i.e., current direct evidence, CDE). This is shown in (7) and (8). In (7), the speaker is witnessing (seeing) the bear at the utterance time, and the only appropriate determiner is *tə*. In (8), the speaker again has visual direct evidence of the woman at the utterance time, and the preferred determiner is the feminine CDE determiner *łə*; the general CDE determiner *tə* is also marginally possible in this context.

(7) *Context: You look out the window and there's a bear in your yard.*
nɛ {**tə** / #šɛ / #kʷ} mɛχał.
niʔ {**tə** / #šə / #kʷ}=miχ̣ał
be.there {**CDE.DET** / PDE.DET / DET}=black.bear
'There's a bear.' [CURRENT DIRECT EVIDENCE]

(8) *Context: There's a woman on the beach and you see her now.*[5]
nɛ {**łə** / #ɬ / ʔ**tə** / #kʷ} sałtxʷ ʔə tə q̇ʷɛt.
niʔ {**łə** / #ɬ / ʔ**tə** / #kʷ}=sałtxʷ ʔə=tə=q̇ʷit
be.there {**F.SG.CDE.DET** / F.SG.PDE.DET / **CDE.DET** / DET}=woman OBL=CDE.DET=beach
'There's a woman on the beach.' [CURRENT DIRECT EVIDENCE]

The determiners *šə* and *ɬ*, in contrast, indicate that the speaker had direct evidence for the existence of the referent in a previous situation, but no longer does at the time of utterance (i.e., previous direct evidence, PDE). This is shown in (9) and (10). Example (9), repeated from (4c), contrasts minimally with (7): this time, the speaker's visual evidence for the existence of the bear was prior to the utterance time, and *tə* is no longer acceptable. Instead, the PDE determiner *šə* is used. Example (10) involves a feminine referent who was witnessed prior to the utterance time, triggering the use of the feminine PDE determiner *ɬ*; the general PDE determiner *šə* is also marginally possible.

[5] There is some variability in whether *ɬ* (the feminine PDE determiner) is judged infelicitous in examples like (8). We believe this is because the CDE determiner *łə* can reduce to *ɬ* in connected speech, neutralizing the surface contrast between the two. Judgements are more consistent in the opposite direction: *łə* is always judged infelicitous when the speaker has PDE (cf. (10) below), since the surface contrast is never neutralized in this direction.

(9) *Context: I'm at your house, telling you about a bear I encountered this morning.*
nɛʔoł {#tə / **šɛ** / ʔkʷ} mɛχał ʔə šɛtᶿ ʔasq̇ič
niʔ-uł {#tə / **šə** / ʔkʷ}=miχał ʔə=šə=ətᶿ=ʔasq̇iyč
be.there-PST {CDE.DET / **PDE.DET** / DET}=black.bear OBL=PDE.DET=1SG.POSS=outside
skʷiǰoł.
skʷiǰuł
morning
'There was a bear in my yard this morning.' [PREVIOUS DIRECT EVIDENCE]

(10) *Context: You saw a woman on the beach earlier (but not now).*
nɛʔoł {#łə / **ɬ** / ʔ**šɛ** / #kʷ} sałtxʷ
niʔ-uł {#łə / **ɬ** / ʔ**šə** / #kʷ}=sałtxʷ
be.there-PST {F.SG.CDE.DET / **F.SG.PDE.DET** / **PDE.DET** / DET}=woman
ʔə tə q̇ʷɛt skʷiǰoł.
ʔə=tə=q̇ʷit skʷiǰuł
OBL=CDE.DET=beach morning
'There was a woman on the beach this morning.' [PREVIOUS DIRECT EVIDENCE]

While speakers usually rely on visual evidence to confirm the existence of a referent, as in (7) and (10), some referents cannot be accessed visually and consequently are directly perceived through other senses. For example, internal organs or heat can only be perceived somatically (11–12), taste necessarily relies on gustatory evidence (13), smell relies on olfactory evidence (14), and sound relies on auditory evidence (15). In all these examples, the evidence is perceived at the time of speech, and so the CDE determiner *tə* is the acceptable choice.

(11) *Context: Calling attention to a medical condition.*
χəčθot {**tə**tᶿ / #šɛtᶿ / kʷʊtᶿ} ƛ̓ukʷɛnə̓s.[6]
x̣əč-θut {**tə**=ətᶿ / #šə=ətᶿ / kʷ=ətᶿ}=ƛ̓əkʷinas
get.sharp.pain-REFL {**CDE.DET**=1SG.POSS / PDE.DET=1SG.POSS / DET=1SG.POSS}=heart
'I have a stabbing pain in my heart.' [CURRENT DIRECT EVIDENCE: SOMATIC]

(12) *Context: It's a hot summer day.*
łaχsxʷčɛn {**tə** / #šɛ / #kʷ} k̓ʷas.
łəx̣-sxʷ=čan {**tə** / #šə / #kʷ}=k̓ʷas
bad-CAUS=1SG.SBJ {**CDE.DET** / PDE.DET / DET}=heat
'I don't like this heat.' [CURRENT DIRECT EVIDENCE: SOMATIC]

