The Count-Mass Distinction in ʔayʔaǰuθəm[*]

D. K. E. Reisinger
University of British Columbia

Abstract: This paper explores the status of the count-mass distinction in ʔayʔaǰuθəm (a.k.a. Comox-Sliammon; ISO 639-3: coo). Employing a series of common diagnostics, such as number marking, countability, and quantifiers (cf. Wiltschko 2005, 2008, 2012; Davis 2014), I argue that the language distinguishes between count and mass nouns in its grammar. Strikingly, this conclusion does not emerge from the usual diagnostics, but rather hinges on the use of a hitherto unused tool: the Wh quantifier. Thus, this study not only contributes to the discussion on whether the Salish languages encode the count-mass distinction, but it also expands our toolkit for future surveys.

Keywords: ʔayʔaǰuθəm (Comox-Sliammon), count-mass, countability, quantifiers, plural marking

1   Introduction

This paper explores the status of the count-mass distinction in ʔayʔaǰuθəm (a.k.a. Comox-Sliammon; ISO 639-3: coo), a Central Salish language traditionally spoken by four communities along the northern Strait of Georgia in British Columbia, Canada. According to the most recent survey by the FPCC (2022), the language is currently spoken by 78 fluent speakers.

While count and mass nouns behave very differently in languages like English, as shown in (1) and (2), profoundly little is known about the status of this distinction in Salish.[1]

(1)   *Count nouns:*

    a.   There's a **rock** in my shoe.
    b.   There are **rocks** in my shoe.
    c.   There are **two rocks** in my shoe.

(2)   *Mass nouns:*

    a.   There's **sand** in my shoe.
    b. * There are **sands** in my shoe.
    c. * There are **two sands** in my shoe.

To my knowledge, only St'át'imcets and Halkomelem have been systematically probed in this regard and, ironically, the big picture emerging from these investigations is less than clear. On the

---

[1] Ungrammatical examples are marked with an asterisk (*), infelicitous examples with a hashtag (#). In the ʔayʔaǰuθəm examples, the first line is given in the orthography, the second line is a phonemic representation showing morpheme breaks, the third line provides a gloss, and the fourth line gives the translation. The abbreviations used in this paper follow the Leipzig Glossing Rules, with the following additions: CLDEM 'clausal demonstrative', CTR 'control transitive', DPRT 'discourse particle', HAB 'habitual', INT 'intensifier', LV 'linking vowel', NTR 'non-control transitive', RPT 'reportative'. Affixes are marked by a hyphen '-', clitics by an equal sign '=', and fused morphemes that cannot be segmented by a '+'.

---

one hand, Davis and Matthewson (1999) as well as Wiltschko (2005, 2008, 2012) argue against the existence of a count-mass distinction in the grammars of St'át'imcets and Halkomelem. Davis (2014), on the other hand, comes to the opposite conclusion. After analyzing novel data from St'át'imcets, and re-evaluating Wiltschko's Halkomelem data, he even goes so far as to propose that:

(3)   All Salish languages grammatically encode the count-mass distinction.   (Davis 2014:179)

Motivated by this bold hypothesis, this paper provides a first systematic investigation of the status of count and mass nouns in ʔayʔaǰuθəm. Drawing from original fieldwork data, I show that ʔayʔaǰuθəm encodes a count-mass distinction in its grammar. Strikingly, however, it is not the established diagnostics that lead to this conclusion, but rather the use of a novel tool: the Wh quantifier *kʷɛn* /kʷin/ ('how many'). The current study thus not only adds another puzzle piece to the discussion on whether Salish languages distinguish count and mass nouns, but it also expands our toolkit for future explorations.

The remainder of this paper is structured as follows. In Section 2, I will briefly provide some theoretical background. Once this has been done, Section 3 will present the results of three key diagnostics for ʔayʔaǰuθəm. Section 4 will outline some avenues for future research, and Section 5 will conclude.

2   Background

Before we take a closer look at the situation in ʔayʔaǰuθəm, it seems worthwhile to briefly review the literature on count and mass nouns.

As Frawley (1992:84) notes, what we call the *count-mass distinction* is merely a linguistic reflex of an overarching conceptual distinction, namely the difference between bounded and unbounded entities. On a conceptual level, an entity counts as *bounded* if it is clearly demarcated — that is, if it comes with an obvious spatial boundary (1992:81). Wiltschko (2005, 2012) uses the term *individuals* to refer to such entities. In contrast, *unbounded* entities are said to lack an obvious limit and instead occupy a less well-defined region in space. Wiltschko (2005, 2012) labels such entities as *substances*.

Figure 1 illustrates this distinction by means of a concrete example. The sandpiper in the picture exemplifies a bounded entity (i.e., an individual) as we can clearly identify its limits. In contrast, it is much more difficult to determine the limits of the sand and the water surrounding the bird. These entities lack a clear demarcation and, consequently, we tend to think of them as unbounded entities (i.e., substances).

Figure 1: An illustration of bounded (sandpiper) and unbounded (sand, water) entities.

