

**Hul'q'umi'num' storytellers' use of gestures to
express space and viewpoint**

**by
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Abstract

This thesis describes how co-speech gestures are used by Hul'q'umi'num' storytellers. Hul'q'umi'num' is the dialect of Halkomelem Salish (ISO:hur) spoken on Vancouver Island. All language users gesture, though the form and function of gestures can vary across languages and dialects. This work comprises the first description of iconic gestures in a Salish language, focusing on gestures used in narratives by fluent speakers including the late Quw'utsun' elder, Sti'tum'at Dr. Ruby Peter. Speakers utilize the physical space around them to convey locational and referential meanings, tied to both real-world and in-fiction spaces. Speakers also use gestures to express events from different perspectives, called viewpoints, such as that of a character enacting the event or an observer watching it take place. The thesis analyzes how Hul'q'umi'num' gestures are used to illustrate space and viewpoint, and explores the connections to similar communicative strategies used in signed languages.

Keywords: Salish; Halkomelem; gesture; narratives; viewpoint

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out west, as Chelsea always had words of advice and comfort for how to be a grad student, and how to remember it is what I want to be doing.

I feel honoured to have been at Woodbank for the first week back to in-person language classes since the world shut down in 2020. It was so special, and so uplifting, to be surrounded by everyone who is working so hard to carry their language forward. Being able to meet people I've seen scattered around Zoom, learning about people's relatives, where they're from, why they're learning their language and what it means to them. It was all incredibly powerful. I will remember the energy that was in the air for a long time to come. Thank you for having me, and for giving me such an amazing experience.

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List of Abbreviations

ASL	American Sign Language
BSL	British Sign Language
CL	Classifier
C-VPT	Character Viewpoint
DC	Depicting Construction
D-VPT	Dual Viewpoint
ET	Eva Thomas
L1	First language
L2	Second language
LA	Lussy Aleck
LH	Left Hand
LW	<i>Little Wren Goes Hunting</i>
MG	Margaret James
N-VPT	No Viewpoint
O-VPT	Observer Viewpoint
QS	<i>Q'ise'q and the Stoneheads</i>
RH	Right Hand
RLH	Right and Left Hand
SG	<i>(Snotboy Saves the) Sequestered Girl</i>
SOV	Subject-object-verb
TCOTFW	<i>The Coming of the First Whites</i>
TO	<i>Thunderbird and Orca</i>
TPWRM	<i>The People Who Raised Me</i>
TSB	<i>The Shining Baby</i>

Chapter 1.

Introduction

Storytelling is a fundamental part of traditional and modern life of Hul'q'umi'num' speakers. Stories are central to the curriculum, and in classes students practice listening to stories and transcribing texts, analyzing stories for their narrative and rhetorical structure, translating stories from one language to another, standing up and trying to tell stories, helping others tell stories, and constructing new stories (Claxton 2020; Seymour 2018). Storytelling is more than just words – for example intonation, quotation, and body language are all a part of constructing a narrative as a whole (Gerdtts 2018, 2019; Gilkison 2020). I turn my focus to the meaning and significance behind co-speech gestures in Hul'q'umi'num' storytelling.

When I was brought onto this project, I was tasked with documenting the role gesture plays in Hul'q'umi'num', learning terminology and strategies around gesture use, and compiling types of gestures which can be incorporated into learning storytelling.¹ We want to learn the frequent forms, patterns, and techniques used in Hul'q'umi'num' gestures, to then develop resources for L2 speakers who are becoming storytellers. The work that I sum up in this thesis is the first comprehensive study of gestures in a Salish language, and it is just the beginning.

Gestures can situate us within the real world surrounding us, reflect our position relative to locations or events, and highlight certain characters or locations to make them more prominent in a narrative. They can also convey the

¹ The project presented in this thesis was funded by SSHRC, through an Insight Grant (Gerdtts PI) "Hul'q'umi'num' stories: The prosodics and pragmatics of performance", a Partnership Development Grant (Hedberg PI) "Coast Salish ways of speaking: Documenting discourse as a path to fluency", a CGS-M Grant "Gesture in Hul'q'umi'num' Storytelling", and funding from the Simon Fraser University Department of Linguistics. Research proceeds collaboratively under a Memorandum of Partnership Engagement with Hul'q'umi'num' Language & Culture Society.

perspective, or viewpoint, which we take on certain events; being either directly immersed or watching them unfold from afar, as a character in the story or an audience member observing it, or as some combination of these viewpoints. I focus on the ways Hul'q'umi'num' speakers express space and viewpoint by analyzing narratives by fluent storytellers, and I explore the connections to similar mechanisms used in signed languages. As Rayman says, "linguistic resources can constrain and shape the possibilities of narration. Language does not demand certain storytelling styles, but it does lead to certain tendencies in patterned discourse" (Rayman 1999 p. 80). In this thesis I explore what those tendencies are for Hul'q'umi'num'.

The remainder of this introduction gives a brief background on the features of Hul'q'umi'num', the methods by which I analyze narratives, and lays out the structure of the thesis as a whole.

1.1. Background on Hul'q'umi'num'

Hul'q'umi'num' is the Island dialect of Halkomelem (ISO: hur), a language in the Central Salish branch of Salish languages, spoken in British Columbia. Hul'q'umi'num' is one of three dialects of Halkomelem; there are also Halq'eméylem (Upriver) and həŋqəmiñəm (Downriver). The map in Figure 1 shows the area where the three dialects of Halkomelem are spoken, and Figure 2 is a more detailed map of the territory where Hul'q'umi'num' is spoken.

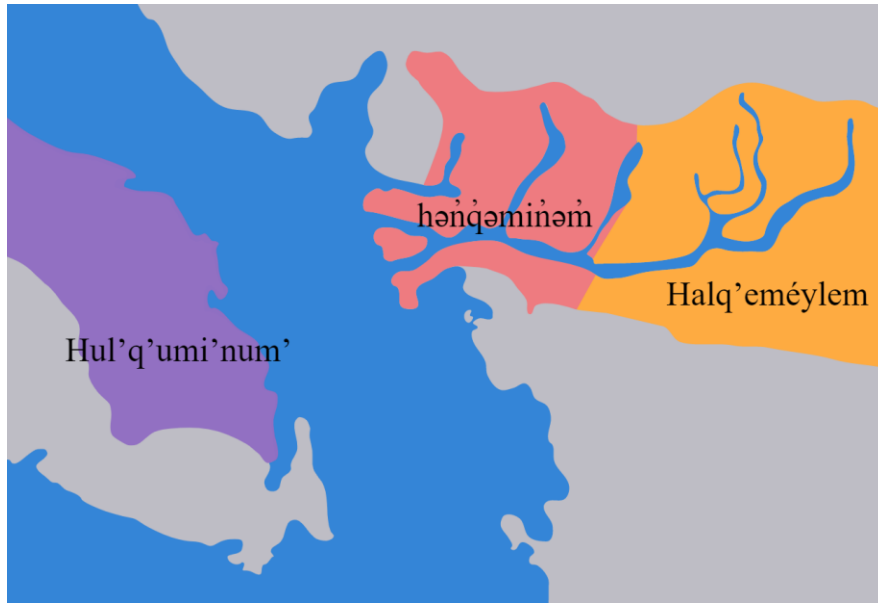


Figure 1: Three dialects of Halkomelem (map by Michelle Parent)



Figure 2: Territory where Hul'q'umi'num' is spoken (map by Michelle Parent)

The Hul'q'umi'num' language, like most Indigenous languages of North America, is endangered. According to linguist Donna Gerdts, there are around forty fluent first language (L1) speakers remaining, all of them quite elderly. Fortunately, there are over sixty elders who are fluent second language (L2)

speakers and many others who understand the language. The intergenerational transmission of the language was broken by colonization and English-only education policies, but a recent surge of funding under the reconciliation mandate has provided opportunities to strengthen the language. More than 1000 learners throughout the territory are in language classes and groups every day. Revitalization efforts currently underway include: post-secondary language courses, community-hosted language programs, elementary immersion programs, and language/culture classes in communities and schools.

There has been a lot of detailed work on the structure of Hul'q'umi'num', by linguists Donna Gerds and Thomas Hukari, among others (Gerds 2010, 2016; Gerds & Hukari 2004, 2008). Aspects of narrative discourse and storytelling in Hul'q'umi'num' have also been studied (Claxton 2020; Gerds 2017, 2018, 2019; Gerds & Gilkison 2018; Gilkison 2020; Schneider & Gerds 2021; Seymour 2018). I turn my eyes to how gestures are used in Hul'q'umi'num' storytelling. Understanding the properties of Hul'q'umi'num' co-speech gestures and learning the terminology to describe the types and uses of gestures will allow us to construct Hul'q'umi'num'-specific terms which can then be added to immersive narrative and discourse structure courses – see, for example, the Accelerative Integrated Method (AIM) developed by Wendy Maxwell (Maxwell 2017), and the Where Are Your Keys (WAYK) program developed by Evan Gardner (Gardner & Ciotti 2018). Teachers have worked on bringing gesture into the classroom for two dialects related to Hul'q'umi'num'. Downriver Halkomelem (həŋ'qəmiŋəm) teacher Victor Guerin has been using the WAYK method in his Simon Fraser University courses, and Mary Stewart adapted AIM to be used in Upriver Halkomelem (Hal'qeméylem) (Stewart 2019).

In order to analyze how co-speech gestures are used in Hul'q'umi'num', I first had to annotate videos and code the gestures speakers used. The following section details how I undertook this task.

1.2. Methods

My study of Hul'q'umi'num' gestures comprises four narratives told by the late Quw'utsun' elder Sti'tum'at, Dr. Ruby Peter.² These stories (Peter 2011a, 2011b, 2011c, 2011d) were filmed in August 2011 in Duncan, British Columbia. Transcriptions and translations are by Dr. Peter and Donna Gerdts. Jason Loutitt did the filming, Zoey Peterson the video post-production, and Donna Gerdts the sub-titles.³ The four narratives are *yu 'um'mush tthu t'ut'um'*, “Little Wren Goes Hunting” (abbreviated LW), *s-hwuhwa'us 'i' lhu q'ullhanumutsun*, “Thunderbird and Orca” (abbreviated TO), *q'ise'q 'i' tthu munmaanta'qw*, “Q'ise'q and the Stoneheads” (abbreviated QS), and *tse'yul'ltum' ts'u thu q'e'mi'*, “(Snotboy Saves the) Sequestered Girl” (abbreviated SG). I also bring in examples from stories by additional elders, though these have not been fully annotated yet. I give the metadata of the other stories as they come up in the text.

Dr. Peter's stories have been annotated and coded in ELAN (2021), a free video annotation program. I annotated all manual gestures but have not fully looked at facial gestures. Facial gestures are used very subtly by Dr. Peter, and I do not yet know enough about how Hul'q'umi'num' speakers in general use facial gestures to provide confident annotations. As such, this remains to be done in future work.

1.2.1. Annotation

In my annotations, I first time-aligned the Hul'q'umi'num' transcription in the language's orthography, the English translation, and the corresponding transcript line number. Gestures are coded for which hand(s) are active, the handshape, if the gesture is repeated, and, if two hands are active, whether they are moving in parallel or mirrored to each other. The gesture is described briefly

² Dr. Peter learned these stories from her parents Xitsulenuhw, Basil Alphonse, and Qwulsimtunaat, Cecelia Leo Alphonse, who were renowned as storytellers.

³ All four stories can be found at the following link, with videos, Hul'q'umi'num' transcripts, and English translations: <http://saalhsqwal.hwulmuhwqun.ca/ruby-peters-stories/>.

in this tier as well. Gesture start time is identified as when the hands begin to move from resting position (which is typically one hand cupped in the palm of the other, or hands clasped together), or when they begin a new path of motion from the preceding gesture. The end time of gesture events is determined by a return to rest position, if a path of motion comes to a stop, or the start of a new motion.

A representative example of the types of gesture we will see throughout the thesis is given in Example 1 below.

Example 1: A typical Hul'q'umi'num' gesture



Figure 3: Little Wren's grandmother knitting

'i 'uw' 'a'mut thu susule' kwey'xutssum'.

And his grandmother was sitting, knitting.

Gesture: RLH, gripping, mir: rep. circling motion (vertical), out of sync.

(LW 51.6:16)

In each example, the story abbreviation and time of start of gesture are given below the images. The above gesture sequence comes from *Little Wren Goes Hunting*, occurring with line 51, and beginning at the timestamp 6:16, and so this appears as (LW 51.6:16). Examples also include the Hul'q'umi'num' utterance, English translation in italics, and a description of the gesture as it appears in ELAN.

The screenshot below of the ELAN user interface shows an example of some of the tiers used, taken from the *Little Wren Goes Hunting* narrative. This view of ELAN corresponds to the sequence shown just above in Example 1.

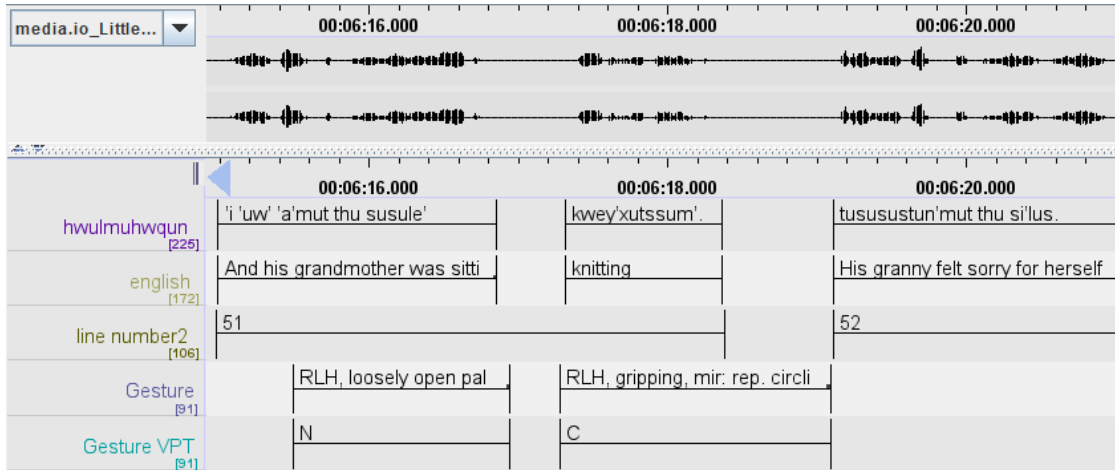


Figure 4: ELAN user interface showing some tiers used in annotation and coding

The full display of ELAN contains these annotation tiers, the waveform of the audio, the video itself, and a window to view annotations and notes in more detail. This full display is given in Figure 5, from the *Thunderbird and Orca* annotation:

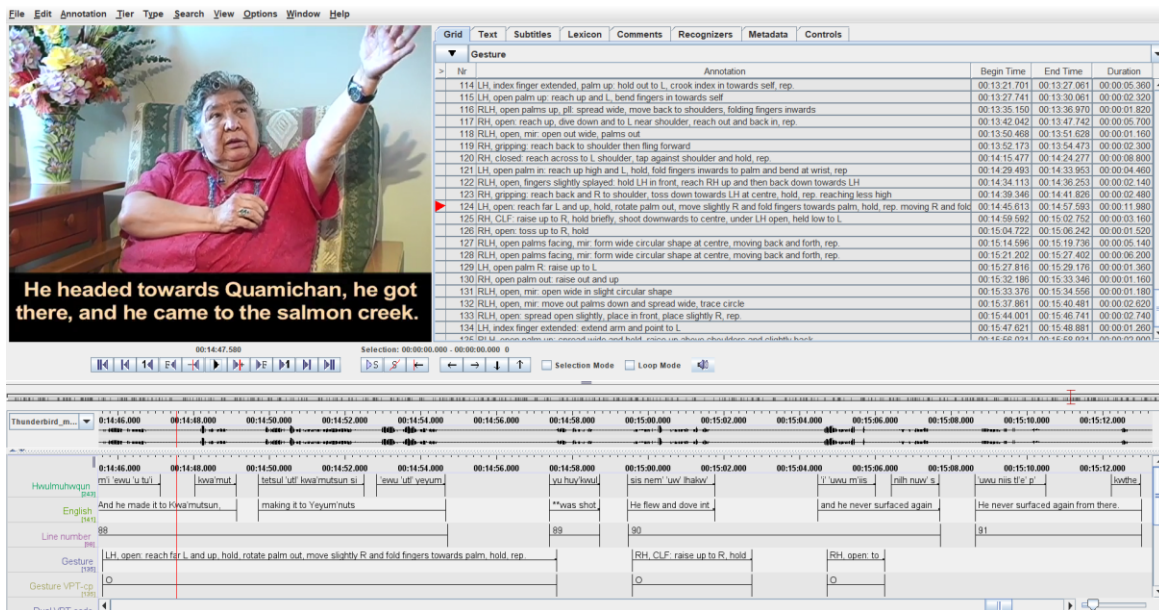


Figure 5: Full view of ELAN display

1.2.2. Coding scheme

Gestures can convey the perspective, or viewpoint, that a speaker is taking in the narrative, as will be detailed in Chapter 4. In my annotations, gestures are coded as one of the four possible viewpoint representations: Character, Observer, Dual, or No Viewpoint. A tier is added for gaze, which is annotated only for sequences in which it is used meaningfully (e.g. for role shift; see Sections 2.2.2 and 4.2.2), as either Left or Right. For cases of Dual Viewpoint gestures, they are given a number depending on what subtype of viewpoint combination they are (see Chapter 5 for more detail). The full set of abbreviations used in annotations is given in Appendix A.

