

The Count-Mass Distinction in ʔayʔajuθəm*

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Abstract: This paper explores the status of the count-mass distinction in ʔayʔajuθəm (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: ʔayʔajuθəm (Comox-Sliammon), count-mass, countability, quantifiers, plural marking

1 Introduction

This paper explores the status of the count-mass distinction in ʔayʔajuθəm (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

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¹ Ungrammatical examples are marked with an asterisk (*), infelicitous examples with a hashtag (#). In the ʔayʔajuθəm 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 ʔayʔajuθəm. Drawing from original fieldwork data, I show that ʔayʔajuθəm 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 *kʷen* /*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 ʔayʔajuθəm. 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 ʔayʔajuθəm, 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.

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 delimited 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 ʔayʔajuθəm

With the theoretical background in place, we can now return to our initial question: does ʔayʔajuθəm 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. books, cats, guitars, wives
 (15) a. blood, grease, sand, snow [MASS]
 b. *bloods, *greases, *sands, *snows

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 ʔayʔajuθəm, plural marking on nouns is usually realized via C₁əC₂~ 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’	<i>tumiš</i>	<i>təm~tumiš</i>
b. ‘chief’	<i>hegus</i>	<i>haw~hegus</i>
c. ‘cat’	<i>mēmaw</i>	<i>məm~mēmaw</i>
d. ‘horse’	<i>teqew</i>	<i>təq~teqew</i>
e. ‘book’	<i>puk</i>	<i>pək~puk</i>

In contrast, the data for mass nouns turn out to be more difficult to interpret. Mellesmoen (in prep.) finds that many ʔayʔajuθəm nouns that typically refer to substances can be pluralized via C₁əC₂~ 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’	<i>qayε</i>	<i>qi~qayε</i>
b. ‘land, dirt’	<i>giʔε</i>	<i>gəʔ~giʔε</i>
c. ‘sugar’	<i>šuk^wa</i>	<i>šək^w~šuk^wa</i>
d. ‘soup’	<i>lasup</i>	<i>ləs~lasup</i>
e. ‘coffee’	<i>kapi</i>	<i>kəp~kəpi</i>

Example (18) illustrates these phenomena for the noun *qayε* /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, ʔayʔajuθəm 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.*
qaxmot qiqayε θo?na.
 qəx̣-mut **qəy~qaya?** θu?na
 a.lot.of-INT **PL~water** other.room
 'There's lots of water in the other room.'
 (vf | JoF 2019-02-14)
- b. *qiqayε*
qəy~qaya?
PL~water
 'lots of water' (in buckets or bottles)
 (vf | JeF 2019-02-24)
- c. #*qiqayε*
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.*
#xanaθ ga čelas tə qiqayε.
 x̣an-a-θ=ga čelas 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, *xanaθ ga čelas lamayε qayε* ['Give me three bottles of water']."
 (sf | BW 2024-02-14)

It might be tempting to conclude from the above that ʔayʔajuθəm 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 ʔayʔajuθəm. After all, as Huijsmans and McCarthy (2014) 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'	<i>man</i>	* <i>mən~man</i>
b. 'fish'	<i>ʃɛnx^w</i>	* <i>ʃɪn~ʃɛnx^w</i>
c. 'seal'	<i>ʔasx^w</i>	* <i>ʔəs~ʔasx^w</i>
d. 'heron'	<i>paɪ̃</i>	* <i>pəl~paɪ̃</i>
e. 'potato'	<i>qawθ</i>	* <i>qo~qawθ</i>

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 ʔayʔajuθəm.

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 ʔayʔajuθəm.

- (22) a. *Context: I tell Henry about a recent hiking trip and the birds that I saw there:*
 kʷonoxʷolč čelas homhóm.
 kʷən-nxʷ-ul=č čalas humhum
 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, čelas pəkpuḱ hojuxʷən.
 ʔəy-mut čalas pək~puḱ huḱ-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:*

mosayε čičuy *k^wot^θ xa^l.*
mos-aya **či~čuy** *k^w=ət^θ=xá^l*
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 *qiqayε* /qəyqayaʔ/ (‘water(s)’) or *šək^wšuk^wa* /šək^wšuk^wa/ (‘sugar(s)’). To repair these utterances, she inserts a countable noun specifying the unit of apportionment, such as *lamayε* /lamayu/ (‘bottle(s)’) or *k^waʔsta* /k^waʔsta/ (‘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.*

#xanaθ ga čelas tə qiqayε.
xān-a-θ=ga **čelas** *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, *xanaθ ga čelas lamayε qayε* [‘Give me three bottles 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:*

#xanaθ ga saʔa šək^wšuk^wa.
xān-a-θ=ga **saʔa** *sək^w~šuk^wa*
 give-LV-CTR+1SG.OBJ=DPRT **two** **PL~sugar**
Intended: ‘Give me two sugars.’
Consultant’s comment: “You’ve got cups in there. *xanaθ ga saʔa k^waʔsta šək^wšuk^wa.* [‘Give me two cups of sugar’].” (sf | BW 2024-02-14)

- (24) a. *čelas qayε t^θ xa^l.*
čelas *qayaʔ* *t^θ=xá^l*
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.
 ʃan-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 tʰχaʃ.
 xʷaʔ **saʔa** kəp~kapi tʰ=χaʃ
 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 ʔayʔajuθəm, 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'wik'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 ʔayʔajuθəm.

Unsurprisingly, just like in Halkomelem and St'át'imcets, most quantifiers in ʔayʔajuθəm turn out to be of the general-purpose variety. To illustrate this, the examples in (28) and (29) show that both *qax/qəx̣* ('a lot of') and *ʔuk^w/ʔuwk^w* ('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:*

qaxmot ʃiʃiʃins!

qəx̣-mut ʃəʃ~ʃəʃən-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:*

ʔeʔ, *qax*ʔot *k^wot^θ* qayɛ.