Wiltschko (2012:147) argues that this conceptual distinction is universal. More specifically, she proposes "that all languages have nominals that denote substance and nominals that denote individuals". However, she adds, languages differ in whether they also reflect this distinction in their grammar. In other words, some languages grammatically distinguish count and mass nouns while others treat nouns as a single uniform class. Table 1 schematizes these different distinctions.

Table 1: A typology for the count-mass distinction. Arrows indicate a contrast.

CONCEPTUAL LEVEL	LANGUAGE LEVEL	
	grammar with count-mass distinction	grammar without count-mass distinction
bounded entities (individuals) ↕ unbounded entities (substances)	count nouns ↕ mass nouns	nouns

English belongs to the group of languages that grammatically distinguish count and mass nouns. The following paragraphs will show how this distinction manifests itself in the grammar.

First, only count nouns can carry number marking in English, while mass nouns typically can not. Examples (4) and (5) illustrate this behaviour for the count noun *boy* and the mass noun *snow*.

(4) a. Hazel likes a boy. b. Hazel likes snow.

(5) a. Hazel likes boy**s**. b. * Hazel likes snow**s**.

Secondly, count nouns can be directly introduced by numerals, like *one*, *two*, *three*, etc. As shown in (6) and (7), this is usually not the case for mass nouns, like *blood*.

(6) a. Saoirse donated a coat. b. Saoirse donated blood.

(7) a. Saoirse donated **two coats**. b. * Saoirse donated **two blood(s)**.

Third, count and mass nouns can only be selected by certain determiners and quantifiers. The following examples show that quantifiers like *each* (8) and *many* (9) only combine with count nouns, whereas quantifiers like *much* (10) and *little* (11) only combine with mass nouns.

(8) a. Werner likes **each cat**. b. * This plant needs **each water**.

(9) a. Werner likes **many cats**. b. * This plant needs **many water(s)**.

(10) a. * Werner likes **much cat(s)**. b. This plant needs **much water**.

(11) a. # Werner likes **little cat(s)**.[2] b. This plant needs **little water**.

---

[2] While the sentence in (11a) is technically grammatical, it does not convey the intended meaning (i.e., *little* 'a small amount' as opposed to *little* 'small in size'). Consequently, I mark it as infelicitous, and not as ungrammatical.

Based on these observations, we can see that the English grammar explicitly tells us whether a noun refers to an individual or to a substance — or to put it another way, the language has a grammatical count-mass distinction. While this distinction is fairly robust, two processes may occasionally obscure the line between count and mass nouns: *apportionment* and *grinding* (cf. Deal 2013; Davis 2014).

Apportionment describes a phenomenon in which mass nouns have been coerced to act like count nouns, usually because the substance has been divided into contextually appropriate portions. Water, for instance, is typically conceptualized as an unbounded mass, but in a restaurant context, where it tends to get portioned into glasses or bottles, it behaves like a count noun, as shown in (12).

(12) a. A pipe burst, and now we have **water** in the basement.   [MASS]

      b. Waiter, two **waters**, please.   [COUNT]

Grinding does the exact opposite: it turns something that's usually thought of as an individual into a substance. Raccoons, for example, are usually encountered as clearly delimitated units and, hence, can easily be counted. However, a car crash may turn raccoons into an unbounded mass, as illustrated in (13).

(13) a. Look, there are two **raccoons** in the front yard!   [COUNT]

      b. We got into a car accident, and now there is **raccoon** all over the windshield.   [MASS]

While these two processes can add a bit of complexity to the system, the count-mass distinction remains a well-established fact in the grammar of English.

3   The count-mass distinction in ʔayʔaǰuθəm

With the theoretical background in place, we can now return to our initial question: does ʔayʔaǰuθəm have a grammatical count-mass distinction? In the following sections, I present the results of three key diagnostics that have been commonly used to determine whether a language distinguishes count and mass nouns in its grammar. In particular, I will look at number marking (Section 3.1), countability (Section 3.2), and quantifiers (Section 3.3).

3.1   Diagnostic #1: number marking

The first diagnostic focuses on number marking. As mentioned earlier, it is generally assumed that only count nouns can be pluralized, as shown in (14), while mass nouns cannot combine with a plural marker, as shown in (15).

(14) a. book, cat, guitar, wife   [COUNT]

      b. book**s**, cat**s**, guitar**s**, wive**s**

(15) a. blood, grease, sand, snow   [MASS]

      b. *blood**s**, *grease**s**, *sand**s**, *snow**s**

469

In Salish, this diagnostic has produced varied results. Wiltschko (2012:153) notes that in Halkomelem all nouns can be pluralized, regardless of whether they refer to an individual or to a substance, and consequently concludes that "pluralization is not sensitive to a mass/count distinction". Davis (2014:158ff.), on the other hand, argues that this diagnostic provides the most substantial evidence for establishing a grammatical count-mass distinction in St'át'imcets. This judgment is not only supported by the distribution of the plural determiner,[3] but also by the unavailability of plural reduplication on mass nouns.

