

Gitksan *gi*: A marker of past evidence*

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Abstract: This paper provides the first targeted investigation of the semantics of the particle *gi* in Gitksan (Tsimshianic). This particle has previously been characterized, both in Gitksan and in related Tsimshianic languages, as a distal deictic marker (Boas 1911, Jóhannsdóttir 2006, Rigsby 1986, Tarpent 1984, 1987, 1998). However, we provide evidence that *gi* does not enforce spatio-temporal distance. Instead, we suggest that *gi* in a declarative sentence conveys that at least one interlocutor had prior evidence for the asserted proposition. The use of *gi* extends to *wh*-questions, in which it conveys that at least one interlocutor had prior evidence for the answer to the question, or for the question itself. Whether *gi* signals the hearer's knowledge or the speaker's is determined pragmatically. According to this preliminary analysis, *gi* is a discourse particle with a cross-linguistically unusual property: it encodes information about the knowledge state not of one particular discourse participant (speaker / addressee), but of *either* participant.

Keywords: Gitksan, discourse particles

1 Introduction

This paper provides the first targeted investigation of the Gitksan particle *gi*, an element which has previously been characterized as a marker of spatio-temporal distance (e.g., Boas 1911, Jóhannsdóttir 2006, Rigsby 1986, Tarpent 1984, 1987, 1998). The use of *gi* is illustrated in (1). In anticipation of our findings, we gloss *gi* as PR.EVID for 'prior evidence'.¹

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¹ Data are presented in the orthography developed by Hindle and Rigsby (1973). ' represents a glottal stop or glottalization; hl is a voiceless lateral fricative; x, k and g are uvulars; j is [dz]; vowel length is represented by double vowels. Abbreviations not covered by the Leipzig Glossing Rules: I/II/III = series I/II/III pronoun, BPG = best possible grounds, CAUS1 = prefixal causative, CAUS2 = suffixal causative, CL.CNJ = clausal conjunction, CN = connective, DM = determiner marker, EPIS = epistemic modal, INCEP = inceptive, LV = light verb, PN = proper name, PREP = preposition, PR.EVID = prior evidence, REP = reportative, QUDD = question under discussion downdate, SUBORD = subordinator, T = "T" suffix, YNQ = yes-no question, -PPS = -p in projected set.

- (1) *Context: Michael has asked George's name and been told it, but he has forgotten it. So he has to ask:*

Michael: Oo naa=hl we-n=**gi**?
 oh who=CN name-2SG.II=**PR.EVID**
 'Oh, what's your name, again?'

George: George=hl we-'y=**gi**
 George=CN name-1SG.II=**PR.EVID**
 'My name is George.' (HH)

We will present novel data showing how *gi* is used in both declarative and interrogative clauses, and argue that it encodes discourse-related notions rather than deictic ones. Specifically, we propose that when *gi* attaches to a declarative clause denoting a proposition *p*, it signals that at least one of the interlocutors had evidence for a salient proposition – usually *p* itself – before the time of utterance. In the second sentence in (1), for example, *gi* is licensed because Michael had been told George's name before. When *gi* appears in an interrogative clause, as in the first sentence in (1), it signals that at least one of the interlocutors should have known the answer to the question, or at least have heard the question itself, before the time of utterance. We will further argue that the effect of spatio-temporal distance – in particular the frequently cited connection between *gi* and 'past tense' (cf. Jóhannsdóttir 2006) – falls out from our analysis without having to be hardwired into the lexical meaning. We will also show that although prior knowledge by at least one interlocutor is required to license *gi*, not every context in which this condition is satisfied allows *gi*. We will derive the observed asymmetry between speaker knowledge and addressee knowledge from Gricean principles.

The paper is structured as follows. In the remainder of the introduction, we provide background on the language, our consultants, our methodology, and the syntactic distribution of *gi*. In Section 2 we summarize prior research on *gi*. Section 3 presents data on the use of *gi* in declaratives and interrogatives. Section 4 presents our preliminary analysis. Section 5 offers a preliminary test of our generalizations on some spontaneous narratives and conversation, and Section 6 concludes.

1.1 Language and speaker background

'Gitksan' is the name traditionally given by linguists to a chain of dialects spoken along the drainage of the upper Skeena River in northwestern British Columbia, Canada. Gitksan is currently endangered, with fewer than 400 remaining first language speakers (FPCC 2014). Together with neighbouring Nisga'a, spoken in the Nass River Valley, Gitksan comprises the Interior branch of the Tsimshianic language family; though Gitksan and Nisga'a are very closely related and mutually intelligible, both speech communities consider them to be distinct languages (see Rigsby 1987, Rigsby and Kari 1987).

This paper presents data from speakers of three dialects of Gitksan. Our

primary consultants for this research are Vincent Gogag from Git-anyaaw (Kitwancool), Hector Hill from Gijigyukwhla (Gitsegukla), and Barbara Sennott from Ansbayaxw (Kispiox). Some data were additionally checked with Ray Jones (Prince Rupert and Gijigyukwhla) and Louise Wilson (Ansbayaxw, and seasonally Prince Rupert). Each piece of data is annotated with the speaker's initials. As we will outline below, there is some variation between speakers in their use of *gi*, though there are many commonalities.

1.2 Methodology

Our primary methods of data collection include the standard semantic elicitation techniques of asking for translations in either direction, asking for acceptability judgments of sentences in specified discourse contexts, and asking for volunteered sentences in specified discourse contexts (Matthewson 2004). We have also examined spontaneous narratives for instances of *gi*, as well as one recorded conversation between two fluent speakers.

A word is in order regarding the challenge of forming robust empirical generalizations about discourse-dependent elements like *gi* (see also Grenoble 2007 for discussion). Like all discourse particles, *gi* is extremely context-dependent, with even very subtle tweaks to the context affecting its acceptability. Even when rigorous efforts are made to control discourse contexts (as we have endeavoured to do throughout), it is never possible to be sure that the speakers are not adding extra contextual information in their minds before judging the utterance. Like most discourse particles, *gi* is virtually impossible to translate into English, and although speakers offer many insightful comments about the effect of *gi*, these are only clues to its contribution and are not always consistent. Further adding to the complexity of the situation is that *gi* is not obligatory even when it is licensed. And finally, cultural issues arise due to the fact that *gi* indicates prior knowledge, and therefore may be taken to suggest that the addressee *should* have known something before (even if they don't). Our consultants often allude to the importance of politeness in Gitksan culture; this may be a factor which sometimes influences the acceptability of *gi*.

For all these reasons, we do not have results about *gi*'s usage which are 100% consistent from speaker to speaker and from context to context. However, we have extracted several fairly robust generalizations. Where there is significant or systematic inter-speaker variation, we note this below.

1.3 Distribution of *gi*

The particle *gi* appears clause-finally both in declarative sentences and in *wh*-questions, as shown in (1) above.² Tarpent (1984) classifies *gi* in Nisga'a as a postclitic, and Rigsby (1987) marks it with an equals sign (=), the symbol for a clitic. Supporting this, *gi* is in complementary distribution with the clause-final

² There may be a separate *gi* which can attach to nominals, but we do not address it here.

yes-no question particle *aa*. This yes-no particle is obligatorily present in all (and only) yes-no questions, and *gi* may not co-occur with *aa*, as shown in (2).³

- (2) *Context: I have been told Stacy's name before, but forgot it. I think it might be 'Stacy', but I ask to check:*

Stacy=hl wa/we-n=**aa**?
 Stacy=CN name-2SG.II=**YNQ**
 'Is your name Stacy?'

* Stacy=hl wa/we-n=**aa=gi**?
 * Stacy=hl wa/we-n=**gi=aa**? (BS, VG)

For *aa*, there is clear phonological evidence that it encliticizes to the preceding word, since it induces voicing of a preceding voiceless obstruent. (See Hoard 1978, Rigsby 1986, Rigsby and Ingram 1990, and Brown 2008: sec. 4.3 on this voicing process.) Since *gi* appears to occupy the same slot as *aa*, we assume it is also an enclitic.

Imperatives also appear to allow *gi*, as shown in (3). The particle is not felicitous the first time Henry orders us to make food, but becomes acceptable when the command is repeated. (A parallel example gave rise to the same results with VG.)

- (3) *Context: Henry comes in to our elicitation session where we are working with Barbara and decides that she needs some food. He says:*

Henry: Jap=hl wineex a-s Barbara(=#**gi**)!
 make=CN food PREP-PN Barbara(=#**PR.EVID**)
 'Make Barbara some food!'

T.J.: Gwi?
 what
 'What?'