ʔiʔ *qəx̣*=ʔut *k^w=ət^θ*=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:*

mək^wtəm Anabel *ʔuk^w* ʃɛ qawθs.

mək^w-t-əm Anabel *ʔuwk^w* ʃə=qawθ-s

eat-CTR-PASS Anabel **all** DET=potato-3POSS

'Anabel ate all her potatoes.'

(vf | BW 2023-08-14)

- b. *mək^wtəm* Anabel *ʔuk^w* ʃɛ qawθ.

mək^w-t-əm Anabel *ʔuwk^w* ʃə=qawθ

eat-CTR-PASS Anabel **all** DET=potato

'Anabel ate the whole potato.'

(sf | BW 2024-07-17)

- c. *q^woq^wotəm* Gloria *ʔuk^w* ʃɛ tihayɛ.

q^wuq^wu-t-əm Gloria *ʔuwk^w* ʃə=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 *kʷen* /*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:*

kʷen *kʷa* *qawθ* *χaλs* *Gloria*?
kʷin=*kʷa* *qawθ* *χaλ*-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:*

kʷen *homhom* *kʷi* *kʷonoxʷoxʷ*?
kʷin *humhum* *kʷi* *kʷən-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:*

kʷen *tiktēken* *hojoxʷoxʷ*?
kʷin *tək~takin* *huj-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 *kʷen* /*kʷin*/ ('how many') becomes ungrammatical, as illustrated in (31). Here, the consultant's comments are particularly illuminating.

- (31) a. **kʷen* *lasup* *kʷ* *məkʷtəsot*?
kʷin *lasup* *kʷ=məkʷ-t=as-ul*
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:*

**kʷen* *səm* *jukʷ* *čəχatən*?
kʷin=*səm* *jukʷ* *čax-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:*

**kʷɛn* *kʷθ qayɛ?*

kʷin *kʷ=əθ=qaya?*

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.”

(vf | BW 2023-04-25)

Since amount questions obviously cannot be formed with *kʷɛn* /*kʷin*/ (‘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 *qax* /*qəx̃*/ (‘a lot of’), as shown in (32).

- (32) a. *qaxa* *kʷ məkʷtəxʷot?*

qəx̃=a *kʷ=məkʷ-t=axʷ-ut*

a.lot.of=Q DET=eat-CTR=2SG.ERG-PST

‘How much (soup) did you eat?’

Literally: ‘Did you eat a lot?’

(vf | 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:*

qaxasəm *jukʷ ɕɛxatən?*

qəx̃=a=səm *jukʷ ɕax̃-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?’

(vf | BW 2023-04-11)

- 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:*

qaxʔota *kʷθ qayɛ?*

qəx̃=ʔut=a *kʷ=əθ=qaya?*

a.lot.of=EXCL=Q DET=1SG.POSS=water

‘How much water do you have left?’

Literally: ‘Do you have a lot of water?’

(vf | BW 2023-04-11)

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 *ʔayʔajuθəm*, if we had only focussed on *qax* /*qəx̃*/ (‘a lot of’) and *ʔukʷ* /*ʔuwkʷ*/ (‘all’), we would have found no signs of a count-mass distinction. Fortunately, we also included the Wh quantifier *kʷɛn* /*kʷin*/ (‘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 *kʷen* /*kʷin*/ (‘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, *kʷen* /*kʷin*/ (‘how many’) has cognates in most Coast Salish languages.

Table 2: Cognates of *kʷen* /*kʷin*/ (‘how many’) across the Coast Salish branch

Language	Cognate	Translation	Source
Pentlatch	—	—	—
Sechelt	<i>kʷin</i>	‘how many’ / ‘how much’	(Beaumont 2011:223)
Squamish	<i>kʷin</i>	‘how many’ / ‘how much’	(Jacobs & Jacobs 2011:279)
Halkomelem	<i>kʷin</i> , <i>kʷil</i>	‘how many’	(Suttles 2004:395)
Nooksack	<i>kʷin</i>	‘how many’ / ‘some/any number’	(Davis & Galloway [in prep.])
Northern Straits	<i>kʷin</i>	‘how many’ / ‘how much’ / ‘a few’ / ‘many’	(Montler 2018:431)
Klallam	<i>kʷin</i>	‘how many’ / ‘how much’	(Montler 2012:201)
Lushootseed	<i>kʷid</i>	‘how much’ / ‘some amount’	(Daskalaki & Beck 2013:1)
Twana	<i>kʷid</i>	‘how many’	(Thompson 1979:70)

First, it seems worthwhile to test whether /*kʷin*/’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 /k^win/ 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 “k^win 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 k^win 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 ʔayʔajuθəm, 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:*

k^wenos ga tɛʔe?

k^win-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 /k^win/ 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, /k^win/ 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 ʔayʔajuθəm, k^wen /k^win/ ‘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 qaxmot qegəθ. k^wonəs k^wen taseʔeç.

hihiw qəx̣-mut qigaθ k^wən=as k^win təsəʔiç

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:*

χ^wox^w ʔi taʔat šim̄ tə ʔəqəm. k^wonəs k^wen t⁰ok^w.

χ^wux̣^w ʔiy taʔat šəm̄ tə=ʔəqəm k^wən=as k^win t⁰uk^w

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 ʔayʔajuθəm, 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 Québécoise 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 ʔayʔajuθəm. *Papers for ICSNL* 59:169–186.
- Huijsmans, Marianne, D. K. E. Reisinger, & Lisa Matthewson. (2020). Evidential Determiners in ʔayʔajuθəm. *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). *Sen'coten: 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 ʔayʔajuθəm 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.