In ʔayʔaǰuθəm, plural marking on nouns is usually realized via $C_1C_2\sim$ reduplication, and optional for non-human entities (Huijsmans & McCarthy 2024). Many count nouns in the language freely can be inflected this way, as illustrated by the forms in (16).

(16) *Plural reduplication with count nouns (cf. Huijsmans & McCarthy 2024):*

		SINGULAR	PLURAL
a.	'man'	*tumɪš*	*təm~tumɪš*
b.	'chief'	*hegus*	*haw~hegus*
c.	'cat'	*mɛmaw*	*məm~mɛmaw*
d.	'horse'	*tɛqɛw*	*təq~tɛqɛw*
e.	'book'	*puk*	*pək~puk*

In contrast, the data for mass nouns turn out to be more difficult to interpret. Mellesmoen (in prep.) finds that many ʔayʔaǰuθəm nouns that typically refer to substances can be pluralized via $C_1C_2\sim$ reduplication — but only if they have been apportioned (cf. Section 2). To complicate things further, she also finds that the acceptance of these forms varies widely across speakers, even if the context emphasizes an apportionment interpretation.

(17) *Plural reduplication with mass nouns (cf. Mellesmoen [in prep.]):*

		SINGULAR	PLURAL
a.	'water'	*qayɛ*	*qi~qayɛ*
b.	'land, dirt'	*giǰɛ*	*gəǰ~giǰɛ*
c.	'sugar'	*šukʷa*	*šəkʷ~šukʷa*
d.	'soup'	*lasup*	*ləs~lasup*
e.	'coffee'	*kapi*	*kəp~kɛpi*

Example (18) illustrates these phenomena for the noun *qayɛ* /qayaʔ/ 'water'. Both (18a) and (18b) suggest that pluralizing this form is okay as long as we apportion the water first, for instance, by placing it into pots, bottles, or buckets. However, if we conceptualize the water as a substance, for instance when talking about the water of a lake, the pluralized form is judged as infelicitous, as shown in (18c). Finally, (18d) highlights that some speakers don't like the pluralized form, even when the context suggests that the entity has been apportioned.

---

[3] Like most Salish languages, ʔayʔaǰuθəm lacks dedicated plural determiners (cf. Huijsmans et al. 2020; Reisinger et al. 2020), so this particular test is not applicable.

(18) a. *Context [volunteered]: There's lots of pots of water in the kitchen.*

    *qaχmot **qiqayɛ** θoʔna.*
qəx̌-mut	**qəy~qaya?**	θuʔna
a.lot.of-INT	**PL~water**	other.room

    'There's lots of water in the other room.'   (vf | JoF 2019-02-14)

b. ***qiqayɛ***
    qəy~qaya?
    PL~water
    'lots of water' (in buckets or bottles)   (vf | JeF 2019-02-24)

c. #***qiqayɛ***
    qəy~qaya?
    PL~water
    'water' (for a lake)   (vf | JeF 2019-02-24)

d. *Context: You are at the gas station and your friend asks you to pick up some bottles of water. You ask how many.*

    *#χanaθ ga čɛlas tə **qiqayɛ**.*
x̌an-a-θ=ga		čalas	tə=**qəy~qaya?**
give-LV-CTR+1SG.OBJ=DPRT		three	DET=**PL~water**

    Intended: 'Bring me three waters.'
    Consultant's comment: "No, you would say, *χanaθ ga čɛlas <u>lamayɛ</u> qayɛ* ['Give me three <u>bottles</u> of water']."   (sf | BW 2024-02-14)

    It might be tempting to conclude from the above that ʔayʔaǰuθəm has a count-mass distinction, as mass nouns seemingly fail to carry number marking unless they've been apportioned. However, the question arises how conclusive this diagnostic really is, particularly for ʔayʔaǰuθəm. After all, as Huijsmans and McCarthy (2024) show, a lot of count nouns fail to reduplicate as well. A selection of such forms is presented in (19).

(19) *No reduplication with count nouns (cf. Huijsmans & McCarthy 2024):*

		SINGULAR	PLURAL
a.	'father'	*man*	* *mən~man*
b.	'fish'	*ǰɛnxʷ*	* *ǰɪn~ǰɛnxʷ*
c.	'seal'	*ʔasxʷ*	* *ʔəs~ʔasxʷ*
d.	'heron'	*paƛ̓*	* *pəl~paƛ̓*
e.	'potato'	*qawθ*	* *qo~qawθ*

Considering this, it seems impossible to tell whether it is the count-mass distinction that stops typical mass nouns from reduplicating, or perhaps some completely unrelated factor.

3.2 Diagnostic #2: Countability

The second diagnostic targets the countability of entities. As noted in Section 2, only count nouns can be introduced by numerals, whereas mass nouns typically can not. In English, for instance, a numeral like *five* can only select countable entities like books, pretzels, skirts, etc. (20), but usually not mass entities such as butter, fat, flour, etc. (21).