Henry: Jap=hl wineex a-s Barbara(=**gi**)!
 make=CN food PREP-PN Barbara(=**PR.EVID**)
 'Make Barbara some food!' (BS)

Our preliminary data from imperatives are very much in line with the data from declaratives and interrogatives we will present below. However, *gi* in imperatives has not been investigated in any detail, so these constructions will be set aside for the remainder of the paper.

2 Prior research on *gi*

³ The alternation between *wa* and *we* for 'name' in (2) represents a dialect difference: *wa* for BS, *we* for VG. This is part of a systematic *a/e* alternation which will appear in other data in the paper.

Writing about Nisga'a (the 'Nass dialect'), Boas (1911:349–350) states that the suffix *-g·é* marks distance in space and time. Tarpent (1984:366) similarly claims for Nisga'a that 'the postclitic *-gi* indicates that the topic of conversation is remote from the speaker in place or time or both.' One of Tarpent's examples is given in (4) (glosses slightly updated):

- (4) 'Wii sim'oogit t=nigwood-i'y=**gi**
 big chief PN=father-1SG.II=**PR.EVID**
 '[either] My father, who lives far away, is a great chief [or] My father, who
 is dead, was a great chief.' (Tarpent 1984:366)

Tarpent (1998) also presents a similar description of the Southern Tsimshian phrase-final enclitic =*ga'a*, saying it encodes deictic distance – either physical or psychological – from the speaker.

For Gitksan itself there is very minimal discussion of *gi*. Rigsby (1986), in his grammar of the language, glosses it as 'DIST' but does not provide discussion. Jóhannsdóttir (2006), in the context of an examination of some aspectual morphemes, analyzes *gi* as a distal adverb and glosses it as 'past', proposing that *gi* places the reference time before the utterance time. However, she observes that she has occasionally observed *gi* in a present tense context, and states that further research is required. The current paper aims to begin filling the gap in work on *gi* by providing the first detailed attempt at characterizing its empirical properties in Gitksan, and the first discourse-based analysis of it in any of the Tsimshianic languages.⁴

3 Function of *gi* in declarative and interrogative clauses

In this section we present the major empirical generalizations about the contexts where *gi* is and is not licensed, in both declarative and interrogative clauses.

3.1 Repetition of an assertion or question

One very robust case where *gi* is felicitous is when the speaker is repeating information that has been presented before. One common sub-case of this is in contexts where the addressee has forgotten what they had previously been told, as in (1) above. Further examples of forgetting contexts are given in (5)–(6).

⁴ See Matthewson (2015) for analysis of two other discourse particles in Gitksan: *ist*, which signals that the question under discussion is being downdated, and *k'ap/ap*, which signals that the negation of the asserted proposition is in the set of projected future common grounds at the time of utterance.

- (5) *Context: T.J. and Aidan are in Moricetown. They've been talking about going there all day. T.J. wasn't paying attention to where they were driving and he forgot the entire conversation.*

T.J.: Hinda wil 'wihl wil-i'm?
 where COMP around LV-1PL.II
 'Where are we?'

Aidan: Moricetown wil wil-i'm(=gi).
 Moricetown COMP LV-1PL.II(=PR.EVID)
 'We're in Moricetown.' (LW)

Consultant's comment: "The *gi* says that you weren't paying attention."⁵

- (6) *Context: One of my really good friends is having a dinner party on May 12. He told me about the dinner a while ago, and I told him I will not be there because I'm going up north that week. But he forgot, so he asks me:*

Friend: Dim 'witxw 'niin go'o=hl luu gwendins-'y
 PROSP arrive 2SG.III LOC=CN in party-1SG.II
 e=hl May 12=aa?
 PREP=CN May 12=YNQ
 'Are you coming to my dinner party on May 12?'

Me: Nee, dim daa'whl 'nii'y go'o=hl gigeenix
 NEG PROSP leave 1SG.III LOC=CN Gigeenix
 e=hl ganootxw tust(=gi).
 PREP=CN week DEM.PROX(=PR.EVID)
 'No, that week I'm going up north (to Gigeenix territory).' (VG)

Consultant's comment: "Yeah. Previously mentioned you can use *gi*."
 [Researcher: "If I hadn't mentioned it before, could I use *gi*?"] "The first time you don't need it. No."

A second subset of repetition cases involve scenarios where the addressee has expressed disbelief and the speaker repeats herself for that reason. An example of this type is given in (7).

- (7) *Context: Jack and Jill are at the library, reading books about animals. Jill is reading about the Chinese water deer.*

Jill: Wan=hl 'win-am=hl wan goo=hl China(=#gi)
 sit.PL=CN tooth-ATTR=CN deer LOC=CN China(=#PR.EVID)
 'There are toothed deer in China.'

Consultant's comment about *gi*-version: "I would say no; it's like when

⁵ In a similar vein, BS comments in another context that *gi* "can be used as like a snarky way of saying 'I told you!'" And HH comments about *gi* in a forgetting context that "That means he better not forget again. When you put the *gi* on, it's like screaming at him, but you're not really."

you have to convince somebody.”

Jack: Nee=dii=n sim-e-din=hl he-n!
NEG=FOC=1SG.I true-say-CAUS2=CN say-2SG.II
‘I don’t believe you!’

Jill: Nee! Ap lukw'il wan=hl 'win-am wan goo=hl
NEG ¬PPS very sit.PL=CN tooth-ATRR deer LOC=CN
China=**gi**.
China=**PR.EVID**

‘No! Deer with teeth do live in China.’ (BS)

Consultant’s comment: “She could use the *gi* to emphasize to him that she’s right.”

A third set of repetition uses of *gi* is where the addressee did not hear the information the first time it was uttered. Examples of this are given in (8) and (9).

(8) Mary: Hats'-d-i=hl us=hl duus.
bite-T-TR=CN dog=CN cat
‘The dog bit the cat.’

John: Gwi?
what
‘What?’

Mary: Hats'-d-i=hl us=hl duus=**gi**!
bite-T-TR=CN dog=CN cat=**PR.EVID**
‘The dog bit the cat!’ (BS)

(9) Context: T.J. has asked Serena what her name is.

Serena: Serena=hl wa-'y(**#gi**).
Serena=CN name-1SG.II(**#PR.EVID**)
‘My name is Serena.’

T.J.: Guu? Nee=dii=n lax'ni=hl he-n.
what NEG=FOC=1SG.I hear=CN say-2SG.II
‘What? I didn’t hear what you said.’

Serena: Serena=hl wa-'y=**gi**.
Serena=CN name-1SG.II=**PR.EVID**
‘My name is Serena.’ (LW)

The consultant for (9) rejects *gi* when Serena tells T.J. her name for the first time, commenting that using *gi* the first time is “rude”, “like insinuating I don’t have all my faculties. And that how dare I not remember something.” However, *gi* is fine in Serena’s second sentence, as T.J. didn’t hear the

information the first time. LW comments that in the repeated sentence, “It’s re-emphasizing her name. Not being sarcastic.” Another consultant, RJ, spontaneously commented “That’s when you use *gi*, when people are hard of hearing.”⁶

Summarizing so far, prototypical contexts for *gi* in declarative clauses are where the speaker is asserting information that the addressee had prior exposure to (whether they have forgotten, didn’t believe it the first time, or failed to hear). With the two exceptions noted in footnote 6, *gi* is consistently accepted by our speakers in all these contexts.

We also see a ‘prior knowledge’ effect when *gi* appears in interrogatives. An example of this was given in (1) above, in which *gi* appears in the question because the speaker knew the answer before. A similar point is made by the minimal pair in (10)–(11). The consultant judges that *gi* is acceptable in Katie’s question if she had known before when the next full moon is and temporarily forgot (10), but not if she never knew the answer (11).

- (10) *Context: Katie wants to know when the full moon is. She knew when it is, but she temporarily forgot.*

Dax gwi dim hoo luu mitxw hloxs-im axxw(=**gi**)?
 when what PROSP again in full sun-ATTR night(=**PR.EVID**)
 ‘When is the next full moon?’ (BS)

- (11) *Context: Katie wants to know when the full moon is. She never had any idea when it is.*

Dax gwi dim hoo luu mitxw hloxs-im axxw(=#**gi**)?
 when what PROSP again in full sun-ATTR night(=#**PR.EVID**)
 ‘When is the next full moon?’ (BS)

Similarly in (10), *gi* is acceptable if the questioner has forgotten an answer they previously knew, but is not acceptable in an out-of-the-blue question.

