

# Illocutionary mood marking in Sm'alyax

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## Abstract

In this paper I discuss a root-level clitic that occurs in *wh*-questions in Sm'alyax (Tsimshianic, VSO, also known as Coast Tsimshian), and analyse it as an overt instantiation of interrogative illocutionary mood, found in a left-peripheral position. I provide evidence for such a structure based on interrogative and non-interrogative uses of *wh*-words, embedded and coordinated questions, as well as the interaction between this clitic and other clitics associated with the evidential and mood system — providing compelling support for analyses that analyse illocutionary mood/speech acts as involving a syntactically projected operator (Krifka 2001; Speas & Tenny 2003; Farkas & Bruce 2010; Sauerland & Yatsushiro 2017).

## 1 Introduction

In this paper I discuss issues pertaining to the syntax/sentence mood interface via an investigation of questions and grammatical particles which appear in questions in Sm'alyax (Martitime Tsimshianic. ISO 639-3 language code: tsi, also known as Coast Tsimshian), and argue that the distribution of a particle =*u* in matrix, embedded, and coordinated questions supports analyses which encode the sentential force within the sentence's syntactic representation (Krifka 2001; Speas & Tenny 2003; Sauerland & Yatsushiro 2017).

*Wh*-questions in Sm'alyax are characterised by a *wh*-word or phrase appearing to the left of the predicate (contra declarative VSO word order as in (1)), and the appearance of a question particle (henceforth WH-PARTICLE) =*u*, which surfaces either in a position immediately to the right of the *wh*-phrase (2a), or a post-predicative position (2b) — this variable positioning being conditioned by the appearance of post-verbal morphology including person-marking and extraction morphology.<sup>1</sup>

<sup>1</sup> 1 = first person, 2 = second person, 3 = third person, ACC = accusative, ATTR = attributive, AX = agent extraction morpheme, CN = common noun connective, COMP = complementizer, ERG = ergative, FOC = focus, INDEF = indefinite, INS = instrumental, IRR = irrealis, LOC = locative, MANR = manner clause, NEG = negative, NOM = nominative, OBL = oblique, PASS = passive, PFV = perfective, PL = plural, PN = proper noun connective, POSS = possessive, PROSP = prospective, Q = question particle, REAS = reason

- (1) Łimoom sm'ooygida łguułgit.  
 łimoom-ə(-t)=a sm'ooygit=a łguulk-t  
 help-TR-3=CN chief=CN child-3  
 'The chief helped his child.'
- (2) Wh-particle placement: left-peripheral vs. clause internal:
- a. Naayu łimoomn?  
 naa [=u łimoom-ə-n \_\_\_\_]  
 who =Q help-TR-2.SG  
 'Who did you help?'
  - b. Naał łimoomdu sm'ooygit?  
 naa [=ł łimoom-ə-t=u sm'ooygit \_\_\_\_]  
 who =CN help-TR-3=Q chief  
 'Who did the chief help?'

This particle is a root phenomenon — as observed above it appears in matrix *wh*-questions, while (3) and (4) show us that it cannot appear in embedded questions:

- (3) Wilaayu naa łimoom sm'ooygit.  
 wilaay-u [naa(\*=u) łimoom(-ə)-t(\*=u) sm'ooygit \_\_\_\_]  
 know-1SG who help-TR-3 chief  
 I know who the chief helped
- (4) Güüdagu naa łimoom sm'ooygit.  
 güüdax-u [naa(\*=u) łimoom(-ə)-t(\*=u) sm'ooygit \_\_\_\_]  
 ask-1SG who help-TR-3 chief  
 'I asked who the chief helped.'

Apart from embedded questions, a number of other contexts prohibit the occurrence of the *wh*-particle, including non-interrogative uses of *wh*-words such as *wh*-indefinites, free-relatives and exclamatives. This distribution differs substantially from better studied question particles (Q-PARTICLES) in languages such as Sinhala, Japanese and Tlingit (Hagstrom 1998; Kishimoto 2005; Cable 2007), and suggests that the *wh*-particle is associated not with *wh*-words or phrases themselves (contra Q-particle analyses put forth by Hagstrom (1998); Beck (2006); Cable (2007); Kotek (2014)). Rather, it is associated solely with root interrogative clauses.

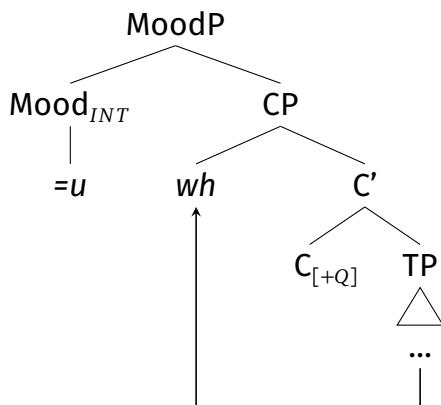
The first question I address in this paper is: given the distribution outlined above, how should we formally classify the *wh*-particle =u? Drawing from analyses of the syntax/semantics of speech acts and illocutionary mood in Cinque (1999); Speas & Tenny (2003); Sauerland & Yatsushiro (2017); Krifka (2001); Farkas & Bruce (2010), I analyse =u

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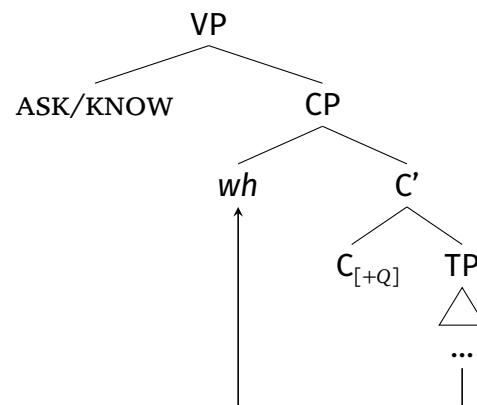
clause, REL = relative, SG = singular, SX = subject extraction morpheme, TOP = topic, TR = transitive, VER = verum, YNQ = polar question particle.

as an instantiation of an interrogative mood operator, which is restricted to matrix interrogative clauses. The basic structure of root and embedded questions is schematised below. The *wh*-word moves to [Spec,CP]. This CP level either combines with  $=u$  to be interpreted as an interrogative as in (5), or can be taken as an argument to question-embedding verbs as in (6).

(5)

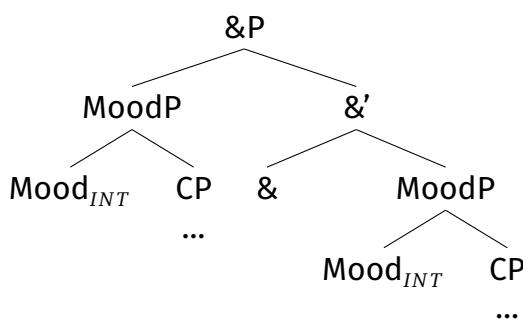


(6)

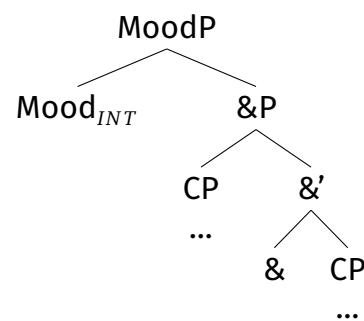


In addition to accounting for the absence of  $=u$  in embedded questions, the structure in (5) makes certain predictions about other syntactic contexts involving questions, including coordinated *wh*-questions of the type ‘who are you and what did you see?’ Two possible structures for coordinated questions are predicted by (5): one in which a MoodP is coordinated with another MoodP, where we expect to find two occurrences of the interrogative Mood head (7) (instantiated as  $=u$  in Sm’alyax), and one in which two CPs are coordinated under a single MoodP, where we expect to find a single occurrence of the Mood head (8).

(7)



(8)



Indeed, both options are found in Sm'alyax: coordinated questions can be marked by two occurrences of *=u* (one in each coordinate), or a single occurrence of *=u* in the first coordinate:<sup>2</sup>

- (9) Goyu nah gabn ada naayu nah int dzapt?  
 [goo=**u** nah gap-ə-n] [ada naa=**u** nah in=t dzap-t]  
 what=Q PFV eat-TR-2 and who=Q PFV AX=3 make-3  
 ‘What did you eat? And who made it?’
- (10) Goyu nah gabn ada naał nah int dzapt?  
 [goo=**u** nah gap-ə-n] [ada naa=ł nah in=t dzap-t]  
 what=Q PFV eat-TR-2 and who=CN PFV AX=3 make-3  
 ‘What did you eat and who made it?’

In addition to falling out from the syntactic structure in (5), the ability to coordinate questions under the Mood projection (as in (8)) has implications for analyses of conjoined questions in Krifka (2001) and Hirsch (2017), both of which analyse the coordination of questions as the coordination of interrogative illocutionary acts (corresponding to MoodP). The apparent ability to coordinate questions *under* a sentential mood projection in Sm'alyax presents challenges for such analyses, especially Hirsch (2017), whose inflexible semantics for coordinating connectives crucially requires conjoined questions to be analyzed as separate illocutionary acts.

The layout of this paper is as follows: in §2 I outline the distribution of *wh*-words and the question particle *=u* across root, embedded, and coordinated questions, as well as non-interrogative *wh*-constructions; in §3 I give an analysis of interrogatives in Sm'alyax couched in the operator-based approaches to illocutionary mood, which can be extended to other clitics which constitute the sentential mood and evidential system in Sm'alyax. In §4 I discuss the broader Q-particle literature and suggest that the prominent family of Q-particle analyses cannot parsimoniously account for the distribution of *=u*; In §5 I conclude.

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<sup>2</sup> A third logical option is a coordinated question in which INT/*=u* appears only in the second conjunct. Coordinated questions of this type are not attested in existing descriptive, theoretical, or documentary work on Sm'alyax, and are routinely judged as ungrammatical by my language consultants:

- (i) \*[goo=ł nah gap-ə-n] [ada naa=**u** nah in=t dzap-t]  
 what=CN PFV eat-TR-2 and who=Q PFV AX=3 make-3  
 Intended: ‘What did you eat and who made it?’  
 Consultant’s comment: “I wouldn’t say that.” Corrected to (9).

The ungrammaticality of this coordination is consistent with the predictions of (5).

## 2 Questions and question particles

*Wh*-questions in Sm'algyax are characterised by the presence of a *wh*-word (11), and a *wh*-particle =*u* (12):<sup>3</sup>

- (11) *Wh*-words in Sm'algyax

<i>naa</i>	'who'
<i>goo</i>	'what'
<i>ndaa/ndeh</i>	'where, how'
<i>ksindaa/ksindeh</i>	'which'
<i>dzindaa/dzindeh</i>	'when'
<i>t'masool</i>	'how many (people)'
<i>t'maays</i>	'how many (things)'

- (12) Naayu nah baat?

naa = **u** nah baa-ət  
 who = Q PFV run-SX  
 'Who ran?'

The goal of this section is to give a description of *wh*-questions in Sm'algyax, including the distribution of =*u*, as well as non-interrogative uses of *wh*-words. I show that =*u* is a root-level phenomenon, in that it appears in root interrogatives and does not appear in embedded questions. I also show that =*u* is not associated directly with the *wh*-word itself – it does not appear alongside *wh*-indefinites or non-interrogative *wh*-clauses such as free-relative constructions or *wh*-exclamatives. This section lays the groundwork for §3, where I propose an analysis in which =*u* is the overt instantiation of an interrogative mood operator. I direct the reader to Brown et al. (2020b) for a more detailed look at the morphosyntax of Ā-movement, *wh*-questions, and the *wh*-particle in Sm'algyax.

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<sup>3</sup> A free variant of the particle =*u* is =*du*:

- (i) Naadu baat?

naa = *du* baa-ə-t  
 who = Q run-SX  
 'Who ran?'  
 Consultant's comment: "Same as *Naayu baat*."

The generalisations for =*u* outlined in the discussion in this section also hold for =*du*, however in the interest of space I do not discuss =*du* in this paper.