(20)   a.   I bought books / pretzels / skirts.   [COUNT]

      b.   I bought **five** books / pretzels / skirts.

(21)   a.   I bought butter / fat / flour / water / wine.   [MASS]

      b.   #I bought **five** butter(s) / fat(s) / flour(s) / water(s) / wine(s).

For Salish, this diagnostic has been consistent in yielding inconsistent results. In Halkomelem, Wiltschko (2012) finds that numerals can sometimes — but not always — combine with nouns that denote mass entities. The data she presents suggest that this is particularly the case for substances that can be easily apportioned, like sand and wood. In contrast, nouns referring to entities that are less likely to allow apportionment, like snow and wind, typically cannot be selected by numerals.[4] Davis (2014) observes a similar pattern in St'át'imcets and shows that, while numerals can sometimes combine with mass nouns, judgments for this diagnostic strongly depend on the provided context and on speaker preferences. As the following paragraphs will show, the same is true for ʔayʔaǰuθəm.

To establish a baseline, let us first look at the interaction of numerals and count nouns. As illustrated by the examples in (22), these elements tend to combine without any issues in ʔayʔaǰuθəm.

(22)   a.   *Context: I tell Henry about a recent hiking trip and the birds that I saw there:*

      ƛ̓ʊnʊxʷołč **čɛlas** hoṁhoṁ.
      ƛ̓ʷən-nxʷ-uł=č   **čalas** huṁhuṁ
      see-NTR-PST=1SG.SBJ   **three** grouse
      'I saw three grouse.'   (sf | BW 2023-06-27)

      b.   *Context: Gloria and I are taking a class on Swedish crime novels. The prof gave us a long list of books that we are supposed to read. At some point, I ask Gloria how the reading is going. She says:*

      ʔimot, **čɛlas** pəkpuk hoǰuxʷən.
      ʔəy-mut   **čalas**   pək~puk   huǰ-əxʷ=an
      good-INT   **three**   PL~book   finish-NTR=1SG.ERG
      'Very good, I have finished three books so far.'   (sf | BW 2023-06-27)

---

[4] Unfortunately, Wiltschko (2012) does not include any contexts for her language data. For the former examples, however, the translation line refers to "pieces of" or "kinds of", which indicates that both the sand and the wood must have been apportioned.

c. *Context: I'm chatting with a friend about her dreams for the future. She tells me:*

mosayɛ čičuy kʷʊtᶿ χaƛ̓.
mos-aya   čəy~čuy   kʷ=ət̓ᶿ=x̌aƛ̓
four-people   PL~child   DET=1SG.POSS=want
'I want to have four children.'   (vf | BW 2023-06-27)

In contrast, the results for this diagnostic appear much less tidy for nouns that typically denote substances. The following examples, which Gloria Mellesmoen kindly shared with me, show that judgments tend to vary considerably regarding the countability of mass nouns. In some contexts, as exemplified by (23), the speaker firmly rejects utterances in which a numeral directly selects an (apportioned) mass noun, such as *qiqayɛ* /qəyqayaʔ/ ('water(s)') or *šəkʷšukʷa* /šəkʷšukʷa/ ('sugar(s)'). To repair these utterances, she inserts a countable noun specifying the unit of apportionment, such as *lamayɛ* /lamayu/ ('bottle(s)') or *kʷaʔsta* /kʷaʔsta/ ('cup(s)'). Yet, in other contexts, directly combining numerals and mass nouns seems to be much less of an issue, as shown in (24).

(23) a. *Context: You are at the gas station and your friend asks you to pick up some bottles of water. You ask how many.*

#χanaθ ga **čɛlas** tə qiqayɛ.
x̌an-a-θ=ga   **čalas**   tə=qəy~qayaʔ
give-LV-CTR+1SG.OBJ=DPRT   **three**   DET=PL~water
Intended: 'Bring me three waters.'
Consultant's comment: "No, you would say, *χanaθ ga čɛlas <u>lamayɛ</u> qayɛ* ['Give me three <u>bottles</u> of water']."   (sf | BW 2024-02-14)

b. *Context: You are at home baking a cake, and the cake requires two cups of sugar. You tell your friend:*

#χanaθ ga **saʔa** šəkʷšukʷa.
x̌an-a-θ=ga   **saʔa**   šəkʷ~šukʷa
give-LV-CTR+1SG.OBJ=DPRT   **two**   PL~sugar
Intended: 'Give me two sugars.'
Consultant's comment: "You've got cups in there. *χanaθ ga saʔa <u>kʷaʔsta</u> šəkʷšukʷa.* ['Give me two <u>cups</u> of sugar']."   (sf | BW 2024-02-14)