Regarding the classifications of No Viewpoint: Parrill identifies certain gestures in her study that lacked motion event content and coded these as No Viewpoint. Her criteria included “rhythmic beat gestures, metaphoric gestures, deictic gestures, or iconic gestures that simply traced shapes” (Parrill 2009 p. 278).⁴ In my coding, I similarly assigned N-VPT to beat gestures, deictic gestures (of which there are very few), and iconic gestures tracing shapes clearly not within the narrative. Culturally specific gestures were also coded as N-VPT, such as raising the hands palms up when saying “thank you” or talking about one’s family and ancestors; or rotating hands back and forth at the wrist when people are talking.

⁴ These types of gestures will be defined briefly in Section 2.1.

Example 2: N-VPT gesture



Figure 6: Raising the hands

'een'thu sti'tum'atul'wut, nilh nu shhwuw'weli qwulsimtunaat 'i' xitsulenuhw.
I'm sti'tum'atul'wut. My parents are Qwulsimtunaat (Cecelia Leo Alphonse) and Xitsulenuhw (Basil Alphonse).

Gesture: RLH, palms up, pll: raise to just below shoulders, hold. (LW 1.0:12)

Example 2 shows a very common N-VPT gesture in Dr. Peter's narratives, where she raises her hands when talking about her parents. This gesture is also done at the very end of all the stories she tells. Hul'q'umi'num' speakers use this gesture when giving thanks. When I asked Dr. Peter about raising your hands, this is what she told me (Dr. Peter, p.c., Oct 30th 2020):

That's a sign of appreciation. Or honouring the people that you're with or that you see. And that shows that you're an honourable person also. Gratitude, thank you... a sign of appreciation. Raising your hands to another person that has done something good to you, or has done something good for the people.

Many Hul'q'umi'num' speakers and learners make this gesture, raising hands when giving thanks.

In some cases, there is potential ambiguity between gestures that could be coded as O-VPT and those that are N-VPT. When possible, this is

disambiguated by discourse context, or elements in the utterances themselves, like mentions of characters, objects, or locations.⁵

In addition to the four narratives by Dr. Peter, I have sampled videos from other Elders, looking for similar gesture patterns. Donna Gerdt and her team recorded these videos in the 1990s, and included are stories by Lussy Aleck, Margaret James, Eva Thomas, Irene Harris, and Robert Rice Sr. I have not fully annotated and coded these stories, but they serve as qualitative comparisons to Dr. Peter's gestures.

1.3. Roadmap

The remainder of the thesis is structured as follows. Chapter 2 covers key terminology and concepts from signed language linguistics that will be essential to understand the analysis throughout the thesis as a whole. I provide an overview of the ways *classifier handshapes* and *constructions* are used in signed languages, along with *role shift*. I also briefly discuss ways in which previous authors have applied each of these communicative strategies to gesture studies, and how speakers may use *classifiers* and *role shift* differently from how signers do.

Chapter 3 deals with how the *physical space* around the speaker is organized, and how this space can be used in different ways to enhance the spoken discourse. There is meaning not only in how a speaker gestures, but also where they gesture. I track where referents are located in gesture space throughout narratives as a whole, and explore the relationships between gesture space and the real-world space the speaker was in when telling these stories. There is a strong connection between speakers, the land around them, and the

⁵ It is worth noting that my counts may be impacted slightly by this ambiguity. I am unable to consult with Dr. Peter further to help with disambiguation, and I have not made time to work with other speakers, since it has not been long since Dr. Peter's passing. Showing videos of Dr. Peter to her family and community so soon is a sensitive matter.

narratives they tell. I briefly touch on how other languages, both spoken and signed, structure space as well.

Chapter 4 begins the discussion of *viewpoint*, or how a speaker's perspective on scenes and events can influence the form of gestures. Speakers may represent events from *character* viewpoint, where they act out characters' actions with their own body, on a life-sized scale. Or, they may use *observer* viewpoint, which conveys the actions in the narrative to the audience from a zoomed-out perspective. Whether a speaker chooses one viewpoint over the other can depend on what types of events they are talking about, and what characters are doing in the narratives. This terminology has also been applied to signed languages, and so I point back to some of the discussion from Chapter 2 again.

Chapter 5 continues the discussion of *viewpoint*, and covers the cases in which *character* and *observer* viewpoint are represented simultaneously, in what are called *dual viewpoint* gestures. Little research exists on these types of gestures, and they have been thought to be very rare. However, I show that *dual viewpoint* gestures are more common in Hul'q'umi'num' narratives than one might expect. They are often accomplished with some of the same communicative strategies used in signed languages, as discussed in Chapter 2. In studying Hul'q'umi'num' gestures through a signed language linguistics lens, we are able to identify viewpoint combinations that have not previously been studied.

Chapter 6 concludes with a summary of the thesis and a reflection of how Hul'q'umi'num' co-speech gestures compare to other languages, thus contributing to the cross-linguistic picture of gesture studies. I note what work has already taken place with gestures and language learning in Hul'q'umi'num' and its sister dialects. I offer some thoughts on how my research results could be used in Hul'q'umi'num' language classes, to help further the goals and wishes of the community.

Chapter 2.

Basics of gestures and signed languages

We might ask why gestures, viewpoint, and space are worth studying. Gesturing while speaking or signing aids in both language comprehension and production (Dargue & Sweller 2018, 2020a, 2020b; Goldin-Meadow 1999; Hostetter & Alibali 2008; Stec 2012; Willems et al. 2007). On the comprehension side, it has been found that observing typical gestures is particularly beneficial to comprehending narratives (Dargue & Sweller 2018, 2020b). *Typical* gestures here are taken to mean those which are “produced more frequently in the absence of specific instruction” with certain words or phrases, in contrast to infrequently produced *atypical* gestures (Dargue & Sweller 2018 p. 329). Gestures may be more typical based on ease of production, if they better portray the event being represented or are more semantically related, or if they are more common or ritualized. For example, someone gesturing swinging a bat while talking about baseball would be typical, but would be clearly atypical if they were talking about soccer.⁶ Gestures are also used to track referents in discourse and can be affected by the discourse status of referents, information which aids in comprehension and disambiguation (Debreslioska et al. 2013; Koike 2001).

Gesturing has been integrated into language learning pedagogies with the aim of facilitating production as well (Gardner & Ciotti 2018; Maxwell 2017). Using gestures and signs in Indigenous language learning settings in particular is one way to move language learning out of the colonizer language (in our context, English). Techniques in these pedagogies include producing ASL (or other signed languages) signs, or iconic gestures, while speaking in the target language. Studying and understanding how Hul’q’umi’num’ speakers use

⁶ A gesture may exist on a gradient of typicality as well – swinging a bat would be highly typical while talking about baseball, but gesturing something like eating popcorn would be semantically compatible (e.g. eating snacks while watching a baseball game), though likely considered less typical.

gestures will hopefully prove a valuable teaching and acquisition tool to aid speakers on their path to fluency.

Gesture studies and signed language linguistics often go hand-in-hand due to their shared manual modality. Certain concepts and terminologies from signed language linguistics have proven particularly insightful when applied to my research on co-speech gestures in Hul'q'umi'num'. In this chapter, I first talk about different kinds of gestures, and then cover how we can connect gestures and signed languages.

2.1. Types of gestures

Throughout the history of gesture studies, there have been a number of different classification schemes. I adopt the scheme introduced in McNeill's 1992 book, as it seems to have persisted and is used in many modern gesture studies (McNeill 1992). McNeill divides gestures into four main categories: iconics, metaphoric, deictics, and beats. I focus only on the first of these four, but I will first give brief definitions of the other categories as a point of comparison. *Metaphoric* gestures convey "an abstract concept, such as knowledge, language itself, the genre of the narrative, etc." (McNeill 1992 p. 80). This might include, for example, a speaker mentioning someone talking very rapidly and candidly, with details "all coming out quite spontaneously," and gesturing outwards and upwards as if showing a substance gushing out (Kendon 2004 p. 100). There was no actual expulsion of material from the speaker, but this conveys the metaphoric imagery of something spilling out. *Deictic* gestures are points, which usually consist of movement and extension of an articulator either towards a concrete entity in space, or a location in gesture space which has been previously established for a referent within the narrative. *Beat* gestures do not convey any identifiable meaning, and are small, simple movements that usually align with the rhythm of the speech. Beat gestures may be associated with the narrative discourse structure, occurring for example at introductions of new

characters, when summarizing actions, or marking other significant events (McNeill 1992 p. 15).

The thesis focuses on *iconic* gestures in Hul'q'umi'num'. A broad definition of *iconicity* is when the form of something (e.g. a sign or gesture) looks like its meaning (Kuhn & Aristodemo 2017 p. 27).⁷ Iconic gestures are those which convey, in form and manner, aspects of the same scene that the speech is also describing (McNeill 1992 p. 78). This is not to say that utterance content and gesture content must be perfectly matched; they are almost always semantically congruous, but the speech and gesture may contribute distinct pieces of information to the overall meaning. For an example of gesture specifying form, one can imagine regaling a friend about a fish they caught, and saying "It was *this* big!" accompanied with a gesture holding hands a wide distance apart. A manner-specifying gesture might be something like a speaker moving their hand in a zig-zag motion as they say "he ran away," indicating that the character took a specific path back and forth as they were running away, rather than simply going straight.

In Dr. Peter's telling of *Q'ise'q and the Stoneheads*, she produces a gesture that helps convey the manner in which one character is making himself wings, shown in Example 3:

⁷ It is worth nothing that speech can be iconic as well – for example, onomatopoeic words like "bang" or "beep" are iconic in that they sound like the thing they are conveying. In addition, prosodic vowel lengthening can be used to express duration or physical dimension ("loooong"), and pitch can be used to express smallness (high pitch) or largeness (low pitch). Similarly, certain linguistic processes like reduplication may be considered iconic – e.g. reduplicating a word or morpheme to indicate pluractionality of an event.

Example 3: Gesture specifying manner of a character's action



Figure 7: Q'ise'q making wings from birds

wulh yu they'tus tthu t'eluw' kwus ... stli's kws hwu st'es 'u tthu sqw'ulesh
kws lhalhukw's.

He made his own wings ...because he wanted to fly like a bird.

Gesture: RLH, flat: brush RH from L wrist up to shoulder and back down, LH from
R shoulder down to R wrist, rep. RH up L shoulder and down. (QS 107.15:22)

Just prior to this line, Dr. Peter says that Q'ise'q has gathered many birds. When she explains that he made his own wings to be able to fly, she brushes her hands down her own arms. In this gesture, she is indicating that Q'ise'q has affixed the birds' feathers/wings to his own arms. Without this gesture, the listener may imagine Q'ise'q using some other method to fly with the birds' wings, such as attaching them to branches which he can hold, or another such technique. With

Dr. Peter's co-speech gesture, the listener understands precisely how Q'ise'q is able to fly now.

Speech alone does not always capture the entirety of the message, and nor does gesture alone – the two often must be taken together to understand the speaker's intent and the way events unfold.

2.2. Signed languages

Two communicative features used in signed languages are strongly reflected in the Hul'q'umi'num' storytelling I have studied, and in this section, I cover their basics. The concepts of *classifiers* and *role shift* have served as a guide for how I have approached and studied gestures in Hul'q'umi'num' narratives, and as such, terminology introduced here will be carried throughout the remainder of the thesis. We will see in later chapters some of the ways that gestures and signed language techniques have been compared and studied previously.

2.2.1. Classifiers

In signed languages, classifiers are nominal or predicational expressions of entities or referring expressions (Leeson & Saeed 2012; Suppalla 1986; Swabey 2002). Broadly speaking, they can identify and then optionally say something about some entity or entities. The status of classifiers and what terminology to use for them has been debated in signed language linguistics (see, e.g. Cormier et al (2012) and Schembri (2003)), but this debate does not affect my work and as such I will continue to use this terminology when discussing my data.⁸

Classifiers can be subdivided into *handshapes* and *constructions*. Classifier handshapes act as pronouns to previously established discourse

⁸ At issue is whether classifiers and classifier constructions in signed languages are linguistic or gestural, and whether they can be compared to classifier systems in spoken languages.

referents and can function similarly to a point, or as a placement of or reference to an object or entity. Classifier constructions, on the other hand, are an expression of both the entity and a predicate; they are verb constructions using a classifier handshape (Barberà & Quer 2018). These may also be called *depicting constructions* (Cormier et al. 2012), but I will maintain the term *classifier construction* for simplicity. Example 4 shows a classifier construction used in both American Sign Language and British Sign Language (BSL), for the sign FALL (appears as figures 9a and 9b in Cormier et al. 2012).