## 2.1 Wh-questions and placement of question particles

Sm'algyax is a head-marking language with an unmarked VSOX order:

- (13) Nah dzaba suwiliinsgm 'yuuta waap da nakst.  
      na dzap-ə(-t) [=a suwiliinsk-m 'yuuta] [=a waap] da(-t) [=a naks-t]  
      PFV make-TR-3 =CN hunt-ATTR man =CN house OBL-3 =CN wife-3  
      'The hunter has built a house for his wife.'

The example in (13) also illustrates the behaviour of the determiner-like CONNECTIVES which prosodically encliticize to the element on their left despite being syntactically associated with the nominal element to their right; see Sasama (2001) and Davis (2018) for description and analysis of the connective system in Sm'algyax.

Contra declarative word order (14a), wh-questions (14b), focus-constructions (14c), and relative clauses (14d) in Sm'algyax all involve the appearance of some element in a position to the left of the predicate:

- (14) a. Tgi k'apaaytga 'yuuta  
      tgi   k'apaaytk=a 'yuuta  
      down fall=CN       man  
      'The man fell down.'
- b. Naayu tgi k'apaaytgit?  
      naa [=u tgi   k'apaaytk-ət \_\_\_\_]  
      who =Q down fall-SX  
      'Who fell down?'
- c. Dzon tgi k'apaaytgit.  
      Dzon [=a tgi   k'apaaytk-ət \_\_\_\_]  
      John =CN down fall-SX  
      'JOHN fell down.' (a suitable answer to (14b))
- d. Wilaayu 'yuuta tgi k'apaaytgit.  
      wilaay-u=a 'yuuta [=a tgi   k'apaaytk-ət \_\_\_\_]  
      know-1SG=CN man =CN down fall-SX  
      'I know the man who fell down.'

Ā-movement in Sm'algyax is island sensitive (Brown et al. 2020b). Below we see that extraction from adjunct islands and complex-noun phrases is ungrammatical:

## (15) Adjunct island:

- a. Dawłit Dzon awilt liiłdit Meelit Michael.  
 dawł=t Dzon [awil=t liił=t Meeli=t Michael]  
 leave=PN John because=3 watch-3=PN Mary=PN Michael  
 'John left because Mary was looking after Michael.'
- b. \*naa=u dawł-ət=t Dzon [awil=t liił-ə-t=t Meeli \_\_\_\_]  
 who=Q leave-SX=PN John because=3 watch-TR-3=PN Mary  
 Intended: \*Who did John leave because Mary was looking after?

## (16) Complex NP island:

- a. Gabis Dzon hoon nah sip'iyaans Meeli.  
 gap-ə(-t)=s Dzon hoon [nah si-p'yaan(-ə-t)=s Meeli]  
 eat-TR-3=PN John fish PFV make-smoke-TR-3=PN Mary  
 'John ate the fish that Mary smoked.'
- b. \*naa=u gap-ə(-t)=s Dzon hoon [nah sip'yaan-ə-t \_\_\_\_]  
 who=Q eat-TR-3=PN John fish PFV make-smoke-TR-3  
 Intended: \*Who did John eat the fish that smoked?

All Ā-extraction constructions in Sm'algyax are marked by extraction morphology indicating the grammatical role of the extracted element. Below we see an intransitive Subject (S) relative clause marked by the suffix *-ət* SUBJECT EXTRACTION (17), an Object (O) relative clause marked by the suffix *-ə* TRANSITIVE (18),<sup>4,5</sup> and a transitive subject, or Agent (A) relative clause marked by the prepredicative morpheme *an* AGENT EXTRAC-

<sup>4</sup> In addition to appearing in object extraction, this suffix also appears on transitive verbs in independent/non-subordinated clauses. See [Forbes \(2018:\(chapter 6\)\)](#) and [Brown et al. \(2020a\)](#) for an overview of this transitive suffix in Sm'algyax, and across Tsimshianic.

<sup>5</sup> The transitive suffix *-ə* is deleted in (18) due to a number of morphophonological processes including the deletion of the post-verbal agreement suffix *-t* when it is directly adjacent to the DP with which it agrees ([Davis 2018](#)), as well as the deletion of *-ə* when it is followed by the common-noun connective *=a*. This *-ə* suffix will surface when there is no overt Agent DP, or in “irrealis” environments in which the irrealis form of the common-noun connective changes to *=ł*:

- (i) ts'ik'aawsa gabit.  
 ts'ik'aaws [=a gap-ə-t \_\_\_\_]  
 split.salmon =CN eat-TR-3  
 'the split dried salmon s/he ate.'
- (ii) ts'ik'aawsa gu akadit gabił gyet.  
 ts'ik'aaws [=a gu aka=di=t gap-ə(-t)=ł gyet \_\_\_\_]  
 split.salmon =CN REL NEG=FOC=3 eat-TR-3=CN.IRR person  
 'the split dried salmon the people didn't eat.'

TION and the resumptive third person clitic =t (19). In each case a common-noun connective cliticises to the right edge of the extracted element.<sup>6</sup>

(17) S relative:

- a. Sisaaxsa gyet.  
sisaaxs=a gyet  
laugh=CN person  
'A person laughed'
- b. Wilaayu gyeda sisaaxsit.  
wilaay-u gyet [=a sisaaxs-ət \_\_\_\_]  
know-1SG person =CN laugh-SX  
'I know the person who laughed'

(18) O relative:

- a. Gaba gyeda ts'ik'aaws.  
gap(-ə-t)=a gyet=a ts'ik'aaws  
eat-TR-3=CN person=CN split.salmon  
'The people eat split dried salmon.'
- b. Niidzu ts'ik'aawsa gaba gyet.  
niist-u ts'ik'aaws [=a gap(-ə-t)=a gyet \_\_\_\_]  
see-1SG split.salmon =CN eat-TR-3=CN person  
'I saw the split dried salmon the people ate.'

(19) A relative:

- Wilaayu gyeda int gaba ts'ik'aaws.  
wilaay=u gyet [=a in=t gap(-t) \_\_\_\_ =a ts'ik'aaws]  
know-1SG person =CN AX=3 eat-3 =CN split.salmon  
'I know the people who eat split dried salmon.'

The same extraction morphology observed above appears in *wh*-questions. *Wh*-questions are further marked by the presence of the enclitic =u, which appears in every *wh*-extraction configuration, with all *wh*-words.<sup>7</sup> Below we see S, O, and A questions marked predictably with their respective extraction morphology as well as the *wh*-particle =u:<sup>8</sup>

<sup>6</sup> The common-noun connective often does not appear in A(gent) extraction cases, and is generally a point of variation between speakers. A extraction in Interior Tsimshianic lacks the common-noun connective in this position (Davis & Brown 2010).

<sup>7</sup> The *wh*-particle =u may be dropped in colloquial or rapid speech. My consultants describe this as "taking shortcuts" and it is judged as a difference in register. They systematically produce *wh*-questions with =u during elicitation.

<sup>8</sup> Note that in each *wh*-configuration the connective =t in the left-peripheral phrase that is usually associated with extraction does not cooccur with =u. The presence of an expected connective is also variable affected

- (20) S *wh*-question:

Naayu sisaaxsit?  
 naa [=u sisaaxs-ət \_\_\_\_]  
 who =Q laugh-SX  
 'Who laughed?'

- (21) O *wh*-question:

Goyu gabin?  
 goo [=u gap-ə-n \_\_\_\_]  
 what =Q eat-TR-2SG  
 'What did you eat?'

- (22) A *wh*-question:

Goyu int ḥak'an?  
 goo [=u in=t ḥak'-n \_\_\_\_]  
 what =Q AX=3 bite-2SG  
 'What bit you?'

This clitic exhibits variable positioning in the clause – it may appear in a left-peripheral position, encliticized to the *wh*-phrase, or may optionally appear in a post-predicative position in case there is a third-person agreement suffix *-t* on the predicate:

- (23) O *wh*-question – variable positioning of =u:

- a. Goł gabidu gyet?  
 goo [=ɿ gap-ə-t=u gyet \_\_\_\_]  
 what =CN eat-TR-3=Q person  
 'What do the people eat?'
- b. Goyu gaba gyet?  
 goo [=u gap(-ə-t)=a gyet \_\_\_\_]  
 what =CN eat-TR-3=CN person  
 'What do the people eat?'

- (24) A *wh*-question – variable positioning of =u:

- a. Naał int gapdu ts'ik'aaws?  
 naa [=ɿ in=t gap-t=u \_\_\_\_ ts'ik'aaws]  
 who =CN AX=3 eat-3=Q split.salmon  
 'Who ate the split salmon?'

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by other mood and sentential clitics such as =ii POLAR QUESTION and =sn CONJECTURAL EVIDENTIAL. I set this issue aside for this paper.

- b. Naayu int gapa ts'ik'aaws?  
 naa [=u in=t gap(-t)=a \_\_\_\_ ts'ik'aaws]  
 who =Q AX=3 eat-3=CN split.salmon  
 'Who ate the split salmon?'

Finally, though the examples above have shown the *wh*-particle occurring with the question words *naa* 'who' and *goo* 'what' in core-argument (S, O, A) questions, we see below that it also occurs in locative (25), temporal (26), and manner (27) questions, and with all other *wh*-words such as *ndaa/ndeh* 'where', or 'how' (25), (27), *dzindaa/dzindeh* 'when' (26), *ksindaa/ksindeh* 'which (one)' (28), the quantificational *wh*-words *t'masool* 'how many (people)' (29), *t'maays* 'how many (things)' (30), as well as complex *wh*-constructions such as *goo gan* 'why' ('what' followed by a dependent clause headed by the subordinator *gan*) (31), or *ndeh gasgaaw/goo gasgaaw* 'how big', 'how much' (lit. what/how is the size/amount) (32).<sup>9</sup>

- (25) Ndeyu nam wil niidzu?  
 ndeh [=u nah=m wil niist-u \_\_\_\_]  
 where =Q PFV=2SG COMP see-1SG  
 'Where did you see me?'
- (26) Dzindat dm 'ap yaltgidut Norman?  
 dzindaa [=t dm 'ap yaltk-t=u=t Norman \_\_\_\_]  
 when =CN PROSP VER return-3=Q=PN Norman  
 'When is Norman really coming back?' (Sasama 2001)
- (27) Ndeyu wila waan?  
 ndeh [=u wila waal-n \_\_\_\_]  
 how =Q MANR do-2SG  
 'How are you doing?'
- (28) Ksindeyu gan diduulsit?  
 ksindeh [=u gan diduuls-ət \_\_\_\_]  
 which =Q tree alive-SX  
 'Which tree is alive?'
- (29) T'masooldu gyet?  
 t'masool-t [=u gyet]  
 how.many.people-3 =Q people  
 'How many people are there?'

<sup>9</sup> The variable positioning of =u in these examples is consistent with what was established with respect to core-argument extraction in this section: =u appears left-peripherally unless there is non-participant agreement morphology on the predicate.

- (30) T'maaysdu dzak'wüsga gyilks diyeltgn?  
 t'maays-t [=u dzak'wüska = a gyilks = di = yeltk-n]  
 how.many.things-3 = Q animal = CN back = with = return-2SG  
 'How many animals did you return with?' (TSLA 2013)
- (31) Goł gan sis'aaxsdut Kayla?  
 goo [ = l gan sis'aaxs-t = u = t Kayla \_\_\_\_ ]  
 what = CN REAS laugh-3 = Q = PN Kayla  
 'Why is Kayla laughing?' (Sasama 2001)
- (32) Ndeł gasgaawdu xsos Dzon?  
 nde [ = l gasgaaw-t = u xsoo(-t) = s Dzon]  
 how = CN amount-3 = Q canoe-3 = PN John  
 'How big is John's canoe?'

In this section we have seen that the particle =u appears in root interrogatives, appearing variably between a left-peripheral position and a post-predicative position. Let us now turn to embedded and coordinated questions.

