

Research Article

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Irrealis-marked interrogatives as rhetorical questions

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Abstract: I describe and compare two strategies to form rhetorical questions (RQs) in Sm'algyax (Tsimshianic). I show that one kind is isomorphic to ordinary, information-seeking questions, and is compatible with positive and negative answers, while the second is marked with irrealis morphology and only allows negative answers. I provide evidence from answerability and embedding to suggest that both types of RQs in Sm'algyax behave like questions in terms of their syntax/semantics, and propose that the irrealis subordinator present in the second type signals to the addressee that a negative answer is expected. These findings have implications for the presence of irrealis and subjunctive morphology appearing in RQs crosslinguistically.

Keywords: non-canonical questions, content questions, question marker, clitic, Tsimshianic, Sm'algyax

1 Introduction

Rhetorical questions (RQs) may informally be characterized as interrogative sentences that have the feel of an assertion, that do not expect an answer, but that may be answered (Biezma and Rawlins 2017, Caponigro and Sprouse 2007, Han 2002, Sadock 1974, a.o.). In this article, I discuss RQs in Sm'algyax, also known as Coast Tsimshian, a Maritime Tsimshianic language of British Columbia and Alaska, and show that there are two ways to form them. The first construction is morphosyntactically isomorphic to information-seeking questions (ISQs). In the case of content (or *wh*-) questions, this involves the appearance of a *wh*-expression appearing in the initial position, as well as the optional appearance of the interrogative clitic *u* (1).

- (1) Naa(yu) int ba'an gip'aayk'nsk?
 naa(=u) in=t baa-'n gip'aayk'nsk
 who(=q) AX=3.I run-CAUS plane
 'Who can fly a plane?' ISQ/RQ

The second type also features an initial *wh*-expression, but is further marked by the presence of the irrealis subordinating element *dzi*, as well as the obligatory absence of the interrogative clitic *u*.

- (2) Naa dzi int ba'an gip'aayk'nsk?
 naa(*=u) dzi in=t baa-'n gip'aayk'nsk
 who(*=q) IRR AX=3.I run-CAUS plane
 'Who can fly a plane?' = nobody can fly a plane RQ

Beyond the morphological differences between these constructions, we also observe interpretive differences. The first type in (1) is compatible with positive and negative answers, while the second type is only

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compatible with negative answers, as indicated by the negative declarative paraphrase given as an alternate translation in (2).

This article presents a description of RQs in Sm’algyax, focusing on the notions of answerability, embeddability, and their appropriateness across different contexts. I investigate why a question marked with *dzi* would yield an obligatorily rhetorical interpretation, and how this effect could be derived compositionally. I take as a baseline the claim in Caponigro and Sprouse (2007) that RQs share a syntax and semantics with ordinary, ISQs, differing only in terms of their pragmatics, and suggest that unmarked RQs such as (1) are straightforwardly accounted for by this analysis. However, irrealis-marked RQs are obligatorily rhetorical, and have an obligatory “negative implication” distinguishing them from ISQs and unmarked RQs. Drawing from an analysis in Ladusaw (1980) in which questions are worded in a way that facilitates the answer, I suggest that this negative implication arises due to the presence of the irrealis morphology in the question limiting the possible answers in the answer set to the negative answer. This proposal has implications for the analysis of the presence of irrealis or subjunctive marking in interrogative sentences in languages beyond Sm’algyax.

This article proceeds as follows. Section 2 introduces the data and methodology. Section 3 provides a background to canonical vs non-canonical questions and describes canonical question formation in Sm’algyax and the irrealis subordinator *dzi*. Section 4 covers RQs in Sm’algyax and outlines the differences between the unmarked RQs and the irrealis-marked RQs. In Section 5, I outline an analysis of RQs from Caponigro and Sprouse (2007) for both types of RQs in Sm’algyax but suggest that the negative implication associated with marked RQs arises due to the presence of irrealis morphology coercing a negative answer (compatible with Ladusaw 1980). Section 6 concludes.

2 Data and methodology

All uncited Sm’algyax examples are from my own fieldwork, carried out in Prince Rupert, British Columbia, between 2018 and 2023 with fluent Sm’algyax speakers: Velna Nelson, Ellen Mason, (Txałgiw/Hartley Bay), and Beatrice Robinson (Gitxaala/Kitkatla), and on Zoom between 2020 and 2023 with Velna Nelson. The elicitations in Prince Rupert most often consisted of a group of two or more language consultants and myself, while Zoom elicitations were one-on-one. Though the data set is not publicly available at the time of publication, data inquiries may be addressed to the author’s email.