- (12) *Context: Adam and Bill meet up, and across the room they see a woman who Adam has never seen before. Adam asks Bill:*

Naa=hl we=hl hanak’ tus=**gi**?
 who=CN name=CN woman DEM.DIST=**PR.EVID**
 ‘What is that woman’s name?’ (HH)

Consultant’s comment: “If Adam forgot. When you put that, it means he

⁶ However, another consultant, HH, rejected *gi* in a failure-to-hear scenario on one occasion, and VG states that *gi* does not appear in the first repetition after a failure to hear, but only after a time lapse or after several repetitions. For VG, *gi* is systematically licensed by forgetting – as shown in (6) – but not by failure to hear. Further research is required into this variation; it could be that for some speakers, an addressee who did not hear the information is judged as not having been exposed to it. It could also be that for some speakers, there needs to be a longer time-span between the initial mention and the *gi*-sentence.

forgot.”

Interestingly, *gi* is licensed in questions by prior knowledge not just on the part of the speaker – as in (1) and (10) – but also of the addressee. And it can be either the answer, or the question, which was previously known. In (13), *gi* is accepted because the addressee had heard the question before, but forgot it.

(13) A: Nde win jog-an?
where COMP live-2SG.II
‘Where do you live?’

B: T'eg-i'y=hl guu=hl gidax-n.
forget-1SG.II=CN what=CN ask-2SG.II
‘I forgot what you asked.’

A: Nde win jog-an(=**gi**)?
where COMP live-2SG.II(=**PR.EVID**)
‘Where do you live?’

(VG)

Just like with assertions, *gi* in questions is licensed not only by forgetting, but also by not hearing, at least for some speakers. In (14), A repeats his question because B did not hear it the first time.

(14) *Context: At a noisy bar.*

A: Naa=hl wa-n?
who=CN name-2SG.II
‘What’s your name?’

B: Gwi? Nee=dii=n lax'ni=hl he-n!
what NEG=FOC=1SG.I hear=CN say-2SG.II
‘What? I didn’t hear what you said!’

A: Naa=hl wa-n=**gi**?
who=CN name-2SG.II=**PR.EVID**
‘What’s your name?’

(BS)

Gi is also licensed in interrogatives when a third person repeats a question that was not heard. This is shown in (15), where Clarissa fails to hear T.J.’s question and Katie repeats it.⁷

(15) *Context: T.J., Katie, and Clarissa are in the room together. Clarissa has recently returned to Vancouver from Toronto.*

T.J.: Dax guu jiswihl gukws 'witxw-in e=hl Vancouver?
when what when return arrive-2SG.II PREP=CN Vancouver
‘When did you return to Vancouver?’

⁷ BS gave parallel judgments on this example, modulo dialectal pronunciation differences.

C: Guu? Nee=dii=n nax'ni=hl he-n!
 what NEG=FOC=1SG.I hear=CN say-2SG.II
 'What? I didn't hear what you said!'

K: Dax guu jiswihl gukws 'witxw-in=gi?
 when what when return arrive-2SG.II=PR.EVID
 'When did you return?' (VG)

Consultant's comment: "That's when you repeat and then you use [gi]."

This use of *gi* to repeat a third person's question is reminiscent of the behaviour of the Cuzco Quechua reportative evidential, which is shown by Faller (2002) to be felicitous when somebody is reporting (i.e., repeating) somebody else's question. We return to this in Section 3.6.

The preceding data illustrated cases where the question is old information, for whatever reason. The example in (16) is a case where it's the *answer* which should already be known by the addressee. We see that *gi* is felicitous here as well.

(16) *Context: The teacher teaches the children that 'our lands' is called 'lax yip'. The next day she gives them a quiz and asks:*

Gwi dip si-wa-di=hl 'our lands'=gi?
 what 1PL.I CAUS1-name-T=CN 'our lands'=PR.EVID
 'What do we call 'our lands'? (BS)

Consultant's comment: "Yeah, you could because she told them yesterday."

3.2 All-new contexts

In order to establish that *gi* is not merely *compatible* with repetition contexts, but *requires* some kind of prior knowledge, we need to establish that *gi* is rejected in situations where the information is brand new. For the reasons mentioned in Section 1.2 above, it is sometimes difficult to obtain clear and consistent rejections of *gi*. Speakers could, for example, always (perhaps subconsciously) enrich the context to infer that there was some prior knowledge. However, we do detect a difference in the acceptability status of *gi* in new-information contexts as opposed to prior-evidence contexts. For example, in (17) the consultant rejects *gi* unless the students have known the answer before.

(17) *Context: A classroom, somewhere in the United States. The children know nothing about Gitksan territory. The teacher hands them all a map of Gitksan territory and is trying to see whether they can read the map to work out what the name of a river is. She asks:*

Guu=hl aks galksi bax-t ga'a=hl lax yip=hl
 what=CN water through run=3.II LOC=CN on land=CN
 Gitksen(#=gi)?
 Gitksan(#=PR.EVID)

‘What river runs through Gitksan territory?’ (HH)

Consultant’s comment: “When you put *gi* on there, they’ve already known it before ... Not if they didn’t know it before.”

In (12) above, we saw that the consultant rejects *gi* if it is the first time Adam asks Bill the woman’s name. This result was confirmed with another speaker; as shown in (18), VG also rejects *gi* on Bill’s answer if it is the first time the information is given. This is evidence that *gi* is not merely compatible with prior knowledge contexts, it enforces them. (Note also that although Bill has prior evidence here, this is not sufficient to license *gi* in Bill’s answer. We return to this pragmatic bias towards address knowledge in Section 4.3.)

(18) *Context: Adam and Bill meet up, and across the room they see a woman. Adam knows that Bill knows who she is.*

Adam: Naa=hl we=hl hanak'(#=gi)?
who=CN name=CN woman(#=PR.EVID)
‘What’s the woman’s name?’

Bill: Daphne=hl we-t(#=gi).
Daphne=CN name-3.II(#=PR.EVID)
‘Her name is Daphne.’ (VG)

Often, the effect of a new-information context is revealed primarily by consultant comments. In (19), for example, the consultant finds a way for the utterance to be acceptable, but her comment reveals that the speaker of the sentence must be incorrectly assuming he is not really in an out-of-the-blue context. This is consistent with our generalization about *gi*.

(19) *Context: A stranger comes up to me on the street. We’ve never spoken before. He says:*

Yukw dim ha-'nii-sgyad-i'y t'aahlakw=gi.
IPFV PROSP INS-on-be.born-1SG.II tomorrow=PR.EVID
‘It’s my birthday tomorrow.’ (BS)

Consultant’s comment: “No. But if he was telling a complete stranger he might use *gi* – maybe he thinks he knows you.”

In (20), we again see that the speaker appears to accept *gi* in a new-information context (in this case, a context where the speaker is answering a question they have just been asked for the first time). However, the comment reveals that the consultant understands the speaker to be suggesting that the addressee should know the information already.

(20) *Context: Lisa is married to Henry. T.J. asks her:*

T.J.: Naa=hl siip'-in-in?

who=CN like-CAUS-2SG.II
'Who do you love?'

Lisa: Henry=**gi**.
Henry=**PR.EVID**
'Henry.' (LW)

Consultant's comment: "It's like 'How could you not know that it's Henry?'"

In the context in (20), the addressee (T.J.) knows that Lisa and Henry are married, so it is not a solid new-information context. In a minimally different context where the interlocutors are strangers, *gi* is predictably rejected, as shown in (21).

(21) *Context: Peter and Jack are strangers to each other.*

Peter: Naa=hl siip'-in-in?
who=CN like-CAUS-2SG.II
'Who do you love?'

Jack: # T=Jill=hl siip'-in-i'y=**gi**.⁸
DM=Jill=CN like-CAUS-1SG.II=**PR.EVID**
'Jill is the one I love.' (BS)

Examples (22)–(23) are a minimal pair illustrating the contrast between a situation where the addressee had no prior knowledge, and where they did. We see that *gi* is rejected in the former case, but accepted in the latter.

(22) *Context: We're at Totem Field Studios (the UBC Linguistics Department) and it's Katie's baby shower! An SFU undergrad who is thinking about applying to the UBC linguistics program opens the door and sees the party.*

Student: Yukw=hl gwi-si'm?
IPFV=CN what-2PL.II
'What are you guys doing?'

Katie: Yukw dip jap=hl sii-sgyad-im party
IPFV 1PL.I do=CN new-be.born-ATTR party
(loo-'y)(#=**gi**)!
(OBL-1SG.II)(#=**PR.EVID**)
'We're having a baby shower!' (BS)

Consultant's comment: "If he asks just after opening the door and seeing something going on, no *gi*."

⁸ The initial determinate marker *t* in Jack's reply is optional for BS, and would not be present for HH or VG.