Example 4: Classifier construction in ASL/BSL (Cormier et al. 2012 p. 337)



Figure 8: Biped /V/ entity handshape used in ASL/BSL sign FALL

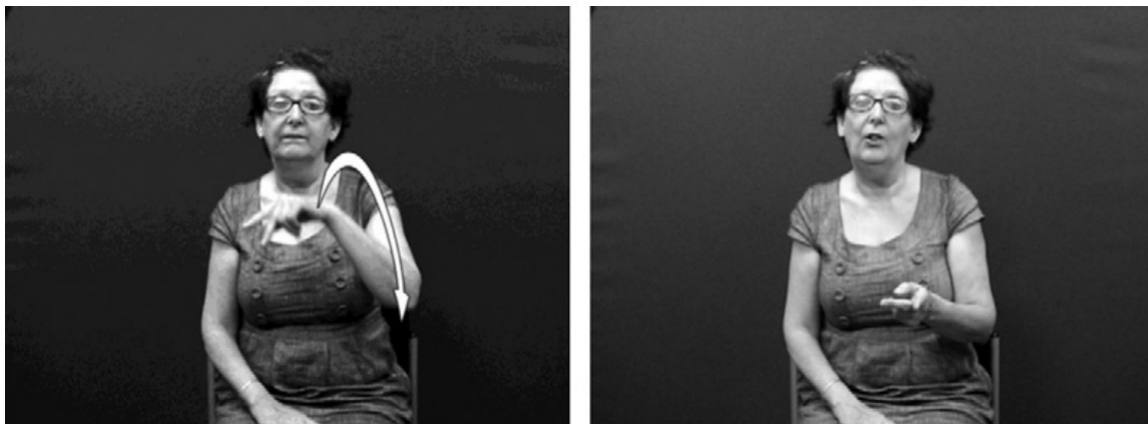


Figure 9: Lexical sign FALL in ASL/BSL

The image in Figure 8 shows the inverted V handshape used in ASL and BSL originally to represent two-legged entities, which is extended to refer to other objects or entities when used in the sign FALL. Articulation of this sign is shown

in Figure 9, where the signer moves their hand in this classifier handshape down and outwards from their body, iconically depicting something falling.

Classifiers can also be divided into *entity* and *handling* handshapes and constructions. Broadly speaking, entity classifiers are those which represent an object, and handling classifiers represent how an object is handled (see Cormier et al. (2012) for detailed discussion). Handling classifiers will not be mentioned further, and I lay their discussion aside.⁹ However, as we will see in Section 4.1, gestures in the narratives I study can be likened to entity classifiers. Entity handshapes may represent part of a referent, or the referent in its entirety, and often iconically convey information about the shape and size of the referent (Cormier et al. 2012 p. 332; Engberg-Pedersen 1993; Schembri 2003). In Example 5, we can see how an entity handshape is used in a classifier construction.

**Example 5: Entity classifier construction in BSL
(Cormier et al. 2012 p. 330)**



MAN

DC:upright.stick.shaped.entity+move+from.location.x+to.location.y

‘The man moved/walked (from location x to location y).’

Figure 10: Articulation of BSL phrase using an entity handshape

Note that the label “DC” in the second and third images for *depicting construction* is analogous to the term I use, *classifier construction*, as mentioned above. In this utterance, the entity handshape iconically represents the upright form of a figure;

⁹ This is partially due to the fact that it is unclear how handling “classifiers” in gesture would be different from handling gestures as a whole – i.e., is every instance of a character holding a knife an instance of a handling classifier, or is this a more general gesture form?

here, a man. The construction conveys both the form of the man and his general path of motion, at the same time.

The expression of multiple, distinct pieces of information across different articulators at the same time, e.g. each hand, is often thought to be a property unique to signed languages (Vermeerbergen et al. 2007). Signed language users can achieve this kind of *simultaneity* in a variety of ways by combining manual articulators, or by using oral and manual articulators together (Perniss 2007; Sáfár & Crasborn 2013; Sandler 2009; Vermeerbergen & Demey 2007). Spoken languages, by contrast, generally have sequentially organized components. However, when we consider co-speech gestures alongside spoken utterances, some of the ways in which signed languages utilize simultaneity can be applied to our discussion as well. One method is through the use of classifier constructions much like those we have just seen. These constructions may also incorporate another communication technique used in signed languages, where the speaker or signer acts out the events and emotions a character undergoes with their own body.

2.2.2. Role shift

Role shift (also called referential/reference shift, surrogate blends, or constructed action) is one of the ways signed languages represent a change in point of view (Dudis 2004; Earis & Cormier 2013; Liddell 1995; Metzger 1995). In role shift utterances, the “signer imitates typically a human or animate referent by taking on one or more attributes of that referent, such as facial expression and/or body position” (Loew 1984 via Earis & Cormier 2013 p. 314). Role shift can be thought of as instances of the speaker embodying a character, as the signer takes on that entity’s perspective and their features. This is usually marked through a physical shifting of the body, or through movement of eye gaze. Signers may use some of their articulators in role shift to represent a character (e.g. face, body, one arm or hand), while still using their hand(s) to sign accompanying narration (Metzger 1995).

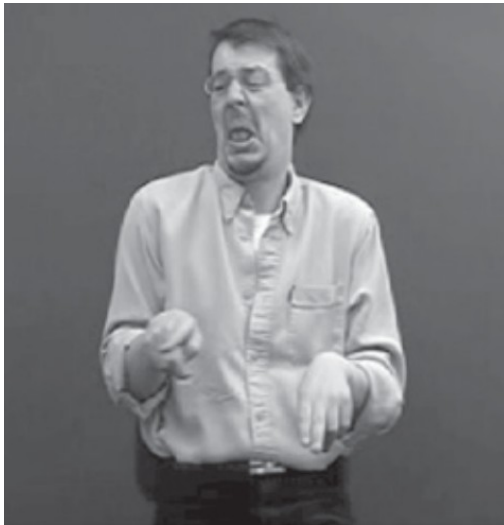
Referents are placed at a locus in space and remain static there, while the signer role shifts to indicate a change in perspective when embodying a particular character (Janzen 2012). Signers may also embody multiple characters throughout a narrative. If more than one referent is at play, a particular referent may be ‘assigned’ to one side of the signing space to contrast with a referent on the opposite side, and signers can shift back and forth between sides, utilizing “contrastive role shift” (Padden 1986). Another technique available to signers does not involve the shifting of the signer themselves, but instead the signer remains static while the referents are “mentally rotated” in front of them (Janzen 2012). In this case, the signer does not visibly shift locations to where a referent has been assigned; rather, as they are taking the perspective of different referents, it is understood that the space in front of them rotates to align the perspective of the character with that of the signer. Janzen reports that when representing characters in narratives, signers tend to use mentally rotated spaces more than contrastive role shifts (Janzen 2012 p. 162).

Role shifting and mentally rotated spaces are used particularly in dialogue scenes between two referents, and will be discussed in greater detail in Chapter 4.2. Role shifting is one technique that can be used during what is often called *constructed dialogue*, in first-person representations of speech.¹⁰ The narrator is fully in the character’s role throughout the dialogue, and can shift to different sides of sign/gesture space to indicate they are speaking as a certain character.

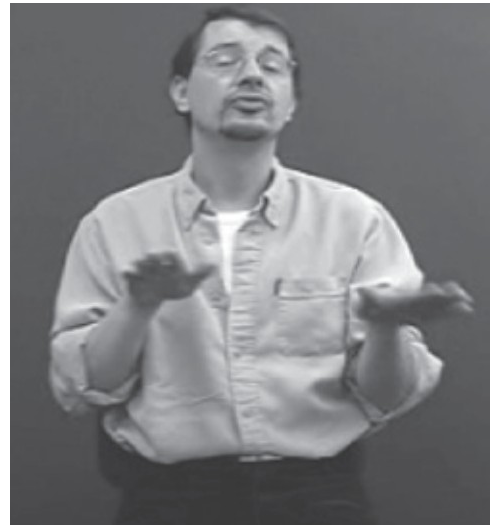
In Example 6, we can see a BSL signer adopting role shift strategies during a telling of the story *The Tortoise and the Hare*.

¹⁰ In *constructed dialogue*, the speaker creates the direct dialogue between characters. The speech which has been constructed may not have been precisely what was said, and the speaker can invent or embellish discourse, for theatrical effect or to increase involvement (Saxton 1992; Spronck & Nikitina 2019; Tannen 1986). This is similar to terms like “direct quotation” or “reported speech” (Liddell 2003; Metzger 1995; Tannen 1986).

Example 6: Role shift in BSL narration (Earis & Cormier 2013 p. 329)



a. Hare addressing tortoise



b. Tortoise's point of view

Figure 11: Use of eye gaze and facial expression for role shift

When the signer is taking on the role of the hare addressing the tortoise, he looks downwards and to the right, and has a particular facial expression and body position, seen in Figure 11a. In contrast, when he assumes the role of the tortoise, he looks upwards and to the left (Earis & Cormier 2013 p. 329). Figure 11b is taken from a scene in which the signer is telling the story from the tortoise's point of view, containing no dialogue, and yet we can still see that the signer's eye gaze, facial expression, and body position are quite different from when he is depicting the hare. It may be possible to analyze this as an example of mental rotation, however, due to the minimal body shift of the speaker. It could be the case that the signer is shifting the location of the characters in front of him, while he remains nearly static and assumes the facial expression and gaze direction of the character he is actively portraying.¹¹

¹¹ Thank you to Terry Janzen for pointing out this alternate analysis to me. Determining which analysis is more accurate, between role shift or mental rotation, would require access to the full narrative. The authors note that the signer in these images did not use index signs to establish locations of the tortoise and the hare, however additional instances of eye gaze would help clarify the placements of these referents and how the signer's space is being used throughout the narrative.

These same spatial strategies hold in co-speech gestures as well – English speakers in the study by Earis & Cormier (2013) moved their heads and bodies in a similar way to the BSL signer in Example 6, however with less consistency.¹² The speakers do use role shift, but not in quite the same ways as signers. Using gestures for role shift can convey a more descriptive and rich narrative than speech alone (Koike 2001; Stec et al. 2016, 2017). For instance, Liddell (2003 p. 158) gives the example of a speaker describing some man, Frank, searching for his keys:

“Frank was looking for his keys.” (uttered while pressing the palms against shirt pockets then pants pockets)

The speaker has engaged in role shift, as their hands and body are now understood to belong to Frank, not the speaker themselves. With the gesture accompanying this utterance, the audience understands not only that Frank was looking for his keys, but they also understand the manner in which he did so. This integration of the verbal and manual modalities allows for more detailed depiction of events.

Rayman (1999) conducted a study comparing ASL and English storytelling, including both signing and speaking participants who had experience acting, to investigate the linguistic tools used in storytelling in both spoken and manual modalities. Participants watched a two-minute cartoon of the Tortoise and the Hare story, and re-told it. Rayman found that although role shift strategies were available to all participants, Deaf storytellers used it much more frequently than speaking storytellers (Rayman 1999 p. 78). In general, the ASL signers tended to focus more on the experiences of the characters, portrayed through role shift and use of facial expressions, while the English speakers told the story in a more narrator-focused style. However, Rayman notes that the speaker who was a trained actress used role shift features more than any other

¹² This is discussed in more detail in Section 4.2.2.

speaking participant. This shows that performing experience can influence the use of gestures.

Stec et al. (2016) also found in their study that English speakers do indeed use manual articulators “to achieve something like role shift as is typically described for users of signed language” (Stec et al. 2017 p. 2). We will see later in Section 4.2.2 that Hul’q’umi’num’ speakers also use role shift, and it is particularly notable in sequences of dialogue between two characters.

The next chapter takes a closer look at two more techniques used in Hul’q’umi’num’ gesturing, which can also be tied to notions within signed languages. These techniques, as with role shift, demonstrate how a speaker (or signer) can utilize gestures and the space around them. This space is used to convey different relationships between referents, and to give a detailed and grounded description of events.

Chapter 3.

Use of space

In this chapter, I investigate how speakers utilize the physical space around them: is there significance and meaning to *where* a storyteller gestures, as well as how? How is gesture space structured when telling narratives, and how does this compare across languages? Does Hul'q'umi'num' storytelling stand out in the way speakers use space to talk about space?¹³

As it turns out, Hul'q'umi'num' storytellers do indeed structure their gesture space in very salient and robust ways. There are two main strategies Dr. Peter uses to convey where characters and places are, and to highlight certain referents, often in contrast to others. I refer to these as *locating* (Section 3.1) and *spotlighting* (Section 3.2). In some ways, these strategies as used in Hul'q'umi'num' storytelling look much more similar to discourse and narrative tools used in signed languages than they do to co-speech gestures in other spoken languages. For examples, in Section 2.2.2, we saw that though speakers of British English engaged in role shift in Earis & Cormier's 2012 study, they were not consistent throughout the entirety of the narrative in where they located characters in their gesture space. As we will see, Hul'q'umi'num' speakers maintain referents in their "assigned" locations more consistently, like BSL or ASL users.

In order to analyze where referents are placed and talked about in Dr. Peter's gesture space and to investigate the two strategies of locating and spotlighting, I added to my initial methodology as laid out in Chapter 1. While watching Dr. Peter's storytelling, it was quickly apparent that some referents were consistently gestured to on certain sides, and so I created "gesture maps" which

¹³ This chapter of the thesis includes research that was presented by Rosemary Webb and Donna B. Gerdtts at the Society for the Study of Indigenous Languages of the Americas, January 2022 (Webb & Gerdtts 2022).

tracked the locations of these referents in gesture space. These diagrams show which referents are gestured on which sides of the speaker's body. If there is movement across the body to the opposite side, this is also noted. I paid special attention to recurring characters in each story, as well as real-world place names, and story-internal locations that were not tied to real-world places. The resulting diagrams look like that shown in Figure 12 below:

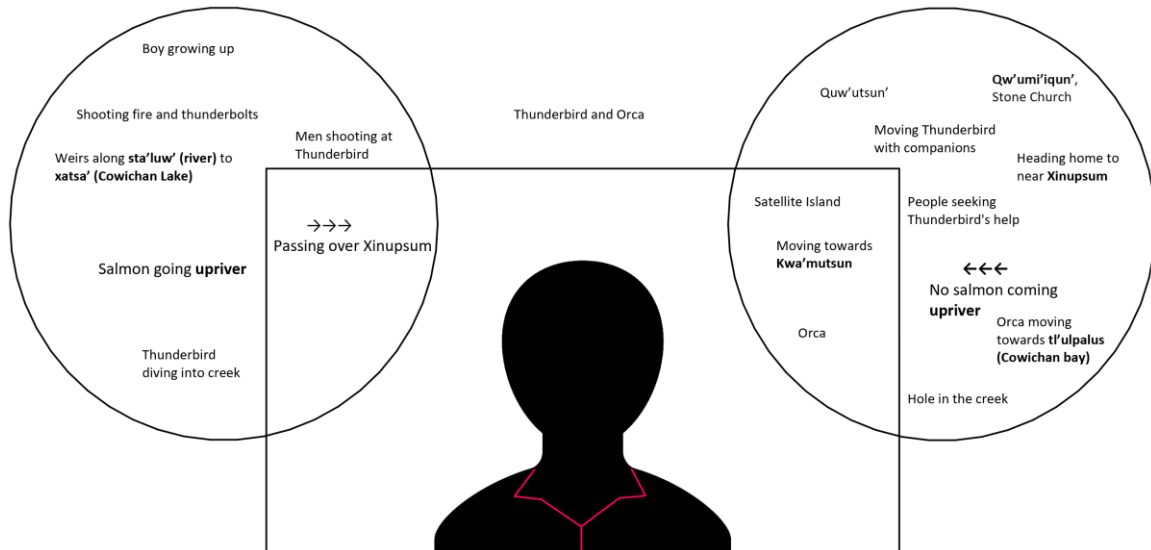


Figure 12: Gesture map for *Thunderbird and Orca*

Gestures on Dr. Peter's right side are almost always done with her right hand, and vice versa for the left side – however, if there is a hand crossing over to the opposite side, this is always captured by the ELAN annotation, as one of the elements I code for is which hand is being used in the gesture. Arrows above referent labels in the gesture maps indicate that the referent was gestured with movement in the direction of the arrow. In each of these diagrams for the four main narratives I studied, Dr. Peter's left side corresponds with the west, and right with the east, as Dr. Peter was facing south while telling the stories.