All language data are elicited in line with standard semantic fieldwork methodology (Matthewson 2004): the consultant is provided with a context and an English sentence and is asked to translate the sentence into Sm’algyax. Acceptability judgments are elicited by providing the consultant with a Sm’algyax sentence and asking for comments on acceptability for a given context. These examples are presented here, when relevant, alongside the context that was provided during elicitation. Given that this article discusses indirect speech acts (in this case, interrogative sentences being used in conversation in functions distinct from “asking”), some of my elicited examples include constructed dialogues. To construct these dialogues, individual sentences were elicited in context, then assembled, and presented to consultants as a dialogue, which was judged by consultants for acceptability/felicity.

The four-line glossing convention used here is as follows: the top line appears in the community orthography used throughout British Columbia, adapted from John Dunn’s Sm’algyax orthography (Dunn 1979). The second line utilizes the same orthography, but indicates morpheme boundaries; the third line provides grammatical category labels in line with the Leipzig glossing rules,¹ and the final line provides an English translation. A number of examples are pulled from the traditional Ts’msyen narratives (or *adaawx*), including

¹ <https://www.eva.mpg.de/lingua/pdf/Glossing-Rules.pdf> (19.05.2023).

from Boas (1912) and Beynon (1932–1939), where irrealis-marked RQs commonly occur. Though it was not in use at the time of writing/transcription, I have presented these data in the community orthography.

3 (Non-)canonical questions

Recent work (Farkas 2022) defines a canonical question act as one that satisfies all of the assumptions in (3):

- (3) Default assumptions accompanying question acts (Farkas 2022)
- a. Speaker ignorance: The speaker’s epistemic state is neutral relative to the possible resolutions of the issue she raises.
 - b. Addressee competence: The speaker assumes that the addressee knows the information that settles the issue she raises.
 - c. Addressee compliance: The speaker assumes that the addressee will provide this information in the immediate future of the conversation as a result of the speaker’s speech act.
 - d. Issue resolution goal: It is assumed that the main aim the speaker pursues when raising an issue is to have it resolved in the immediate future of the conversation.

More informally, a canonical question is one in which the speaker doesn’t know the answer, expects the addressee to know the answer, and expects the addressee will answer the question (as having the question answered is the purpose of asking it in the first place).

However, according to Farkas (2022), one or more of these default assumptions in (3) may be suspended or weakened. This results in a non-canonical question. RQs, a subtype of non-canonical question, arise by suspending the speaker ignorance and issue resolution goal assumptions; the speaker already knows the answer (by the suspension of speaker ignorance), assumes that the addressee also knows the answer (by retaining addressee competence), and does not expect the addressee to answer (by the suspension of the issue resolution goal). This configuration of assumptions results in a sentence that may have an interrogative form (in terms of its morphosyntax, and potentially even semantics), but has a distinct conversational function, more in line with the notions of “asserting,” or “reminding,” rather than “asking.”

3.1 Questions in Sm’algyax

Sm’algyax is an ergative, head-marking language with a rigid verb–subject–object order. Before we turn to our description of RQs in Sm’algyax, let us first outline how this language forms questions. I refer the reader to Forbes (2023) and references within for an overview of the basic grammatical properties of Sm’algyax and its Tsimshianic relatives, and to Brown (2022) for a more detailed description of questions in Sm’algyax.

Polar questions, or yes–no questions, (shown in (4)) retain the default word order (shown in (4)), and are marked by the presence of the clitic *ii*, which appears exclusively in polar and alternative interrogatives.

- (4) (a) Dawłit Dzeen
 dawł=t Dzeen
 leave=PN Jane
 ‘Jane left.’ Baseline
- (b) Dawłiit Dzeen?
 dawł=ii=t Dzeen
 leave=Q=PN Jane
 ‘Did Jane leave?’ Polar question

- (c) Al dawłdiit Dzeen?
 a=l dawł-t=ii=t Dzeen
 NEG=IRR.CN leave-3.II=Q=PN Jane
 ‘Did Jane leave?’² Polar question

In the following, we see that information-seeking polar questions (5) and rhetorical polar questions (6) are morphosyntactically identical. The question in the context of (5) clearly satisfies the default assumptions in (3): the speaker doesn’t know the answer and expects their addressees to know and to provide the answer. In (6), the speaker has an answer in mind (namely “no”) and assumes that the addressee shares this answer – (6) may felicitously go unanswered.

- (5) ISQ context (from Braun et al. 2019): At a party, you offer cake made with limes. You would like to know which of the guests like this fruit and would like some of it. You say to your guests:

Anoogas ligit naayii lime?
 anoox-i[-t]=s ligi=t naa=ii=a lime
 like-TR-3.II=PN ligi=PN who=Q=CN lime
 ‘Does anyone like lime?’

- (6) RQ context (from Braun et al. 2019): Your aunt offers limes to her guests. However, it is known that this fruit is too sour to be eaten on its own. You say to your cousin:

Anoogas ligit naayii lime?
 anoox-i[-t]=s ligi=t naa=ii=a lime
 like-TR-3.II=PN ligi=PN who=Q=CN lime
 ‘Does anyone like lime?’