(23) Context: As in (22), except instead of some random SFU student, it's Katie's husband Luke who wasn't at the baby shower, and only came to UBC because he locked himself out of the house and thought he'd be able to swing by the department and pick up the keys. Luke says:

Luke: Yukw=hl gwi-si'm?
 IPFV=CN what-2PL.II
 'What are you guys doing?'

Katie: Yukw dip jap=hl sii-sgyad-im party
 IPFV 1PL.I do=CN new-be.born-ATTR party
 (loo-'y)(=**gi**)!
 (OBL-1SG.II)(=**PR.EVID**)
 'We're having a baby shower!' (BS)

Consultant's comment: "The more I think about it you definitely use the *gi*. 'See we're making a party for your baby, y'know.'"⁹

Here is one more minimal pair showing the effect of prior knowledge in licensing *gi*. The same sentence with *gi* is rejected when it is the first answer to a question, but accepted when it is repeated.

(24) A: Gwi dim wi-n hiihluxw t'aahlakw?
 what PROSP LV-2SG.II morning tomorrow
 'What are you doing tomorrow morning?'

B: Yug=uma dim yee-'y goo=hl sbagayt
 IPFV=EPIS PROSP go-1SG.II LOC=CN together
 gan(**#=gi**).
 tree(**#=PR.EVID**)
 'I might go for a walk in the forest.'

Consultant's comment: "The *gi* would be there if he's answering for at least a second time."

A: Nee=dii=n lax'ni=hl he-n=gi.¹⁰
 NEG=FOC=1SG.I hear=CN say-2SG.II=PR.EVID
 'I didn't hear what you said.'

B: Yug=uma dim yee-'y goo=hl sbagayt

⁹ BS frequently volunteers the comment that *gi* translates into English as 'y'know'.

¹⁰ This is not a prototypical use of *gi*, since the addressee does not have prior knowledge of the proposition 'I didn't hear what you said.' It is however parallel to other cases where prior speaker knowledge alone is apparently sufficient to license *gi*; cf. (25) and (26) below. When asked about the presence of *gi* in A's utterance in (24), the consultant says that *gi* makes it more polite.

IPFV=EPIS PROSP go-1SG.II LOC=CN together
gan(=**gi**).
tree(=**PR.EVID**)
‘I might go for a walk in the forest.’ (BS)

In summary, there is clear evidence that *gi* requires some kind of prior knowledge on the part of at least one interlocutor.

3.3 Prior evidence for the speaker only

We have seen so far that prototypical contexts for *gi* in declaratives include cases where the addressee is hearing the information for the second (or subsequent) time (if the addressee has forgotten, or is disbelieving, or has not heard). In the data seen so far (with the one exception noted in footnote 10), *gi* in declaratives is rejected if the information is completely new to the hearer. Based on these facts alone, it seems like *gi* in assertions could be restricted solely by a requirement for prior evidence for the addressee. This would differ from the situation in interrogatives, where we have seen that either the speaker or the addressee having had prior information is sufficient to license *gi*.

However, there are data which show that even in declaratives, we cannot tie the effect of *gi* solely to the addressee. There are cases where *gi* is accepted or produced even when the information is completely new to the hearer, as long as the information is based on prior evidence on the part of the speaker. Consider, for example, (25)–(26).

(25) *Context: I was in Gitksan territory last winter and I felt that it was really cold. Katie is going there now and asks me what the weather is like in winter there. I say:*

Lukw'il sak=**gi**.
very cold=**PR.EVID**
‘It’s very cold.’ (VG)

Consultant’s comment: “If she knew you’d been there, yeah.”

(26) *Context: As in (25).*

Ap lukw'il sak goo=hl lax yip tust=**gi**.
¬PPS very cold LOC=CN on land DEM.DIST=**PR.EVID**
‘It’s very cold in the territory.’ (BS)

Consultant’s comment: “You wanna add the *gi* because you’re telling her for the second time?” [Researcher: “No.”] “Well, you could say that just for emphasis.”

In both (25) and (26), the consultants make a comment which alludes to prior addressee knowledge, but nevertheless in both cases they accept the *gi*-sentence in the absence of such knowledge. (In (25), the addressee may know that the speaker has been to Gitksan territory before, but she crucially does not

know the proposition to which *gi* attaches, namely that it is cold in the territory in winter.) Our interpretation of these facts is that while *gi* in assertions is strongly biased towards signalling addressee prior knowledge, speaker prior knowledge can suffice. We return to a possible explanation for the strong bias towards addressee knowledge in Section 4.3.

3.4 Evidence time must be before utterance time

In this sub-section we present data to show that *gi* crucially relies on evidence which was obtained prior to the utterance time, and therefore is rejected when the evidence obtains at the utterance time. This is true whether it is speaker or addressee evidence which is invoked.

Consider again (25)–(26) from the preceding sub-section, which we presented to show that speaker prior knowledge is sufficient to license *gi*. In these sentences, *gi* becomes bad if the evidence is not obtained before the utterance time, but instead holds at the utterance time. This is shown in (27). Both VG and BS accept and volunteer other versions of this sentence, either with no sentence-final particle or with *ist* (the ‘question under discussion downdate’ particle; Matthewson 2015). With *gi*, it is rejected. This is because the speaker is just now experiencing the cold for the first time.

(27) *Context: I am in Gitksan territory in winter for the first time. I land and get out of the plane and the air is cold. I call my husband on my cellphone and say:*

#	Uuu,	lukw'il	sak(= gi).	
	oh	very	cold(= PR.EVID)	
	‘Oh, it’s very cold.’			(VG)

#	Ap	lukw'il	sak= gi . ¹¹	
	¬PPS	very	cold= PR.evid	
	‘It’s very cold.’			(BS)

The contrast between (25)–(26) and (27) suggests that *gi* is only felicitous when the evidence for the assertion was obtained prior to the utterance time.

The same point is made, this time with respect to addressee prior knowledge, by the triplet in (28)–(30). In (28), *gi* is felicitous in both question and answer because the information about the capital of Canada was taught earlier that day. In (29), *gi* is rejected, because the question comes out of the blue. And in (30), *gi* is rejected if the children are presently looking at the maps while the teacher asks them, but becomes good if they have put away the maps and are working from memory.

¹¹ BS requires the Question Under Discussion downdate particle *ist* in this sentence, because “You know he wants to know if it’s really cold.”

(28) *Context: The teacher had taught the children what the capital of Canada is in the morning. In the afternoon she checks to make sure they remember the lesson from the morning.*

Teacher: Nde=hl miinhlgalts'ep=hl Canada=**gi**?
 where=CN main.village=CN Canada=**PR.EVID**
 'What is the capital of Canada?'

Student: Ottawa=**gi**.
 Ottawa=**PR.EVID**
 'It's Ottawa.' (VG)

(29) *Context: Following up on (28), the teacher has a bonus question. She has never talked about it before, but she asks the students:*

Nde=hl miinhlgalts'ep=hl Australia=**gi**?
 where=CN main.village=CN Australia=**PR.EVID**
 'What is the capital of Australia?' (VG)

Consultant's comment: "No. Not if she hadn't mentioned it."

(30) *Context: Now the teacher is asking about capitals in Africa. She passes out maps of Africa and says "Okay, everyone let's look at Kenya." Then she asks the students:*

Nde=hl miinhlgalts'ep=hl Kenya=**gi**?
 where=CN main.village=CN Kenya=**PR.EVID**
 'What is the capital of Kenya?' (VG)

Consultant's comment: "Putting away the maps, yeah. If you're not looking at it then yes. It's memory."

A further question is whether *gi* requires some prior *personal* evidence by an interlocutor, or whether common or general knowledge is sufficient. This issue frequently arises in the evidentials literature, and it could potentially be relevant for *gi*. For example, Faller (2002, 2011) argues that the Cuzco Quechua 'direct' evidential =*mi* actually marks the 'best possible grounds' a speaker can have for an utterance. She further argues that the best possible grounds may include propositions which were obtained by general knowledge rather than personally witnessed. On the other hand, some evidentials are specialized for sensory evidence and are incompatible with general knowledge (e.g., St'át'imcets (Lillooet Salish) *lákwa*; Matthewson 2011, 2012).

Further research is required into this issue with *gi*, but our preliminary results suggest that for at least one speaker, common knowledge is not sufficient. VG displays a clear difference in judgment between (25), where the speaker personally witnessed the cold weather, and (31), where the claim relies on common knowledge. However, BS accepts (32). These results are preliminary.