## 2.2 *Embedded and coordinated questions*

Question-embedding verbs are typically analysed as belonging to one of two classes: RESPONSIVE ('know'-class), which allow declarative as well as interrogative complements and ROGATIVE ('ask'-class), which permit only interrogative complements (Lahiri 2002). Both verb-classes permit embedded *wh*-questions in Sm'algyax. However, questions embedded under either class of predicate lack the particle =u:<sup>10</sup>

<sup>10</sup> Although, as we will see in §2.3, headless-relative clauses with a *wh*-word may appear in an argument position, language-internal diagnostics suggest that embedded questions attach as clausal complements and are therefore distinct phenomena. This is not so clear in the case of questions embedded under *wilaay* 'know', which could perhaps be analysed as 'I know the one [(who) the chief helped \_\_\_\_]'. The sentence in (34), on the other hand, can not be analysed as 'I asked [about] the one [(who) the chief helped \_\_\_\_]'. This is because the verb *güüidax* 'ask' requires a (interrogative) clausal complement. This can be seen below: (i) shows us that a PP complement of *güüidax* is not possible. The variant with an interrogative complement (ii) was offered by my consultants as a correction:

- (i) \*nah güüidax(-ə-t)=a fisman [da k'wan]  
 PFV ask-TR-3 = CN fisherman OBL 2.OBL  
 Intended: 'The fisherman asked about you.'
- (ii) Nah güüdaga fisman ndeh wila waan.  
 nah güüidax(-ə-t)=a fisman [ndeh wila waal-n]  
 PFV ask-TR-3 = CN fisherman how MANR be-2  
 'The fisherman asked how you are.'

- (33) Responsive predicate with interrogative complement:  
 Wilaayu naa ḥimoom sm'ooygit.  
 wilaay-ə-u [naa(\* = u) ḥimoom(-ə-t)(\* = u) sm'ooygit \_\_\_\_]  
 know-TR-1SG who help-TR-3 chief  
 I know who the chief helped
- (34) Rogative predicate with interrogative complement:  
 Güüdagu naa ḥimoom sm'ooygit.  
 güüdax(-ə)-u [naa(\* = u) ḥimoom(-ə-t)(\* = u) sm'ooygit \_\_\_\_]  
 ask-TR-1SG who help-TR-3 chief  
 'I asked who the chief helped.'

Coordinated questions also exhibit interesting distributional properties relating to the *wh*-particle =u. The following examples show us two distinct patterns — one in which each coordinated clause is marked by an occurrence of the *wh*-particle (35a), and one in which there is a single occurrence of the *wh*-particle, which appears in the first coordinate (35b). These can be contrasted with (35c) which shows us that coordinated questions with a single occurrence of =u in the second conjunct are ungrammatical, suggesting that this distinction cannot be simply reduced to the optionality of =u:

- (35) Context: You're talking to a friend who returned from a baking exchange:
- Goyu nah gabn ada naayu nah int dzapt?  
 [goo = u nah gap-ə-n] [ada naa = u nah in = t dzap-t]  
 what = Q PFV eat-TR-2 and who = Q PFV AX = 3 make-3  
 'What did you eat and who made it?' (Accepted form)
  - Goyu nah gabn ada naał nah int dzapt?  
 [goo = u nah gap-ə-n] [ada naa = ɿ nah in = t dzap-t]  
 what = Q PFV eat-TR-2 and who = CN PFV AX = 3 make-3  
 'What did you eat and who made it?' (Volunteered form)
  - \*[goo = ɿ nah gap-ə-n] [ada naa = u nah in = t dzap-t]  
 what = CN PFV eat-TR-2 and who = Q PFV AX = 3 make-3  
 Intended: 'What did you eat and who made it?'  
 Consultant's comment: "I wouldn't say that." Corrected to (35b).

This asymmetry follows from the analysis I put forth in §3 in which =u heads a Mood projection above CP, and coordinated questions either involve coordination of two MoodPs (yielding the double marked coordinated questions as in (35a)), or coordinated CPs *under* a single MoodP (yielding the single-marked variety (35b)).

Though it is difficult to assess the differences between the single-marked and double-marked questions, my language consultants will routinely volunteer double-marked

questions when there are multiple addressees, and dislike single-marked questions in these cases:

- (36) Context: a parent is scolding his two children. He asks the first child the first question and turns to the second child and asks the second question:  
 Goyu gan wila gyoon a gwa'a, ada goyu gan sisaaxsn?  
 [goo=u gan wila gyoo-n a gwa'a] [ada goo=u gan sisaaxs-n]  
 what=Q REAS MANR do-2SG OBL here and what=Q REAS laugh-2SG  
 'Why did you<sub>i</sub> do this, and why are you<sub>j</sub> laughing?' (Volunteered form. Form with one =u rejected.)

Coordinated questions to a single addressee, in which the second question is a clear followup or continuation to the first are routinely volunteered with a single occurrence of =u (though my consultants will accept double-marked coordinated questions in these cases):

- (37) Context: a parent is scolding his child who is not taking the punishment seriously:  
 Goyu gan wila gyoon a gwa'a, ada goł gan sisaaxsn?  
 [goo= u gan wila gyoo-n a gwa'a] [ada goo=ł gan sisaaxs-n]  
 what=Q REAS MANR do-2SG OBL here and what=CN REAS laugh-2SG  
 'Why did you<sub>i</sub> do this, and why are you<sub>i</sub> laughing?' (Volunteered form. Form with two occurrences of =u accepted.)

Mixed constructions which coordinate a declarative and interrogative pattern differently from coordinated interrogatives. In the examples below the question in the second conjunct is marked with =u:<sup>11</sup>

- (38) Okanagan di wil 'waatgu, ada ndeyu di wil 'waatgn?  
 [Okanagan=a di wil 'waatk-u] [ada ndeh=u di wil 'waatk-n]  
 Okanagan=CN FOC COMP be.from-1SG and where=Q FOC COMP be.from-2SG  
 'I'm from the Okanagan, and where are you from?'

---

<sup>11</sup> When I asked for an acceptability judgement of (38) and (39) without =u I was told by my consultants that that was "a real shortcut, eh?", and they repeated back the forms with =u. This contrasts with cases such as (35b) which are offered and accepted without =u in the second conjunct.

- (39) Context: Three siblings are organising who cooks dinner and when:  
 'Nüüyu dm int dzam wineeya a sah gyaw'n ada naayu dm int dzam wineeya dzig-its'iip?  
 [’nüüyu dm in=t dzam(-t)=a wineeya a sah gyaw'n] [ada naa=u dm  
 1SG PROSP AX=3 cook-3=CN food OBL day this and who=Q PROSP  
 in=t dzam(-t)=a wineeya dzigits'iip]  
 AX=3 cook-3=CN food tomorrow  
 'I'm cooking today, and who is cooking tomorrow?'

This also follows from my analysis in §3 as mixed coordinations could not be analysed as coordinations under a single MoodP as there is a mismatch between interrogative and declarative Mood — these must be analysed as coordinations of two MoodPs, which is supported by the differing behaviour with respect to =u across these distinct environments.

In this subsection we have seen that the *wh*-particle =u does not appear in embedded questions, and may appear either once or twice in coordinated questions — in single-marked questions it is only able to appear in the first coordinate. This, as well as data from mixed coordinations featuring a declarative and an interrogative support the analysis of =u put forth in §3.

### 2.3 Wh-words in non-interrogative contexts

Having established a basic description of *wh*-questions above, as well as a distribution for the *wh*-particle =u, let us turn to non-interrogative uses of *wh*-words in Sm'algyax. Apart from appearing in *wh*-interrogatives, *wh*-words also appear in the formation of indefinites, free-relatives, and exclamatives, all of which prohibit the appearance of =u. This shows that =u is not associated solely with *wh*-words, but with *wh*-questions.

Bare *wh*-words can appear as generic, indefinite nouns in argument positions:

- (40) Ksiniidzu naa.  
 ksi=niist-u **naa**  
 out=see-1SG who  
 'I picked out a person.'
- (41) Hablbootida goo a ts'im ts'ikts'ikt.  
 ha=bl~boolt-ə-t=a **goo** a ts'im ts'ikts'ik-  
 INS=PL~keep-TR-3=CN what OBL in car-3  
 'He is keeping things in his car.'

- (42) **Dogada nagoos nagwaat.**  
 dox-ə-t=a na-goo=s nagwaat-t  
 take.PL-TR-3=CN POSS-what=PN father-3  
 'He took his father's things.'

Indefinite or indeterminate nouns in Sm'alyax can also be composed of a *wh*-word preceded by a particle which contributes quantificational force, including *ligi* 'any', *txa'nii* 'all', and *at/aka* 'not'.

The particle *ligi* combines with a *wh*-word to form an existential indefinite. These indefinite uses of *wh*-words cannot be marked by =*u*:

- (43) a. Ła'a ligi goo haasgu.  
 ł'a'=a ligi goo=a haas-k-u  
 bite=CN INDEF what=CN dog-PASS-1SG  
 'Something bit my dog.'  
 b. \*... ligi goo=**u**
- (44) a. Nah niidzu ligit naa  
 nah niits-u ligi=t naa  
 PFV see-1SG INDEF=PN who  
 'I saw someone.'  
 b. \*... ligi naa=**u**

Apart from occurring alongside *wh*-words, *ligi* plays additional roles, including participating in the formation of non-*wh*-indefinites by combining with nominals and numerals, or marking disjunction.

Universal indefinite nouns are also formed by combining a quantificational particle – *txa'nii* 'all/every' – with a *wh*-word:

- (45) a. Dm małdu txa'nii goo da k'wan.  
 dm mał-t-u txa'nii goo da k'wan  
 PROSP tell-T-1SG all what OBL 2SG.OBL  
 'I will tell everything to you.'  
 b. \*... txa'nii goo=**u**
- (46) a. Txa'nii ndeh nwil niidzn.  
 txa'nii ndeh n-wil niist-n  
 all where LOC-COMP see-2SG  
 'I see you everywhere'  
 b. \*... txa'nii ndeh=**u**

As is also the case with *ligi*, *txa'nii* can compose with non-*wh*-words creating universal quantificational phrases.

Negative indefinite nouns are formed by negation directly preceding a *wh*-word. The *wh*-particle is also prohibited here:

- (47) a. Aka gooł dzabi.  
**aka** **goo**=ɿ dzap-i  
 NEG what=CN do-1SG  
 'I'm not doing anything.'  
 b. \*... aka goo=u
- (48) a. Akadii ndeł dm gooyin!  
**aka**=dii **ndeł**=ɿ dm goo-ə-n  
 NEG = FOC where=CN PROSP go-TR-2SG  
 'You're not going anywhere!'  
 b. \*... akadii ndeh=u

In addition to functioning as indefinite nouns, *wh*-words also appear in headless-relative clauses, which bear predictable extraction morphology, and thus closely resemble *wh*-questions. However these constructions also obligatorily lack the *wh*-particle =u:

- (49) Dm gooyu ndeh nwil gyigyeda 'nagyeku.  
 dm goo-ə-u [ndeł(\*=u) n=wil gyi~gyet=a/\*=u] 'nagyeku]  
 PROSP go-TR-1SG where LOC=COMP PL~born=CN parent-1SG  
 'I will go to where my parents were born.'
- (50) Waayu naa dmt in dzaba ts'ikts'igu.  
 waa-ə-u [naa(\*=u) dm=t in dzap=a/\*=u] ts'ikts'ik-u]  
 find-TR-1SG who PROSP=3 AX do=CN car-1SG  
 'I found someone who will fix my car.'

Finally, though rare in Sm'algyax, *wh*-exclamatives are attested, and also cannot be marked by =u:

- (51) Goł waalt!  
 goo=ɿ/\*=u) waalt-t  
 what=IRR.CN be-3SG  
 'What a thing!'

In this section I have shown that the *wh*-particle =u appears in root *wh*-questions, and does not appear in embedded questions and that non-interrogative uses of *wh*-words cannot be marked with =u. In the next section I suggest that existing accounts of illocutionary mood can account for the distribution of =u outlined in this section.