As rhetorical polar questions do not have a comparable irrealis-marked construction, the remainder of this article is dedicated to discussing content questions.

Content questions, also known as *wh*-questions, are characterized by a *wh*-expression appearing in the initial position, and extraction morphology appearing either before or after the predicate, depending on the grammatical role of the extracted element. A distinct interrogative clitic *u* appears in the root-level content questions.

- (7) (a) Tgi k’apaaytga ’yuuta
 tgi k’apaaytk=a’ yuuta
 down fall=CN man
 ‘The man fell down.’ Baseline
 (b) Naayu tgi k’apaaytgit?
 naa=**u** tgi k’apaaytk-it
 who=Q down fall-SX
 ‘Who fell down?’ Content question

This interrogative particle may not appear in embedded questions.

- (8) Gүүдaga’nut Klalens goo dm hasagu.
 gүүdax-’nu=t Klalens [goo(***=u**) dm hasax-u]
 ask-1SG.III=PN Clarence [what(***=Q**) PROSP want-1SG.II]
 ‘Clarence asked me what I want.’

Interrogative particles appear in ordinary ISQs (7) as well as non-canonical questions such as self-directed questions (those in which the speaker = the addressee (9)) and quiz-show questions (those in which the speaker

² The negation element *a* does not obligatorily encode bias as in English questions marked with negation (such as “Didn’t Jane leave yesterday?”).

knows the answer and is testing the addressee (10)). They appear in the first type of RQ (11), but not the second type, which is marked with *dzi* (12). Though the contexts in which (9) though (11) occur show that they are non-canonical, they are morphosyntactically isomorphic to ISQs.

- (9) Context: You're home alone and you can't find your keys. You ask yourself:

Ndeyu nahak'a'ayu?
 ndeh=**u** na-hak'a'a-u
 where=Q POSS-key-1SG.II
 'Where are my keys?' Self-addressed question

- (10) Context: A geography teacher is quizzing a student who is looking at a map of Canada:

Ndeyu wil t'aa ts'a'mas?
 ndeh=**u** wil t'aa=a ts'a'mas
 where=Q COMP sit=CN Vancouver
 'Where is Vancouver?' Quiz-show question

- (11) Context: You're visiting a friend in a small town and realize you forgot your toothbrush, it's Sunday night, and you know everything will be closed:

(Oo du,) Ndeyu dm gooyu gya'wn
 (oo du) ndeh=**u** dm goo-u gya'wn
 (oh particle) where=Q PROSP go-1SG.II now
 'Oh, where could I go now.' = there's nowhere to go now Unmarked RQ

- (12) Context: You are trying to console a friend who is having a hard time, but you are lost for words:

Goo dza hawi?
 goo(***=u**) **dzi** haw-i
 what(***=Q**) IRR say-IRR.1SG.II
 'What could I say?'=there's nothing I can say *Dzi*-marked RQ

In sum, content questions involve a *wh*-expression appearing in initial position as well as the optional presence of the interrogative clitic *u*. The interrogative clitic is restricted to root interrogative sentences and may appear in several non-canonical question types. However, it may not appear in irrealis-marked RQs, which are instead marked with *dzi*. Let us now outline the distribution of *dzi*.

3.2 Irrealis marking in embedded and root clauses

The element *dzi*, which is variably spelled/pronounced as *dza*, is described as a “subordinator used to express hypotheses” in Sasama (2001) and as a particle that “weakens a statement” in Mulder (1994). Descriptive and theoretical work on the interior Tsimshianic cognate *ji/ja* give it the label “irrealis” (Rigsby 1986, Tarpent 1987, a.o.), and is described in Hunt (1993) as a subordinator “used when the subordinate clause expresses uncertain or non-factual information.” Though I do not provide an analysis of *dzi* here, I gloss it as irrealis in this article. Besides appearing in marked-RQs, *dzi* also appears in a number of environments, exhibiting behavior consistent with a clausal subordinator or complementizer.

One common environment in which *dzi* appears is embedded polar questions such as (13).³

³ The predicates that embed *dzi*-headed polar questions also embed content questions; however, those do not appear with *dzi*. See, for example, (8).

- (13) Gүүдaḡat dzit k'otsdit Lucy hoon
 gүүdax-i-t [dzi=t k'ots-t=t Lucy=a hoon]
 ask-TR-3.II [IRR=3.II cut-3.II=PN Lucy=CN fish]
 'He asked if Lucy cut the fish.'

Certain non-interrogative clausal complements are also introduced by *dzi*. In (14b), we see a *dzi*-clause selected by the predicate “think,” in a context in which the speaker likely no longer believes the embedded clause (that the addressee possesses a dog) to be true.