(13) *Context: I taste the cake and I don't like it.*
łaχsxʷčɛn {**tə** / #šɛ / ʔkʷ} t̓aʔanəns.
łəx̣-sxʷ=čan {**tə** / #šə / ʔkʷ}=t̓aʔ-anən-s
bad-CAUS=1SG.SBJ {**CDE.DET** / PDE.DET / DET}=taste-NMLZ-3POSS
'I don't like the taste of it.' [CURRENT DIRECT EVIDENCE: GUSTATORY]

[6] As noted in Watanabe (2003:79), it is not clear whether the determiners should be posited to have an underlying vowel. We have found that *tə* and *šə* are usually (but not always) pronounced with a vowel, whereas *kʷ* is generally vowelless except when accompanied by a possessive proclitic; our underlying forms reflect this. For a more detailed explanation, see Huijsmans et al. (2020:171, fn. 7).

(14) *Context: Daniel brought in some cedar.*
hɛhɛw ʔajɛqəp **tə** hoq^{w}anəns təχəmay.
hihiw ʔaǰ-aqap **tə**=həq^{w}-anən-s təx̣əmay
very good-smell **CDE.DET**=smell-NMLZ-3POSS cedar
'The smell of cedar is very good.' [CURRENT DIRECT EVIDENCE: OLFACTORY]

(15) *Context: I like the sound my new phone makes. As I hear it ring, I remark to you:*
oh, ʔisx^{w}čɛn {**tə** / k^{w}} č̓iyanəns.
oh ʔəy-sx^{w}=čan {**tə** / k^{w}}=č̓iy-anən-s
oh good-CAUS=1SG.SBJ {**CDE.DET** / DET}=hear-NMLZ-3POSS
'Oh, I like the sound of it.' [CURRENT DIRECT EVIDENCE: AUDITORY]

As already mentioned above, both *łə* and *ɬ* are specialized in terms of gender, occurring with female referents (see Watanabe 2003, Huijsmans & Reisinger to appear) — primarily with humans as in (8), (10), and (24b) below, but occasionally with animals as in (16). The only exception to this gender restriction occurs in contexts where the referenced entity is considered small (an observation first made by Davis 1974; see Huijsmans & Reisinger to appear for further discussion and analysis).

(16) papʔegən **łə** qegaθ.
papʔigan **łə**=qigaθ
pregnant **F.SG.CDE.DET**=deer
'The deer is pregnant.'

While the non-feminine determiners are number-neutral, both *łə* and *ɬ* can only be used with singular, never with plural referents (17a–b).

(17) a. *Context: You see a group of women on the beach now.*
nɛʔɛw {#łə / **tə**} nəgəpti ʔə tə q̓^{w}ɛt.
niʔ-iw {#łə / **tə**}=nəgəpti ʔə=tə=q̓^{w}it
be.there-PL {F.SG.CDE.DET / **CDE.DET**}=women OBL=CDE.DET=beach
'There are women on the beach.'

b. *Context: You saw a group of women standing on the beach yesterday.*
nɛʔ k̓^{w}ak̓^{w}ʔɛšitoł {#ɬ / **šə**} nəgəpti sǰɛsoł
niʔ k^{w}a<k^{w}>ʔiš-it-ʔuł {#ɬ / **šə**}=nəgəpti sǰasuł
be.there stand<PL>-STAT-PST {F.SG.PDE.DET / **PDE.DET**}=women yesterday
ʔə tə q̓^{w}ɛt.
ʔə=tə=q̓^{w}it
OBL=CDE.DET=beach
'There were women standing on the beach yesterday.'

4.2 The non-evidential determiner *k^{w}*

In contrast to the determiners that encode direct evidence, *k^{w}* is evidence-neutral. It is marginally acceptable when the speaker has direct evidence, but usually appears in contexts

where the speaker only has indirect evidence or no evidence at all. Among other things, speakers use *k*^{w} to refer to entities for which they only have inferential or reportative evidence (18–19), future entities (20), entities whose existence is in question (21), and entities asserted not to exist (22). In all these cases, direct evidence determiners are judged as inappropriate.

(18) *Context: You go outside and you see fresh bear footprints in your driveway.*
nišoł čɛ̇ {#tə / #šɛ / **k**^{w}} mɛχał. nɛ tə ǰɪšɪnmɛns.
niš-ʔuł=čɛ̇a {#tə / #šə / **k**^{w}}=miχ̣ał. niʔ tə=ǰišinmin-s
be.here-PST=INFER {CDE.DET / PDE.DET / **DET**}=bear be.there CDE.DET=footprint-3POSS
'A bear must have been here. There are its footprints.' [INFERENTIAL EVIDENCE]

(19) nɛ k̇^{w}a kʷa:náč {#ł / **k**^{w}} sałtxʷ ʔə tə q̇^{w}ɛt
niʔ=k̇^{w}a kʷanáč {#ł / **k**^{w}}=sałtxʷ ʔə=tə=q̇^{w}it
be.there=RPT sit<STAT> {F.SG.PDE.DET / **DET**}=woman OBL=CDE.DET=beach
xʷa k̇^{w}a ṫog-ut=əs.
xʷaʔ=k̇^{w}a ṫug-ut=as
NEG=RPT recognize-CTR=3SBJV
'He said there was a woman sitting on the beach. He didn't recognize her.'
[REPORTATIVE EVIDENCE]