### 3 Analysis

In this section I propose that *=u* should be analysed as an interrogative illocutionary mood marker – a morpheme linked to the conversational function of ‘questioning’. This proposal relies on the following distinction between the notions of clause type on one hand, and sentence mood and force on the other (definitions from Portner (2018)):

- (52) a. CLAUSE TYPES are grammatically defined classes of sentences which correspond closely with sentence moods
- b. SENTENCE MOOD [i.e., illocutionary mood (CB)] is an aspect of linguistic form conventionally linked to the fundamental conversational functions within semantic and pragmatic theory
- c. SENTENTIAL FORCES are the fundamental conversational functions with which sentence moods are associated

According to this distinction the embedded clause in a sentence such as ‘I don’t know **who will go.**’ is interrogative in terms of clause type, but declarative in terms of its sentence mood and force. By treating *=u* as an instantiation of interrogative mood we can account for the facts outlined above, broadly: the appearance of *=u* in root interrogatives, and the prohibition of *=u* elsewhere.

#### 3.1 Illocutionary mood

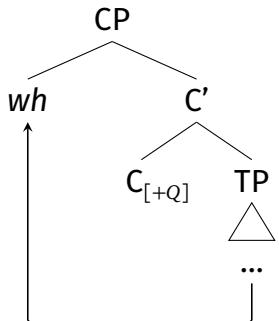
A number of theories of illocutionary mood pursue an operator based approach, in which a distinct, syntactically projected element encodes a sentential argument with the force of a declarative, interrogative, or imperative (Stenius 1967; Bierwisch 1980; Krifka 2001; Farkas & Bruce 2010; Wiltschko & Heim 2016; Woods 2016).<sup>12</sup>

I adopt a simple syntactic structure which is compatible with the references listed above. An interrogative clause is derived via conventional *wh*-movement: a [+Q] C-head drives movement of a *wh*-phrase to [Spec,CP] resulting in *wh*-initial word order. The CP at this stage is characterised as an interrogative clause type.

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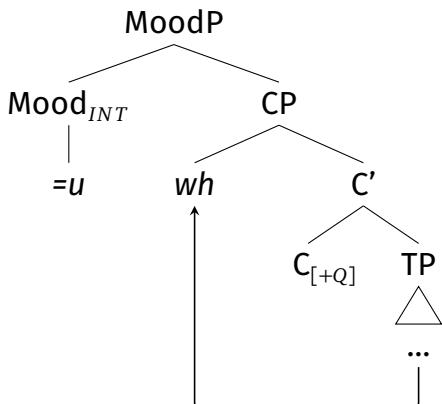
<sup>12</sup> The characterisation and implementation of illocutionary mood can vary substantially from author to author. See Woods (2016); Portner (2018) for an overview of sentential mood and speech act literature.

(53)



The interrogative Mood head – instantiated as =u in Sm'algyax – projects a MoodP (adapted from Cinque's (1999) Mood<sub>SpeechAct</sub> projection) which takes the interrogative CP as an argument. This structure represents a root interrogative:<sup>13</sup>

(54)

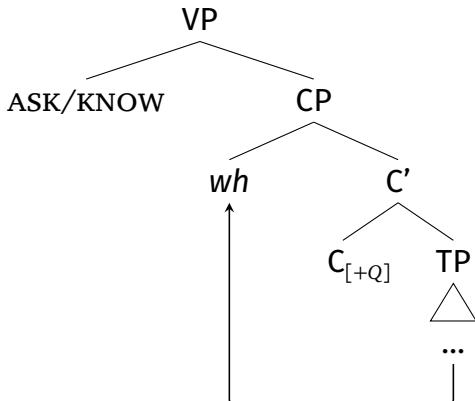


The semantic contribution of =u can be captured by the interrogative illocutionary operators discussed in Krifka (2001), and expanded upon in Farkas & Bruce (2010). The predominant role of this type of operator in the Farkas & Bruce framework is to take a QUESTION RADICAL (a set of propositions – which corresponds to my syntactic structure in (53)) as an argument, and to add that set of propositions to the stack of questions/issues under discussion. I refer the reader to Farkas & Bruce (2010:pg. 10) for details, definitions, and a discussion of questions using this framework.

Embedded questions, under my analysis, proceed as follows: a question-embedding verb such as 'know' or 'ask' will select the interrogative CP, and not the MoodP, as its complement, which is consistent with the prohibition of =u in syntactically embedded contexts:

<sup>13</sup> Though I do not provide an analysis of clitic linearisation here, I discuss this issue in §5.

(55)



It is not immediately evident *why* embedding verbs cannot take MoodP as an argument. This question is part of a larger debate. Until relatively recently, illocutionary mood has commonly been assumed to be restricted to root clauses, which is consistent with the Sm'algyax data presented here. For instance, Stenius (1967) suggests that a speech act, which is conceived of as the output of an illocutionary operator applied to a sentence radical, is not a regular semantic object — it does not participate in syntactic representations of semantic recursion and is therefore not embeddable. A similar line of reasoning is adapted in Portner et al.'s (2019) account of the unembeddability of illocutionary content in Korean, namely politeness marking. The analysis put forward is that the locus of politeness marking is in a head c which appears in a position above CP, and that c contributes a unique type of meaning that is not propositional, and therefore not embeddable. In dynamic approaches such as the Farkas & Bruce (2010) framework the denotation of an illocutionary mood operator is also not propositional, but rather is a function from input discourse structures  $K_i$  to output discourse structures  $K_i$ . If we ascribe such a denotation to  $=u$  then it follows that it also cannot be embedded.

On the other hand, recent accounts of root-like embedded phenomena such as embedded inverted questions in English dialects and embedded V2 in German have suggested that this is evidence that illocutionary acts are in fact able to be embedded in a restricted way, usually under roative verbs corresponding to 'ask' or 'wonder' (Krifka 2014; Woods 2016). This, however, does not hold crosslinguistically. Languages such as Mandarin (Li & Thompson 1981; Paul 2014), Cantonese (Sybesma & Li 2007; Lam 2014), Cuzco Quechua (Faller 2002, 2003, 2014), and Korean Portner et al. (2019) exhibit a wide range of illocutionary material in root clauses that is not able to appear in embedded clauses. This paper places Sm'algyax among these languages, with respect to interrogative mood marking. It is not clear whether these differences can be ascribed to different lexico semantic and syntactic properties of embedding verbs in these languages (arbitrary selection: Sm'algyax and Cantonese embedding verbs cannot select for MoodP, while German embedding verbs can), or whether there is a distinct difference between

how illocutionary mood is encoded across these languages. Ongoing, careful crosslinguistic work on the syntax and semantics of illocutionary content can bring us closer to answering these questions.

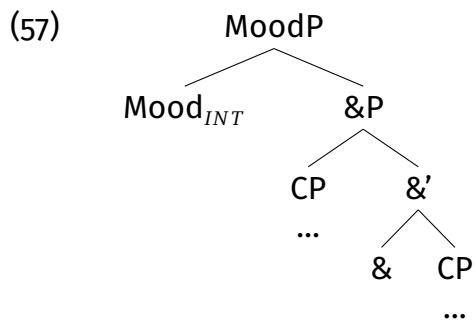
In the following discussion I address a number of predictions made by this analysis, including the behaviour of *=u* in coordinated questions, polar questions, as well as clause type/sentence mood mismatches such as rhetorical questions and so-called conjectural questions.

### 3.1.1 Coordinated questions

Recall from §2.2 that coordinated questions such as ‘who arrived and who left?’ can feature a single occurrence of the particle *=u* in the first conjunct, but not in the second conjunct:

- (56) a. Ndeł di wil dzoxdu 'neexł ada goł di gabit?  
       [Ndeh=ł di wil dzox-t=u 'neexł \_\_\_\_] [ada goo=ł di  
           where=CN FOC COMP live-3=Q killer.whale     and what=CN FOC  
           gap-ə-t \_\_\_\_]  
           eat-TR-3  
       ‘Where do killer whales live and what do they eat?’  
       b. \*[Ndeh=ł di wil dzox(-t)=a 'neexł] [ada goo=u di gap-ə-t]

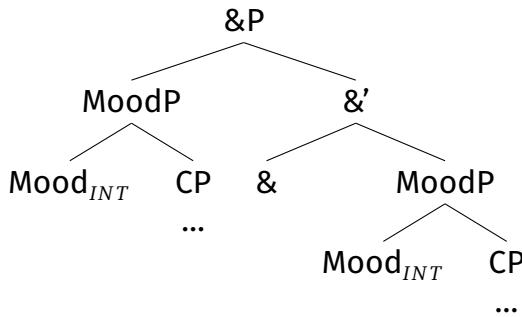
If *=u* is associated with interrogative mood, then the fact that coordinated questions are able to occur with a single occurrence of *=u* suggests that, under my analysis, coordinated interrogative clauses may constitute a single question act. This structure is given in (57) where we see the coordination of two interrogative clauses, with the MoodP headed by *Mood<sub>INT</sub>* dominating both CPs:



The presence of the structure in (57) does not rule out the coordination of question acts; recall that certain coordinated questions in Sm'algyax (such as those with multiple addressees) required two occurrences of *=u*. This suggests that coordinated

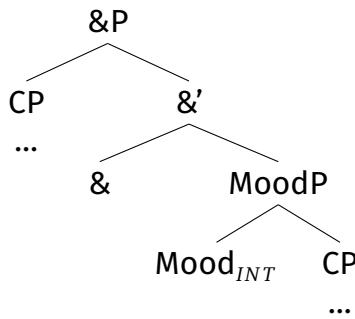
questions could be generated in two ways — as in (57) where we find a single occurrence of  $\text{Mood}_{\text{INT}}/=/u$ , and (58) where we find two occurrences:<sup>14</sup>

(58)



The ungrammatical option in (56b) is ruled out as a CP, uninflected for sentential mood is coordinated with a MoodP. The illegal structure is given below:

(59)



This proposal has implications for accounts of coordinated questions in Krifka (2001) and Hirsch (2017), both of which analyse coordinated questions as coordinations of separate question acts, with each coordinate marked by an interrogative illocutionary operator. The possibility of coordinating under a question act is not considered in Krifka, and is especially problematic for Hirsch.

Hirsch arrives at the issue of coordinated questions via an investigation of the semantics of connectives such as 'and', for which he adopts an inflexible denotation of type  $\langle t, \langle t, t \rangle \rangle$ :

- (60) Inflexible semantics for [[and]] (Hirsch 2017; Schein 2017)  
 $\llbracket \text{and} \rrbracket = \lambda p_t . \lambda q_t . p \wedge q$

<sup>14</sup> This tree can also account for the mixed coordinations of a declarative and interrogative observed in §2.2 examples (38) and (39) if we amend it as follows: the first MoodP is headed by a (null) non-interrogative Mood head, while the second one remains headed by the interrogative Mood head.