One important thing to note is that these diagrams do not represent the relative positions of referents within the gesture space – that is, referent labels that appear to the outer edges of the circles were not necessarily gestured at that precise height, or that far to the left or right. Similarly, referent labels placed close

to Dr. Peter’s body in the diagram were not necessarily gestured closer to her. A detailed gesture map of the referents in Dr. Peter’s narratives is something that could be made in future work, perhaps through the use of video capture software. For an idea of what this kind of map might look like, we could take McNeill’s gesture space drawings as inspiration (McNeill 1992 p. 89).

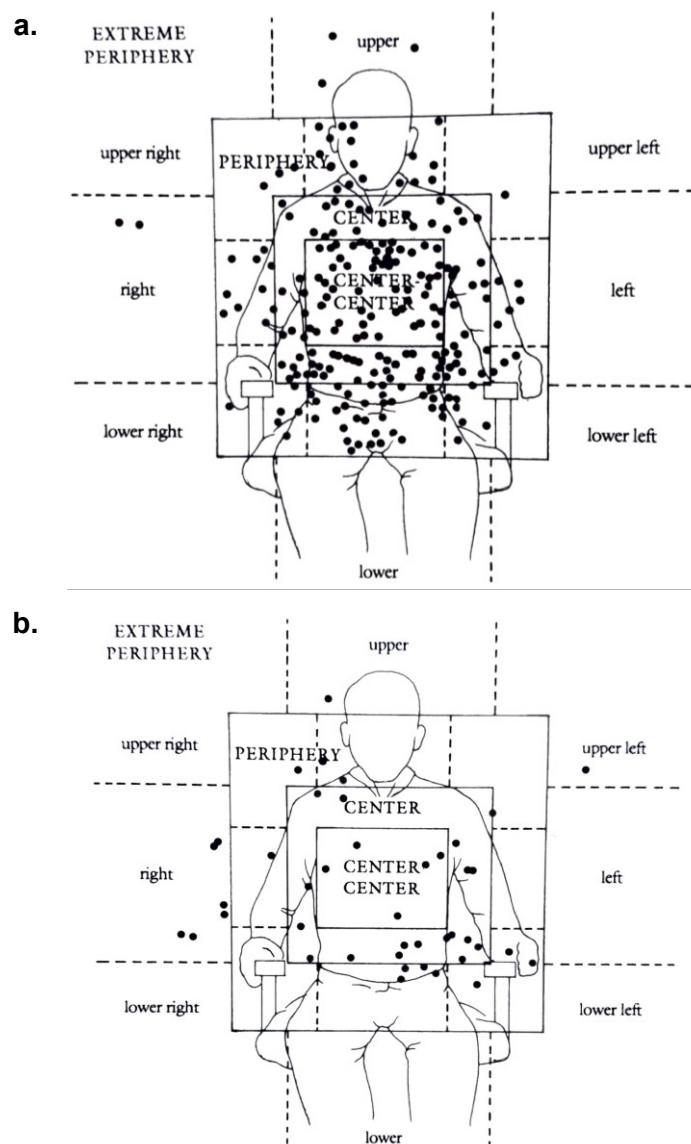


Figure 13: Gesture space diagram from McNeill (1992 pp. 90–91)

These two images show the distributions of different gesture types across a speaker’s gesture space. Figure 13a is the map for *iconic* gestures, while Figure 13b is the map for *deictic* gestures. Plotting them in this way allows the us to see

that iconics are more centrally clustered, while deictics tend to occur at the peripheries.

Another method I added was text-first rather than video-first. I went through the transcripts and flagged any uses of place names (e.g. *quw'utsun* 'Cowichan', *xinupsum* 'Green Point', *tl'ulpalus* 'Cowichan Bay'), as well as (spatio-temporal) demonstratives (e.g. *tu'i* 'this here', *tunanulh* 'in the distance') (Hedberg & Gerdts 2020). I then looked to the accompanying videos and checked whether there were gestures with these words. The video-first approach I had been taking up to this point did not allow me to fully appreciate the times when Dr. Peter's hands were notably still. In contrast, the text-first method was particularly useful, since I was able to identify instances where Dr. Peter was *not* gesturing, including where we might anticipate movement, e.g. pointing with certain demonstratives (Reisinger & Huijsmans 2021). I found that Dr. Peter rarely gestured with demonstratives, but gestures accompanying place names was more common, as I will detail in Section 3.1.

Gesture and signed language studies are often concerned with the ways in which a speaker can utilize *pointing* (Engberg-Pedersen 2003; Haviland 1993, 2010; Kendon 2004; Kita 2010; McNeill 1992). In her narratives, Dr. Peter does not tend to use conventional deictic pointing gestures (the prototypical index-finger point) when referring to characters or places around her.¹⁴ This is not to say that index-finger handshapes are the only kinds of points; indeed, previous authors have noted that different handshapes are used depending on what the speaker is pointing at, or talking about (Kendon 2004; Kendon & Versante 2003;

¹⁴ Reisinger & Huijsmans (2021) present a survey of demonstratives in ʔayʔajuθəm, a Central Salish language; one set of demonstratives, which they call "GDEMS", is consistently accompanied by gestures. The authors note that these demonstratives (and accompanying gestures) are used primarily in "exophoric contexts ... where the speaker picks out a concrete referent in the external world," and very rarely in stories (Reisinger & Huijsmans 2021 p. 328). As my research involves stories, the data do not present the same type of opportunity for investigation as in Reisinger & Huijsmans. Dr. Peter's gestures do not seem to be tied to demonstratives as in ʔayʔajuθəm, although she does reference the external (real) world in her stories.

McNeill 1992; Wilkins 2003). Kendon (2004 p. 200) defines pointing gestures in the following way:

Pointing gestures are regarded as indicating an object, a location, or a direction, which is discovered by projecting a straight line from the furthest point of the body part that has been extended outward, into the space that extends beyond the speaker.

Kendon goes on to expand that pointing gestures may be understood as referring to locations within the speaker's physical space, e.g. the room around them and their audience, or further away, e.g. past the walls of the room the interlocutors are in. Locations may also be entirely divided from the real world, and speakers may be pointing to places in the "narrated space" (Haviland 1993).¹⁵ While we do not see her use conventional pointing, Dr. Peter does still use gestures to describe the locations of various referents. These are usually done with a flat hand, rather than an extended finger.¹⁶ She points in this way to both kinds of locations just discussed above – real world as well as narrated spaces. This real-world locating is the focus of the following section.

3.1. Locating

Gestures can be used to locate characters within the world surrounding the storyteller. By using their body as a central point, the speaker can gesture leftwards or rightwards to landmarks or territories that a character is moving through. The *locating* strategy can be used to situate the speaker within the real world, but speakers can also use locating for in-fiction places, and provide re-mappings of a story space; this is briefly discussed at the end of this section. In

¹⁵ Haviland uses the term "narrated space" to mean "narrated events seen from some narrated perspective" – that is, spaces and events which are understood not to be taking place in the "here and now" that the speaker is in at utterance time, but possibly in the "there and then" past or alternate location (Haviland 1993 p. 26). This quickly becomes complicated when we think of the overlay of narrated spaces on top of real spaces, as all speakers exist in the real world when talking, and these two cannot be entirely untangled. See Haviland's chapter for a detailed discussion.

¹⁶ Hul'q'umi'num' speakers do not seem to have index-finger pointing (Donna Gerdts, p.c.).

Section 3.1.1 I discuss how this is done in Hul'q'umi'num', and in Section 3.1.2 I address other languages' use of locating.

3.1.1. Locating in Hul'q'umi'num'

These directional gestures are sometimes precisely aligned with the cardinal directions.¹⁷ For example, when Dr. Peter was telling one story while sitting facing south, gestures to locations east of her were done on her left side, whereas gestures to the west of her were done on her right side. The sides to which Dr. Peter gestures is relative to the direction she was facing; in another telling of the same story, she was sitting facing a different direction, and her gestures shifted accordingly. The territory that Dr. Peter and other speakers live in is also the place of their stories, and we can see this is visibly reflected in the gestures accompanying narratives.

¹⁷ Thanks to Donna Gerdts for pointing this out to me and leading me to this part of the research.

Example 7: East-west locating gesture



Figure 14: Setting up weirs from Cowichan Bay to Cowichan Lake

'i' nilh sus 'uw' shxetl' saay'stum' thu shxetl' nem' tus 'uti' quw'utsun' xatsa' ni' 'u tranulh tsa'luqw.

They got the weirs ready at different places from Cowichan Bay going up to Lake Cowichan.

Gesture: RH, open: move out and far R, flapping hand, raise up high to R above head. (TO 48.7:56)

In this gesture sequence from *Thunderbird and Orca*, we can see Dr. Peter tracing the path of weirs set up along the river from *tl'ulpalus* 'Cowichan Bay' to *quw'utsun' xatsa'* 'Cowichan Lake'. The river runs east-west, and Dr. Peter's gestures follow a path from left (Cowichan Bay, east) to right (Cowichan Lake, west).

Once the speaker has indicated where certain landmarks or locations are, these points in space can then serve as *anchors* in the narrative that follows (Engberg-Pedersen 1993; Haviland 1993). Further gestures representing

characters in these locations, or moving through them, will occur on the appropriate side of the body, or in the appropriate direction. We can see this in Example 8, where Dr. Peter is describing how salmon would pass through the weirs she had previously indicated, on the path from east to west up the river.

Example 8: Entities moving through previously established anchors



Figure 15: Salmon moving through weir up the river

nuw' sxuxits kwthu ni' kwe'tum, nem' 'aantum kws nem's yul'ew' 'u thu shxetl'.
They figured out which salmon they would let pass through the weir.
Gesture: LH, open palm R: move out to L, sweep back in to chest. (TO 52.8:39)

Here, and later in the narrative as well, Dr. Peter represents the movement of entities around the locations she has set up by consistently gesturing in the same directions or on the same sides of her body.

Dr. Peter's cardinal alignment and anchoring of locations is very consistent, as can be clearly seen in diagrams I have made. Figure 12 from above, simplified and repeated here as Figure 16, shows which referents (characters, places) and actions (primarily movement) occur on each side of Dr. Peter's gesture space. In Figure 17 just below, I have indicated in different colours the place names that match between the Dr. Peter's gesture space and the geographical map of the surrounding area. Dr. Peter's location is indicated near top center with a red dot.



Figure 16: Simplified gesture map for *Thunderbird and Orca*

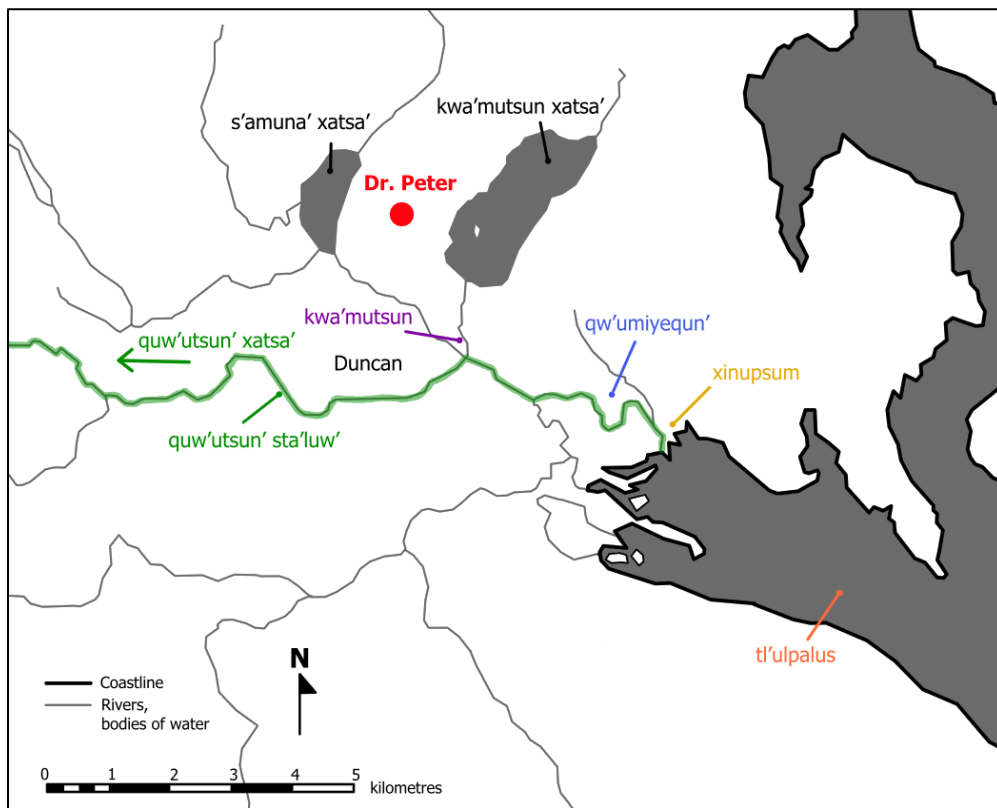


Figure 17: Map of Qw'utsun' and surrounding areas, adapted from Map 2 in Evans, Thom, & Gardner (2005 p. 109)

When we compare the circles on the gesture map to the real-world map of the territory surrounding Dr. Peter, we can see that the referents line up very precisely.

In studying videos from additional Elders, it became clear that many videos were unfortunately often too closely framed to tell what speakers were doing with their hands. However, in one story by Elizabeth (Lussy) Aleck, we do see geographical locating gestures used. This story, *The Coming of the First Whites*, was recorded on October 29th, 1995 in Nanoose, British Columbia.¹⁸ In these examples, I give the speaker's initials and story abbreviation followed by gesture start time.

While telling this story, Mrs. Aleck was sitting facing east. Nanoose Bay is located northeast of her, or to her left, and the mountain which she is referring to in the story is to the south of her, to her right. Example 9 shows her gesturing to these two locations.

Example 9: Locating gestures by Mrs. Aleck



Figure 18: Describing mountain to the south and bay to the northeast

¹⁸ Transcriptions and translations were done by Donna Gerdt and Theresa Thorne, filming was done by Dave Barnes, and video post-production was done by Chris Bouris.

ha' xlhs kws xlhs 'i wulh 'aam [u] tthu smeent 'ulhtun tse' tu ts'um'ush.

People were invited from up the mountain to come eat herring eggs.

Gesture: RH, flat, palm left: raise to R above shoulder, bob up and down, rep. pinch fingers together.

hwun' xut'u 'u tthuy' 'i' wulh m'i tetsul tthu pout, shup, m'i lheel. 'a-a-a-yum 'ul' 'i' m'i qw'im.

While this was going on a boat come toward shore, a ship, and then some people disembarked.

Gesture: LH, flat, palm in: raise to L shoulder, slide R to center and slightly downwards, rep. (LA TCOTFW 0:32–0:43)

In this narrative, Mrs. Aleck has a clear divide in her gesture space between the people coming down from the mountain, gestured on her right side (in the first row), and the boat of white people docking in the bay, gestured on her left side (the second row). When Mrs. Aleck is later describing the chief coming down from the mountain to meet the white people, we see her right hand tracing his path across to the left – this is shown in Example 10:

Example 10: Gesturing a path from south to northeast



Figure 19: Chief descending towards Nanoose Bay from the mountain

suw' t'ahw tthu chifs tthu tun'ni' 'u tun'a
The chief went down — chief from here

ha'kwush tthu ni' ha'kwushus kws chifs.
using their outfits as chiefs.