(20) hiyʔəmttᶿəm tə čuy
hiy-ʔəm-t=tᶿəm tə=čuẏ
make-IND-CTR=1SG.SBJ+FUT CDE.DET=child
(ʔə) {#tə / #šɛ / **k**^{w}} q̇ɛq̇snay.
(ʔə)={#tə / #šə / **k**^{w}}=q̇i<q̇>snay
OBL={CDE.DET / PDE.DET / **DET**}=shirt<DIM>
'I will make a little shirt for the child.' [FUTURE ENTITIES]

(21) nɛʔa {#təθ / #šɛθ / **k**^{w}ʊθ} ʔayšɛʔəm?
niʔ=a {#tə=əθ / #šə=əθ / **k**^{w}=əθ}=ʔayša ʔəm
be.there=Q {CDE.DET=2SG.POSS / PDE.DET=2SG.POSS / **DET**=2SG.POSS}=change
'Do you have any change?' [ENTITIES UNDER QUESTION]

(22) *Context: Marianne is about to start weaving a basket with Betty, but she doesn't have an awl. She tells Betty:*[7]
xʷukʷt {#tətᶿ / #šɛtᶿ / **k**^{w}ʊtᶿ} χʷoχʷṗ.
xʷukʷt {#tə=ətᶿ / #šə=ətᶿ / **k**^{w}=ətᶿ}=x̣ʷux̣ʷṗ
not.exist {CDE.DET=1SG.POSS / PDE.DET=1SG.POSS / **DET**=1SG.POSS}=awl
'I don't have an awl.' [ENTITIES ASSERTED NOT TO EXIST]

[7] It is possible to use direct evidence determiners in a negated proposition, so long as the speaker has PDE or CDE for the referent. This is illustrated for *šə* in (i).

(i) *Context: You know I was considering a specific boat that our mutual friend was selling. When I get home from seeing it, I tell you:*
xʷaʔtᶿəm yəqtan {**šɛ** / *k^{w}} nuxʷɛł.
xʷaʔ=tᶿəm yəq-t=an {**šə** / *k^{w}}=nəxʷił
NEG=1SG.SBJ+FUT buy-CTR=1SG.SBJV {**PDE.DET** / DET}=canoe
'I'm not going to buy the boat.'

Cases where *kʷ* is used when the speaker has direct evidence often involve generalizations over groups where the speaker is not referring to any specific member (23).

(23) *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 {#tə / **kʷ**} t̓ᶿagateqʷoǰɛtən.
ʔətᶿ=χaƛ̓	tᶿ=yəq-ʔəm	ʔə={#tə / **kʷ**}=t̓ᶿagatiqʷuǰatən
1SG.POSS=desire	1SG.POSS=buy-ACT.INTR	OBL={CDE.DET / **DET**}=ring

'I want to buy one of these rings.'

It is important to note that the choice between *kʷ* and the other determiners is not based on how certain the speaker is that the referent exists, but on their access to direct evidence. For instance, if a speaker is talking of her great-grandmother whom she never met, she can use *kʷ*, but neither of the direct evidence feminine determiners, even though she knows for sure that her great-grandmother existed (24a). If she has met her, *ɬ* is used (24b).[8]

(24) a. xʷač k̓ʷʊnʊxʷanoɬ
xʷaʔ=č k̓ʷən-əxʷ-an-ʔuɬ
NEG=1SG.SBJ see-NCTR=1SG.SBJV-PST
{#ɬətᶿ / #ɬətᶿ / **kʷ**ʊtᶿ /
{#ɬə=ətᶿ / #ɬ=ətᶿ / **kʷ**=ətᶿ /
{F.SG.CDE.DET=1SG.POSS / F.SG.PDE.DET=1SG.POSS / **DET**=1SG.POSS /
#šɛtᶿ} čɛčɛmɛqʷoɬ.
#šə=ətᶿ}=čačamiqʷ-ʔuɬ
PDE.DET=1SG.POSS}=great.grandmother-PST
'I never saw my late great-grandmother.'

b. k̓ʷʊnʊxʷoɬč **ɬ**ətᶿ čɛčɛmɛqʷoɬ.
k̓ʷən-əxʷ-uɬ=č **ɬ**=ətᶿ=čačamiqʷ-ʔuɬ
see-NCTR-PST=1SG.SBJ **F.SG.PDE.DET**=1SG.POSS=great.grandmother-PST
'I saw my late great-grandmother.'

Similarly, when speaking of a (trustworthy) friend's family whom I have not met, I can use the non-evidential determiner *kʷ*, but not the PDE determiner *šə*, even though I have reliable evidence of their existence from my friend's prior reports (25).