- (31) *Context: I'm packing to go to Antarctica and T.J. asks me a silly question: 'Why are you packing warm clothes?' I answer:*

E=hl win sak=gat go'o=hl Antarctica(=#gi).
 PREP=CN COMP cold-REP LOC=CN Antartica(=#PR.EVID)
 'It's cold in Antarctica.'
 (VG)

- (32) *Context: as in (31).*

Ap lukw'il sak goo=hl Antarctica(=#gi).
 ¬PPS very cold LOC=CN Antarctica(=#PR.EVID)
 'It's very cold in Antarctica.'
 (BS)

Consultant's comment: "Is she saying it more than two times now?"

[Researcher: "No."] "It's good because you're just making a statement, but it's emphasized by the *gi*."

There is also evidence that a *gi*-interrogative is not felicitous when the answer will be based on pure guesswork. In (33), *gi* is acceptable if Bob had some prior evidence about where the pinecone is (as we expect), but (34) shows that *gi* is rejected if Bob is merely guessing and did not witness where the pinecone went.

- (33) *Context: Adam and Bob are playing a game. The table between them has three boxes; you cannot see inside the boxes. Adam shows Bob a pinecone, and while Bob is watching he puts the pinecone into one of the boxes. Adam and Bob have a conversation, and five minutes passes. Then Adam asks Bob:*¹²

Nde=hl win luu sgi=hl meek=gi?
 where=CN COMP in lie=CN pinecone=PR.EVID
 'Where is the pinecone?'
 (VG)

- (34) *Context: Adam is running a sort of gambling game. Bob has to pay Adam \$1 to play this game. He has to randomly guess which box Adam put the pinecone in. And if he's right he wins \$5. Bob closes his eyes, Adam puts the pinecone in one of the boxes, then Bob opens his eyes. Adam asks Bob:*

Nde=hl win luu sgi=hl meek(=#gi)?
 where=CN COMP in lie=CN pinecone(=#PR.EVID)
 'Where is the pinecone?'
 (VG)

3.5 The flexibility of *gi*

So far, we have seen that *gi* requires some information to have been available to at least one interlocutor, prior to the utterance time. This is the case both in declaratives and in *wh*-interrogatives. In this section we present data which show

¹² This is also an acceptable question even without five minutes passing, if Bob is known by Adam to have an extremely bad short term memory.

that *gi* is flexible with respect to exactly what must be already known.

First, observe that it is not the case that *gi* in a declarative sentence requires *gi*'s prejacent proposition to be already known. We see this in (35), which is a continuation of the forgetting scenario in (12) above. While the *gi* in Bill's answer is entirely expected (Bill is repeating information he had previously told Adam), the *gi* in Adam's question is not as straightforward, because the fact that Adam forgot the name is not actually old information.

(35) *Context: Adam and Bill meet up, and across the room they see a woman. Adam asks Bill the woman's name, and he tells her. But Adam forgets it after a while.*

Adam: T'eg-i'y=hl we=hl hanak' tus=**gi**.
 forget-1SG.II=CN name=CN woman DEM.DIST=**PR.EVID**
 'I forgot the woman's name.'

Bill: Daphne=hl we=hl hanak' tus=**gi**.
 Daphne= CN name=CN woman DEM.DIST=**PR.EVID**
 'The woman's name is Daphne.' (HH)

This usage is vaguely reminiscent of English restitutive *again*, where for example 'John opened the door again' does not entail that the door was opened before (let alone by John), but only that it had previously been in an open position (perhaps it was built that way; see von Stechow 1996, a.o.). Similarly in (35), it is not old information that Adam forgot the name, but it is old information that he is in a state of needing to know the name.

A slightly different example, although again with the predicate *t'ak* 'forget', is given in (36).¹³ The presence of *gi* does not signal that the speaker forgot the berries before. The old information was that they were supposed to *buy* the berries.

(36) *Context: I'm having a party tomorrow. And I'm in charge of the catering and I promised that I would bring huckleberries. And then tomorrow comes and I tell everyone:*

T'ag-i'y dim sgals sim maa'y ky'oots=**gi**.
 forget-1SG.II PROSP buy real berry yesterday=**PR.EVID**
 'I forgot to buy the huckleberries yesterday.' (BS)

Consultant's comment: "Having the *gi* just emphasizes what you're saying. It's like if you say I forgot to bring berries yesterday, y'know, see."

In short, *gi* requires *some* relevant information to be prior knowledge, but there is flexibility in what exactly needs to be already known.

3.6 No commitment to the speech act

¹³ Recall from Section 1.3 that the final consonant of *t'ak* voice before a vowel.

In (15) above, repeated here as (37), we saw an interesting case where *gi* can be used in a repeated question, even when the person using *gi* was not the original asker, and may not even want to know the answer themselves.

(37) *Context: T.J., Katie, and Clarissa are in the room together. Clarissa has recently returned to Vancouver from Toronto.*

T.J.: Dax guu jiswihl gukws 'witxw-in e=hl
 when what when return arrive-2SG.II PREP=CN
 Vancouver?
 Vancouver
 'When did you return to Vancouver?'

C: Guu? Nee=dii=n nax'ni=hl he-n!
 what NEG=FOC=1SG.I hear=CN say-2SG.II
 'What? I didn't hear what you said!'

K: Dax guu jiswihl gukws 'witxw-in=gi?
 when what when return arrive-2SG.II=PR.EVID
 'When did you return?' (VG)

As mentioned above, Faller (2002) notes a similar ability of the Cuzco Quechua reportative evidential to appear in questions being repeated on behalf of a third person. A Quechua example is given in (38).¹⁴

(38) *Context: Martina asks the consultant's sister a question, which the sister does not hear. The consultant repeats Martina's question.*

Martina: Imayna-ta-n ka-sha-nki
 how-ACC-BPG be-PROG-2
 'How are you?'

Consultant: Imayna-s ka-sha-nki
 how-ACC-REP be-PROG-2
 '(She says) How are you?' (Faller 2002:233)

Faller argues that the Cuzco Quechua reportative is an illocutionary operator which can scope over other illocutionary operators, such as a question operator. In (38), the consultant reports that Martina had asked 'How are you?' The consultant is not herself performing a speech act of questioning.

With *gi*, a similar effect may arise in declarative sentences as well. In (39), Adam asks Bill a question, Bill answers, Adam doesn't hear, and Charlie repeats Bill's answer but then indicates that he doesn't himself believe it. Example (40) is a similar case, with forgetting rather than not hearing.

(39) Adam: Naa=hl wa=hl hanak'?
 who=CN name=CN woman

¹⁴ Faller (2007) gives a slightly different version of the same example.

‘What’s the woman’s name?’

Bill: Daphne=hl wa-d=ist.
Daphne=CN name-3.II=QUDD
‘Her name is Daphne.’

Adam: Gwi? Nee=dii=n lax'ni=hl he-n.
what NEG=FOC=1SG.I hear=CN say-2SG.II
‘What? I didn’t hear what you said.’

Charlie: Daphne=hl wa-t=**gi**, ii ap Erin=hl
Daphne=CN name-3.II=**PR.EVID** CL.CNJ ¬PPS Erin=CN
dii ap wa-t.
FOC ¬PPS name-3.II
‘Daphne is her name, but Erin is her name.’ (BS)

(40) Adam: Naa=hl we=hl hanak'ʔ
who=CN name=CN woman
‘What’s the woman’s name?’

Bill: Daphne=hl we-t.
Daphne=CN name-3.II
‘Her name is Daphne.’

Time passes ...

Adam: Oo t'eg-i'y=hl he-n. Naa=hl we=hl
oh forget-1SG.II=CN say=2SG.II who=CN name=CN
hanak'=**gi**?
woman=**PR.EVID**
‘Oh, I forgot what you said. What’s the woman’s name?’

Charlie: Daphne=hl we-t=**gi**. Oo Erin=hl we=hl
Daphne=CN name-3.II=**PR.EVID** oh Erin=CN name=CN
an-e-n.
NMLZ-say-2SG.II
‘Her name is Daphne. Oh you meant to say [lit. ‘you said’] her name
is Erin.’ (VG)

These uses have in common that the speaker of the *gi* utterance does not themselves perform the relevant speech act. As mentioned, in (37), Katie is not herself asking when Clarissa returned, and in (39)–(40), Charlie is not himself asserting that Daphne is her name. Nor is the speaker merely repeating a third person’s previous utterance verbatim, since they are adding *gi*. It seems that *gi*, like the Cuzco Quechua reportative, is able to take scope over either the ordinary semantic content of its prejacent, or over an entire speech act.

4 Steps toward an analysis

This paper is the first targeted investigation of *gi* in the literature, and our main goal is to establish the core empirical generalizations about its function. We are not yet able to provide a formal analysis which derives all of *gi*'s properties, but in this section we take steps towards an eventual analysis. We begin by dismissing an analysis which will *not* work.