Gesture: RH, CL1: move smoothly from R shoulder to center, slightly downwards once at chest, rep. with less extension to R. (LA TCOTFW 0:53)

As we saw with Dr. Peter in Example 8, Mrs. Aleck is using the locations of Nanoose Bay and the mountain as anchors that characters can then move through and around. Hul'q'umi'num' people often note their strong connection to the land, and the storytellers and listeners share much knowledge of locations in the territory.

3.1.2. Locating in other languages

Cardinally aligned gesture mapping is a relatively understudied gesture phenomenon – however, Haviland (1993, 2010) has noted that speakers of Guugu Yimithirr also demonstrate this kind of directional precision in their gestures. In Haviland's 1993 paper, he analyzes a narrative told by a storyteller on two separate occasions, a few years apart. As he notes, the storyteller ("JB") is oriented differently in each telling; once facing roughly west, once facing roughly north. Crucially, Haviland's analysis shows that JB gestures in different directions in each telling of the narrative, to maintain the precise directional orientation built into Guugu Yimithirr (Haviland 1993).

Engberg-Pedersen talks about a similar strategy in Danish Sign Language, and calls it "concrete anchoring of an abstract referent." (Engberg-Pedersen 1993 p. 98). Signers assign a referent some *locus* in their signing space, which they can then point to, similar to how a speaker might use a demonstrative or pronoun. Signs in or to that locus are understood as references to that entity. In one example Engberg-Pedersen gives, the locus is established in signing space based on where the referent exists, geographically, in the real physical space surrounding the signer and audience. Namely, the conference centre the signer is referring to exists west of the signer, and so she places the locus to her left. The signer does not use the Danish sign west at all in the utterance which, in fact, is usually articulated to a signer's right side (European Sign Language Center 2018), and Engberg-Pedersen notes that the signer articulating this locus on her left is "in keeping with the iconic convention" (Engberg-Pedersen 1993 p. 98). For comparison, the ASL sign WEST is

articulated with the hand in a W shape moving across the body to the left (Mitchell n.d.). This is articulated as if you were looking at a map, which by Western convention has north at the top – west would then be on your left. Many (but not all) signed languages around the world use some sort of leftward movement, point, or articulation on the left for the sign WEST (Mitchell n.d.).

Speakers do not always need to structure gesture space with respect to the real world around them. They may also utilize space to set up locations of abstract concepts, or characters and locations within a narrative with no explicit ties to the real world.¹⁹ In a blending of these two, even if events took place in the real world, the speaker may still place entities in gesture space without reference to their actual geographical locations. For instance, if a speaker is utilizing their gesture space to give prominence to certain characters or locations, the anchors for these referents may be re-mappings of in-story directions, rather than cardinal directions.

3.2. Spotlighting

Another way that speakers make use of the physical space is through a technique we have called *spotlighting*. Storytellers may indicate the importance of a character by assigning them to a particular side of the gesture space and then refer to them by gesturing in that space. A referent may be set up on only one side, as distinct from the central gesture space in front of the speaker's body, or there can be two contrasting referents on opposite sides of the space. Section 3.2.1 first covers the use of spotlighting in Hul'q'umi'num', and then in Section 3.2.2 I turn to other languages.

3.2.1. Spotlighting in Hul'q'umi'num'

The spotlighting technique as used for contrast is best demonstrated in Dr. Peter's telling of *Snotboy Saves the Sequestered Girl*. She sets up the

¹⁹ Recall "narrated spaces" from above; see also Footnote 15.

location of the *protagonists'* family, house, and surrounding forest on her left side, whereas the *antagonist*, the island on which he lives, and the path to get to that island is established on her right side. Reference to each of these locations or entities is done either on their assigned sides in her gesture space, or with respective left or right hands. The *Snotboy* narrative contains a disproportionate number of gestures with the left hand. This is particularly notable as most of her one-handed gestures in non-contrastive events, or in other narratives, are done with her dominant right hand. However, once we look at the gesture maps for *Snotboy*, we see why Dr. Peter is using her left hand so much.

When the characters in the story are interacting around the protagonists' home, Dr. Peter's gestures are consistently on her left or using her left hand; when the characters move to the island location of the antagonist, there is a definitive transition to using her right hand and gesturing on the right side of her gesture space. These referent locations as used for *spotlighting* are summed up in the gesture map in Figure 20 below:

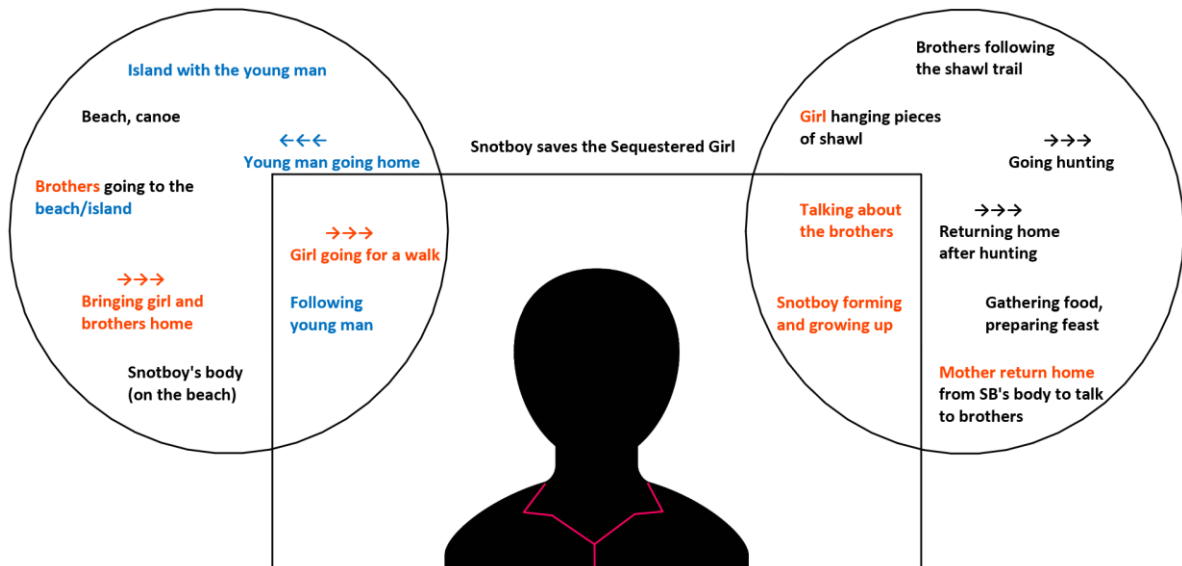


Figure 20: Gesture map for *Snotboy Saves the Sequestered Girl*

Here, I have colour coded the *protagonists* and *home* anchors in orange, and *antagonist* and *island* anchors in blue. Notice that even though the protagonists (Snotboy, the girl, and her brothers) are occasionally gestured on the right side, it

is only when they are either in transit to the *island*, or there is movement leftwards back towards *home* despite the gesture occurring on the right side.

Example 11 below occurs when Dr. Peter is talking about one of the sequestered girl's ten brothers going to search for her on the antagonist's island. The top row of images corresponds to Gesture 1, and the bottom row to Gesture 2.

Example 11: Switching hands when talking about different spaces



Figure 21: Protagonist traveling to antagonist's island

sus 'uw' yu tsukwul'ul'qum' nem' 'u they' skwi'kwthu.

Each one followed them to that island.

Gesture 1: LH, flat: raise to shoulder, move down and R towards center, rep, sweeping farther R and up across body.

Gesture 2: RH, CL1 to flat: arc from L shoulder down and back up to far R, switching to flat hand at bottom of arc. (SG 93.11:17–11:27)

In this sequence, Dr. Peter clearly switches articulators and sides of her body as she talks about the protagonist moving from his home space to the antagonist's

location. The top row of images corresponds to when she is talking about the protagonists' home space, and the bottom row is when she describes traveling to the antagonist's island. Throughout the narrative, there are multiple scenes in which characters travel from the *home* location to the *island* location, and each time, Dr. Peter repeats this switch of hands as the canoe passes to the island.

Even when characters are in the *island/antagonist* location, but mention their home, Dr. Peter's gestures are done on the right side of her body but in a leftward direction, or she is directing her gaze toward the left/*home* location. We can see that the gesture direction is sometimes aligned with which referent is being spotlighted, rather than where they are actively located.

Example 12: Gesture direction matched with referent anchor rather than character location

a.



Figure 22: Protagonist talking about bringing kidnapped sister home

“nem’ tsun t’ukw’stamu.”

“I’m going to take you home”

Gesture: RLH, flat, palms facing and up: held apart, shift from R to L and
toss upwards.

(SG 163.19:32)

b.



Figure 23: Characters bringing food from forest back home

'ula'ulh tthey' s'e'ulhtun wulh huye' t'akw'.

They loaded the canoe with different kinds of food and headed home.

Gesture: RLH, flat, palms facing: held apart, move from center L and up to shoulder. (SG 186.22:05)

In Example 12a, the character who is speaking is at that time located on the *island*; however, since he is talking about bringing his sister *home* in the very near future, Dr. Peter gestures leftwards to the *home* location. Similarly, in Example 12b, the characters Dr. Peter are referring to are not at the *home* location, they are in transit to that space, and again we see Dr. Peter gesturing leftwards.

In the videos I have studied so far, Dr. Peter appears to be the only speaker who contrasts referents on left and right sides; other speakers tend to use the strategy of spotlighting on one side only. We can look first at Margaret James' telling of *The Shining Baby*, recorded June 9th, 1995 in Nanaimo, British Columbia.²⁰

In this story, Mrs. James is talking about a baby that her grandmother found in the bushes while picking berries. This baby is spotlighted on

²⁰ Transcriptions and translations were done by Donna Gerdt and Theresa Thorne, filming by Strang Burton, video post-production by Chris Bouris, and subtitles by Donna.

Mrs. James' right side, she consistently gestures or gazes towards it when she is talking about it. There is no contrasting referent on Mrs. James' left side, but the right side is clearly separate from her central gesture space. Example 13 shows when Mrs. James' grandmother first finds the baby in the bushes; the images correspond to the first and last lines included below, as indicated by the bolded Hul'q'umi'num' and English lines.

Example 13: Spotlighting to one side



Figure 24: Baby set up to Mrs. James' right

suw' ne.e.em' 'u tthey' qetum.

So, she went into the thicket.

Gesture: RLH, flat, palms facing and up: held apart, shift L and R rep, both mir. and pll, hold briefly to R. (MJ TSB 18.2:19)

na'ut wulh ts'imul' 'i' na'ut 'uw' xeem.

As she got closer, she could still hear crying.

tthey' xamululhtsu, xamululhts tthu sun'ut-s tthu xwulmuhw tthey' qeq.

It was a xamululhtsu, the native name for this crying baby.

tl'uw' wulh nem' ts'imul'.

So, she went closer.

Gaze: R and down, slightly in front. (MJ TSB 21.2:39)

Mrs. James first establishes the baby's location on her right side with a manual gesture, and then reinforces this location again with her gaze. As she continues to tell this story, she frequently looks around to the listeners in the room with her,

engaging them in the story. When she refers back to the baby, though, she consistently directs her hands or her eyes to this anchor in the lower right part of her gesture space. We can see this in Example 14, which has two instances of eye gaze as a spotlighting technique. Again, the two images correspond to the first and last lines of text, which are bolded.

Example 14: Eye gaze used for spotlighting

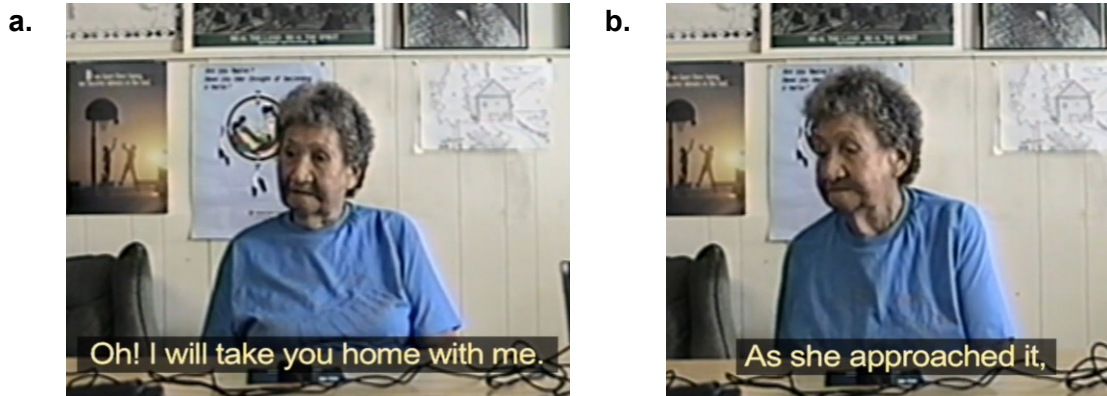


Figure 25: Mrs. James' grandmother looking at baby

'i' wulh thut, "a-a-a! nem' tsun tse' kwunathaam t'ukw'staam.

"Oh! I will take you home with me.

Gaze: R and down, slightly in front; nod head. (MJ TSB 31.3:26)

kwunut tsun tse' kw'unu shhwulukw't 'uw' stemus lhunu tl'itl'uptun' q'ulnuts
I will wrap it up in my skirt;" she had on a lot of skirts.

"nem' tsun tse' t'ukw'stuhw tun'a qeq."

"I am going to take that baby home."

nem' t-suthut, wulh m'i kw'a'usum tthey' qeq lemutum.

As she approached it, the baby looked up at her, staring.

Gaze: R and down, slightly in front, look up and back down. (MJ TSB 34.3:48)

It is often clearer when Mrs. James uses gaze to refer back to the location of the baby compared to when she uses manual gestures. Her hands are in rest position underneath the table for much of the narrative, out of sight of the camera. When she does engage in manual gestures, she makes great use of her space, and has very dynamic movements in front of her, towards her listeners,

and sometimes below the table. Hence, it can be challenging to pinpoint the times when Mrs. James is directing manual gestures towards the anchor of the baby. Though her eyes scan around quite a bit as well, it is apparent when she makes an intentional gaze towards the baby's spotlighted location on her right.

Using gesture space in a structured way to set up contrasts or emphasis between referents is not unique to Hul'q'umi'num' co-speech gestures. This strategy has been described for other languages as well, both spoken and signed.

3.2.2. Spotlighting other languages

What I have been calling *spotlighting* is reminiscent of a strategy used in signed languages, called *spatial mapping* by Mather & Winston (1998). Winston (1995) discusses the use of *spatial mapping* in an ASL signer's narrative, in which the signer sets up two contrasting concepts on opposite sides of his signing space. When he elaborates on each of these topics and signs about his experiences with them, he does so within the previously assigned sides or with the appropriate right or left hands. The signer also points to the sides of his signing space as deictic references to the two entities. He has utilized the space around him to diagram a comparative discourse frame.²¹

McNeill describes gestures used to this effect as well, calling it a *metaphoric* use of space (McNeill 1992). He discusses an example of a speaker setting up an opposition of moral status by utilizing the two sides of his gesture space; using the left side to talk about the characters' true moral status, right side for their ascribed "good guy" status, and center for their ascribed "bad guy" status (McNeill 1992 p. 155). In addition to these conceptual contrasts depicted spatially, McNeill notes that speakers also divided space between characters, and gestured on one side when talking about one character, then switched sides

²¹ See also Janzen (2012) for discussion of references in comparative discourse frames and the use of different types of space.

of their gesture space when talking about another character. We saw earlier in Section 2.2.2 on *role shift* that signers can also set up locations of various characters in space, and then shift into those locations when they are embodying the characters; in these cases as well, the mapping remains stable throughout the narrative.