(i)  $[\&P [_{\text{MoodP}} \text{Mood}_{\text{-INT}} [_{\text{CP1}} \dots ]] [_{\&} \& [_{\text{MoodP}} \text{Mood}_{\text{+INT}} [_{\text{CP2}} \dots ]]]]$

An issue for this analysis arises with coordinated questions. The standard Hamblin-set denotation of a question is  $\langle\langle s, t \rangle, t \rangle$ , which cannot be an argument of the  $\langle t, \langle t, t \rangle \rangle$  connective in (60). In order to accommodate inflexible [and] Hirsch must find a type  $t$  node in the LF of a question to be a suitable scope site for [and]. He suggests that a simplex question such as (61) has a higher node which qualifies as such (62):

- (61) Skeletal LF for question  
 $[\text{CP} \text{ who arrived}]$
- (62) Introducing a higher type  $t$  node  
 $[\text{TP} \vdash \text{ask} [\text{CP} \text{ who arrived}]]$

Hirsch (2017:pg.182) suggests that the higher type  $t$  node is the result of a covert performative verb ASK, which is at least superficially analogous to my Mood operator. Crucially for this analysis, Hirsch analyses performative clauses as truth-value denoting declaratives. Inflexible [and] is able to take these performative clauses of type  $t$  as arguments yielding the following LF for coordinated questions:

- (63)  $[\&P [\text{TP} \vdash \text{ask} [\text{CP} \text{ who arrived}]]] [\text{and} [\text{TP} \vdash \text{ask} [\text{CP} \text{ who left}]]]]$

However evidence from coordinated questions such as (56a) in Sm'algyax suggests that the coordination of questions also happens lower than this resulting in the following possible structure unaccounted for in Hirsch (2017):

- (64)  $[\text{TP} \vdash \text{ask} [\&P [\text{CP} \text{ who arrived}]]] [\text{and} [\text{CP} \text{ who left}]]]$

Perhaps even more compelling evidence that coordinated questions can be coordinated lower comes from clause-type marking languages such as Japanese. The interrogative clause-type (not Mood) particle *ka* in Japanese appears clause finally in *wh*-questions, whether root or embedded. Similar to what we observed in Sm'algyax, coordinated questions in Japanese are often formed with a single instance of *ka* in the clause final position, suggesting that the coordination of questions is occurring lower than the CP projection:

- (65) Japanese:  
Naoko wa doko ni iki nani o tabemashita **ka**?  
Naoko TOP where LOC go what ACC eat Q  
'Where did Naoko go and what did she eat?'
- (66) Japanese:  
[Naoko ga doko ni itte nani o tabeta no **ka**] shitteimasu.  
Naoko NOM where LOC go what ACC eat NO Q know  
'I know where Naoko went and what she ate.'

The mood marking data in Sm'algyax and clause-type marking data in Japanese suggest that questions can be coordinated lower than the level of an illocutionary act, which is not accounted for under Hirsch's (2017) analysis of conjoined questions. See Hirsch (2017:pg.217) for an semantic analysis of conjoined questions couched in Rooth-Hamblin style alternative computation – one that he ultimately abandons – which is able to successfully account for lower coordinations discussed in this section.<sup>15</sup>

### 3.1.2 Non-canonical questions

Let us now turn to non-canonical questions: questions which do not request information from an addressee. If we analyse *=u* as a marker associated with interrogative mood, we might expect its distribution to be affected by non-information-seeking uses of interrogative clause types. This in fact appears to be borne out. In this section, I address rhetorical questions and so-called conjectural questions (Littell et al. 2010), and show that they are uniquely marked variations on the interrogative clause type, which lack the particle *=u*.

A clause type/sentence force mismatch occurs in the case of rhetorical questions: they have the clause type of an interrogative, but the force of a declarative. The speaker does not expect an answer, as the answer is either known to them, or there does not exist an answer. Questions for which there does not exist an answer in Sm'algyax are formed as in (67) with the irrealis complementiser *dzi*, and cannot include *=u*:

- (67) Goo *dzi hawt?*  
 goo [(\*=u) *dzi hawt*-t \_\_\_\_]  
 what IRR say-3  
 ‘What else is there to say?’  
 = There is nothing to say

There are many examples of this type of question in narrative contexts, where it is the narrator posing the question to their audience to make a certain point. In the following example, the story's protagonist is stranded on a snowy mountain without his magical tools. The narrator asks a question which lacks *=u* (the only question lacking *=u* in the entire story), and immediately follows his question with a statement showing that there is no licit response to this question:

<sup>15</sup> Hirsch (2017) briefly considers, and ultimately rejects a type-shifted [[and]], showing that it fails to predict the appropriate meaning of a coordinated question. See Hirsch (2017:pg.182) for argumentation.

- (68) a. Ndaa dzi yaakit?  
 ndaa [(\*=u) dzi yaak-i-t \_\_\_\_]  
 where IRR go-TR-3  
 'Where could he go?'  
 b. Man duulxk, ada tgi duulxgit, ada lagax duulxgit...  
 man duulxk, ada tgi duulxk-t, ada lagax duulxk-t...  
 up stuck and down stuck-3 and side.to.side stuck-3  
 'Not up, nor could he go down, he couldn't go to either side...' (TSLA 2013:  
 Asdiwaal 1484)

The protagonist dies on the mountain.

Questions that the speaker does not expect the addressee to know the answer to are marked with the 'conjectural evidential' =sn/=si'in. Interrogative clauses marked with =sn instead of =u also appear to lack interrogative force, and are translated as 'I wonder...' statements (69). These types of questions are also routinely volunteered as self-addressed questions (70):<sup>16</sup>

- (69) Naasn waat.  
 naa=**sn** waa-t  
 who=CONJ.EVID name-3  
 'I wonder what her name is...'  
 (70) Context: You can't find your keys, you're home alone. You ask yourself:  
 Ndesn nahak'a'ayu...  
 ndeh=**sn** na-hak'a'a-u  
 where=CONJ.EVID POSS-key-1  
 'I wonder/I can only guess where my keys are...'

Questions of this flavour have been called conjectural questions — constructions in which there is an interrogative clause-type, with a conjectural/inferential modal or evidential, which lack interrogative force (Littell et al. 2010; Faller 2019). Nearly identical constructions are attested in St'át'imcets (Lillooet Salish), N̄te?kepmxcín (Thompson

<sup>16</sup> The conjectural evidential also appears in non-interrogative clauses, and contributes the meaning that the speaker has arrived at this conclusion via reasoning, and not direct evidence. Contrary to the conjectural questions without =u which are consistently translated into English as 'I wonder...' statements, those marked with =u are translated as 'wh do you reckon...' questions:

(i) Dm 'wiisahoonsnt Josephine  
 dm 'wiisahoon=**sn**=t Josephine  
 PROSP twin=CONJ.EVID=PN Josephine  
 'Maybe Josephine is having twins.' (Sasama 2001)

Salish), and Gitksan (Tsimshianic) (Littell et al. 2010), as well as Cuzco Quechua (Faller 2019).

Unlike the rhetorical questions discussed above, questions with the conjectural evidential *can* by marked by =*u*, which has an effect on how these questions are used. Questions marked by both =*sn* and =*u* appear in contexts where the speaker assumes the addressee might know, or is able to infer the answer to the question, and expects an answer. Speakers translate these sentences into English as ‘*wh* do you reckon...’:

- (71) Context: You've missed a call from a number with a mysterious area code; you show me the number and ask:  
 Naasnu nah int si'is huutgu?  
 naa = **sn** = **u**            nah in = t    si'is huutk-u  
 who = CONJ.EVID = Q PFV AX = 3.I try call-1SG  
 ‘Who do you reckon is trying to call me?’
- (72) Context: Me and my brother are hiking through the woods and see fresh animal tracks, which may be dangerous as we are in bear country. Fortunately my brother recently completed a wilderness class and is in a better position to judge. I ask him:  
 Goosnu galksa daawłit a gwa'a?  
 goo = **sn** = **u**            galka    daawł-it a    gwa'a  
 what = CONJ.EVID = Q through pass-SX OBL here  
 ‘What do you reckon passed through here?’ (context adapted from Korotkova (2016))
- (73) Context: Velna and Margaret are listening to old Sm'algyax recordings and Margaret hears a voice she doesn't recognize. She suspects Velna might know who it is, but isn't sure of that. Margaret asks:  
 Naasnu amhawt da gwii?  
 naa = **sn** = **u**            amhaw-t da    gwii  
 who = CONJ.EVID = Q voice-3SG OBL there  
 ‘Whose voice is that there?’

Although a more in-depth look at conjectural questions in Sm'algyax is left as future research, the above examples show that the conjectural questions without =*u* lack interrogative force (which is consistent with the descriptions of conjectural questions in Salish, Gitksan, and Cuzco Quechua (Littell et al. 2010; Faller 2019)), and that conjectural questions with =*u* have interrogative force. Likewise, rhetorical questions, formed with the irrealis marker *dzi* do not expect an answer from the addressee, and also lack =*u*. This is consistent with the analysis that =*u* is associated with interrogative mood.

### 3.1.3 Polar questions

One potential issue for the illocutionary-mood analysis arises when polar questions are considered. If  $=u$  is an instantiation of an interrogative-mood operator, we might predict it to also appear in non-*wh*-questions. This prediction is not borne out — polar questions are marked by the clitic  $=ii$ :

- (74) Nah gabinii ts'ik'aaws?  
nah gap-ə-n = **ii** / (\* = **u**) ts'ik'aaws  
PFV eat-TR-2SG = YNQ split.salmon  
'Did you eat the split dried salmon?'

However, we do see some substantial overlap between the behaviour of  $=u$  and  $=ii$ . First of all, they do not occur together (74). Also, like  $=u$ ,  $=ii$  is confined to root clauses. In (75) we see that  $=ii$  is prohibited in embedded questions, which instead are headed by the irrealis complementiser *dzi*:

- (75) a. Hasaxł haasii wineeya?  
hasax = ɿ haas = **ii** wineeya  
want = CN dog = YNQ food  
Does the dog want food?  
b. Wilaays Dzon dzida hasaga haasa wineeya.  
wilaay = s Dzon [dzi = dā̄ hasak = a haas = a wineeya]  
know = PN John IRR = FOC want = CN dog = CN food  
'John knows if the dog wants food.'  
c. \*wilaay = s Dzon [(dzi = ada) hasax = ɿ haas = **ii** wineeya]  
know = PN John IRR = and want = CN dog = YNQ food

In focus-fronting constructions,  $=ii$  also exhibits variable positioning between a left-peripheral (76a) and post-predicative (76b) position:

- (76) a. Ts'ik'aawsii gabit gyet?  
ts'ik'aaws = **ii** gap-ə(-t) = ɿ gyet  
split.salmon = Q eat-TR = CN person  
b. Ts'ik'aawsł gabidii gyet?  
ts'ik'aaws = ɿ gap-ə-t = **ii** gyet  
split.salmon = Q eat-TR-3 = CN person  
'Is it ts'ik'aaws that the people eat?'

This resembles the variable positioning of  $=u$  but is in fact freer. While  $=u$  is only able to appear post-predicatively when there is a non-participant suffix on the predicate, this restriction does not hold for  $=ii$  (for instance  $=ii$  follows second person *-n* in (74)). This

shows that while both clitics are able to appear post-predicatively, only  $=u$  is sensitive to person hierarchies.

Finally, in the closely-related and mutually-intelligible language Sgüüxs (Southern Tsimshian), the same particle  $=i$  is used in both *wh*-questions and polar questions:

- (77) Sgüüxs polar question:  
 Ahl mi wilaaxhl waadi?  
 a=h<sub>1</sub> mi wilaax=h<sub>1</sub> waa-t=**i**  
 NEG=CN 2SG know=CN name-3=Q  
 'Do you know her name?' (Tarpent 1994)
- (78) Sgüüxs *wh*-question:  
 Ndahl gasgoohl hasagani?  
 nda=h<sub>1</sub> gasgoo=h<sub>1</sub> hasaga-n=**i**  
 how=CN amount=CN want-2SG=Q  
 'How much do you want?' (Tarpent 1994)

The above suggests that the polar question and *wh*-particles in Sm'alyax could be subsumed under a unified analysis in which they encode the clause with interrogative force:

- (79) [Mood<sub>P</sub> =ii / =u [CP ...]]

The different forms for Mood<sub>INT</sub> can be conceived of as contextual allomorphy: the same underlying lexical item is spelled out as  $=u$  or  $=ii$  depending on differences in grammatical features. An obvious candidate for conditioning this allomorphy is the [+wh] feature in C in *wh*-questions. Mood<sub>INT</sub> is spelled out as  $=u$  in case there is a [+wh] feature in C, while Mood<sub>INT</sub> is spelled out as  $=ii$  elsewhere. Mood<sub>INT</sub> in Sgüüxs is not sensitive to C<sub>[+wh]</sub> which results in the surfacing of  $=i$  in polar questions as well as in *wh*-questions.

This approach is similar to a unified analysis of imperative, promissive, and exhortative clause types in Korean put forth by Portner (2004) and Zanuttini et al. (2012) which suggest that these three constructions can be subsumed under a single class, namely 'jussive', and differ in form due to grammatical person features, rather than being indicative of different clause types.