(24) a. **čɛlas** qayɛ tᶿ χaƛ̓.
čalas qayaʔ   t̓ᶿ=x̌aƛ̓
three water   1SG.POSS=want
'I want three waters.'
Consultant's comment: "The waitress comes around, three of us are there. 'Three waters, please.' So… the person serving you automatically knows you are talking about three glasses."   (vf | BW 2024-02-14)

b. *Context: Asking someone for two sugar cubes.*

*χanaθ ga **saʔa** šəkʷšukʷa.*
χan-a-θ=ga **saʔa** šəkʷ~šukʷa
give-LV-CTR+1SG.OBJ=DPRT **two** PL~sugar
'Give me two sugars.'
Consultant's comment: "Then it would work." (sf | BW 2024-02-14)

c. *Context: You order coffee at a restaurant for you and a date. Your server brings you one coffee.*

*xʷa, **saʔa** kəpkapi tᶿ χaƛ̓.*
xʷaʔ **saʔa** kəp~kapi tᶿ=χaƛ̓
NEG **two** PL~coffee 1SG.POSS=want
'No, I want two coffees.' (vf | BW 2024-02-14)

So, what does this tell us? While Davis (2014:170) muses that patterns like this could be a sign *for* a grammatical count-mass distinction, Wiltschko (2012:157) interprets the variability of the judgments as evidence *against* a grammatical count-mass distinction. As far as I can see, both arguments seem reasonable, suggesting that countability may perhaps not be a very good diagnostic in the first place. For ʔayʔaǰuθəm, I regard this test as inconclusive.

3.3   Diagnostic #3: Quantifiers

Finally, the third diagnostic tests whether quantifiers (i.e., words like *all*, *many*, *much, some*, etc.) are sensitive to a potential count-mass distinction. In English, for instance, the quantifier *many* only occurs with count nouns (25), whereas the quantifier *much* only occurs with mass nouns (26). In addition, there are also some general-purpose quantifiers, like *a lot of*, which can freely combine with both count and mass nouns (27).

(25) a. Keith uses **many guitars**.

    b. * Gordon doesn't use **many butter**.

(26) a. * Keith uses **much guitars**.

    b. Gordon doesn't use **much butter**.

(27) a. Keith uses **a lot of guitars**.

    b. Gordon doesn't use **a lot of butter**.

Looking at the Salish literature, this diagnostic has not been very fruitful. Wiltschko (2005:269–271), for instance, examined the Halkomelem quantifiers *qex* ('many, much'), *mekw'* ('all'), and *ewete* ('no'), but found that none of them are sensitive to a potential count-mass distinction. Based on this, she concludes that "there is no […] quantifier that would distinguish between two subcategories of N's akin to mass and count N's in English". In St'át'imcets, Davis (2014:164ff.) makes a similar observation regarding the weak quantifiers *cw7ít* ('much; many; a

lot of') and *k'wík'wena7* ('(a) few; little'). His results for the strong quantifiers *tákem* ('all') and *sáq'ulh* ('half') look a bit more promising at first sight, showing signs of a grammatical count-mass distinction. However, upon closer inspection, Davis concedes that it is impossible to tell whether it's these quantifiers, or rather the accompanying determiners, that are responsible for this. He concludes that "the distribution of strong quantifiers doesn't tell us anything we didn't already know from the number marking on the determiners" (Davis 2014:167). Despite this rather underwhelming track record, we should nonetheless look at quantifiers in ʔayʔaǰuθəm.

Unsurprisingly, just like in Halkomelem and St'át'imcets, most quantifiers in ʔayʔaǰuθəm turn out to be of the general-purpose variety. To illustrate this, the examples in (28) and (29) show that both *qaχ* /qəx̌/ ('a lot of') and *ʔukʷ* /ʔuwkʷ/ ('all') can introduce count nouns as well as mass nouns.

(28) a. *Context: I show my nephew a large centipede I found in the backyard. My nephew is fascinated and mutters:*

    qaχmot ǰıšǰıšıns!
    qəx̌-mut   ǰəš~ǰəšən-s
    a.lot.of-INT PL~legs-3POSS
    'It has a lot of legs!'   (vf | BW 2023-04-14)

    b. *Context: My friend Andi and I are hiking across the White Mountains in Crete. It's almost a desert up there, and water is difficult to find. At one point, I ask if he has any water left. He tells me:*

    *ʔɛʔ, **qaχʔot** kʷʊtθ qayɛ.*
    ʔiʔ **qəx̌**=ʔut   kʷ=ətθ=qayaʔ
    yes **a.lot.of**=EXCL DET=1SG.POSS=water
    'Yes, I have lots of water.'   (vf | BW 2023-04-11)

(29) a. *Context: My mother is babysitting my niece and my nephew. In the evening, my sister comes to pick them up. My mother tells my sister:*

    *mʊkʷtəm Anabel **ʔukʼʷ** šɛ qawθs.*
    məkʷ-t-əm   Anabel **ʔuwkʷ** šə=qawθ-s
    eat-CTR-PASS Anabel **all**   DET=potato-3POSS
    'Anabel ate all her potatoes.'   (vf | BW 2023-08-14)

    b. *mʊkʷtəm Anabel **ʔukʼʷ** šɛ qawθ.*
    məkʷ-t-əm   Anabel **ʔuwkʷ** šə=qawθ
    eat-CTR-PASS Anabel **all**   DET=potato
    'Anabel ate the whole potato.'   (sf | BW 2024-07-17)

    c. *qʷoqʷotəm Gloria **ʔukʼʷ** šɛ tihayɛ.*
    qʷuqʷu-t-əm   Gloria **ʔuwkʷ** šə=tihaya
    drink-CTR-PASS Gloria **all**   DET=tea
    'Gloria drank all the tea.'   (sf | BW 2023-07-17)

While these quantifiers obviously don't encode a count-mass distinction, I argue that there is at least one quantifier in the language which does — namely the Wh word *ƙʷɛn* /kʷin/ ('how many'). As shown in (31), speakers typically use this Wh word when they want to inquire about the quantity of some countable entity (e.g., potatoes, grouse, socks).