(25) *Context: I'm telling you that Daniel has gone home for the holidays to see his family. I've never met his family.*

kʷa	θo	Daniel	gʊǰɛs.	θo	k̓ʷa	k̓ʷʊtəs	{#šɛ / **kʷ**} ʔayištəns.
kʷa	θu	Daniel	gəǰa-s	θu=k̓ʷa		k̓ʷə-t-as	{#šə / **kʷ**}=ʔayištən-s
CLD.DIST	go	Daniel	land-3POSS	go=RPT		see-CTR-3ERG	{PDE.DET / **DET**}=cousin-3POSS

'Daniel has gone home to his country. He's gone to see his cousins.'

[8] The vowel between the determiner and the possessive proclitic in *ɬətᶿ* in (24b) is not from the determiner (otherwise the determiner would be *ɬə*, which encodes CDE). It seems likely that the vowel is contributed by the possessive proclitic; see footnote 6.

5. Discussion

Based on the data above, we propose a re-analysis of the ʔayʔaǰuθəm determiner system that organizes the paradigm primarily around evidentiality. The main distinction divides the direct evidence determiners from the evidence-neutral determiner. Direct evidence determiners are further divided by the timing of the speaker's access of direct evidence for the referent, creating a distinction between previous direct evidence and current direct evidence. Finally, there is a gender and number split among the direct evidence determiners. Hence, the determiner system of ʔayʔaǰuθəm can be organized as in Table 3.

Table 3: New analysis of ʔayʔaǰuθəm determiners

	Direct Evidence		**Evidence-Neutral**
	Current	**Previous**	
Gender/Number-Neutral	*tə*	*šə*	*kʷ*
Feminine SG	*łə*	*ɬ*	—

Formally, we propose a Speasian analysis of evidentiality (Speas 2010; Kalsang et al. 2013) in which ʔayʔaǰuθəm determiners encode relationships between two situations: an **information situation** (IS / s_I) and a **discourse situation** (DS / s_D).[9] The former is the minimal, contextually salient situation in which the speaker accesses evidence for the referent's existence, while the latter refers to the minimal situation in which the speaker utters *p*.

To derive the direct evidence reading associated with *tə*, *šə*, *łə*, and *ɬ*, the referent (*x*) must be included in the IS ($x \subset s_I$). This means that the referent is present in the same situation as the speaker at the point where the speaker has or had evidence of its existence.[10] The differences between CDE and PDE result from different configurations between the IS and the DS. The CDE determiners *tə* and *łə* are used when the DS is included in the IS ($s_D \subset s_I$), meaning that the speaker has evidence for the existence of the referent at the time of utterance. The PDE determiners *šə* and *ɬ*, in contrast, are used when the DS is excluded from the IS ($s_D \not\subset s_I$); the speaker does not have evidence for the existence of the referent *x* at the time of utterance.

For the CDE determiners, we thus have the relations in (26a): the referent is included in the IS, meaning that the speaker has direct evidence for the referent, and the DS is included in the IS, meaning that the speaker has this evidence at the time of speaking. For the PDE determiners, we have (26b): the IS includes the referent, meaning that the speaker has direct evidence for the referent's existence, but the DS is not included in the IS, meaning that the speaker does not have this evidence at the time of speaking.[11]

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[9] We assume that situations are parts of worlds with particular temporal-spatial locations. Speas's analysis is for evidentiality at the propositional level and involves relations between three situations.

[10] Indirect evidence would be encoded ($x \not\subset s_I$) if the referent were not included in the IS (see, e.g., Speas 2010). This is the case for example if the speaker perceives some clues to the referent's existence, or hears a report of their existence, in the IS. However, we do not argue for any determiners in ʔayʔaǰuθəm which specifically require indirect evidence.

[11] A reviewer asks whether this definition of PDE successfully excludes the PDE determiner *šə* in cases of future reference, as in (20), where the shirt does not yet exist in the DS, and *šə* is infelicitous. We assume that in these cases there is no IS, because at the UT, the speaker has not yet acquired evidence for the referent's existence.

(26) a. $[\![\text{CDE}]\!]^{s_D}(x)(s_I) = 1$ iff $[(x \subset s_I) \wedge (s_D \subset s_I)]$
b. $[\![\text{PDE}]\!]^{s_D}(x)(s_I) = 1$ iff $[(x \subset s_I) \wedge (s_D \not\subset s_I)]$

To take a concrete example, in (27) (repeated from (7)) the bear (the referent) is part of the IS, the salient situation in which the speaker has evidence of the bear's existence (the speaker seeing the bear). The DS is contained in the IS, since the speaker utters (27) while seeing the bear. Therefore, the speaker has CDE. The relations between situations are shown in Figure 1.