In this section I suggested that  $=u$  should be analysed as an interrogative mood operator, which takes a question radical as an argument and encodes it with the force of a question:

- (80) [Mood<sub>INT</sub> [CP *wh*-question]]

I outlined some predictions made by this analysis which were consistent with the Sm'alyax data, including the absence of  $=u$  in non-canonical questions, and the possi-

bility of a unified analysis of the *wh*-particle *=u* and the polar-question particle *=ii*. One consequence of this analysis is that it is possible to coordinate questions at the MoodP level, as well as the CP level, which proved problematic for an analysis of conjunction and coordinated questions in Hirsch (2017).

## 4 Q-particle analyses

Having established outlined my analysis of *=u* as a marker of interrogative mood, let us turn to a potential counteranalysis for *=u*. In this section I discuss a family of analyses which aims to account for the varied syntactic and semantic behaviour of Q-particles from a number of unrelated languages. Much of the work pursued by these analyses explores and proposes a shared semantics of the many roles of Q in languages with overt Q-particles (Hagstrom 1998; Cable 2007, 2010a,b; Uegaki 2018), while syntactic work on Q-particles explores the concept of the Q-particle or QP as a target for syntactic movement, overt or covert, and interactions of this movement with island effects, and pied-piping Cable (2007); Kotek (2014). Apart from Tlingit (discussed in Cable (2007, 2010a,b)), most languages discussed in this Q-particle literature are *wh*-in-situ, including Japanese (Kuroda 1965; Hagstrom 1998; Uegaki 2018), Sinhala (Kishimoto 1992; Hagstrom 1998; Slade 2011), Malayalam (Jayaseelan 2001), and Shuri Okinawan (Hagstrom 1998).

I argue that despite certain surface similarities between *wh*-particles in Sm'algyax and the languages discussed in this literature, the predictions which arise from these analyses are not borne out for Sm'algyax.

### 4.1 Syntax of Q-particles

A prominent syntactic account of Q-particles in *wh*-movement languages comes from Cable (2007, 2010a,b), which adopt the notion of Q-MOVEMENT. Under this analysis, a question particle takes a *wh*-word or phrase in its canonical argument position as a complement and projects a QP, which is the target for Q-movement.<sup>17</sup>

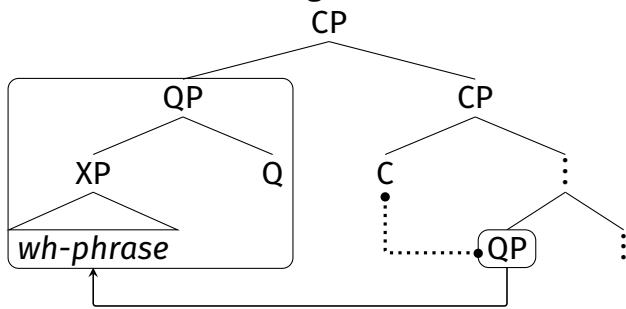
Cable argues that this process is especially transparent in Tlingit, an SOV Na-Dene language spoken in Alaska, British Columbia, and the Yukon. Below we see that Tlingit's Q-particle *sá* appears in a phrase final position, to the right of a *wh*-phrase which obligatorily appears in a left-peripheral position, bearing some surface resemblance to the positioning of *=u* in Sm'algyax:

<sup>17</sup> Cable (2007) also proposes a syntax for *wh*-in-situ languages such as Japanese, in which the Q-particle adjoins to an XP (rather than projecting a QP) and undergoes Q-movement to a clause-peripheral position. As Sm'algyax is a *wh*-movement language I do not discuss this component of Cable's analysis.

- (81) [Daa sá] i éesh al'óon?  
 [what Q] your father he.hunts.it  
 'What is your father hunting?' Tlingit; (Cable 2007)
- (82) [Aadóo yaagú sá] ysiteen?  
 [who boat Q] you.saw  
 'Whose boat did you see?' Tlingit; (Cable 2007)
- (83) [Goodéi wugootx sá] has oowajée i shagónich?  
 [where.to he.went Q] they.think your parents.ERG  
 'Where do your parents think that he went?' Tlingit; (Cable 2007)

Cable proposes the structure in (84) to account for *wh*-movement in Tlingit:

- (84) QP movement in Tlingit:



(84) is understood as follows: an interrogative C head probes for and enters into an Agree relation (indicated here with a dotted line) with a Q head, instantiated as sá in Tlingit. This relation requires the goal — the QP — to move to the projection of the interrogative C (indicated by a solid line). As Q takes a phrase containing a *wh*-word as its complement in *wh*-movement languages, the entire QP, including the *wh*-word will appear in this left-peripheral position.

Cable outlines a number of predictions which fall out from the structure in (84), including the inability to strand the Q-particle, as well as the behaviour of the Q-particle in multiple *wh*-questions. Below I show, following Cable's argumentation, that Tlingit adheres to the predictions of (84), and that crucially, these predictions are not borne out in Sm'algyax.

The first prediction is that *wh*-questions in *wh*-movement languages are ill-formed if only the *wh*-word appears in the left-peripheral position, stranding the Q-particle. This is shown to be the case in Tlingit:

- (85) No fronting *wh*-word alone in Tlingit (Cable 2007)

- a. [[Goodéi **sá**]<sub>1</sub> [has uwajée [t<sub>1</sub> woogootx] i shagóonich]]?
- where.to Q they.think he.went your parents.ERG
- ‘Where do your parents think he went?’
- b. \*[[Goodéi]<sub>1</sub> [has uwajée [t<sub>1</sub> **sá** woogootx] i shagóonich]]?
- where.to they.think Q he.went your parents.ERG

This would suggest that if we were to apply the structure in (84) to Sm’algyax we should expect the same prohibition on fronting a *wh*-word and stranding the Q-particle. However, as we already saw in §2.1 this is not the case — the *wh*-word often appears in a left-peripheral position while =*u* appears in a post-predicative position:

- (86) Fronting *wh*-word alone in Sm’algyax:

Got int sibaasdu haas?  
 goo=ɬ in=t sibaas-t=**u** haas  
 what=CN AX=3 scare-3=Q dog  
 ‘What scared the dog?’

If *wh*-movement is driven by movement of a QP headed by Q to a left-peripheral position, and if we for the sake of argument treat =*u* as an instantiation of Q, it does not directly follow how the *wh*-word but not the Q-head has undergone movement.<sup>18,19</sup>

We could potentially salvage this analysis if the *wh*-phrase, the predicate, and the post-predicative =*u* were to form a constituent. This would be difficult to derive as, in the case of transitive subject extraction, the predicate and subject would have to form

<sup>18</sup> If we were to allow Q-stranding in Cable’s theory, it is still not likely that this is what is happening in Sm’algyax as evidence from extraction of other phrasal material strictly prohibits the stranding of heads. This can be observed in the PP extraction case below — the extraction of the complement of P, and the stranding of P is rejected:

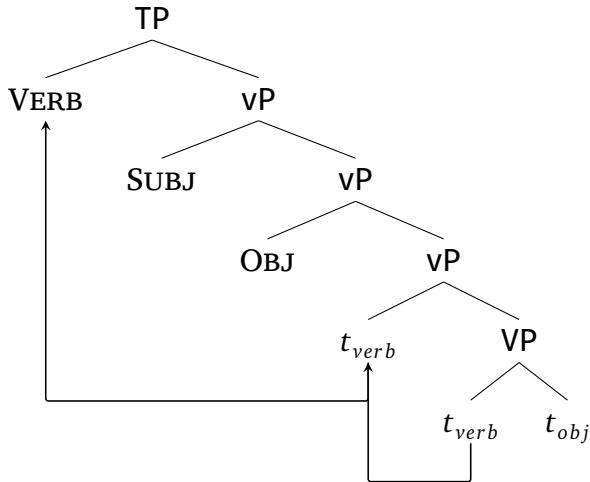
- (i)     a. Nan sipaay’nu das Clarence.  
 nah=n si-paay’nu da(-t)=s Clarence  
 PFV=2SG make-pie-3 OBL-3=PN Clarence  
 ‘I baked a pie for Clarence.’
- b. Naayu wil sipaay?  
 naa=u wil si-paay-n  
 who=Q COMP make-pie-2SG  
 ‘Who did you make a pie for?’
- c. \*naa=u wil si-paay-n da(-t)=s?  
 who=Q COMP make-pie-2SG OBL-3=PN

It is more likely that the *wh*-phrase and =*u* do not form a constituent in the same way that *sá* does with *wh*-phrases in Tlingit.

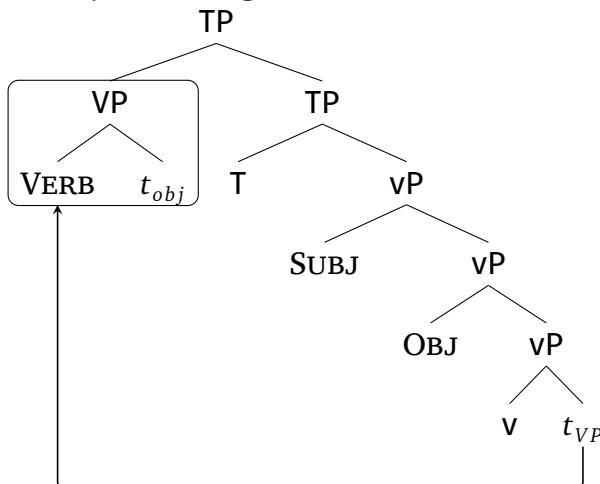
<sup>19</sup> It should be noted here that while Cable’s analysis does not account for the surface position of =*u*, my analysis has sidestepped the issue of clitic linearisation, which I discuss in §5.

a constituent to the exclusion of the object, while in object extraction questions the predicate and object would have to form a constituent to the exclusion of the subject. Whether Sm'algyax's VSO order is derived via V (87) or VP raising (88), this is not able to be derived parsimoniously.

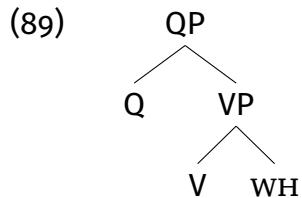
- (87) VSO by V raising (Alexiadou & Anagnostopoulou 1998, 1999)



- (88) VSO by VP raising (Massam 2001)



For any given point in the derivation of either structure the only possible grouping of the object and verb to the exclusion of the subject occurs before the movement of the object and the movement of the verb in (87) or the VP in (88). Therefore it is possible to conceive of a QP being projected at the VP level to account for questions in which the *wh*-object and the predicate appear to the right of a Q-particle:



I assume a left-headed Q as this is consistent with the grammar of Sm'algyax. The correct order of the *wh*-object, verb, and =*u* (in that order) can be derived by moving the *wh*-object to [Spec,VP], then pied-piping the VP (an instance of secondary *wh*-movement (Heck 2008)) to [Spec,QP]. The QP is then able to move to [Spec,CP] as in (84) deriving the correct order for object *wh*-questions with a post-predicative =*u*. However, nowhere in either derivation is it possible for the verb and subject to form a constituent to the exclusion of the object, which fails to account for transitive subject questions with a post-predicative =*u*. Another serious issue for this approach is that a number of other elements including the aspectual morpheme *dm* and the verum operator (*k*)'ap (90) and the complementiser *wil* (91) may intervene between the *wh*-word and =*u*, suggesting that the QP in (89) is far too low:

- (90) Dzindał dm 'ap yaltgidut Norman?  
dzindaa=ł dm 'ap yaltk-t=u=t Norman  
when=CN PROSP VER return-3=Q=PN Norman  
'When is Norman really coming back?' (Sasama 2001)
- (91) Ndał mi wil gyiikdu ngwüda'atsn?  
ndaa=ł mi wil gyiik-t=u n-gwüda'ats-n  
where=CN 2SG COMP buy-3=Q POSS-coat-2SG  
'Where did you buy your coat?'