(30) a. *Context: Marianne and I are shopping at Save On's. We're also supposed to buy a few things for Gloria. I ask Marianne:*

ƙʷɛn ƙʷa qawθ χaƛ̓s Gloria?
kʷin=k̓ʷa   qawθ   χaƛ̓-s   Gloria
how.many=RPT   potato   want-3POSS   Gloria
'How many potatoes did Gloria say she wanted?'   (vf | FL 2024-04-11)

   b. *Context: Henry tells me about all the birds he has seen this year. I ask him:*

ƙʷɛn hom̓hom̓ kʷi ƙʷʊnʊxʷʊxʷ?
kʷin   hum̓hum̓   kʷi   k̓ʷən-nxʷ=axʷ
how.many   grouse   CLDEM   see-NTR=2SG.ERG
'How many grouse have you seen so far?'   (sf | BW 2023-08-14)

   c. *Context: My mother told me she is knitting socks for everyone in my family. This morning, I call her and ask her about her progress:*

ƙʷɛn tɪktɛkɛn hoǰʊxʷʊxʷ?
kʷin   tək~takin   huǰ-əxʷ=axʷ
how.many   PL~sock   finish-NTR=2SG.ERG
'How many socks have you finished?'   (vf | BW 2023-08-14)

However, when speakers want to know the amount of a mass entity (e.g., soup, rice, water), the use of *ƙʷɛn* /kʷin/ ('how many') becomes ungrammatical, as illustrated in (31). Here, the consultant's comments are particularly illuminating.

(31) a. * ƙʷɛn lasup kʷ mʊkʷtəsoɬ?
           kʷin   lasup   kʷ=məkʷ-t=as-uɬ
           how.many   soup   DET=eat-CTR=3SG.ERG-PST
           Intended: 'How much soup did he eat?'
           Consultant's comment: "You can't count soup!"   (sf | BW 2020-04-03)

   b. *Context: We've invited some people from the community over to dinner. Gloria has been tasked to cook some rice. She asks:*

     * ƙʷɛn səm ǰukʷ čɛχatən?
       kʷin=səm   ǰukʷ   čax̌-a-t=an
       how.many=FUT   Indian.rice   cook-LV-CTR=1SG.ERG
       Intended: 'How much rice shall I cook?'
       Consultant's comment: "Would be counting."   (sf | BW 2023-04-25)

c. *Context: My friend Andi and I are hiking across the White Mountains in Crete. It's almost a desert up there, and water is difficult to find. At one point, I ask Andi:*

*ƙʷɛn kʷʊθ qayɛ?

kʷin	kʷ=əθ=qayaʔ
how.many	DET=1SG.POSS=water

Intended: 'How much water do you have left?'
Consultant's comment: "No, would be used if we could count it."

<div align="right">(vf | BW 2023-04-25)</div>

Since amount questions obviously cannot be formed with *ƙʷɛn* /ƙʷin/ ('how many'), speakers have to use other means to get such inquiries across. Usually, they do this by making use of yes/no questions involving the quantifier *qaχ* /qəx̌/ ('a lot of'), as shown in (32).

(32) a. *qaχa kʷ mʊkʷtʊxʷoɫ?*

qəx̌=a	kʷ=məkʷ-t=axʷ-uɫ
a.lot.of=Q	DET=eat-CTR=2SG.ERG-PST

'How much (soup) did you eat?'
Literally: 'Did you eat a lot?'

<div align="right">(vf | BW 2020-04-03)</div>

b. *Context: We've invited some people from the community over to dinner. Gloria has been tasked to cook some rice. She asks:*

qaχasəm ǰukʷ čɛχatən?

qəx̌=a=səm	ǰukʷ	čax̌-a-t=an
a.lot.of=Q=FUT	Indian.rice	cook-LV-CTR=1SG.ERG

'How much rice shall I cook?'
Literally: 'Should I cook a lot of rice?'

<div align="right">(vf | BW 2023-04-11)</div>

c. *Context: My friend Andi and I are hiking across the White Mountains in Crete. It's almost a desert up there, and water is difficult to find. At one point, I ask Andi:*

qaχʔota kʷʊθ qayɛ?

qəx̌=ʔut=a	kʷ=əθ=qayaʔ
a.lot.of=EXCL=Q	DET=1SG.POSS=water

'How much water do you have left?'
Literally: 'Do you have a lot of water?'