4.1 Not a marker of past tense

As noted in Section 2, previous research has often claimed that *gi* enforces past tense. There are indeed data which seem to suggest a correlation with past tense, as for example in (41). VG construes the presence of *gi* here as indicating that the speaker no longer loves Jill; he judges that if Jack still loves Jill at the time of speech, *gi* is inappropriate.

(41) *Context: Jack speaking to Peter.*

Jill siip'-in-i'y=**gi**.
 Jill like-CAUS-1SG.II=**PR.EVID**
 'I loved Jill.' (VG)

Consultants will also often spontaneously translate sentences containing *gi* into past-tense English sentences, while the corresponding *gi*-less sentences are translated with present tense. An example of this is given in (42), where the English translations were provided by the consultant.

- (42) a. Yukw-t hats'-i=hl us=hl duus.
 IPFV-3.II bite-TR=CN dog=CN cat
 'The dog **is** biting the cat.'
- b. Yukw-t hats'-i=hl us=hl duus=**gi**.
 IPFV-3.II bite-TR=CN dog=CN cat=**PR.EVID**
 'The dog **was** biting the cat.' (BS)

Often, however, data which initially seem to support a past-tense analysis have another explanation. Consider (43)–(44). Here, VG judges that Aidan cannot use *gi* while the interlocutors are still at Anlaḵ, even if the sentence is being repeated due to Michael not having heard. He accepts *gi*, in both Michael's and Aidan's utterances, only if the conversation is taking place the next day. This looks like a past-tense effect, especially in light of the consultant's volunteered comment on (43).

- (43) Michael: Nde win 'wihl wil-i'm=si, Aidan?
 where COMP around LV-1PL.II=PROX Aidan
 'Where are we, Aidan?'
- Aidan: Yukw=hl win 'wihl wil-i'm go'o=hl Anlaḵ.
 IPFV=CN COMP around LV-1PL.II LOC=CN Anlaḵ
 'We are at Anlaḵ.'

Michael: Nee=dii=n nax'ni=hl he-n! Pdeld-in=hl
 NEG=FOC=1SG.I hear=CN say-2SG.II raise-2SG.II=CN
 ame-n.
 voice-2SG.II
 'I didn't hear what you said! Say it louder.'

Aidan: Yukw=hl win 'wihl wil-im go'o=hl
 IPFV=CN COMP around LV-1PL.II LOC=CN
 Anlak(=#gi).
 Anlak(=#PR.EVID)
 'We are at Anlak.'
(VG)

Consultant's comment: "The *gi* is used to remind that we were there previously, we were talking about it previously. But if it's in the present you don't use it."

(44) *The next day after (43).*

Michael: T'ag-i'y win wil-i'm=gi.
 forget-1SG.II COMP LV-1PL.II=PR.EVID
 'I forgot where we were.'

Aidan: 'Wihl wil 'nuu'm go'o=hl Anlak(=#gi).
 around LV 1PL.III LOC=CN Anlak(=#PR.EVID)
 'We were at Anlak.'
(VG)

However, the contrast between (43) and (44) is expected anyway for this consultant, and does not motivate a past-tense analysis of *gi*. As we noted above, VG often rejects *gi* in a context where the utterance is repeated due to the addressee not having heard, but accepts it in a forgetting context (see footnote 6).¹⁵

Our claim that *gi* does not enforce past tense is supported by evidence that *gi* is possible in sentences which talk about present or future events. For example, (28), repeated here as (45), includes a present-tense assertion with *gi*, and (46) is another present-tense scenario.

(45) *Context: The teacher had taught the children what the capital of Canada is in the morning. In the afternoon she checks to make sure they remember the lesson from the morning.*

Teacher: Nde=hl miinhlgalts'ep=hl Canada=gi?
 where=CN main.village=CN Canada=PR.EVID
 'What is the capital of Canada?'

¹⁵ In fact, there are indications that the 'forgetting' scenario does not always exclude *gi* for VG. The conversation in (43) was judged by him as felicitous with *gi* on a different occasion. Further investigation is required into this phenomenon; it could be that *gi* is undergoing a shift for some speakers.

Student: Ottawa=**gi**.
 Ottawa=**PR.EVID**
 ‘It’s Ottawa.’ (VG)

- (46) *Context: Michael and Aidan have been hiking. They take a break and they sit down to have a picnic. Michael doesn’t know where they are. While they’re sitting down, having their picnic, he asks:*

Nde wil 'wihl wil-i'm=**gi**, Aidan?
 where COMP around LV-1PL.II=**PR.EVID** Aidan
 ‘Where are we, Aidan?’ (VG)

Consultant’s comment: “Only if he had to repeat.”

With respect to future interpretations, (6), repeated here as (47), makes an assertion about a future event which contains *gi*, as does (48). Further indication that *gi* is acceptable in future sentences is given by the consultant’s comment in (49). The consultant rejects *gi* here due for an independent reason (the absence of prior evidence), but her comment reveals that *gi* is in principle fine when talking about the future.

- (47) *Context: One of my really good friends is having a dinner party on May 12. He told me about the dinner a while ago, and I told him I will not be there because I'm going up north that week. But he forgot, so he asks me:*

Friend: Dim 'witxw 'niin go'o=hl luu gwendins-'y e=hl
 PROSP arrive 2SG.III LOC=CN in party-1SG.II PREP=CN
 May 12=aa?
 May 12=YNQ
 ‘Are you coming to my party on May 12?’

Me: Nee, dim daa'whl 'nii'y go'o=hl Gigeenix
 NEG PROSP leave 1SG.III LOC=CN Gigeenix
 e=hl ganootxw tust(=**gi**).
 PREP=CN week DEM.DIST(=**PR.EVID**)
 ‘No, that week I’m going up north to Gigeenix territory.’ (VG)

- (48) *Context: I’m going to Chicago this summer, and I mentioned this to Aidan before. He forgets what I said, and he tells me he forgot. I say:*

Dim wil 'nii'y go'o=hl Chicago sint tun(=**gi**).
 PROSP LV 1SG.III LOC=CN Chicago summer DEM.PROX(=**PR.EVID**)
 ‘I’ll be in Chicago this summer.’ (VG)

- (49) *Context: We have not yet discussed my plans for tomorrow. You haven’t asked me yet what I’m doing tomorrow, and you don’t know what I usually do on that day of the week. You ask me:*

Gwi dim wi-n hiihluxw t'aahlakw(=#**gi**)?
 what PROSP LV-2SG.II morning tomorrow(=#**PR.EVID**)

‘What are you doing tomorrow morning?’ (BS)

Consultant’s comment: “You can use *gi* if you had to say it another time ... You could have a *gi* if you had asked the question before.”

Interestingly, the cases where we have found *gi* to be acceptable when talking about the future all involve schedulable events, as in (47)–(49). Non-schedulable events, such as the weather, resist *gi*, as shown in (50). Here, the consultant rejects *gi* in Michael’s answer, even though it repeats information that T.J. was told before. We address this fact in the next sub-section.

(50) *Context: At 11am Michael says:*

Michael: Dim wis yuxwsa t'aahlakw.
PROSP rain evening tomorrow
‘It’s gonna rain tomorrow evening.’

T.J.: Nee=dii am!
NEG=FOC good
‘That’s not good!’

Michael and T.J. go their separate ways. At 4pm they see each other again.

T.J.: T'eg-i'y=hl he-n e=hl wila wi=hl
forget-1SG.II=CN say-2SG.II PREP=CN manner COMP=CN
wis=**gi**.
rain=**PR.EVID**
‘I forgot what you said about rain.’

Michael: Dim wis yuxwsa t'aahlakw(**#=gi**).
PROSP rain evening tomorrow(**#=PR.EVID**)
‘It’s gonna rain tomorrow evening.’ (VG)

4.1.1 Deriving the past-tense effect

We just showed that *gi* is not restricted to sentences which talk about past events; we conclude from this that *gi* does not hardwire a requirement that the described event took place in the past. Any apparent past tense effects must be derived from the core meaning of *gi* (that at least one interlocutor had prior evidence for the proposition).

This will work roughly as follows, taking the dog-biting case in (42) as an example. If at least one interlocutor needs prior evidence for the dog-biting, it is very likely that the biting took place in the past. In fact, as shown in (27) (the case where I have just arrived in Gitksan territory and am experiencing the cold), the prior-evidence requirement of *gi* renders it infelicitous in contexts where the evidence for the utterance holds only at the utterance time. Given this, it follows that the consultant’s default translation of the *gi*-sentence of (42) will use an English past-tense verb.