(27) *Context: You look out the window and there's a bear in your yard.*
nɛ {**tə** / #šɛ / #kʷ} mɛχał.
niʔ {**tə** / #šə / #kʷ}=miχał
be.there {**CDE.DET** / PDE.DET / DET}=black.bear
'There's a bear.' [CURRENT DIRECT EVIDENCE]

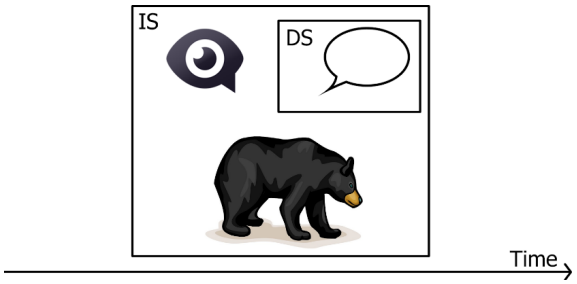

Figure 1: Relations between situations for (27)

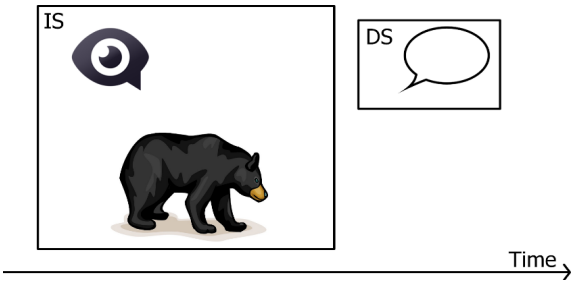

Figure 2: Relations between situations for (28)

For PDE, consider (28), repeated from (9). Here, the bear is within the IS, which again is a situation where the speaker sees the bear. In this case, however, the DS is not included in the IS. The speaker's utterance does not occur in the situation where the speaker sees the bear, but later, after the bear is no longer present. Figure 2 shows the situational relations for this case.

(28) *Context: I'm at your house, telling you about the bear encounter I had this morning.*
nɛʔoł {#tə / **šɛ** / ʔkʷ} mɛχał ʔə šɛtᶿ ʔasq̇ič
niʔ-uł {#tə / **šə** / ʔkʷ}=miχał ʔə=šə=ətᶿ=ʔasq̇iyč
be.there-PST {CDE.DET / **PDE.DET** / DET}=black.bear OBL=PDE.DET=1SG.POSS=outside
skʷiǰoł.
skʷiǰuł
morning
'There was a bear in my yard this morning.' [PREVIOUS DIRECT EVIDENCE]

To capture the relations between situations encoded by the different determiners, we propose the lexical entries in (29) and (30). Each of the evidential determiners in (29a–d) take the IS as an argument; we assume this argument is syntactically provided as a silent situation pronoun (following, e.g., Elbourne 2013, Renans 2016). The formula in (29a) presupposes the existence of a unique entity that satisfies the description of the noun (*P*) and for which the speaker has CDE.[12] The output of the function is the unique individual with these qualities. The formula in

[12] While we use the terms 'presuppose' and 'unique', ʔayʔaǰuθəm determiners, like those of St'át'imcets (Matthewson 1998) and Sḵwx̱wú7mesh (Gillon 2006/2013), do not require a unique referent in the common ground (see (35) and (36) below, also Huijsmans et al. 2018). The referent is unique only in the sense of having

(29b) is minimally different, requiring that the speaker has PDE for the referent. The entries in (29c) and (29d) are parallel to (29a–b), but place additional restrictions such that the referent must be feminine and singular.

(29) a. $[\![t\text{ə}]\!]^{s_D} = \lambda P_{\langle e,st\rangle}\, \lambda s_I : \exists!x\, [P(x)(s_I) \wedge \text{CDE}(x)(s_I)]\, .\, \iota y\, [P(y)(s_I) \wedge \text{CDE}(y)(s_I)]$

b. $[\![\check{s}\text{ə}]\!]^{s_D} = \lambda P_{\langle e,st\rangle}\, \lambda s_I : \exists!x\, [P(x)(s_I) \wedge \text{PDE}(x)(s_I)]\, .\, \iota y\, [P(y)(s_I) \wedge \text{PDE}(y)(s_I)]$

c. $[\![ɬ\text{ə}]\!]^{s_D} = \lambda P_{\langle e,st\rangle}\, \lambda s_I : \exists!x\, [P(x)(s_I) \wedge \text{CDE}(x)(s_I) \wedge \text{SING}(x) \wedge \text{FEM}(x)]\, .$
$\iota y\, [P(y)(s_I) \wedge \text{CDE}(y)(s_I) \wedge \text{SING}(y) \wedge \text{FEM}(y)]$

d. $[\![ɬ]\!]^{s_D} = \lambda P_{\langle e,st\rangle}\, \lambda s_I : \exists!x\, [P(x)(s_I) \wedge \text{PDE}(x)(s_I) \wedge \text{SING}(x) \wedge \text{FEM}(x)]\, .$
$\iota y\, [P(y)(s_I) \wedge \text{PDE}(y)(s_I) \wedge \text{SING}(y) \wedge \text{FEM}(y)]$

where $[\![\text{SING}]\!](x) = 1$ iff $\#x = 1$ and $[\![\text{FEM}]\!](x) = 1$ iff x is female

The entry in (30) is different from the rest, simply introducing existential quantification over individuals, but not requiring any type of evidence for the individual's existence. This allows the k^w determiner to be used in cases where the speaker has only indirect evidence, as in (18) and (19). Furthermore, since the existential quantification is part of the at-issue contribution, it can be embedded under negation, future marking, or question operators, deriving readings where the referent is not asserted to exist, as in (20) and (21), or asserted not to exist (22). Note that the situation argument in (30) is not an information situation, but rather the 'topic situation' — the situation for which the whole proposition is true or false (e.g., Kratzer 2019).