- (14) Context (elicited via storyboard “Feeding Fluffy” TFS Working Group): Pat is tasked with taking care of Fluffy, Stacy’s pet. Pat doesn’t know what kind of animal Fluffy is and buys a bone just in case Fluffy is a dog (Fluffy is in fact a snake). Stacy asks (14a), and Pat responds (14b):
- a. Goḡ mi gan giikdu sayp?
 go=i mi gan giik-t=u sayp
 what=IRR.CN 2.I reas buy-3.II=Q bone
 ‘Why did you buy a bone?’
- b. Ha’ligoodi dzi haasgn
 ha’ligoot-i [dzi haas-k-n]
 think-IRR.1 SG.II [IRR dog-PASS-2 SG.II]
 ‘I thought you had a dog.’

In the following, we see a contrast between embedded clauses introduced by the irrealis subordinator *dzi* and the default complementizer *wil*. In (15), *dzi* introduces a clause that does not appear to be presupposed by the speaker and encodes the otherwise factive predicate *aam* ‘be good’ with desiderative meaning, while in (16) the embedded clause does appear to be presupposed and there is no special desiderative meaning encoded.

- (15) Aam dza aamt.
 aam [dza aam-t]
 good [IRR good-3.II]
 ‘I hope that she is good.’ (SLLTD) Literally: It’s good if s/he is good.
- (16) Aam wilt siip’ndit Billt Meeli
 aam [wil=t siip-’n-t=t Bill=t Meeli]
 good [COMP=3.I sick-CAUS-3.II=PN Bill=PN Mary]
 ‘It’s good that Bill loves Mary.’

A similar contrast is observed in the following examples. In (18), the speaker does not know if the embedded clause is true, and *dzi* appears, while in (17), the speaker does know that the embedded clause is true, and *wil* appears.

- (17) Context: You don’t know whether Lucy cut the fish. You’re talking about whether Bill saw Lucy cutting the fish:
 Akadit nii dzit k'otsdit Lucy hoon
 aka=di=t nii[-t] [dzi=t k'ots-t=t Lucy=a hoon]
 NEG=FOC=3.I see[-3.II] [IRR=3.I cut-3.II=PN Lucy=CN fish]
 ‘He didn’t see whether Lucy cut the fish.’
- (18) Context: You don’t know whether Lucy cut the fish. You’re talking about whether Bill saw Lucy cutting the fish:
 Akadit nii wilt k'otsdit Lucy hoon.
 aka=di=t nii[-t] [wil=t k'ots-t=t Lucy=a hoon]
 NEG=FOC=3.I see[-3.II] [COMP=3.I cut-3.II=PN Lucy=CN fish]
 ‘He didn’t see that Lucy cut the fish.’

In non-clearly embedded contexts, *dzi* appears in certain polite imperative constructions, as follows:

- (19) *Dzi amaniidzn dziłam baala wan*
dzi amaniist-n dzi=ła=m baal=a wan
 IRR careful-2SG.II IRR=INCEP=2SG.I cut=CN deer
 ‘Take care when you cut open the deer.’ (SLLTD)

Although the clause headed by *dzi* in (19) is not clearly embedded (that is, it does not appear as a complement to a clear-cut matrix predicate such as those in (13)–(15)), imperatives in Sm’algyax bear morphosyntactic marking indicative of dependent clauses – for instance, the suffixal agreement occurring on the predicate *amaniist* in (19) indexes agreement with the intransitive subject, which only occurs in dependent clauses (in independent clauses this suffix only indexes agreement with transitive subjects, see Sasama (2001, 146)). This suggests that perhaps (19) is an example of root-level embedded phenomena or “insubordination” (Evans 2007), and that *dzi* functions uniformly as a subordinator in Sm’algyax. The polite imperative in (19) would then closely resemble imperatives headed by subordinators and complementizers in languages such as French and Polish.

- (20) **Si** on allait se promen-er?
 if one went REFL walk-INF
 ‘What if we went for a walk?’ (Evans 2007, French)
- (21) **Żeby** ciocia teraz może zadzwoni-ła
 COMP auntie now perhaps telephone-PST,F
 ‘If you (auntie) could perhaps make a phone call for me?’ (Evans 2007, Polish)

4 RQs two ways

This section compares what I refer to as unmarked RQs and irrealis-marked RQs. I show that the unmarked flavor is answerable and compatible with positive and negative answers. Turning to the irrealis-marked flavor, I show that their distribution is more limited, and that they appear in contexts in which the speaker believes that there is no positive answer to the question. In this way, they may function similarly to, and are often translated as, negative declarative sentences. Despite these differences, evidence from embedding suggests that irrealis-marked RQs share syntactic and/or semantic properties with canonical questions.