What about the cases where *gi* is felicitous with present- or future-time

events, as for (45)–(49)? Notice that these contexts have the special property that there was past-time evidence for a present or future eventuality. In (45), the students learned earlier that the capital of Canada is Ottawa, and in (47)–(49) I had previously stated my future plans. And in (50), we suggest that the reason *gi* is infelicitous is because with un-schedulable events like rain, it is not possible to have obtained past evidence that they will occur.

Hence, our proposal that *gi* requires prior evidence accounts for both the fact that *gi* does not enforce past tense, as well as for the fact that it favours past tense as a default.

4.2 A marker of prior evidence

The core generalizations we have discovered about *gi* are listed in (51).

- (51) a. In **declaratives**, *gi* is licensed if at least one interlocutor had prior evidence for some salient proposition, usually the prejacent proposition to which *gi* attaches.

(Sub-cases: The addressee was told the proposition but forgot it; the addressee did not hear the previous utterance; the addressee did not believe the previous utterance; the speaker had prior personal evidence for the proposition.)

- b. In **interrogatives**, *gi* is licensed if at least one interlocutor had prior evidence for either the question or the answer.

(Sub-cases: The speaker is repeating the question due to the addressee's having forgotten it, or failed to hear it; the speaker expects that the addressee had prior evidence for the answer to the question; the speaker is re-asking the question because they knew the answer previously but have forgotten it; a third person is repeating someone else's question due to the addressee's not having heard it the first time.)

It is clear that there is a unifying core to the licensing contexts for *gi*, which we have roughly summarized as a 'prior evidence' requirement. We are, however, several steps away from being able to present a formal unified analysis which derives all of *gi*'s uses. Challenges include firstly the question of how to allow *gi* to be flexible about what is required to be already known (cf. discussion in Section 3.5), but not to be too flexible so as to over-generate. Another important challenge is how one might lexically encode the prior evidence requirement in a way which allows *gi* to attach compositionally to both declaratives and interrogatives, with the desired individual effects. It is also challenging to compositionally derive the flexible effect of *gi* in interrogatives. The fact that *gi* allows prior evidence of *either* the question *or* the answer already poses difficulties, let alone the fact that *gi* allows a 'speech act' reading whereby the questioner is merely reporting somebody else's question.

For these reasons we have to delay a formal analysis till some future time. In the next sub-section we will nevertheless sketch how one might derive the fact that *gi* strongly prefers the prior evidence requirement to target the addressee, but nevertheless allows speaker prior evidence to be sufficient in

some contexts.

4.3 Deriving the addressee bias

Suppose that we are correct in claiming that *gi* requires prior evidence on the part of at least one interlocutor for the speech act being performed. How might we then account for the bias towards *gi* being used only when the *addressee* has prior evidence? We would like to propose that this preference falls out from Gricean reasoning and from standard assumptions about the felicity conditions on assertions (cf. Stalnaker 1978).

If a speaker is asserting a proposition *p*, the default assumption (by Grice’s Quality maxim) is that she has sufficient evidence for *p*. And simple world knowledge dictates that she obtained her evidence before she began to speak. So we propose that the prior evidence constraint, if applied to the speaker, achieves little beyond duplicating the existing conditions on the assertion of *p*. For this reason, *gi* is used mostly to signal *addressee* evidence. However, *gi* can also be used to signal speaker evidence, and this is naturally more likely to happen when for some reason, the speaker wishes to emphasize that they had prior evidence for their utterance.

This approach predicts that *gi* will be perceived as having an emphatic effect when it signals only speaker evidence. This appears to be correct, based on consultant’s comments during elicitation sessions. For example, BS frequently summarizes her views on *gi* by means of a disjunctive definition, highlighting either the prior-knowledge effect or an emphasis effect. Thus, she comments that “We use *gi* for emphasis or to show that we’re repeating ourselves.” On another occasion BS commented that “The *gi* is for repeating yourself or ‘That’s what happened.’” And in (52), a case where *gi* signals only speaker prior evidence, she spontaneously mentions the emphatic effect.

(52) *Context: An answer to (11) above. Katie has asked Michael when the next full moon is; she has never had any idea when it is. He replies:*

Dim	luu	mitxw	hloxs-im	axxw	ji	hlaa
PROSP	in	full	sun-ATTR	night	IRR	INCEP
	xw	sdins	sa=gi.			
	five	day=PR.EVID				

‘The full moon will be in five days.’ (BS)

Researcher: “And he’s not reminding her?”

Consultant: “No, he’s just emphasizing. Sometimes it’s just used to emphasize.”

We predict that whenever *gi* indicates only speaker evidence, there will be an emphatic effect. Further testing is required to establish whether this is upheld.

5 Investigating *gi* in stories and conversation

Investigating discourse-dependent markers based on corpus data is fraught with

difficulty. It is often extremely difficult to determine what licensed a particular marker found in a narrative or conversation; one can often only guess. Another major problem is the absence of negative evidence. The researcher does not know whether an utterance containing the marker in a discourse would have been felicitous without it, or whether an utterance lacking the marker in a discourse would have been felicitous with it. Obviously, one also cannot extract from a corpus information about how the meaning would have been altered, were the marker to be inserted or deleted.

Nevertheless, it is important to at least attempt to test our empirical generalizations on spontaneous data. In this section we report on some preliminary findings based on seven stories told by VG, and on one conversation between BS and VG. We do find evidence which supports our generalizations. We also find a number of cases of *gi* where it is difficult to tell why it appears. There may be an emphatic effect, but this information is not extractable from the corpus itself.

In (53), taken from the conversation, we have a case where *gi* may well be licensed because BS is assuming that VG knows the information already. Alternatively (or as well), *gi* may be licensed here because Walter is dead (cf. Tarpent's translation of (4) above).

- (53) BS: Ii 'nit=hl k'uuhl wil hetxw=hl gya=hl
 CL.CNJ 3SG.III=CN year COMP stand=CN pierce=CN
 gan-s Walter=**gi**, Geel.
 tree-PN Walter=**PR.EVID** Geel
 'And that was the year when they raised Walter's, Chief Geel's,
 totem pole.'

BS: Nee-m amgood=aa?
 NEG-2SG.I remember=YNQ
 'Do you remember?'

Example (54), from the same conversation, is a case where *gi* appears in a question because the speaker knew the answer before, but has forgotten it.

- (54) Ii hlaa Friday ii bakw=hl hlogots'uu-diiit,
 CL.CNJ INCEP Friday CL.CNJ arrive.PL=CN other-3SG.II
 sim'oogit Alice Jeffrey, naa=hl wa=hl hanak'=**gi**,
 chief Alice Jeffrey who=CN name=CN woman=**PR.EVID**
 Benson, Rena Benson
 Benson, Rena Benson
 'And on Friday, the others came, chief Alice Jeffrey (what's the woman's
 name?), Benson, Rena Benson, ...' (BS)

In (55) there is no obvious reason why *gi* is used – that is, there is no reason to suppose that this is repeated information for the addressee – so perhaps *gi* is licensed here only by the fact that the speaker had prior evidence for the relevant proposition. As outlined above, we predict that *gi* has an emphatic effect here,

but this is impossible to confirm (or deny) based on the transcription of the conversation.

(55) BS: Ii 'nit=hl wil-i'y, hlis=hl graduate-'y,
 CL.CNJ 3SG.III=CN LV-1SG.II COMPL=CN graduate-1SG.II
 'And that's what I did, I already graduated.'

[overlapping:]

BS: Hlis-hlisxw-'y ii—
 COMPL-COMPL-1SG.II CL.CNJ
 'And I finished—'

VG: Ii dii hlis galksa-x-hl-xw-in.
 CL.CNJ FOC COMPL through-mouth-?-PASS-2SG.II
 'And you got through (it).'

BS: Ii am wila daa'wihl
 CL.CNJ good MANNER leave
 sa-goot-xw-i'y=**gi**.
 CAUS1-heart-PASS-1SG.II=**PR.EVID**
 'And my plan went very well.'

The preceding examples were all from the conversation. The relative frequency of *gi* in conversation is in line with consultants' comments that *gi* is informal. For example, BS states that *gi* would not be used in a speech at a feast, because such speeches are formal, while *gi* is "conversational". LW similarly comments that *gi* "puts it in the informal", and that *gi* is "casual".

In narratives, *gi* has more variable frequency. The stories in Smith (2004) contain many *gis*, but the instances of it in seven stories by VG can be counted on the fingers of one hand. Here is one example of *gi* from the story 'War with the Jits'aawit'. It is unclear why *gi* is present here. It could be either that the information is judged to be already known by the addressee, or it could be an emphatic usage.