Structuring the physical space with techniques like locating and spotlighting allows the speaker to express additional gestural cues to the audience. For instance, spotlighting a referent can indicate that it is important to the narrative, and listeners should focus on it.²² Speakers can demonstrate their perspective and involvement in the scene as a narrator through gesture in other fashions as well. The next two chapters cover how this notion of perspective is represented in co-speech gestures, and how Hul'q'umi'num' storytellers make use of a wide variety of strategies to convey and combine viewpoints.

²² These indications may be present in the speech or sign utterance as well, such as with focus or contrast marking or topic constructions; see Gundel et al. (1993) and Wilbur (2012).

Chapter 4.

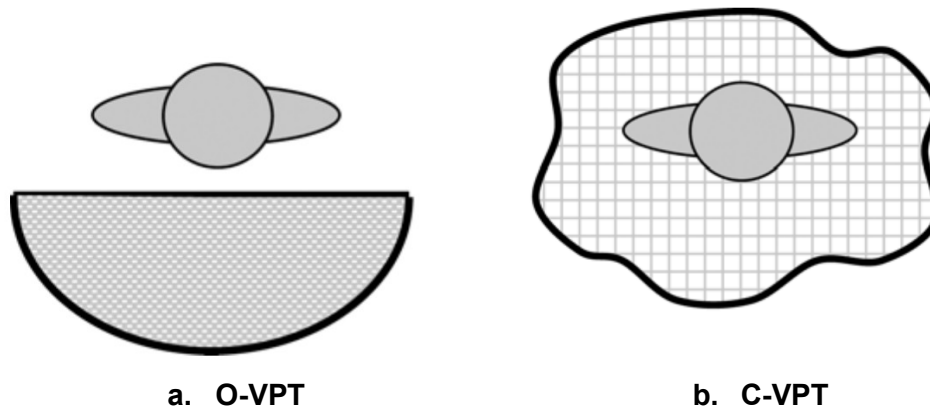
Viewpoint

Within the study of gestures, there is the notion of how gestures reflect a speaker's perspective on an event or scene, also called *viewpoint* (Parrill 2010). Previous authors sometimes use the terms *perspective* and *viewpoint* interchangeably, but I will use the latter. A distinction is made between *character viewpoint* (C-VPT) and *observer viewpoint* (O-VPT), terms which come from McNeill (1992). The difference between these viewpoints is determined by the speaker's involvement or placement within the scene or event they are describing (Parrill 2009, 2010). In C-VPT gestures, the speaker maps the character's body onto their own, with first-person perspective re-enactments, on a life-sized scale. For example, when a speaker is using their hands to iconically represent someone knitting or fishing, they are using Character viewpoint.²³ Since the speaker is embodying a character in the narrative, all C-VPT gestures involve the technique of *role shift* as discussed in Section 2.2.2. O-VPT gestures, by contrast, are schematic and show the scene to the audience as if from afar, in third-person perspective (Stec 2012). Observer viewpoint can be seen, for example, when a speaker uses their hands to represent characters walking or flying along a path.

Figure 26, from Perniss (2012 p. 419), shows a visualization of O-VPT and C-VPT in relation to the speaker. The difference here is whether the narrator is located within the scene or not. Perniss' diagram shows the speaker external from the event space in front of them in Figure 26a. (O-VPT), and within the event space in Figure 26b (C-VPT).

²³ See Frederiksen (2017) for a detailed discussion of the interplay between gesture form and gesture interpretation, with respect to viewpoint.

Figure 26: Visualizations of O-VPT and C-VPT (Perniss 2012 p. 419)



The choice of one viewpoint over another has the potential to be modulated by content of the utterance itself. Parrill's 2010 study asks if transitivity or event structures predispose narrators to use a particular viewpoint in their gestures. McNeill (1992) claims that transitive events evoke more C-VPT gestures while intransitive events have more O-VPT gestures, and Parrill addresses this question again with a larger corpus and provides a more detailed account. She concludes that yes, C-VPT gestures tend to occur with transitive events, but she also looks at the influence that event structure may have on gestural viewpoint. Parrill takes *event structure* to mean the spatial, imagistic, and motion properties of an event (Parrill 2010 p. 656). For example, events describing an entity's trajectory bias towards O-VPT depictions, while events in which a character is holding an object or instrument are accompanied by more C-VPT gestures (Parrill 2010; Quinto-Pozos & Parrill 2015).²⁴

This chapter covers the ways in which O- and C-VPT gestures are used in Hul'q'umi'num' narratives, how the two viewpoints connect to the techniques from

²⁴ Although I do not give the full breakdown of event structure and gestural viewpoint in this thesis, the patterns of O-VPT with trajectory events and C-VPT with handling events are also reflected in Dr. Peter's storytelling.

signed languages as covered in Chapter 2, and the distribution of viewpoints across Dr. Peter's narratives.²⁵

4.1. Observer viewpoint in Hul'q'umi'num' gestures

4.1.1. Trajectory gestures

One of the ways that O-VPT gestures are commonly used in narratives is to convey an entity's path of motion, called *trajectory* gestures. In her 2010 study, Parrill found that utterances describing path of motion overwhelmingly bias towards use of O-VPT gestures; she notes also that this is likely due to the fact that trajectory events are more easily gestured from O-VPT than C-VPT (Parrill 2010 p. 661). It is difficult to imagine how a C-VPT gesture would meaningfully convey the motion and path of an entity.

In the narratives I studied, Dr. Peter consistently uses O-VPT gestures when describing trajectory events, such as a character flying, thunderbolts being shot, or a canoe traveling across the water. In these gestures, her hands trace the path of the object or character through the gesture space in front of her. Example 15 shows an O-VPT gesture being used when Dr. Peter is talking about a character shooting thunderbolts from his eyes. Earlier in the story, this character was injured, and any time he opens his eyes, thunderbolts come out. Here, he is lying on a boulder at night, and has removed the cloth covering his eyes.

²⁵ An earlier version of this section was presented by Rosemary Webb at the Workshop on Structure and Constituency in Languages of the Americas 25, May 2021 (Webb, *forthcoming*)

Example 15: O-VPT with projectiles

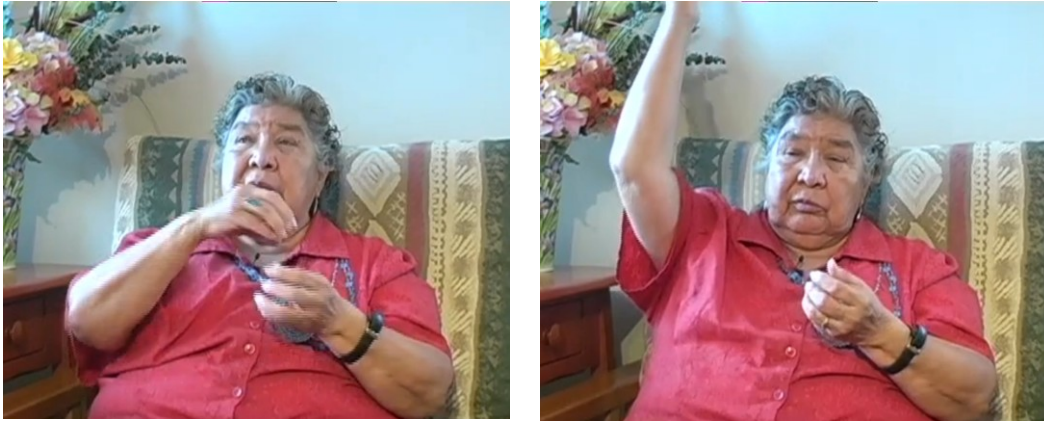


Figure 27: O-VPT trajectory gesture with thunderbolts

ha' ni' xunuq't 'u kwsus snet 'i' nilh sus 'uw' wi'wul' tthu s hwuhwa'us.

When he opened his eyes at night, out came the thunderbolts.

Gesture: RH, gripping: pull upwards above head, hold briefly. (TO 31.5:08)

We can see her left hand is held stationary to represent the character lying down, and the right hand moves up towards the sky above the character to show the path of the thunderbolts.

The above shows how O-VPT gestures are used with projectile-like items, but whole objects and characters can be represented in O-VPT as well. In Example 16 below, Dr. Peter is talking about a canoe carrying a character in it launching from a beach and moving to an island.

Example 16: O-VPT with whole entities



Figure 28: O-VPT trajectory gesture with canoe

'aalh 'u tthu snuhwulh sus nem' 'uw' ... nem' 'u thu skwi'kwthu.

He got in the canoe and went to that little island.

Gesture: RH, flat: move out to R and upwards.

(SG 74.8:39)

In this gesture, her right hand represents the canoe with the character in it moving as an entity towards the island previously mentioned in the story. As discussed in Chapter 4, the location of this island had been established earlier on and any trajectories towards the island are traced in this rightward path or on the right side.

Sometimes, when using O-VPT gestures to represent a character's motion, a particular handshape may be used – recall in Section 2.2.1 the discussion of *classifiers*. Dr. Peter's use of classifier handshapes is the most salient examples of O-VPT in all of her narratives.

4.1.2. Classifiers in Dr. Peter's narratives

One type of gesture seen frequently in Dr. Peter's narratives involves specific handshapes, reminiscent of the entity classifiers discussed above.²⁶ There are two handshapes I see in the narratives I study; one where Dr. Peter's hand is closed with only her index finger extended, used when characters are walking or when small creatures are flying, and the other where her hand is flat, fingers held together, which can also be used when human characters are walking but is primarily used when larger creatures are flying.

Examples of both handshapes are given below in Figure 29 and Figure 30; in my coding, I have labelled the former handshape CL1²⁷ and the latter one CLF.

²⁶ The use of entity classifiers with O-VPT representations has been called *aligned perspective*, whereas if a signer or speaker uses an entity classifier in a C-VPT representation, this would be a *non-aligned perspective* (Perniss 2007). This may also be likened to the notions of *typical* and *atypical gestures* as mentioned in Chapter 2.

²⁷ Note that this is the same as a handshape in BSL which is used to represent an upright person or stick-like entities (Cormier et al. 2012 p. 332). The Plains Indian Sign Language sign for MAN also features this handshape (Cody 1970 p. 64); as does the sign for BOY (Cody 1970 p. 22).



Figure 29: CL1 – index finger extended: Little Wren going for a walk (LW 1:40)



Figure 30: CLF – hand flat: Thunderbird flying (TO 13:10)

The choice between these two handshapes is not always clear, but some tendencies certainly arise, based on aspects such as size of character and type of motion. When consulting with Dr. Peter about some of her gestures, she offered a comment on the CL1 versus CLF handshape indicating a size distinction. I asked if CL1 could be used for a particular large bird character in *Thunderbird and Orca*, and Dr. Peter said “It would be kind of strange. Cause it was a bird, and I think with my palms facing out and flying, that’s identifying that he’s flying” (Dr. Peter, p.c., November 2nd 2020). In the same consultation, I asked if she would ever describe Little Wren flying using the CLF handshape, and Dr. Peter said “It’s with my finger [in CL1]. Little Wren is so small, only about 3-4 inches tall. They’re really tiny.” When I clarified if the difference in

handshapes is partially because Little Wren is so small and Thunderbird is larger, she confirmed and told me “Yes,” this was the case.

Every time CL1 is used for Little Wren, Dr. Peter is implicitly encoding semantic information about his size and shape (small and humanoid), though this is not reflected in the speech. A kind of simultaneity here is possible by use of the classifier, like what is seen in signed languages, by combining modalities. We might ask then what kind of information, if any, is simultaneously represented when CL1 is used for a human referent as they are not small in the same way Little Wren is. I am curious also as to what CLF is doing, and if there is more to simultaneity here, since it seems to be less strictly governed and is not as iconic in appearance compared to CL1.

Looking to Example 17, we can see a classifier construction using CL1, conveying the path of a small bird character, Little Wren. In this line, the gesture was done twice with roughly the same motion and path each time.

Example 17: Little Wren walking up mountain



Figure 31: CL1 used with small character

yu xulhul'tslh suw' huye.e.e' nem' 'imush nem' tsam, tsam 'u thu smeent, yu kwun'eem 'u tthu shuptun.

He was feeling sorry for her and so he started walking, going up into the mountain. He was carrying a knife with him.

Gesture 1: RH CL1: raise up to R, bounce and move L.

Gesture 2: RH CL1: move up, bounce L and up.

(TO 11.1:40)

Note that although this line has the word “walking” rather than “flying,” the character in question, Little Wren, ambulates both by walking and flying

throughout the story. This narrative contained the majority of gestures using CL1, and Dr. Peter consistently represents Little Wren’s movements throughout the story with classifier constructions. She also uses CL1 to represent Little Wren’s grandmother’s movement, and in the narrative *Snotboy Saves the Sequestered Girl*, again uses CL1 when talking about humans walking.

Example 18 shows a sequence of CL1 being used simultaneously on each hand when Dr. Peter is talking about one of the protagonists and the antagonist crossing paths.

Example 18: CL1 on two hands



Figure 32: Sequestered girl passing by Skwathshun’

tl'e' wulh hwthqw'ustul 'u tthu swiw'lus tl'e' wulh 'i chum'ux.

Again, they met up with the young man who was chewing gum.

Gesture: RLH, CL1: held up to shoulders on respective sides, cross LH in front of RH to end at opposite sides, hold, rep. faster and with less extension.

(SG 30.3:48)

Also in the *Snotboy* narrative, we also see Dr. Peter using what seems to be an augmented form of the CL1 classifier – instead of just her index finger extended, she has her first two fingers extended, when she is talking about two characters walking together. Example 19 demonstrates this:

Example 19: Augmented CL1 handshape



Figure 33: Sequestered girl walking with her slave

'i ts'u yu hwu'a'lum' kwus wulh m'i yu hwu'a'lum' tun'ni' 'u tthu tsetsuw' 'uw' yu kwun'atul' 'u thu skw'uyuths.

One day, she was coming back home, coming from the beach, together with her slave.

Gesture: RH, CL1?: Like CL1 but with first two fingers extended, bounce from center across body to L. (SG 11.1:36)

It seems that there is flexibility with how to represent two characters at the same time with CL1. Either two fingers may be used to indicate multiple characters, or each hand can be in CL1 with one finger, and the hands articulate a gesture simultaneously. In a consultation with Dr. Peter, I asked about her use of CL1 on both hands to represent one character following another, and I asked if could have represented the same thing with two fingers on one hand as in the example just above. She told me this (Dr. Peter, p.c., October 30th 2020):

“Uhh.... No. It's usually separate. Cause having two fingers [on one hand], it's pretty hard to identify. So having two separate fingers away from the other, it shows that they're two separate. If you have it together, two fingers together, it's kind of hard ... you don't think of them as people.”

It is apparent that there are some differences in the sequence of events, and how they should be interpreted, when CL1 is used on both hands versus when multiple fingers are extended on one hand.²⁸

We can also see the other handshape Dr. Peter uses, CLF, articulated in gesture sequences. Example 20 shows a CLF classifier construction from *Thunderbird and Orca*, when Dr. Peter is talking about a large bird character falling into a creek after being shot out of the air. In this gesture, Dr. Peter uses her right hand to represent the character Thunderbird plunging into a creek, which is represented by her left hand.