4.1 Unmarked RQs

This section briefly describes what I refer to as “unmarked RQs.” I refer to them as such due to their morphosyntactic isomorphism to canonical content questions. Unmarked RQs are compatible with negative and positive answers. In (22), the context shows that the speaker (Ben) already knows the answer to the question, and it is negative: “nobody,” while in (23), we see the context shows that the speaker (Ben) knows that the answer is positive: “Cassie.”

- (22) Context: Ben is bitter because nobody at his job helped him when he needed it. Later he was invited to a work party. Ben says:

Akadi hasagał dm yaayi Awil naayu int limoomu ła
 aka=dii hasax=ł dm yaa-i awil naa=u in=t limoom-u ła
 NEG=FOC want=IRR.CN PROSP walk-IRR.1SG.II because who=Q AX=3.I help-1SG.II PROX

hasagu a himoo'ma?
 hasax-u a himoom-'a
 want-1SG.II PREP help-PASS
 'I don't want to go. After all, who "Negative" RQ
 helped me when I needed help?'

- (23) Context (adapted from Caponigro and Sprouse 2007): Al is worried Cassie didn't have fun at his party. They both know that Cassie was dancing all night at the party. Ben says to Al "Gooyu nahawn," [what do you mean,]:

Naayu nah miilgit a ludaba aatk?
 naa=**u** nah miilk-it a ludaba aatk?
 who=Q PFV dance-SX PREP whole night
 'Who was dancing all night?' "Positive" RQ

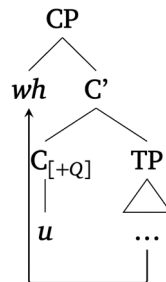
Though they may felicitously go unanswered, unmarked RQs may be answered. Responses include answers to the question (typical of a question act), agreement or disagreement (typical of an assertion), or silence (typical of assertions, some non-canonical questions).

- (24) Context = Al is responding to Ben's RQ in (23):
 A: Cassie.../Oo sm hen [Yes, you're right]/*silence*

The rhetorical content questions described here are as follows. They are content questions marked with the interrogative clitic *u* and a *wh*-expression which undergoes movement (identical to ISQs). They need not be answered but may be answered. They are compatible with positive or negative answers.

I assume that ISQs and unmarked RQs share a basic syntactic structure. In content questions, the complementizer phrase (CP) projection is headed by an interrogative C-element, which in matrix questions optionally surfaces as *u*, the question particle, and the *wh*-expression moves from its in-situ position to the specifier position of CP.

- (25) ISQs and unmarked RQs



4.2 Marked RQs

"Marked RQs," in contrast to ISQs and unmarked RQs, are marked with the irrealis subordinator *dzi* and lack the interrogative clitic *u*. This construction occurs frequently in narrative contexts and is variably translated as a content question or as a declarative sentence with a negative existential element such as "nowhere," or "nothing." Marked RQs are always associated with what I refer to as a "negative implication": the implication that the speaker believes there is no answer to the question. In these narrative contexts, they are never answered.

In the following, we see examples of marked RQs occurring in texts, with the narrative context indicating that there is no clear answer to the question. In (26a), the narrator utters the marked RQ "Therefore what then could he use now?" after making it clear that Asdiwaal has nothing to use to get himself out of the situation he is in, while in (26b) we see the marked RQ "where could he go?" preceding expository material asserting that there is in fact nowhere to go.

(26) Narrative context: Asdiwaal carries with him a number of magical tools that have gotten him out of tricky situations. However, this time he is stranded on a mountain in a storm without his magical tools:

- a. Gan goo dzi gyik hoyt gya'wn?
gan goo **dzi** gyik hoy-t gya'wn
 REAS what IRR again use-3.II now
 'Therefore what then could he use now?'
- b. Ndaa dzi yaakit? Man uulxgit, ada tgi duulxgit
 ndaa **dzi** yaak-t man duulxk-it, ada tgi duulxk-it
 where IRR go-3.II up stuck-3.II and down stuck-3.II
 up
 'Where could he go? He could not go up, he could not go down.'
 (Boas 1912, The Story of Asdiwaal; 144–5)

Shortly after the narrator poses these RQs, Asdiwaal dies on the mountain.

The examples in (27) and (28) show lines from narratives that have been translated with the negative existential, rather than the rhetorical content question translation.