Further evidence that =*u* and the *wh*-word do not form a constituent comes from long-distance extraction. We would expect in the case of long-distance extraction, the entire constituent headed by =*u* would move to the left-peripheral position, and as shown below, this is not the case. In (92) we see that the *wh*-word can be separated from =*u* by an aspectual element *dm* and the predicate. If this were a constituent headed by =*u* the string *goł dm gabidu* would be able to appear in a left-peripheral position in long-distance extraction. (92b) shows us that this is not borne out.

- (92) a. Goł dm gabidu fisman?  
goo=ł dm gap-ə-t=u fisman  
what=CN PROSP eat-TR-3=Q fisherman  
'What will the fisherman eat?'

- b. \*[goo=ɿ dm gap-ə-t] = **u** anoolks-ə-t \_\_  
what = CN PROSP eat-TR-3 = Q allow-TR-3  
Intended: 'What is he allowed to eat?'
- c. Goyu anoolksit dm gabit?  
goo = **u** anoolks-ə-t dm gap-ə-t \_\_  
what = Q allow-TR-3SG PROSP eat-TR-3SG  
'What is he allowed to eat?'
- d. Goɿ anoolksidu dm gabit?  
goo = ɿ anoolks-ə-t = **u** dm gap-ə-t \_\_  
what = CN allow-TR-3SG = Q PROSP eat-TR-3SG  
'What is he allowed to eat?'

I suggest that according to this diagnostic, =*u* and the *wh*-phrase do not form a constituent as predicted by a Cable-style analysis.

The next prediction concerns the behaviour of Q-particles in multiple *wh*-questions. If *wh*-movement is recast as Q-movement, then the overt movement of multiple *wh*-phrases should involve multiple Q-particles. Again, this can be observed in Tlingit — in multiple *wh*-questions, we see that each *wh*-phrase appears in the left-peripheral position, and that each *wh*-phrase is associated with a Q-particle:

- (93) Multiple *wh*-fronting in Tlingit (Cable 2007):  
 Aadóo sá daa sá yéiuwajée du jee yéiteeyí?  
 who Q what Q they.think their hand.at it.is.there  
 'Who thinks they have what?'

This diagnostic does not straight-forwardly apply to Sm'algyax, as multiple *wh*-questions are not allowed in Sm'algyax:

- (94) a. \*naa = **u** in = t dzam goo  
 who = Q AX = 3 make what  
 b. \*naa = **u** in = t dzam goo = **u**  
 who = Q AX = 3 make whatQ  
 c. \*naa = **u** goo = **u** in = t dzam  
 who = Q what = Q AX = 3 make  
 Intended 'Who made what?'

However if we look at coordinated *wh*-questions in Sm'algyax we see that they are often formed with a single occurrence of =*u*. In (95) (repeated from (35)) the first question is marked by the presence of =*u*, while the second question lacks it. A single occurrence of =*u* in the second clause is ruled out, showing that this is not a case of =*u* being optional:

- (95) Context: You're talking to a friend who returned from a baking exchange:

- a. Goyu nah gabn ada naał nah int dzapt?  
 [goo = **u** nah gap-ə-n] [ada naa = ɿ nah in = t dzap-t]  
 what = Q PFV eat-TR-2 and who = CN PFV AX = 3 make-3  
 ‘What did you eat and who made it?’ (Volunteered form)
- b. \*[goo = ɿ nah gap-ə-n] [ada naa = **u** nah in = t dzap-t]  
 what = CN PFV eat-TR-2 and who = Q PFV AX = 3 make-3  
 Intended: ‘What did you eat and who made it?’

The acceptability of (95a) is surprising if  $=u$  were the Q-element entering into an Agree relation with the  $C_{[+Q]}$  head driving Q-movement, as there is an instance of movement in either clause, but only the first features  $=u$ . Examples such as (95) suggest that if we were to try to adapt the structure in (84) for Sm’algyax then Q-movement is perhaps orthogonal to the presence of  $=u$ , as *wh*-movement happens independently of  $=u$ .

Having introduced and discussed Cable’s syntactic theory of Q-movement as well as some basic distributional predictions made by this kind of analysis, I conclude that trying to apply the structure in (84) to Sm’algyax, and treating  $=u$  as an overt correlate of Q cannot account for the syntax of *wh*-movement in Sm’algyax.

## 4.2 Semantics of Q-particles

I will conclude this section with a discussion of the semantics of Q-particles, according to the prominent family of Q-particle analyses put forth by Beck (2006); Kratzer & Shimoyama. (2002); Cable (2007); Kotek (2014); Uegaki (2018), and suggest that this style of analysis fails to predict the distribution of *wh*-phrases and  $=u$  in Sm’algyax.

Much of the semantic work on Q-particles is rooted in two-tier alternative semantics (Rooth 1985, 1992), and proposes a semantics for the roles of Q-particles in question-marking languages such as Japanese and Tlingit. These analyses broadly proceed as follows: in addition to having an ordinary semantic value, lexical items also have a focus-semantic value. *Wh*-words pattern differently in that they only have a focus-semantic value whose denotation is a set of alternatives, and crucially lack an ordinary-semantic value. To illustrate this let us consider the question in (96):

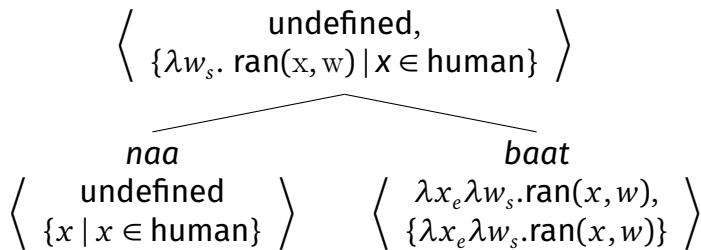
- (96) Naayu baat?  
 naa = **u** baa-ət  
 who = Q run-SX  
 ‘Who ran?’

The ordinary and focus-semantic values for the lexical items in the question are the following:

- (97) Focus and ordinary-semantic values of *baat* 'ran'
- Ordinary-semantic value:  $\llbracket \text{baat} \rrbracket^o = \lambda x_e \lambda w_s. \text{ran}(x, w)$
  - Focus-semantic value:  $\llbracket \text{baat} \rrbracket^f = \{ \lambda x_e \lambda w_s. \text{ran}(x, w) \}$
- (98) Focus and ordinary-semantic values of *naa* 'who'
- Ordinary-semantic value:  $\llbracket \text{naa} \rrbracket^o = \text{undefined}$
  - Focus-semantic value:  $\llbracket \text{naa} \rrbracket^f = \{ x_e : \in \text{human} \}$

As *wh*-words have an undefined ordinary-semantic value and the types of the focus semantic value do not match, we cannot compose the question in (96) via ordinary Function Application, however the focus-semantic values are allowed to compose via Pointwise Function Application (PFA, (99)). This is exemplified by the toy LF of (96) given below:

- (99) Pointwise Function Application (Hamblin 1973)  
 If the node  $\alpha$  has  $\{\beta, \gamma\}$  as a set of its daughters and  $\llbracket \beta \rrbracket^f \subseteq D_\sigma$  and  $\llbracket \gamma \rrbracket^f \subseteq D_{(\sigma, \tau)}$ , then  $\llbracket \alpha \rrbracket^f = \{a \mid \exists f \in \llbracket \gamma \rrbracket^f \exists b \in \llbracket \beta \rrbracket^f [a = f(b)]\}$
- (100) Toy LF of (96)



The alternatives introduced by the *wh*-word are passed up via the application of PFA in the focus semantic dimension, yielding the proposition-set denotation for *wh*-questions (Hamblin 1973; Karttunen 1977). However, according to Beck (2006)'s Principle of Interpretability, an LF must have an ordinary-semantic value, which remains undefined in (100). This is where Q is introduced. Q is defined as a focus-sensitive operator whose role is to convert the focus-semantic value of its sister to an ordinary semantic value, thus returning the Hamblin-set denotation of a question as the ordinary-semantic value (Beck 2006; Kotek 2014; Uegaki 2018):

- (101) a.  $\llbracket \text{naa} \rrbracket^o = \text{undefined}$   
 b.  $\llbracket \text{naa} \rrbracket^f = \{\text{Clarence, Henry, Margaret, ...}\}$   
 c.  $\llbracket \text{naa baat} \rrbracket^o = \text{undefined}$   
 d.  $\llbracket \text{naa baat} \rrbracket^f = \{ \{w': \text{Clarence ran in } w'\}, \{w': \text{Henry ran in } w'\}, \{w': \text{Margaret ran in } w'\}, \dots \}$

- e.  $\llbracket Q [naa baat] \rrbracket^o = \{ \{w': Clarence \text{ ran in } w'\}, \{w': Henry \text{ ran in } w'\}, \{w': Margaret \text{ ran in } w'\}, \dots \}$

If we ascribe the role of  $Q$  to  $=u$ , then we have reached the appropriate denotation for a question in (101e) utilizing the basic ingredients outlined in this family of  $Q$ -particle analyses.

However, these analyses make predictions that are not borne out in Sm'algyax. As *wh*-words are analysed as lacking an ordinary semantic value, we would predict that *wh*-words in Sm'algyax should occur with a  $Q$ -particle in contexts outside of interrogatives. This is exactly what we see in  $Q$ -particle languages such as Tlingit, Sinhala and Japanese. In addition to appearing in (root and embedded) *wh*-questions,  $Q$ -particles in Tlingit, Sinhala, and Japanese also occur minimally in *wh*-indefinites. In Sm'algyax — as we observed in §2.3 — bare *wh*-words with indefinite meanings are able to appear in argument positions, and are prohibited from occurring with  $=u$ . Likewise, embedded questions, *wh*-exclamatives, *wh*-free relatives, and coordinated questions also exhibit instances of *wh*-words without  $=u$ :

- (102) Distributional predictions —  $Q$  particles vs.  $=u$

	$Q$ particle	$=u$
<i>wh</i> -questions	✓	✓
<i>wh</i> -indefinites	✓	✗
embedded Qs	✓	✗
<i>wh</i> -free relatives	✓	✗
<i>wh</i> -exclamatives	✓	✗

The ability for these *wh*-items with an undefined ordinary-semantic value to occur without a  $Q$ -particle goes unexplained by these analyses. Due to the obligatory absence of  $=u$  in non-questions in Sm'algyax, I conclude that this family of analyses does not provide a parsimonious account of  $=u$ . The illocutionary mood analysis presented in §3 better captures the distribution and behaviour of this particle.

## 5 Conclusion

In this paper I introduced the particle  $=u$  which appears in *wh*-questions in Sm'algyax and suggested it should be analysed as an overt instantiation of an illocutionary mood operator, an extension of the abstract speech act operators posited by Stenius (1967); Bierwisch (1980); and Krifka (2001). Syntactically this mood operator takes a CP as a complement and projects a MoodP that is restricted to root clauses (it is not able to be

taken as a complement by embedding verbs). This analysis accounts for the root-clause restriction of  $=u$ , and the behaviour of  $=u$  in coordinated questions.