Example 20: Thunderbird diving into creek



Figure 34: CLF used with large bird character

sis nem' 'uw' lhakw' sis nem' 'uw' nuqum 'i' 'uwu m'iis tl'e' p'ukw nilh nuw' sht'es 'ul.

He flew and dove into the creek and he never surfaced again.

Gesture: RH, CLF: raise up to R, hold briefly, shoot downwards underneath LH.

LH, open, palm facing R: hold low slightly to L. (TO 90.15:00)

While both of Dr. Peter's hands may appear to be in the same handshape, I code her right as CLF based on the fact that just earlier in the story, she has been

²⁸ The Plains Indian Sign Language sign for PEOPLE features multiple extended fingers on each hand, similar to how Dr. Peter sometimes represents multiple people with multiple fingers (Cody 1970 p. 75).

using the same hand and handshape when talking about Thunderbird flying around; this is in contrast to her left hand, which is simply the creek's flat surface.

On some occasions it can be difficult to tell whether Dr. Peter is using a CLF handshape or is simply gesturing with an open hand, as she often depicts the landscape or points to locations with the same basic handshape. In these cases, it can usually be told from surrounding discourse context as well as preceding gestures if she is indeed gesturing with the CLF handshape. It is possible that hand dominance can help to disambiguate between CLF and other uses of flat hands in Dr. Peter's gestures. In the 12 instances of CLF in three narratives, 10 were articulated with Dr. Peter's (dominant) right hand. One of the articulations with her left hand is indeed ambiguous between a plain flat hand gesture and a CLF gesture; however, the articulations with her right hand are strongly identifiable as uses of CLF describing a large creature flying.

With one exception, all of the gestures I have seen using these handshapes look like classifier constructions, expressing the entity in question and some type of action, as opposed to a classifier handshape that simply represents the referent without any predication (Barberà & Quer 2018). The sole example of a classifier possibly being used as a handshape, and not a classifier construction, is when Little Wren is seen by the antagonist in the narrative *Little Wren Goes Hunting*. Dr. Peter's articulation of the classifier at this point seems to be expressing where Little Wren is located in front of Moose, rather than an expression of Little Wren's movement.

Example 21: Possible CL1 handshape without CL construction



Figure 35: Moose looking at Little Wren

le'lum'utum' tthu 'e'uhwiin'.

He was looking at tiny thing.

Gesture: RH, CL1: move out and R, hold.

(LW 21.3:13)

In this gesture, Dr. Peter does not move her right hand around in space to show Little Wren's movement, as he is stationary at this point; the motion of this gesture is simply to place her hand away from her body. Dr. Peter is showing, from the character Moose's perspective, how small Little Wren is. Her hand is loosely in a CL1 shape, and is held out far from her body to further emphasize the small size of Wren. This leads me to conclude that Example 21 is an instance of a CL handshape rather than a CL construction. In every other instance, Dr. Peter articulates CL1 while moving her hand(s) along some path of motion.

In preliminary analyses, we see that the CL1 is used by other speakers of Hul'q'umi'num' as well. Eva Thomas tells a story, "The People Who Raised Me," and uses CL1 several times throughout the short 3-minute narrative. Example 22 shows an instance of what seems closer to a CL1 handshape than construction, as she does not indicate any movement of the people she is representing with this classifier, and is simply indicating the existence of two people.

Example 22: CL1 handshape by Mrs. Thomas



Figure 36: Using CL1 on both hands for two people

qw'uqw'i'tul—suw' xut'ustuhwus tthu hwunitum' cousins, qw'uqw'i'tul 'u thunu ten.
They were cousins, what the white people call cousins, to my mother.
Gesture: RLH, CL1: mir. bring together to center, hold. (ET TPWRM 5.0:35)

Mrs. Thomas is talking about her aunt and her father's relationship, and uses the CL1 handshape on both hands simultaneously at the mention of two people. She does not convey a path of motion in this gesture, but later on in the same narrative she again uses CL1, this time in a classifier construction much like we have seen with Dr. Peter's gestures. Example 23 shows this:

Example 23: CL1 construction by Mrs. Thomas



Figure 37: Mrs. Thomas following her gran

sus nuw'... 'i' tsun 'uw' ts'isum 'ul'... 'i' tsun 'uw' ts'isum 'ul' sus 'i muw'
hwutsukwul'ulqum' sewq't 'i' thu sis.

When I grew up, when I was older, I started following her around, going to look for my gran.

Gesture: RLH, CL1: LH hold against table, RH bounce from next to LH up and R, back to center. (ET TPWRM 16.2:05)

Mrs. Thomas describes how she would follow her gran to her job when she was young, and has her left hand stationary in CL1 while her right hand, also in CL1, traces a path zigzagging back and forth in front of her. It is possible that her stationary left hand represents her gran, as talks about going to find her gran, while her right hand represents Mrs. Thomas walking around. She uses the same bobbing motion in CL1 constructions as Dr. Peter does, which looks like a shared gestural style between some Hul'q'umi'num' speakers.

In Section 3.1, we saw an example from Mrs. Aleck's story *The Coming of the First Whites* in which she described the chief coming down from the mountain to meet the white people. I have repeated this as Example 24 below, as we can look at this example with a different focus.

Example 24: CL1 construction by Mrs. Aleck



Figure 38: Describing the chief’s path down the mountain

suw’ t’ahw tthu chifs tthu tun’ni’ ’u tun’a
The chief went down—chief from here

ha’kwush tthu ni’ ha’kwushus kws chifs.
using their outfits as chiefs.

Gesture: RH, CL1: move smoothly from R shoulder to center, slightly downwards once at chest, rep. with less extension to R. (LA TCOTFW 0:53)

Mrs. Aleck also uses this CL1 handshape when she talks about people walking, throughout this narrative. She sometimes depicts movement with a flat hand as well, but the uses of CL1 are clear. A consistent pattern of Hul’q’umi’num’ speakers using the CL1 handshape in O-VPT depictions of characters’ trajectories is coming to light as we look at additional speakers’ narratives.

While various aspects of viewpoint have been well described in gesture studies, there appears to be less mention of “classifier” type constructions; or, authors do not explicitly call them classifiers.²⁹ Parrill includes an example in her 2010 paper of a speaker producing a gesture which we could liken to a classifier construction, as in Example 25:

²⁹ Cormier et al. call these types of gestures “depicting constructions” (Cormier et al. 2012).

**Example 25: English speaker using a classifier-like construction
(Parrill 2010 p. 651)**



Figure 39: Left hand in entity classifier handshape

Notice that in this gesture, the speaker's left hand is in a similar entity handshape to what we saw in Dr. Peter's gestures for Little Wren, albeit not in the same orientation. The squiggly line in the figure indicates the path that his hand followed throughout the gesture articulation, as he is describing the route a character takes as it hops across the room.

Previous literature has largely been concerned with the comparison between verbal³⁰ classifier systems in spoken languages and manual classifiers in signed languages – however, we are interested in the manual forms across both types of languages (Cormier et al. 2012; Parrill 2010; Perniss 2012; Quinto-Pozos & Parrill 2015). Cormier et al. provide an overview of some literature on this topic, and conclude that, when comparing constructions in the same modality, speakers' O-VPT gestures do indeed look very similar to signers' uses of entity classifier constructions as discussed in Section 2.2.1 (Cormier et al. 2012 p. 341).³¹ They note that one difference lies in the types of handshapes

³⁰ Here meaning spoken, not having to do with verbs.

³¹ The authors also draw parallels between signers' handling classifiers and speakers' C-VPT gestures, but as mentioned in Section 2.2.1, we will not get into this. See also Footnote 9.

used – signers have a more conventionalized and constrained inventory of handshapes, but speakers’ handshapes are more idiosyncratic. In their comparisons of gesture and sign, the authors also highlight that classifier constructions in signed languages lie on a continuum from gestural forms to lexicalized signs. Teasing apart what is gestural and what is linguistic in signed languages is extremely complicated.³² One key point to take away is that once we start comparing *gestural* forms across both spoken and signed languages, it is perhaps unsurprising that we see plenty of similarities, much as we might expect when comparing gestures between different spoken languages.

4.1.3. Ambiguous O-VPT or N-VPT gestures

One challenge that comes with coding O-VPT gestures is disambiguating between when the speaker is gesturing to something in the story space, versus when they are offering their own comments as narrators with accompanying co-speech gestures. As was mentioned in Section 1.2, gestures are coded as N-VPT if they are iconic gestures tracing the shape of objects or paths that are *not* within the narrative. This becomes complicated, as was shown in Section 3.1 that Dr. Peter’s narratives are inextricably tied to locations and landmarks around her. When Dr. Peter gestures the path up the river towards Cowichan Lake, is this her as a narrator showing the audience where the story takes place, or is it as an observer within story space showing where the characters moved? In early stages of this research, I had coded these instances as Landscape-VPT, but it was unclear how these would fit into the larger viewpoint picture, as no prior

³² This is due to the fact that the manual modality is being used for both gesture and linguistic content, whereas in spoken languages the aural form is linguistic and the manual form is gestural. It is further complicated by the troubled history of Sign Language researchers having to prove that signed languages are fully fledged languages with syntactic rules and grammar, and more than just highly structured gesture systems.

studies I consulted had investigated viewpoint in oral narratives in this way. I give an example of one such gesture below:

Example 26: Ambiguous O-VPT or N-VPT gesture



Figure 40: Setting up weirs and getting food

ni.i.i yu st'ut'in' thu shxe'lutl', sht'es kwus kwen'nuhwus tthu hwulmuhw tthu s'ulhtuns.

They lined up the weirs and that's how the First Nations people got their food.

Gesture: RH, open: move up and R, bouncing along the way. (TO 49.8:12)

Dr. Peter starts in the line just prior with an explanation of how the people (within the story) would harvest salmon in the summers, by setting up weirs along the river to Cowichan Lake, gesturing this path.³³ In line 49, she explains that this is how First Nations people got salmon, with another gesture showing where the weirs were set up. It may be possible to code the gesture sequence seen in Example 26 as O-VPT or N-VPT. Dr. Peter might be giving a meta-narrative comment on the actions of First Nations people as a whole, rather than simply those within the story. Whenever possible, I disambiguate these based on the surrounding gestures and discourse context. Since Dr. Peter was just talking about characters within the narrative and produced the gesture in O-VPT in line 48, I coded the gesture in line 49 as O-VPT as well. It should be noted, however, that continuing work on these narratives should include a second coder reviewing these cases.

³³ This was seen in Example 7 from Section 3.1.

4.2. Character viewpoint in Hul'q'umi'num' gestures

4.2.1. Handling gestures

Perhaps the most salient way to tell when a speaker is embodying a character on a life-sized scale in C-VPT is by looking at *handling* events; for example, when a character is holding an object, using an instrument, or accomplishing some task with their hands. Parrill (2010) found that these types of *handling* events strongly predisposed speakers to use C-VPT gestures. Similar to the above with O-VPT and trajectory gestures, it is hard to picture how a speaker would convey a character knitting in O-VPT, and the use of C-VPT is more natural. Indeed, in the narratives I studied, there were zero instances of a handling event being represented with an O-VPT gesture.

Taken from *Little Wren Goes Hunting*, Example 27 shows Dr. Peter using a C-VPT gesture to represent the character Little Wren using his knife to cut up another character's insides. The gesture is repeated three times in this line.

Example 27: Single character viewpoint, one articulator



Figure 41: Single articulator in C-VPT

yu lhilhuts'utus, yu lhilhuts'utus.
And he was slicing with his knife.

Gesture: RH, gripping: move from above R shoulder down and L to chest, rep.
(LW 37.4:45)

Gestures of this type, using an instrument or holding an object in her hand(s), are conventionally called *handling gestures* and are pervasive in Dr. Peter's

narratives. Dr. Peter is right-hand dominant, which is likely why most of these handling C-VPT gestures are done with her right hand.

We can see another example of a handling gesture from a different narrative in Example 28, from *Thunderbird and Orca*:

Example 28: C-VPT handling gesture



Figure 42: Throwing cedar splinters

hwun' xut'u 'i' ni' wulh kwunutus tthu na'nuts'a' sus 'uw' hwpasustus tthu
shhw'aqw'a's 'u tthu ni' [kwun'etus],
*And then one of the boys grabbed ahold of the cedar dust that he threw into his
brother's face.*

Gesture: RH, gripping: reach down and R, mime throwing something towards L
while opening hand. (TO 7.1:43)

Both of these examples of C-VPT gestures show Dr. Peter using her hands acting as the characters' hands, but there are also C-VPT gestures with other articulators as well. A speaker may use their torso, head, facial expression, or eyes to depict a character in the narrative; recall in Section 2.2.2 the ways *role shift* is used in signed languages. Further discussion of torso and face will come later in Chapter 5, but in the next section we can delve into how eye gaze is used.

4.2.2. Eye gaze

Dr. Peter's use of gaze is usually relatively subtle. Her resting gaze is typically slightly downward and to the left, and she rarely looks to the audience, which in this case is only one person, linguist Donna Gerds. Gaze is used meaningfully in some complex gestures (discussed further in Section 4.2) and in sequences of dialogue between two characters. This latter use is of particular interest to me. There is relatively little gesturing with the hands during dialogue compared to the rest of the stories; Dr. Peter's hands are almost unnaturally in resting position, contrasting with the frequency with which she gestures outside of dialogue. In sequences of dialogue, rather than an overt type of body shift (e.g. leaning or repositioning self), Dr. Peter's gaze moves left and right as characters take turns in conversation. Her gaze appears directed towards the addressee, with Dr. Peter's body standing in for the speaker as opposed to looking towards the speaker. We can identify that she is embodying the speaker rather than the addressee based on where she has set up the referents in space prior to the dialogue. An example of gaze change is given in Example 29. Note that each image corresponds to one line of the text.

Example 29: Gaze change in a dialogue sequence



Figure 43: Gaze switching from right to left and to right again

wulh m'i tetsul tthu shhwum'nikws, "ha'! tuw' swuy'qe' wa'!"
Her uncle arrived, "Hey, that's maybe a boy!"

"a.a.a! 'uwu! 'uwu, shmuthi'elh. slhelhni' thunu qeq!"
"No, no, Uncle. My baby is a girl!"

“a.a.a! shme'tth'un'qun ch, na'ut 'uw' sxuxits tthu shqwultuns.”
“You are lying, I can tell by the sound of his cry.” (QS 25–30.4:19–4:45)

This sequence comes from the story *Q'ise'q and the Stoneheads*. In these lines, a young woman and her uncle are talking. The young woman is located to the right in the story space, and the uncle to the left. These locations for the referents were set up at their first introductions a number of lines earlier.

In shorter sequences of dialogue, referent location and switches are not always well-established, but the longer the dialogue is, the clearer Dr. Peter's gaze change is. Similarly, the longer the dialogue is, the more aligned her gaze changes seem to be with the characters switching back and forth, though it still is not always perfect and may move early in anticipation of the next line. Of additional note is that in these longer sequences of dialogue between two characters, called *closed conversation* (Dooley & Levinsohn 2001 p. 50), the linguistic content of Dr. Peter's utterances features fewer markers of who is speaking. She omits mention of the character's names and uses fewer or no speech-reporting verbs. This omission of speech verbs is common in closed conversations in Hul'q'umi'num' narratives, and switches between characters' lines may also be marked by prosody such as vowel lengthening and intonation changes (Gilkison 2020).