<div align="right">(vf | BW 2023-04-11)</div>

The data presented in this section show that quantifiers do not form a monolithic class, and that the results of this diagnostic may vary drastically depending on which quantifiers we decide to look at. For ʔayʔaǰuθəm, if we had only focussed on *qaχ* /qəx̌/ ('a lot of') and *ʔukʷ* /ʔuwƙʷ/ ('all'), we would have found no signs of a count-mass distinction. Fortunately, we also included the Wh quantifier *ƙʷɛn* /ƙʷin/ ('how many') in our survey. Since this form only combines with count nouns, but never with mass nouns, it offers convincing evidence that there is a count-mass distinction in the grammar of the language.

3.4 Summary

In the preceding sub-sections, we tested three common diagnostics for the existence of a grammatical count-mass distinction. Both the numeral marking test and the countability test turned out to be inconclusive. While the results of these tests support a count-mass distinction, they could also be motivated by other factors. Ironically, the strongest evidence comes from the quantifier test — the diagnostic with the weakest track record in previous research (Wiltschko 2005; Davis 2014). Strikingly, the key to success was adding the Wh quantifier $\acute{k}^wɛn$ /k̓ʷin/ ('how many') to the toolkit, as this form robustly distinguishes between count and mass nouns. This emphasizes that we need a more comprehensive approach when testing for the count-mass distinction.

4 Avenues for future research

Section 3 showed that the Wh quantifier may be a crucial tool for determining the status of count and mass nouns in Salish. In the following paragraphs, I will outline two avenues for future research regarding this diagnostic. As shown in Table 2, $\acute{k}^wɛn$ /k̓ʷin/ ('how many') has cognates in most Coast Salish languages.

Table 2: Cognates of $\acute{k}^wɛn$ /k̓ʷin/ ('how many') across the Coast Salish branch

Language	Cognate	Translation	Source
Pentlatch	—	—	—
Sechelt	$\acute{k}^win$	'how many' / 'how much'	(Beaumont 2011:223)
Squamish	$\acute{k}^win$	'how many' / 'how much'	(Jacobs & Jacobs 2011:279)
Halkomelem	$\acute{k}^win, \acute{k}^wil$	'how many'	(Suttles 2004:395)
Nooksack	$\acute{k}^win$	'how many' / 'some/any number'	(Davis & Galloway [in prep.])
Northern Straits	$\acute{k}^win$	'how many' / 'how much' / 'a few' / 'many'	(Montler 2018:431)
Klallam	$\acute{k}^win$	'how many' / 'how much'	(Montler 2012:201)
Lushootseed	$\acute{k}^wid$	'how much' / 'some amount'	(Daskalaki & Beck 2013:1)
Twana	$\acute{k}^wid$	'how many'	(Thompson 1979:70)

First, it seems worthwhile to test whether /k̓ʷin/'s sensitivity regarding the count-mass distinction holds across all the Coast Salish languages. Some entries in the table, namely those in which the form is translated as both 'how many' and 'how much', suggest the opposite. This is specifically the case for Sechelt, Squamish, Northern Straits, Klallam, and Lushootseed. But to my

knowledge, the distribution of /k̓ʷin/ has not been tested systematically in these languages. Regardless, some observations should raise at least some doubt whether translating this Wh quantifier as 'how much' is appropriate. For instance, Beaumont (2011:223) notes for Sechelt that "*k̓ʷin* applies only to amounts that are normally measured by counting". Moreover, all his example sentences that involve a 'how much' reading revolve around money. The same appears to be the case for Klallam. Montler (2012)'s only example in which *k̓ʷin* is translated as 'how much' involves money as well. This raises the question whether the 'how much' translations are perhaps just the result of non-literal translations in one very specific context of use. While English speakers talk about money as if it was a substance (e.g., *How much money do you make? How much does this cost?*), this may not be the case for speakers of Salish. At least, this seems to be true for ʔayʔaǰuθəm, as shown in (33). While the free translation suggests a mass reading, the literal translation shows that we are actually talking about coins — a countable entity.

(33)　*Context: Gloria and I are looking at cars. We find one we like and ask the guy from the car dealership:*

k̓ʷɛn*os ga tɛʔɛ?*
kʷin-us=ga　　　　tiʔi
WH-round.thing=DPRT　DEM
'How much is this one?'
Literally: 'How many round things (= coins) is this one?'　　　　(sf | EP 2021-10-15)

More systematic testing on this is obviously needed, particularly in the languages listed above. Nonetheless, I hypothesize that the Wh quantifier /k̓ʷin/ can only select count nouns across the Central Salish languages.

Secondly, Table 2 also indicates another avenue for future research. As the translations for some entries indicate, /k̓ʷin/ not only has a question reading, but also an indefinite reading in some languages. This seems to be at least the case for Nooksack ('any/some number'), Northern Straits ('a few', 'many'), and Lushootseed ('some amount'). In ʔayʔaǰuθəm, *k̓ʷɛn* /k̓ʷin/ 'how many' allows such an indefinite reading as well ('a few; several'), as illustrated by the examples in (34).