(56) Sim luu tk'al good-in-dii=hl Jits'aawit go'o=hl
 true in against heart-CAUS2-3PL=CN Jits'aawit LOC=CN
 T'aam Meji'aadn
 lake Meji'aadn.
 'They completely killed off all the Jits'aawit at Meji'aadn Lake.'

'Nit gan wi=hl gi'nam=hl Gitwinhlguu'l
 3SG.III SUBORD COMP=CN give=CN Gitwinhlguu'l
 ha~anak' dim niiniks-xw=hl xsdaa-t=**gi**.
 PL~woman PROSP spouse.PL-PASS=CN win-3.II-**PR.EVID**
 'That is why Gitwinhlguu'l offered women to marry these victors.' (VG)

Further investigation of spontaneous uses of *gi* will be most useful if it is

combined with follow-up elicitation with the original speakers, in an attempt to elicit more information about why *gi* appears where it does.

6 Conclusion

In this paper we have provided the first targeted investigation of the particle *gi* in Gitksan. Contrary to previous literature, which has classified *gi* as a spatio-temporal distal marker, we have argued that *gi* is a discourse particle which encodes a prior evidence requirement. Our core empirical findings are repeated in (57). (Recall from section 4.3 that there are further pragmatic complexities which govern when *gi* is used, even when the conditions in (57) are met.)

- (57) a. In **declaratives**, *gi* is licensed if at least one interlocutor had prior evidence for some salient proposition, usually the prejacent proposition to which *gi* attaches.

(Sub-cases: The addressee was told the proposition but forgot it; the addressee did not hear the previous utterance; the addressee did not believe the previous utterance; the speaker had prior personal evidence for the proposition.)

- b. In **interrogatives**, *gi* is licensed if at least one interlocutor had prior evidence for either the question or the answer.

(Sub-cases: The speaker is repeating the question due to the addressee's having forgotten it, or failed to hear it; the speaker expects that the addressee had prior evidence for the answer to the question; the speaker is re-asking the question because they knew the answer previously but have forgotten it; a third person is repeating someone else's question due to the addressee's not having heard it the first time.)

Although we have not yet provided a unified formal analysis, we believe that our findings represent a significant step forward in the empirical understanding of *gi*. In addition, our generalizations suggest that *gi* is a particle with a cross-linguistically interesting property: it requires prior evidence or knowledge, but it does not care which interlocutor has that evidence or knowledge. This makes it different from presuppositional elements (which specifically require information to be in the shared common ground, Stalnaker 1973), and also potentially different from German discourse particles like *ja* or *doch*, which at least under many analyses specifically encode information about the addressee's knowledge state (Zimmermann 2011).

6.1 For future research

There are many avenues for future research with *gi*. In this sub-section we present just one outstanding puzzle, which is a potential interaction with lexical aspect (Aktionsart), at least for one of our consultants. Although (58a) and (58b) both convey approximately the same information, the eventive version in (58a) allows *gi*, while the stative version in (58b) does not. We have no explanation for this at this time, and further research is necessary to establish whether the

effect is systematic.

(58) *Context: I meet a guy, he introduces himself, and in the middle of conversation with him, I realize I've forgotten his name.*

a. T'eg-i'y=hl we-n(=**gi**).
forget-1SG.II=CN name-2SG.II(=**PR.EVID**)
'I forgot your name.'
(VG)

b. Nee=dii=n amgoo=hl we-n(=**gi**)
NEG=FOC=1SG.I remember=CN name-2SG.II(=**PR.EVID**)
'I don't remember your name.'
(VG)

References

- Boas, F. (1911). Tsimshian. In F. Boas, *Handbook of American Indian languages* (pp. 283–422). Washington, D.C.: Government Printing Office.
- Brown, J. C. (2008). *Theoretical aspects of Gitksan phonology*. Doctoral dissertation, University of British Columbia, Department of Linguistics.
- Faller, M. (2002). *Semantics and pragmatics of evidentials in Cuzco Quechua*. Doctoral dissertation, Stanford University, Department of Linguistics.
- Faller, M. (2007). *Evidentiality below and above speech acts*. Unpublished manuscript, University of Manchester.
- Faller, M. (2011). A possible worlds semantics for Cuzco Quechua evidentials. In N. Li, & D. Lutz (Ed.), *Proceedings of SALT 20* (pp. 660–683). Ithaca: CLC Publications.
- First Peoples' Cultural Council. (2014). *Report on the status of B.C. First Nations languages 2014* (2nd ed.). Brentwood Bay, BC: FPCC.
- Grenoble, L. (2007). The importance and challenges of documenting pragmatics. In P. K. Austin (Ed.), *Language documentation and description* (Vol. 4, pp. 145–162). London: SOAS. Retrieved from <http://www.elpublishing.org/PID/054>.
- Hindle, L., & Rigsby, B. (1973). A short practical dictionary of the Gitksan language. *Northwest Anthropological Research Notes*, 7(1), 1–60.
- Hoard, J. E. (1978). Obstruent voicing in Gitksan: Some implications for distinctive feature theory. In E.-D. Cook, & J. Kaye (Eds.), *Linguistic studies of native Canada* (pp. 111–119). Vancouver: UBC Press.
- Jóhannsdóttir, K. M. (2006). Aspect in Gitksan. In A. Fujimori, & M. A. Reis Silva (Ed.), *Proceedings of WSCLA XI* (pp. 82–94). Vancouver: UBCWPL.
- Matthewson, L. (2004). On the methodology of semantic fieldwork. *International Journal of American Linguistics*, 70(4), 369–415. doi:10.1086/429207

- Matthewson, L. (2011). On apparently non-modal evidentials. In O. Bonami, & P. Cabredo Hofherr (Ed.), *Empirical Issues in Syntax and Semantics* 8, (pp. 333–357). Retrieved from <http://www.cssp.cnrs.fr/eiss8/>
- Matthewson, L. (2012). Evidence about evidentials: Where fieldwork meets theory. In B. Stolerfoht, & S. Featherston (Eds.), *Empirical approaches to linguistic theory: Studies in meaning and structure* (pp. 85–114). Berlin: De Gruyter Mouton. doi:10.1515/9781614510888.85
- Matthewson, L. (2015). *On 'emphatic' discourse particles in Gitksan*. Paper presented at 37. Jahrestagung der Deutsche Gesellschaft für Sprachwissenschaft, Universität Leipzig, March 4.
- Rigsby, B. (1986). *Gitksan grammar*. Unpublished manuscript, University of Queensland.
- Rigsby, B. (1987). Indigenous language shift and maintenance in Fourth World settings. *Multilingua*, 6(4), 359–378. doi:10.1515/mult.1987.6.4.359
- Rigsby, B., & Ingram, J. (1990). Obstruent voicing and glottalic obstruents in Gitksan. *International Journal of American Linguistics*, 56(2), 251–263. doi:10.1086/466152
- Rigsby, B., & Kari, J. (1987). *Gitksan and Wet'suwet'en linguistic relations*. Opinion evidence for the plaintiffs, *Delgamuukw et al. v. Her Majesty the Queen*.
- Smith, M. J. (2004). *Placing Gitksan stories in text: Returning the feathers. Guuxs mak'am mik'aax*. Doctoral dissertation, University of British Columbia, Department of Curriculum Studies.
- Stalnaker, R. (1973). Presuppositions. *Journal of Philosophical Logic*, 2(4), 447–457. doi:10.1007/BF00262951
- Stalnaker, R. (1978). Assertion. In P. Cole (Ed.), *Syntax and Semantics, Vol. 9. Pragmatics* (pp. 315–322). New York: Academic Press.
- von Stechow, A. (1996). The different readings of *wieder* 'again': A structural account. *Journal of Semantics*, 13(2), 87–138. doi:10.1093/jos/13.2.87
- Tarpen, M.-L. (1984). From the Nisgha speaker's point of view: The evidential postclitics. *Papers of the XIX ICSNL* (pp. 356–371). Victoria: WPLC.
- Tarpen, M.-L. (1987). *A grammar of the Nisgha language*. Doctoral dissertation, University of Victoria, Department of Linguistics.
- Tarpen, M.-L. (1998). The function of the Southern Tsimshian elements *==ta?* and *==ka?* and the nature of the Tsimshian "connectives". Paper presented at CAIL/SSIL, Philadelphia, December 5.
- Zimmermann, M. (2011). Discourse particles. In K. von Heusinger, C. Maienborn, & P. Portner (Eds.), *Semantics: An international handbook of natural language meaning* (Vol. 2, pp. 2012–2038). Berlin: De Gruyter Mouton. doi:10.1515/9783110255072.2012