(30) $[\![k^w]\!]^{s_D} = \lambda P_{\langle e,st\rangle}\, \lambda Q_{\langle e,st\rangle}\ \lambda s\, .\, \exists x\, [P(x)(s) = 1 \wedge Q(x)(s) = 1]$

The ʔayʔaǰuθəm determiners in (29) and (30) vary in terms of their 'presuppositional' loads (see footnote 12 for explanation of the scare quotes). While k^w does not carry any presuppositions (it is neutral with regard to evidentiality, gender, and number), *tə*, *šə*, *ɬə*, and *ɬ* presuppose direct evidence, and *ɬə* and *ɬ* further require the referent to be singular and female. From this, we might expect the less specified determiners to have a wider distribution, being felicitous also where more highly specified determiners can be used. This is not the case, however. The direct evidence determiners are preferred over k^w whenever the speaker has direct evidence for the existence of the referent, as we saw in (7), (9), and (10). Similarly, the feminine determiners are preferred over the gender-neutral determiners where the referent is singular and female, as for instance in (8) and (10).

To account for this distribution, we propose that more highly specified determiners are chosen over less specified determiners, wherever they can be appropriately used. This follows from general conversational principles privileging more informative items in a paradigm over less informative ones (e.g., Grice 1975, Heim 1991, Bochnak 2016). The result is that the speaker will choose a direct evidence determiner over the evidence-neutral determiner whenever direct evidence is accessed, and a feminine singular determiner over a gender-neutral determiner when the referent is singular and female (or diminutive).

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been singled out by the speaker in the salient IS. More generally, while we use the term 'presuppose' for this not-at-issue contribution, the addressee need not know in advance that the speaker has direct evidence for the referent. The *tə* determiner is frequently used at the beginning of narratives, for instance. See Matthewson (2008) on the absence of restrictions on the common ground in Salish. Thanks to Vera Hohaus (p.c.) for asking about this point.

As we saw above, however, it is not always the case that only one determiner is acceptable in any discourse context. Sometimes a CDE determiner is preferred, but a non-evidential determiner is also marginally acceptable (e.g., (13)). Similarly, a gender-neutral determiner is often marginally acceptable with female referents, as in (10). This supports the proposal that the default determiner choices outlined in the paragraphs above are pragmatic effects (because they can be overridden), rather than semantically hardwired. Thus, these facts speak against an alternative analysis in which *kʷ* semantically encodes the absence of direct evidence (rather than being evidence-neutral, as we propose), and in which the determiners we analyze as gender-neutral are instead semantically non-feminine.

6. Predictions

In this section we outline several further predictions of our analysis. The first two concern the direct evidence requirement of the evidential determiners and the potential for evidential mismatches within a sentence, while the third concerns the maximality requirement. We show that in each case the predictions arising from the proposed analysis are upheld.

Firstly, we predict that it should be possible to have a mismatch between the speaker's source of evidence for the proposition and for a referent. This is borne out. In (31), there is reportative (i.e., indirect) evidence for the proposition, but the speaker has PDE for the existence of Gail's younger sister.

(31) hɛ **k̓ʷa** səm **ɬ** qɛχas Gail ʔə θo ʔəkʷ xʷuǰumayɛ.
hiɬ=**kʷa**=səm **ɬ**=qiẋ-as Gail ʔə=θu ʔə=kʷ=xʷuǰumaya
COP=**RPT**=FUT **F.SG.PDE.DET**=younger.sibling-3POSS Gail CLF=go OBL=DET=store
'Gail's younger sister will be the one to go to the store (I heard).'

The second prediction is that in order to use a PDE determiner, the referent needs to be included in the IS (which precedes the speech time), but the speaker does not necessarily have to have known the identity of the referent at that time — or even which predicates accurately describe the referent. So long as the speaker is able to claim at speech time that the referent was accurately described by the nominal predicate in the IS, the felicity and truth conditions in (29b,d) are satisfied. This is illustrated in (32) to (34), where the speaker had direct evidence of the referent without simultaneously having direct evidence that the referent satisfies the nominal predicate. In (32) the speaker learns the identity of the referent only after having PDE for the referent, in (33) the speaker has a mistaken perception of the referent at the time of having PDE but knows the referent's true identity by the speech time, and in (34), the speaker has PDE for the referent in another role, but not in the role described by the predicate. These examples show that direct evidence is required for the entity itself, rather than for the label given to the entity.[13]

(32) *Context: At a gathering at the gym I talk to a young man I don't know. After a while, he leaves. Once he's gone, you come over and tell me it was Freddie's great-grandson. When I go home to the lodge, I tell Daniel:*

[13] We would like to thank an anonymous reviewer for Sinn und Bedeutung 25 for raising this point.

qʷɛqʷaysxʷołč	{**šɛ** / *kʷ} čɛčɛmɛqʷs	Freddie
qʷi~qʷay-sxʷ-uł=č	{**šə** / *kʷ}=čačamiqʷ-s	Freddie
PROG-speak-CAUS-PST-1SG.SBJ	{**PDE.DET** / DET}=great.grandson-3POSS	Freddie