(27) Narrative context: Sts'ool (Beaver) strands Awta (Porcupine) on an island in the lake. Awta wakes up after nearly drowning, he can't swim:

- Ada ndaa dza dzagayaakit gisga dmt goosga gilhawlitga
 ada ndaa **dzi** dzaga-yaak-t gisga dm=t goo=sga gilhawli-t-ga
 then how IRR across-go-3.II PREP PROSP=3.I GO=CN ashore-3.II=CN
 'And he had no way to go ashore'
 (Boas 1912, Story of Porcupine and Beaver; 232–3)

- (28) 'Nax'nuuyu amhawsm ada goo dzi hawyu.
 'nax'nuu-i-u amhaw-sm ada goo **dzi** haw-u
 hear-TR-1SG.II voice-2PL.II and what IRR say-1SG.II
 'I have heard your request and **there is nothing I can say.**'
 (Beynon 1932–1939, When Txagaaxs Embarrassed Ligeex; Manuscript 91, 5)

Elicitations with fluent speakers confirm that marked RQs may variably be translated as content questions or negative assertions (29), and that this construction is associated with the negative implication: marked RQs only allow negative answers and are only felicitous in non-information seeking scenarios such as (30).

- (29) Goo dzi wila waali... Nah baaltu txa'nii goo
 Goo **dzi** wila waal-I nah baal-T-u txa'nii goo
 what IRR MANR do-IRR.1SG.II PFV try-T-1SG.II what
 every
 'What could I do? I've tried everything.'
 'I don't know what to do, I've tried everything.'
 'There's nothing to do, I've tried everything.'

(30) Context: Bill and Lucy are driving to a cabin, and halfway there, they realize they forgot the cooler with all the food. Arriving at the cabin, Bill says "Kwdii"nu' [I'm hungry]:

- L: Gaba ligi goo!
 gap=a ligi goo!
 eat=CN LIGI what
 'Eat something.'
- B: Goo dza gabi (duu)! Akadi goo!
 goo **dzi** gap-i duu aka=di goo
 what IRR eat-IRR.1SG.II eh NEG=FOC what
 'What's there to eat, eh, nothing!'

Though (30) shows that the speaker may answer their own question, it is also possible for the addressee to answer it.

(31) Context: Same as (30):

- B: Goo dza gabi (duu)?
 goo **dzi** gap-I duu
 what IRR eat-IRR.1SG.II eh
 ‘What’s there to eat, eh?’
- L: Akadi goo...
 aka=di goo
 NEG=FOC what
 ‘Nothing...’

In the following, we see that marked RQs are not felicitous in information-seeking contexts in which there is a possible (non-negative) answer.

(32) Context: Allie and Ben just went shopping, the fridge is full of food. Allie says “Kwdii”nu’ [I’m hungry]:

- B: Gaba ligi goo!
 gab=a ligi goo
 eat=CN LIGI what
 ‘Eat something.’
- A: # Goo dzi gabi, heelda goo doot dm gabm.
 goo **dzi** gab-i, heelda goo doo-t dm gap-m.
 what IRR eat IRR.1SG.II much what have-3.II PROSP eat-1PL.II
 Intended: What’s there to eat? There’s so much to eat.

The following infelicitous sentence shows that, unlike the unmarked RQs described earlier, marked RQs cannot function as the “obvious positive answer” flavor described in Caponigro and Sprouse (2007).

(33) Context (adapted from Caponigro and Sprouse 2007): Al is worried Cassie didn’t have fun at his party. They both know that Cassie was dancing all night at the party. Bill says ‘Gooyu nahawn?’ [what do you mean?]:

- # naa **dzi** nah miilg-it a ludaba aatk?
 who IRR PFV dance-SX PREP whole night
 Intended: ‘Who was dancing all night?’

Turning to embedding facts, we find that these *dzi*-marked questions may be embedded under rogative and responsive predicates – respectively, those that embed only interrogatives (such as “ask” and “wonder”), and those that embed interrogative and declarative complements (such as “know”).

- (34) Nah güüdagu goo dzi wila gyooyi.
 nah güüdax-i-u goo **dzi** wila gyoo-i
 PFV ask-TR-1SG.II what IRR MANR do-IRR.1SG.II
 ‘I asked what could I do.’
- (35) Akandi wilaay goo dzi wila gyooyi.
 aka=n=di wilaay goo **dzi** wila gyoo-i
 NEG=2SG.I=FOC know what IRR MANR do-IRR.1SG.II
 ‘I don’t know what I could do.’

The following examples show that both a matrix and embedded marked RQ may be uttered in the same context.

- (36) Context: You're visiting a friend in a small town and realize you forgot your toothbrush, it's Sunday night, and you know everything will be closed. Frustrated, you say to your host:

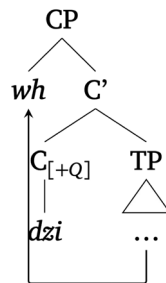
Oo du, ndeh dza gooyi gyaw'n?
 oo du ndeh **dzi** goo-I gyaw'n
 oh particle where IRR go IRR.1SG.II now
 'Well, where could I go now?'