A lingering mystery is the linearisation of  $=u$ . Given the typical analysis that illocutionary operators take a ‘question radical’ (an interrogative clause, or CP) as an argument, it is not clear how or why  $=u$  appears internal to the clause, in varying positions. This mystery can be extended to other ‘variable second-position clitics’ in Sm'algyax which make up the sentential mood and evidential system of the language. As observed in §3.1.3 the polar question particle exhibits variable positioning in a sentence with  $\bar{A}$ -movement with no discernible pragmatic effects. This is also true for the conjectural evidential  $=sn$ / $=si'n$  and the reportative evidential  $=gat$ :

- (103) a. Ts'ik'aawsisi'nł gabał gyet.  
 $ts'ik'aaws = \underline{si'n} = \emptyset \quad gap\text{-}\partial(-t) = \emptyset \quad gyet \quad \_\_$   
 split.salmon = CONJ.EVID = CN eat-TR-3 = CN person  
 ‘It (must be) split dried salmon that they eat.’
  - b. Ts'ik'aaws gabatsi'nł gyet.  
 $ts'ik'aaws = \emptyset \quad gap\text{-}\partial-t = \underline{si'n} = \emptyset \quad gyet \quad \_\_$   
 split.salmon = CN eat-TR-3 = CONJ.EVID = CN person  
 ‘It (must be) split dried salmon that they eat.’
- (104) a. Ts'ik'aawsgał gabał gyet.  
 $ts'ik'aaws = \underline{gat} = \emptyset \quad gap\text{-}\partial(-t) = \emptyset \quad gyet \quad \_\_$   
 split.salmon = REP = CN eat-TR-3 = CN person  
 ‘(they say) It’s split dried salmon that they eat.’
  - b. Ts'ik'aaws gabatgał gyet.  
 $ts'ik'aaws = \emptyset \quad gap\text{-}\partial-t = \underline{gat} = \emptyset \quad gyet \quad \_\_$   
 split.salmon = CN eat-TR-3 = REP = CN person  
 ‘(they say) It’s split dried salmon that they eat.’  
 (Consultant’s comment: They’re both good. Different ways of saying the same thing.)

All of these mood and evidential clitics scope over an entire proposition despite surfacing in a lower linear position. For instance in (105) we see that the evidential obligatorily takes wide scope over negation, despite negation occurring in a clause-initial position:

- (105) EVID > NEG / \*NEG > EVID  
 Akadmdi looyktgas Meeli a Biktolia.  
 aka = dm = di    looyk-t = gat = s    Meeli a    Biktolia  
 NEG = PROSP = FOC move-3 = REP = PN Mary OBL Victoria  
 '(they say) Mary's not moving to Victoria'  
 ≠ 'It is not the case that they say Mary's moving to Victoria.'

Although more careful work needs to be done to pin down the surface distribution of this class of sentential clitic in Sm'algyax, I can speculate as to why this variable positioning is possible in sentences with Ā-movement. Let us assume that these elements are prosodically deficient and must 'lean on' a host in order to form a prosodic constituent, and subcategorise for a (lexical) host to their left. Let us also assume that this linearisation happens via post-syntactic, phonologically-conditioned lowering of the clitic:

- (106) [=cl [ X =cl Y ]]

In Ā-constructions with sentential clitics (as in (104)) I suggest the left-peripheral position is the default position. It is always available in the case of =u (the postpredicative position is not), and it is in this position that other sentential clitics are typically volunteered. The derivation of a sentence with Ā-movement with a left-peripheral sentential clitic proceeds as in (106). The other option, in which the sentential clitic appears in a postpredicative position occurs in analogy to unmarked word order cases, where this position is the second-position (as far as being a satisfactory host for these clitics). In these cases the left-peripheral elements are invisible to the algorithm in (106), and these elements linearise after the predicate. As to why =u is affected by person-hierarchy effects while the other sentential clitics are not, is left as future work, and must be stipulated here. Careful work on the interfaces of prosody and syntax in Sm'algyax can further elucidate the persistent problem of sentential-clitic placement. I leave a full implementation of the linearisation algorithm of sentential mood and evidential clitics as future research.

## References

- Alexiadou, Artemis & Elena Anagnostopoulou. 1998. Parameterizing AGR: Word order, V-movement and EPP-checking. *Natural Language and Linguistic Theory* 16. 491–539.  
 Alexiadou, Artemis & Elena Anagnostopoulou. 1999. Epp without spec, ip. In David Adger, Susan Pintzuk, Bernadette Plunkett & George Tsoulas (eds.), *Specifiers: Minimalist approaches*, 93–109. New York: Oxford University Press.

- Beck, Sigrid. 2006. Intervention effects follow from focus interpretations. *Natural Language Semantics* 14. 1–56.
- Bierwisch, Manfred. 1980. Semantic structure and illocutionary force. In J.R. Searle, F. Kiefer & M. Bierwisch (eds.), *Speech act theory and pragmatics*, 1–35. Reidel, Dordrecht.
- Brown, Colin, Clarrisa Forbes & Michael David Schwan. 2020a. Clause-type, transitivity, and the transitive vowel in Tsimshianic. Unpublished manuscript.
- Brown, Jason, Colin Brown & Henry Davis. 2020b. A'-dependencies across Tsimshianic. Unpublished manuscript.
- Cable, Seth. 2007. *The grammar of Q: Q-particles and the nature of wh-fronting, as revealed by the wh-questions of Tlingit*. Cambridge, MA: MIT dissertation.
- Cable, Seth. 2010a. Against the existence of pied-piping: evidence from Tlingit. *Linguistic Inquiry* 41(4). 563–594.
- Cable, Seth. 2010b. *The grammar of Q: Q-particles, wh-movement, and pied-piping*. Oxford University Press.
- Cinque, Guglielmo. 1999. *Adverbs and functional heads: A cross-linguistic perspective*. Oxford University Press, Oxford.
- Davis, Henry. 2018. Only connect! determiners, case and agreement in Tsimshianic. *International Journal of American Linguistics* 84(4). 471–511.
- Davis, Henry & Jason Brown. 2010. Precedence versus c-command: The curious case of binding in Gitksan. Presentation given at the 45th International Conference on Salish and Neighbouring Languages.
- Faller, Martina. 2002. *The semantics and pragmatics of evidentials in Cuzco Quechua*: Stanford University dissertation.
- Faller, Martina. 2003. Propositional and illocutionary-level evidentiality in Cuzco Quechua. In J. Anderssen, P. Menéndez-Benito & A. Werle (eds.), *The proceedings of sula 2 vancouver, bc*. 19–33. GLSA, Amherst, MA.
- Faller, Martina. 2014. Do speech act evidentials embed after all? In *Paper delivered at the linguistics association of great britain annual meeting, university of oxford, 2nd september 2014*.
- Faller, Martina. 2019. Conjectural speech acts in Cuzco Quechua. Handout for SPAGAD-1: Speech acts in Grammar and Discourse. Berlin, Germany.
- Farkas, Donka & Kim Bruce. 2010. On reacting to assertions and polar questions. *Journal of Semantics* 27. 81–118.
- Forbes, Clarissa. 2018. *Persistent ergativity: Agreement and splits in Tsimshianic*. Toronto, ON: University of Toronto dissertation.
- Hagstrom, Paul. 1998. *Decomposing questions*. Cambridge, MA: MIT dissertation.
- Hamblin, Charles L. 1973. Questions in Montague English. *Foundations of Language* 10(1). 41–53.

- Heck, Fabian. 2008. *On pied-piping: Wh-movement and beyond*. Berlin: Mouton de Gruyter.
- Hirsch, Aron. 2017. *An inflexible semantics for cross-categorial operators*: MIT dissertation.
- Jayaseelan, K. A. 2001. Comparative morphology of quantifiers. *Lingua* 121(2). 269–286.
- Karttunen, Lauri. 1977. Syntax and semantics of questions. *Linguistics and Philosophy* 1(1). 3–44.
- Kishimoto, Hideki. 1992. Lf pied piping: Evidence from Sinhala. *Gengo Kenkyu* 102. 46–87.
- Kishimoto, Hideki. 2005. Wh-in-situ and movement in Sinhala questions. *Natural Language and Linguistic Theory* 23(1). 1–51.
- Kotek, Hadas. 2014. *Composing questions*. Cambridge, MA: MIT dissertation.
- Kratzer, Angelika & Junko Shimoyama. 2002. Indeterminate pronouns: The view from Japanese. In Yukio Otsu (ed.), *The 3rd tokyo conference on psycholinguistics*. Tokyo: Hituzi Syobo.
- Krifka, Manfred. 2001. Quantification into question acts. *Natural Language Semantics* 9(1). 1–40.
- Krifka, Manfred. 2014. Embedding illocutionary acts. In T. Roeper & M. Speas (eds.), *Recursion: Complexity in cognition*, 59–88. Springer, Heidelberg.
- Kuroda, Shige-Yuki. 1965. *Generative grammatical studies in the Japanese language*: Massachusetts Institute of Technology dissertation.
- Lahiri, Utpal. 2002. Questions and answers in embedded contexts. In *Oxford studies in theoretical linguistics*, Oxford University Press, Oxford.
- Lam, Zoe. 2014. A complex ForceP for speaker- and addressee-oriented particles in Cantonese. *Studies in Chinese Linguistics* 35(2). 61–80.
- Li, Charles & Sandra Thompson. 1981. *Mandarin Chinese: A functional reference grammar*. California University Press, Los Angeles.
- Littell, Patrick, Lisa Matthewson & Tyler Peterson. 2010. On the semantics of conjectural questions. In Tyler Peterson & Uli Sauerland (eds.), *Evidence from evidentials*, vol. 28, 89–104. UBCWPL.
- Massam, Diane. 2001. Pseudo noun incorporation in Niuean. *Natural Language and Linguistic Theory* 19. 75–134.
- Paul, Waltraud. 2014. Why particles are not particular: sentence-final particles in Chinese as heads of a split CP. *Studia Linguistica* 68(1). 77–115.
- Portner, P. 2004. The semantics of imperatives within a theory of clause types. In K. Watanabe & R. B. Young (eds.), *Proceedings of semantics and linguistic theory*, vol. 14. 235–52. CLC Publications, Cornell University Linguistics Department.
- Portner, Paul. 2018. *Mood*. Oxford University Press.
- Portner, Paul, Miok Pak & Raffaella Zanuttini. 2019. The speaker-addressee relation at the syntax-semantics interface. *Language* 95(1). 1–36.

- Rooth, Mats. 1985. *Association with focus*: University of Massachusetts, Amherst. dissertation.
- Rooth, Mats. 1992. A theory of focus interpretation. *Natural Language Semantics* 1. 75–116.
- Sasama, Fumiko. 2001. *A descriptive study of the Coast Tsimshian morphology*: Kyoto University dissertation.
- Sauerland, Uli & Kazuko Yatsushiro. 2017. Remind-me presuppositions and speech-act decomposition: Evidence from particles in questions. *Linguistic Inquiry* 48(4). 651–678.
- Schein, Barry. 2017. *'and' conjunction reduction redux*. Cambridge, MA: MIT Press.
- Slade, Benjamin. 2011. *Formal and philological inquiries into the nature of interrogatives, indefinites, disjunction, and focus in sinhala and other languages*.: University of Illinois, Urbana-Champaign dissertation.
- Speas, Peggy & Carole Tenny. 2003. Configurational properties of point of view roles. In A. M. Di Sciullo (ed.), *Asymmetry in grammar*, 315–344. Amsterdam: John Benjamins.
- Stenius, E. 1967. Mood and language-game. *Synthese* 17. 254–74.
- Sybesma, Rint & Boya Li. 2007. The dissection and structural mapping of Cantonese sentence-final particles. *Lingua* 117(10). 1739–1783.
- Tarpent, Marie-Lucie. 1994. Between realis and irrealis, Tsimshianic negation and the status of the morpheme =L. AAA/CAIL meeting, Atlanta, Ga.
- TSLA. 2013. Sm'algyax living legacy talking dictionary, Ts'msyen Sm'algyax Language Authority. M. Anderson (editor). Prince Rupert, B.C. <http://web.unbc.ca/~smalgyax/>.
- Uegaki, Wataru. 2018. A unified semantics for the Japanese Q-particle ka in indefinites, questions and disjunctions. *Glossa: a journal of general linguistics* 3(1): 14. 1–45.
- Wiltschko, Martina & Johannes Heim. 2016. The syntax of confirmationals: A neo-performative analysis. In Evelien Keizer Gunther Kaltenböck & Arne Lohmann (eds.), *Outside the clause: Form and function of extra-clausal constituents*, 305–340. Benjamins.
- Woods, Rebecca. 2016. *Investigating the syntax of speech acts: embedding illocutionary force*: University of York dissertation.
- Zanuttini, R., M. Pak & P. Portner. 2012. A syntactic analysis of interpretive restrictions on imperative, promissive, and exhortative subjects. *Natural Language and Linguistic Theory* 30(4). 1231–74.