ʔəkʷ gym.
ʔə=kʷ=gym
OBL=DET=gym

'I was talking to Freddie's great-grandson at the gym.' [LATE LEARNING]

(33) *Context: When I'm at the grocery store with Gloria, I run into Daniel with a girl and they're holding hands. They have to be somewhere, so they don't chat with us long. I suspect the girl is Daniel's girlfriend and once they're gone, I ask Gloria if this is the case. Gloria informs me that the girl is actually Daniel's wife! I go home and ask my partner, 'Did you know Daniel was married?...'*

k̓ʷʊnʊxʷołč	{**ɬ** / *kʷ} sałtus	nɛʔ	šɛ xʷuǰumayɛ.
k̓ʷən-əxʷ-uł=č	{**ɬ** / *kʷ}=sałtu-s	niʔ	šə=xʷuǰumaya.
see-NCTR-PST=1SG.SBJ	{**F.SG.PDE.DET** / DET}=wife-3POSS	be.there	PDE.DET=store

'I saw his wife at the store.' [MISTAKEN IDENTITY]

(34) *Context: I've met the teacher for my child's class a few times. Recently, someone told me that he is also the head of the local fire department, but I've never seen him in that role. One day, you ask me: Do you know anyone in the fire department?*

ʔɛ,	t̓o:gútč	{**šɛ** / *kʷ} fire chief	hɛł	tičɛs
ʔiʔ	t̓ug-út=č	{**šɛ** / *kʷ}=fire chief	hił	tiča-s
yes	recognize-CTR\STAT=1SG.SBJ	{**PDE.DET** / DET}=fire chief	COP	teacher-3POSS

tᶿ maʔna.
tᶿ=maʔna
1SG.POSS=child

'Yes, I know the fire chief. He's my child's teacher.' [DUAL IDENTITY]

Interestingly, this differs from what was found by Koev (2011, 2017) in his investigation of similar 'delayed learning' cases in the propositional domain. Koev finds for Bulgarian that in cases where the speaker had direct evidence of the event, but only found out what was really happening later, indirect evidentials are used (a crucial example involves someone seeing Nixon erasing tapes, but only learning later that he was covering up the Watergate scandal). This effect is reflected in Koev's analysis which involves a separate 'learning event' in which the speaker learns the prejacent proposition; when this learning event is spatio-temporally removed from the event described by the proposition, the evidence is indirect. We do not predict parallel cases in the nominal domain to involve indirect evidence, since our analysis does not include a separate learning event for the content of the DP; the evidential component of the determiners only encodes whether the referent is present in the IS.

Lastly, our analysis predicts that the evidential determiners are maximal only relative to the IS, not the topic situation (i.e., the situation of which the proposition as a whole is true). There is nothing forcing the IS for the evidential determiners to be maximal relative to the topic situation, so we predict the maximality encoded by these determiners to be quite weak. This is borne out. In (35), the speaker is able to use the *tə* determiner, even though she is describing just two of the 12 visible eggs. Likewise, in (36), the *tə* determiner is used even though *tə*

qaqsɛm ‘the toys’ refers to only a subset of the toys that are visible in the context.

(35) *Context: I open the carton of eggs from the fridge and am annoyed to see two of them are broken. I check the rest of them, and they are intact. Showing you the carton, I tell you:*

k̓ʷʊt gi!	yɛp̓ɛ́t	**tə** saʔa	χʷaχʷɪt.
k̓ʷə-t=gi	yap̓-ít	**tə**=saʔa	x̣ʷax̣ʷit
look-CTR=DPRT	break-STAT	**CDE.DET**=two	egg

‘Look! Two of the eggs are broken.’

(36) *Context: My niece comes over to play. She asks where the toys are. Most are in a box, and a few are on the shelf. Pointing to the toys in the room, I tell her:*

nɛʔ	nəpɛ́t	tə k̓ʷaxʷa	**tə** qaqsɛm	ʔi	nɛʔ
niʔ	nəp-ít	tə=k̓ʷaxʷa	**tə**=qaqsim	ʔiy	niʔ
be.there	put.in-STAT	CDE.DET=box	**CDE.DET**=toys	CONJ	be.there

t̓ot̓ɬɛ́t	ʔə taʔa	tə sqʷaq.
t̓u<t̓>ɬ-ít	ʔə=taʔa	tə=sqʷaq
put.on<PL>-STAT	OBL=DEM	CDE.DET=some/rest

‘The toys are in the box and the rest are there.’

There is a context in which the maximality contribution of the evidential determiners can be detected, however. Where the speaker has direct evidence for a group of referents, but wants to refer to a nonspecific member of that group, the evidential determiners cannot be used, as in (23) above. In this case, unlike in (35) and (36), the IS cannot be narrowed to include only a specific ring or subset of rings. Instead, the speaker obligatorily switches to the non-evidential determiner, even though the rings are visible.