- (37) Context: Same as (36):

Aamɩ güüdaguwii aɩ ndeh dza gooyi gyaw'n?
 aam=ɩ güüdax-u=ii a=ɩ ndeh **dzi** goo-i gyaw'n
 good=IRR.CN ask-1SG.II=Q PREP=IRR.CN where IRR go-IRR.1SG.II now
 'Should I even ask where I could go now?'

The ability for *dzi*-marked questions to be embedded under question-embedding verbs points to shared syntactic and/or semantic properties between this flavor of question and ISQs. I propose the following structure for marked RQs: as we saw in (25), a *wh*-expression undergoes movement to the specifier of CP; however, in this construction, the CP projection is headed by *dzi*. This explains how this construction does not allow the presence of the question particle *u*.

- (38) Marked RQs



In sum, we find two strategies for forming RQs in Sm'alyax. The first kind (unmarked-RQs) is unremarkable. It resembles an ISQ in terms of its mor-phosyntax, but differs in terms of the discourse contexts it appears in. Marked RQs, on the other hand, differ from ISQs in terms of their morphosyntactic characteristics (the appearance of *dzi*, the absence of *u*), and they differ from unmarked RQs in that they are associated with a strict negative implication. There are, however, reasons to treat this construction as being an interrogative clause: it may be embedded under verbs that embed questions, and also bear other features associated with ISQs (for example, *wh*-movement). Available responses, such as answering, as well as agreeing or disagreeing, point to variability between more *question-like* and *assertion-like* behavior: it is not typical for an addressee to *agree* to a question, or to *answer* an assertion. In lieu of a full, compositional analysis, I outline in the following section some potential avenues for analyzing marked and unmarked RQs in Sm'alyax.

5 RQs as questions

One prominent approach to analyzing RQs treats them as being syntactically and semantically equivalent to ISQs, differing from ISQs in terms of their pragmatics (Biezma and Rawlins 2017, Caponigro and Sprouse 2007). Evidence for this isomorphism comes from answerability and embeddability tests.

Caponigro and Sprouse (2007) characterize both information-seeking and rhetorical interrogatives as denoting the proposition that is its true complete answer in a given world *w*.

- (39) $[RQ]^w = [ISQ]^w = p$: *p* is the true complete answer to RQ or ISQ in *w*.

In terms of providing an analysis for the pragmatics of RQs, Caponigro and Sprouse suggest that a question Q is rhetorical if and only if the denotation of Q is a member of a set CG_{S-A} , the set of all propositions believed by the speaker and the addressee (their “Common Ground”).

(40) $CG_{S-A} = \{p: p \text{ is mutually believed by the Speaker and the Addressee}\}$

(41) $Q \text{ is a RQ iff } [Q]^W \in CG_{S-A}$

Adopting this style of approach is straightforward for unmarked RQs in Sm’algyax. The answerability facts showing that they are compatible with positive and negative answers, as well as the presence of the interrogative particle u that is restricted to root-level interrogatives, suggest that these are in fact *questions* that happen to be licensed in contexts distinct from those which license ordinary ISQs. This places unmarked RQs alongside the English RQs described in Caponigro and Sprouse (2007) as parsimoniously lending themselves to a “RQs as questions” analysis, contra the family of analyses that analyze RQs as negative assertions (e.g. Han 2002, Sadock 1974).

Accounting for irrealis-marked RQs is less straightforward. We observe with this flavor a negative inference, which some analyses of RQs have provided accounts for: Sadock (1974) and Han (2002) analyze RQs as covert negative assertions, while Ladusaw (1980) analyzes them as questions with an empty answer-set.

Han (2002) formalizes the questions as negative assertions by suggesting that as part of a post-LF derivation, the *wh*-expression maps onto a negative quantifier. For instance, a RQ “what does he (*even*) like” would be interpreted not as a question, but as the negative assertion “he likes **nothing**.” However, the embedding facts discussed in the previous section as well as the acceptability of answering marked-RQs suggest that we should treat these constructions as formally interrogative clauses.

A promising approach, then, is Ladusaw (1980), which treats RQs as questions with an empty answer-set, and that RQs may be worded in a way that facilitates the expected answer. Evidence for this approach in English RQs comes from the ability for minimizers, a kind of “strong” negative polarity item, such as *budge an inch* or *lift a finger* to be licensed in negative RQs, and not ISQs. We see an example of a minimizer appearing in the following question, triggering an obligatory negative RQ.

(42) Who **lifted a finger** to help? RQ

If we assume a domain with the individuals Allie and Ben, the possible answers for (42) may be interpreted as the following in (43). The only answer that licenses the minimizer, given in bold, is the negative answer.

(43) Allie and Ben lifted a finger to help.

Allie lifted a finger to help.

Ben lifted a finger to help.

Nobody lifted a finger to help.