(34)　a.　*Context: I'm showing my friend Saoirse some photos from a recent hiking trip I did with a friend.*

*hɛhɛw qaχmot qegəθ. kʷʊnəs **k̓ʷɛn** təsɛʔɛč̓.*
hihiw　qəx̌-mut　qigaθ kʷən=as　**kʷin**　təsaʔič
really　a.lot.of-INT　deer　AUX=3SBJV　**a.few**　hundred
'There were so many deer! Must've been maybe a few hundred.'　(vf | EP 2021-10-15)

　　b.　*Context: My grandfather tells me about how he worked on a farm, when he was a little boy. He tells me how he had to cut hay for the cows, and he says:*

*χʷoχʷ ʔi taʔat šɩm̓ tə ƛəqəm. kʷʊnəs **k̓ʷɛn** t̓θok̓ʷ.*
x̌ʷux̌ʷ　　　ʔiy　taʔat　šəm̓　tə=ƛəqəm　kʷən=as　**kʷin**　t̓θuk̓ʷ
long.time　and　HAB　dry　DET=hay　AUX=3SBJV　**a.few**　day
'It took a long time to dry the hay. Maybe several days.'　　　(sf | EP 2021-10-15)

I have not systematically tested yet whether the count-mass distinction will also surface for these indefinite instantiations, though it seems reasonable to assume so.

4   Conclusion

To conclude, in this paper, I provided evidence for the existence of a grammatical count-mass distinction in ʔayʔaǰuθəm, lending support for Davis (2014)'s hypothesis that all Salish languages distinguish between count and mass nouns. Strikingly, this conclusion does not emerge from the usual tests, but hinges upon the use of a novel diagnostic: the Wh quantifier. Doubtlessly, this tool should be included in future explorations of the count-mass distinction in Salish.

References

Beaumont, Ronald. (2011). *Sechelt dictionary.* Sechelt, BC: Sechelt Indian Band.

Daskalaki, Evangelia & David Beck. (2013) The Multi-functionality of the Indefinite/Interrogative stab in Lushootseed. *Northwest Journal of Linguistics* 7(3):1–17.

Davis, Henry. (2014). The count-mass distinction in St'át'imcets (and beyond). *Papers for ICSNL* 49:155–181.

Davis, Henry & Brent Galloway. [in preparation]. *NK Grammar 2: Morphology and Syntax.*

Davis, Henry & Lisa Matthewson. (1999). On the functional determination of lexical categories. *Revue Québecoise de Linguistique* 27:29–69.

Deal, Amy Rose. (2013). Apportionment and the mass-count distinction in Nez Perce. Ms., University of California, Santa Cruz.

FPCC. (2022). Report on the status of B.C. First Nations languages. URL: https://fpcc.ca/wp-content/uploads/2023/02/FPCC-LanguageReport-23.02.14-FINAL.pdf

Frawley, William. (1992). *Linguistic semantics.* London, UK: Lawrence Erlbaum.

Huijsmans, Marianne & Mary McCarthy. (2024). The Puzzle of Plurals in ʔayʔaǰuθəm. *Papers for ICSNL* 59:169–186.

Huijsmans, Marianne, D. K. E. Reisinger, & Lisa Matthewson. (2020). Evidential Determiners in ʔayʔaǰuθəm. *Papers for ICSNL* 55:165–182.

Jacobs, Peter & Damara Jacobs. (2011). *Squamish-English Dictionary.* Seattle, WA: University of Washington Press.

Mellesmoen, Gloria. [in preparation]. *The grammar of Salish reduplication.* Doctoral dissertation. University of British Columbia, Vancouver, BC.

Montler, Timothy. (2012). *Klallam dictionary.* Seattle, WA: University of Washington Press

Montler, Timothy. (2018). *Senćoten: A Dictionary of the Saanich Language*. Seattle, WA: University of Washington Press

Reisinger, D. K. E., Marianne Huijsmans, & Lisa Matthewson. (2021). Evidentials in the Nominal Domain: A Speasian Analysis of ʔayʔaǰuθəm Determiners. *Proceedings of Sinn und Bedeutung* 25:751–768.

Suttles, Wayne. (2004). *Musqueam Reference Grammar.* Vancouver, BC: UBC Press.

Thompson, Nile. (1979). *Twana dictionary: student version.* Shelton, WA: Twana Language Project, Skokomish Indian Tribe.

Wiltschko, Martina. (2005). A part of wood is not a tree: on the absence of the count mass distinction in Halkomelem. *Papers for ICSNL 40*:264–288.

Wiltschko, Martina. (2008). The syntax of non-inflectional plural marking. *Natural Language and Linguistic Theory* 26:639–694.

Wiltschko, Martina. (2012). Decomposing the mass/count distinction: Evidence from languages that lack it. In D. Massam (ed.), *Count and Mass Across Languages*. Oxford, UK: Oxford University Press, 146–171.