7. Summary and implications

We have argued that ʔayʔaǰuθəm determiners encode evidentiality. We proposed that the determiners encode CDE and PDE through relations between situations. When the referent is present in the same situation as the speaker making the utterance, a CDE determiner is used. When the referent was present in a previous situation the speaker experienced, but is not present in the situation in which the speaker makes the utterance, a PDE determiner is used. If the speaker has not been in the same situation as the referent, the neutral determiner is used.

The question naturally arises why our study provides evidence particularly for a situation-based approach to evidentials in ʔayʔaǰuθəm. We prefer a Speasian situation-based analysis of evidentiality over an epistemic modal approach for the determiners for several reasons. First, epistemic modality approaches have a particular affinity for indirect evidentials (e.g., von Fintel & Gillies 2010), but the ʔayʔaǰuθəm evidential determiners do not encode indirect evidence. Second, a modal approach to determiners would complicate the analysis of the nominal domain in a manner that seems unwarranted.

Though the situation-based approach adopted here was originally proposed for proposition-level evidentiality (Speas 2010, Kalsang et al. 2013), it is readily adapted to evidentiality in the nominal domain; situations have temporal and spatial coordinates, so situational relations can capture the speaker’s deictic relation to the referent. Our analysis resembles other approaches

that make use of spatio-temporal coordinates, such as Faller (2004) and Koev (2017), but these approaches require additional components we have not found to be necessary for these nominal-domain evidentials (e.g. perceptual traces, learning events). The evidential relations encoded by the determiners also cannot be purely temporal, as in Lee (2013), Koev (2011), Smirnova (2013), because individuals (unlike events) cannot be temporally located before or after a learning event or evidence acquisition time.

Our proposal that ʔayʔaǰuθəm determiners encode evidentiality adds to a small but growing body of support for evidentiality in the nominal domain in other languages (Hanks 2009; Gutiérrez & Matthewson 2012; Gutiérrez 2015; Rose 2017; Gambarage & Matthewson 2019). The phenomenon in general provides evidence for the existence of semantic atoms or 'building blocks' (von Fintel & Matthewson 2008). Following Hale (1986), these smaller atoms are detectable across different parts of the grammar (i.e., are not tied to particular syntactic projections). Given that relations between situations involve both temporal and spatial information, and that both events and entities can be parts of situations, it is unsurprising that similar relations can be found in different grammatical domains.

Before closing, we will briefly consider the implications of our analysis for a cross-linguistically valid approach to evidentials, in the context of two recent diverging analyses of the relationship between evidentiality and spatio-temporal relations. Bowler (2018) argues on the basis of data from Tatar against 'trace' theories of evidentials (those relying on (non-)overlap between situations) as well as against accounts that derive evidentiality from temporal relations involving a learning event (e.g., Koev 2011). Tatar makes evidential distinctions in the future as well as in the past, and Bowler argues that these future evidentials cannot be differentiated by a temporal or situation-based approach, since the described future event always fails to overlap with the speaker's spatio-temporal location or with the time of acquiring the evidence. More generally, Bowler argues that the Tatar portmanteau tense/aspect/evidentiality morphemes semantically only encode temporal information; the evidential contribution is only implicated. On the other hand, Pancheva and Zubizarreta (2019) advance an opposite idea for Paraguayan Guaraní: evidentiality is grammatically encoded, while the temporal interpretation is derived from the interaction of the person and deictic features of these evidentials.

Unlike what has been claimed for these languages, the ʔayʔaǰuθəm determiners cannot be reduced to tense or aspect in either direction. They also make no evidential distinctions in the future, as all entities which do not yet exist at UT take the evidence-neutral determiner k^w. Nevertheless, while the Speasian approach to evidentiality adopted here encodes evidential relations directly, it does not treat evidence as a primitive but as a relation between situations. These types of relations thus bear resemblance to both the temporal relations proposed for the morphemes that convey evidentiality in Tatar and the deictic relations proposed for the evidential morphemes in Paraguayan Guarani. This suggests that evidential relations as basic building blocks may be a unifying component of diverse evidentials cross-linguistically.

In closing, we make note of an interesting way in which the evidential determiners differ from propositional-level evidentials.[14] While clause-level evidentials in ʔayʔaǰuθəm undergo interrogative flip in questions (see Huijsmans to appear for examples), the evidential

[14] Thanks to Dmitry Gerasimov and Margit Bowler for asking us about this issue.

determiners do not, as shown in (38). Even though the addressee, Daniel, has had PDE for the existence of his brother, the speaker must use the non-evidential determiner *kʷ*.

(38) *Context: I ask Daniel if he's going to see his brother when he goes to Germany. I've never met his brother.*
ḵʷʊnʊxʷačxʷʊm {**kʷ**ʊθ / #šɛθ} nuɬ?
ḵʷən-əxʷ=a=čxʷəm {**kʷ**=əθ / #šə=əθ}=nuɬ
see-NCTR=Q=2SG.SBJ+FUT {**DET**=2SG.POSS / PDE.DET=2SG.POSS}=older.sibling
'Are you going to see your older brother?'

Future research may address whether this is a general difference between propositional and nominal evidentials, and if so, what the difference derives from.

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