(42) thus conveys the Speaker’s belief that nobody helped, because only the negative answer *Nobody lifted a finger to help* licenses the minimizer *lift a finger*.

Turning back to Sm’algyax, we observe in marked RQs a construction where the clause that typically corresponds to a presupposed clause in a canonical content question is introduced by *dzi*: a subordinator that has been characterized in §3.2 as an element that introduces uncertain or unreal information. Perhaps, then, the presence of *dzi* in marked RQs, like the presence of minimizers in English questions, signals to the addressee that the negative answer is expected.

One potential piece of evidence pointing to this analysis for *dzi*-marked questions comes from the optional appearance of *dzi* in declarative sentences with fronted negative quantifiers (which are composed of negation and a *wh*-expression). The presence of overt negation distinguishes these constructions from marked-RQs.

(44) Ada alga goo dza niidzit.
 ada **af=ga** goo **dzi** niist-i-t
 and NEG=FOC what IRR see-TR-3.II
 ‘And they didn’t see a thing.’

(Beynon 1932–1939, The myth of what happened when one of the princesses made a pet of a grubworm; Manuscript 129, 21)⁴

Assuming the same question–answer congruence as in (42)–(43) for Sm’algyax, it is only the negative existential answer that may co-occur with *dzi*.

- (45) Goo dzi gabi?
 goo dzi gap-i
 what IRR eat-IRR.1SG.II
 ‘What could I eat?’
- (46) *Sami dił anaay dzi gabi [meat and bread [IRR eat-I]]
 *Sami dzi gabi [meat [IRR eat-I]]
 *Anaay dzi gabi [bread [IRR eat-I]]
Akadi goo dzi gabi [nothing [IRR eat-I]]

Though more research needs to be done to adequately account for the meaning contribution of *dzi* appearing in and outside of questions, an analysis of RQs as questions with a negative answer is a promising avenue for analyzing marked RQs in Sm’algyax.

6 Conclusion

This article presented a first pass at describing and comparing two RQ constructions in Sm’algyax. The first is referred to as “unmarked” due to its resemblance to ISQs with respect to its morphosyntax. In terms of answerability, this type is compatible with positive and negative answers. “Marked” RQs feature irrealis subordinator *dzi* and the obligatory absence of the interrogative particle *u*. Beyond these differences, they function as obligatorily RQs, with an obligatory “negative implication.” I outlined some possible directions how to analyze (“negative”) RQs, and particles associated with the negative inference, suggesting that a Ladusaw-esque 1980 approach, in which the elements appearing within the question signaled the speaker’s attitude or bias toward a negative answer, fared better than approaches analyzing questions as negative assertions (Han 2002, Sadock 1974).

One contribution of this article that warrants further investigation is that Sm’algyax seems to possess a uniquely RQ construction, which is associated with a negative implication. We find a similar construction in Japanese *mono ka* RQs, which are also obligatorily negative RQs, analyzed as involving an irrealis clause and a covert negative operator (Oguro 2014, 2018).

- (47) Dare-ga kur-u mono ka!
 who-NOM come-PRS COMP Q
 ‘No one will come!’

How common is this, crosslinguistically, for irrealis marking in interrogatives to be associated with a rhetorical effect? In languages beyond Sm’algyax, we also find irrealis marking occurring in RQs. For example, subjunctive/irrealis-marked interrogatives in Fula (Senegambian) are interpreted as RQs (Palmer 2001, 111). However, the presence of subjunctive/irrealis (without any other marker) may also be associated with forming canonical ISQs. This is suggested to be the case for Caddo (Caddoan), Hixkaryana (Cariban), and Serrano (Uto-Aztecan) (Palmer 2001, 172). Closer investigation of RQ formation across a diverse set of languages is needed to uncover the patterns and variation in the appearance of irrealis marking in interrogatives and its association with the formation of RQs.

⁴ Also accessible via the following link on line 169: <https://www.smalgyax.ca/kyiwaaln> (19.05.2023).

Abbreviations

Morpheme glosses

1	first person
2	second person
3	third person
AX	agent extraction morpheme,
CAUS	causative
CN	common noun connective
COMP	complementizer
F	feminine
FOC	focus
I	series I clitic
II	series II suffix
III	series III pronoun
INCEP	inceptive
INF	infinitive
IRR	irrealis
MANR	manner subordinator
NEG	negative
NOM	nominative
PASS	passive
PFV	perfective
PL	plural
PN	proper noun connective
POSS	possessive
PREP	preposition
PROSP	prospective
PROX	proximal
PRS	present
PST	past
Q	question particle
REAS	reason subordinator
REFL	reflexive
SG	singular
SX	subject extraction morpheme
TR	transitive

Additional abbreviations used

A	addressee
CG	common ground
ISQ	information-seeking question
Q	question
RQ	rhetorical question
S	speaker
w	world

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