Gaze in co-speech gestures can also be used to indicate role shift (Earis & Cormier 2013; Koike 2001; Stec et al. 2016; Sweetser & Stec 2016). Recall in Example 6 from Section 2.2.2 that the BSL signer had set up specific locations in his signing space for the hare and the tortoise, and role shifted into positions or directed eye gaze accordingly when enacting those characters (Earis & Cormier 2013). The authors found that English speakers, telling the same narrative, would engage in similar role shift behaviours but with less consistency to the placement of the referents.

Example 30: English speaker using role shift (Earis & Cormier 2013 p. 330)



“Look at your little feet! Look, look, look at your tiny little feet!”

Figure 44: Speaker as the hare addressing the tortoise

In Example 30, the speaker is taking on the role of the hare who is addressing the tortoise, by looking and pointing downwards and to the right. This is remarkably similar to the BSL example; however, the authors note that in both of the English speakers’ narratives, the tortoise was not maintained at that location in gesture space throughout the story.

Koike (2001) analyzed how body, gaze, and prosody were used by a Japanese speaker telling a story and assuming multiple character roles. It is important to note that Japanese is an SOV language, and indicates quotation with a particle and speech act verb (e.g. “say”) sequentially after the quotation itself, in contrast to English, which may put the speech act verb before the quotation. Syntactically, in Japanese, it is not apparent that a portion of the sentence is a quotation until the end of the clause. The speech act verb may also be omitted. In addition, conversationally, speakers may not indicate the subject of the quotation either. All this put together means that Japanese narrative structure does not clearly indicate which character is speaking (Koike 2001).

Other techniques can be used to disambiguate who is speaking – which is where prosody and gesture come into play. Koike found that the speaker

consistently used eye gaze direction to indicate which character was speaking, and had set up locations in her gesture space (including the other conversational participants) for each referent. The participant in Koike’s study was somewhat unlike the speakers from Earis and Cormier’s study, as we saw just above in Example 30 that the hare and the tortoise did not have stable locations in gesture space. In contrast, during the story told by Koike’s participant, referents had definitive and stable locations. Koike includes images showing the different anchors of each role in the conversation, which I have included in Example 31:

Example 31: Role shift in Japanese storytelling (Koike 2001 p. 390)

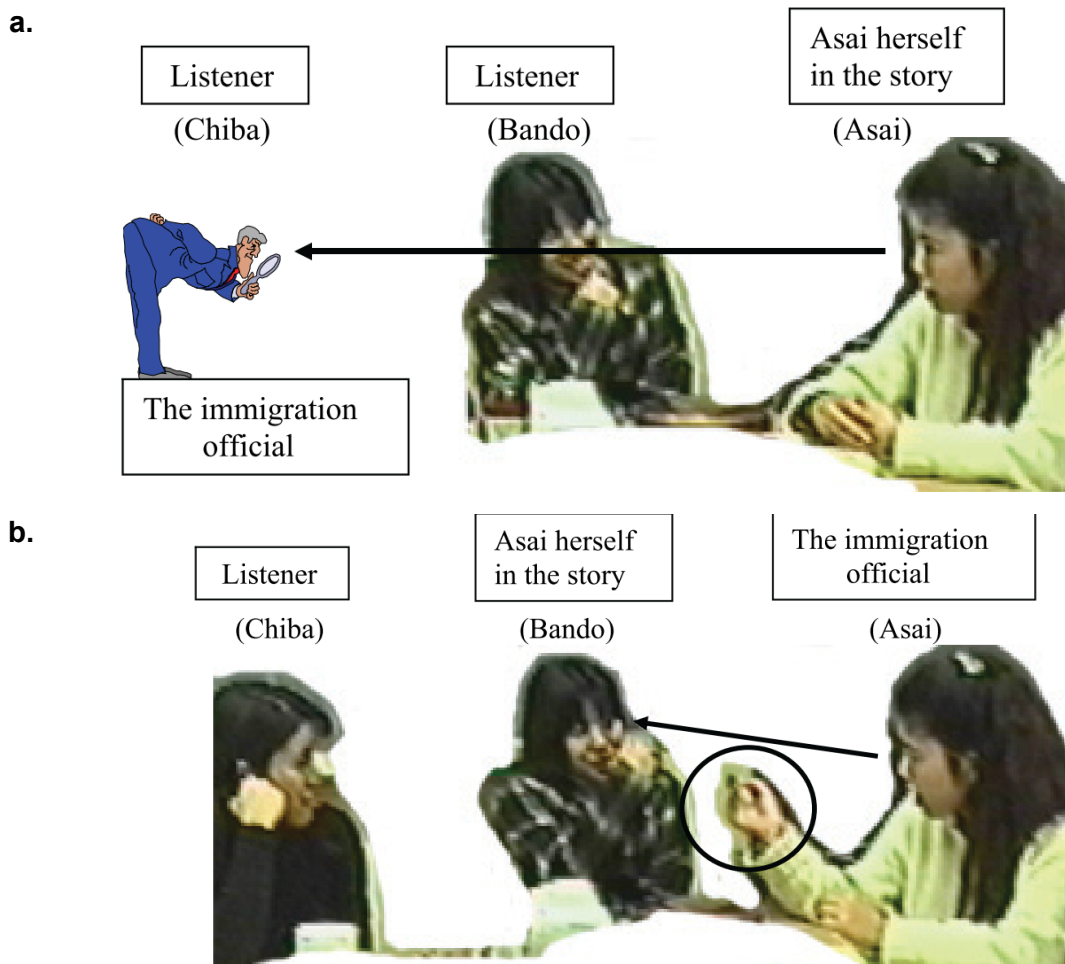


Figure 45: Different participation role anchors of Asai and the official

In Figure 45a, we see the participation roles when Asai (far right) is playing the role of *herself* in the story. The *official* she was talking to at the time is

placed in some gesture space ahead of her, and Asai looks to this anchor when she is playing her own role. Figure 45b shows the participation roles when Asai is playing the role of the *official*, and now, her friend Bando (center) has been designated an anchor for *Asai*. She looks and points to this “Asai” when talking, indicating that Asai has shifted into the role of the *official*.

Throughout the Japanese narrative the speaker is rapidly switching between different characters using the role shift strategies we have been discussing, and uses the wide gesture space to her advantage, allowing multiple characters to exist simultaneously and interact with each other. As Koike notes, this also involves her co-participants in the story, and depicts the scene more vividly (Koike 2001 p. 391).

The way Asai structures her gesture space with her gaze is very similar to how Dr. Peter uses gaze in dialogue scenes, as discussed in Example 29 above. Whereas the speaker in Koike’s study used gaze alongside torso shift and prosody to indicate who is active in the dialogue, in Dr. Peter’s case, she seems to rely more heavily on her gaze change to signal which character is speaking at that moment.³⁴

4.3. Viewpoint distribution and discussion

Having covered the ways in which C- and O-VPT is represented in Dr. Peter’s narratives, we can now ask: what are the viewpoint distributions and patterns seen in Hul’q’umi’num’ gestures? And how does Hul’q’umi’num’ compare to other languages with respect to gestural viewpoint?

For the most part, viewpoint in Dr. Peter’s narratives is shown through manual gestures, though there are some cases in which gaze is a meaningful

³⁴ It is worth asking if these similarities in gesture strategies may be tied to the similarities in dialogue structure from a linguistic standpoint. Dr. Peter’s extended dialogue scenes feature very few speech reporting words or other linguistic indications of which character is speaking; it is the same with Asai’s dialogue in Koike’s study, as Japanese linguistic structure also allows for ambiguities regarding who is speaking.

and significant articulator. As we just saw, in longer sequences of dialogue, gaze is used as the sole articulator to indicate switches between two characters. This is reminiscent of role-shift strategies in signed languages. In these sequences of dialogue, without gaze change to mark changes in which character is speaking, it could become taxing to track who is saying which lines. It appears Dr. Peter is using gaze quite effectively to mark these rapid changes in perspective.

Many of the previous studies of gestures in spoken narratives have had English participants, and so conclusions are not directly transferable. However, it has been found that English speakers tend to tell stories with a higher number of narrator-focused utterances; in contrast, signers tend to use more character-focused utterances (Earis & Cormier 2013; Rayman 1999; Stec et al. 2016). For speakers, this results in a greater number of O-VPT gestures than C-VPT gestures. The data from Dr. Peter’s storytelling aligns with this pattern as well, showing a slightly higher frequency of O-VPT gestures compared to C-VPT gestures. Table 1 shows a breakdown of N-, O-, and C-VPT gestures across the three narratives I have fully coded:

Table 1: Gesture viewpoint types per narrative

	LW	TO	QS	Total
Gestures	92	128	162	382
N-VPT	22	48	69	139 (36.4%)
C-VPT	39	25	45	109 (28.5%)
O-VPT	31	55	48	134 (35.1%)

In *Little Wren Goes Hunting* there was only a slight difference in gesture viewpoints, similar to what Parrill (2009) saw in her data. In *Thunderbird and Orca* the difference was much greater, with O-VPT gestures occurring almost 2.5 times more often than C-VPT gestures. One possibility is that since Dr. Peter’s telling of *Thunderbird and Orca* has many descriptions of thunderbolts coming out of Thunderbird’s eyes and scenes of him flying around, both events that indicate some sort of trajectory, these may have biased use of O-VPT gestures. Whereas in *Little Wren Goes Hunting*, there was more of a balance between

events with a trajectory, like Wren flying around, and handling-prominent events like holding a knife or knitting.

In *Q'ise'q and the Stoneheads*, the difference between number of C- and O-VPT gestures was marginal, with slightly more O-VPT gestures. What stands out most about the distribution in *Q'ise'q and the Stoneheads* is the total number of gestures. *Q'ise'q and the Stoneheads* is twice as long as *Little Wren Goes Hunting*, but the number of gestures does not scale up quite the same. *Q'ise'q and the Stoneheads* only has around 20 more gestures than *Thunderbird and Orca*, but is one third again as long — why do we not see a higher overall number of gestures in *Q'ise'q and the Stoneheads*? Similarly, the jump in approximately 40 additional gestures in *Thunderbird and Orca* compared to *Little Wren Goes Hunting*, with only an additional three minutes, is also surprising. One possible reason for this could be that *Little Wren Goes Hunting* and *Q'ise'q and the Stoneheads* both contain more scenes of dialogue between characters than *Thunderbird and Orca*. As I have already discussed, Dr. Peter's manual gestures decrease or sometimes stop entirely during these dialogue sequences. It could be that this affects the total number of gestures in these two narratives.

The discussion of gestural viewpoint has been missing a piece up to this point; we have not yet considered gestures that use both C-VPT and O-VPT at the same time. To get the full picture, I will spend the next chapter covering the complexities of combined viewpoints.

Chapter 5.

Dual viewpoint

In addition to representations of simply C-VPT or O-VPT, it is also possible to combine viewpoints. Although combined gestures have not been the subject of many studies, they are the focus of this section, and so I start with a brief overview.³⁵

Dual viewpoint (D-VPT) gestures arise when multiple viewpoints are expressed simultaneously, either as a combination of Character + Character or Character + Observer viewpoints (McNeill 1992; Parrill 2009). Parrill's 2009 paper is one of the only studies that focuses solely on D-VPT gestures. As Parrill notes, gestures that have two characters represented through O-VPT are *not* D-VPT (Observer + Observer) combinations, as only one point of view is involved in the gesture event (Parrill 2009 p. 278). This would include, for example, a gesture in which each of the speaker's articulators represents one character in O-VPT.³⁶ Example 32 below shows gestures of this type; Figure 46 with two fingers on one hand, and Figure 47 with two hands.

³⁵ My research on dual-viewpoint gestures in Hul'q'umi'num' has been published previously (Webb 2021). It was also presented at the 2022 Annual Meeting of the Canadian Linguistics Association (CLA) in June 2022 (Webb 2022).

³⁶ Recall this was discussed in Example 18 and Example 19 above.

Example 32: Two characters represented through O-VPT gestures



Figure 46: Two-finger handshape with two characters

'i ts'u yu hwu'a'lum' kwus wulh m'i yu hwu'a'lum' tun'ni' 'u tthu tsetsuw' 'uw' yu kwun'atul' 'u thu skw'uyuths.

One day, she was coming back home, coming from the beach, together with her slave.

Gesture: RH, first 2 fingers extended: bounce from center L and slightly downwards. (SG 11.1:36)



Figure 47: One-finger handshape with one character per hand

'i' wulh hwthqw'ustul 'u tu'inulh yu 'i'mush.

They met up with someone walking.

Gesture: RLH, CL1: hold LH at center, bounce RH from R shoulder to center and downwards towards LH. (SG 12.1:42)

While these gestures represent two characters, they are both seen by the observer from the same perspective, and as such are not D-VPT gestures.

Hul'q'umi'num' storytellers do use true D-VPT gestures, and Dr. Peter accomplishes these gestures in a variety of fashions. The following sections detail the ways in which viewpoints can be combined, how previous authors have studied D-VPT gestures, and how D-VPT is represented in Dr. Peter's narratives.

5.1. Dual viewpoint gestures and body partitioning

When viewpoints are combined, one or multiple articulators can be used. Table 2 below comprises the possible viewpoint combinations identified in McNeill (1992) and Parrill (2009), with a final type I propose. The numbers associated with each type are my addition, and the types are slightly reorganized from Parrill's paper.

Table 2: Viewpoint combinations

Articulators	Type	Viewpoints	Description
One articulator	1	C + O	Character + same character's trajectory
	2	C + O	Character + another character's trajectory
	3	C + C	Chimera (two different characters)
	4	C + C	Chimera with point
Two articulators	5	C + O	Character + same character's trajectory
	6	C + O	Same character trajectory + manner
	7	C + O	Character + another character's trajectory
	*8	C + C	Chimera (two different characters)

Types 1, 3, and 4, when one articulator is used, are the combinations that McNeill discusses in his 1992 book, though he makes a distinction between Type 3 (*chimeras*, representations of multiple characters) used by children and those used by adults. This was because he did not see any uses of Type 3 by adults, only Type 4 chimeras which involve pointing gestures rather than the enactment gestures typical of children (McNeill 1992). Parrill's data include an example of a Type 3 gesture produced by an adult, and in numbering these combinations I collapsed the age distinction. The paper by Parrill introduces viewpoint combinations using two articulators and adds Types 5–7 to the typology, and also identifies Type 2 as a possible combination, though they do not observe any instances of this latter type.

In addition to the seven viewpoint combinations in Table 1, I propose a novel combination, Type 8. This combination could be called a chimera using two articulators. Type 8 is not a part of Parrill's extended typology of viewpoint combinations, but I do not see a valid reason to exclude it.

An ASL signer can produce an utterance during which one hand represents one character's hand, and the other a different character's hand, both engaged in a distinct and semantically meaningful action. One example of this is a signer's description of driving down the highway and being told to move off the road. The signer's right hand was in C-VPT miming gripping a steering wheel, while her left hand, also in C-VPT, was showing a police officer waving and motioning the car to move to the side (Janzen 2005 p. 15). Signers may also produce utterances where the face is representing one character, and the hand(s) another character. Example 33 below demonstrates this.

Example 33: Type 8 D-VPT utterance in ASL (Dudis 2004 p. 232)



Figure 48: Signer representing one character with his face, another character with his hand

In this utterance, the signer is describing someone being punched in the face. Here, the signer's right hand is representing the attacker, and his face is representing the victim being punched. Both articulators are engaged in C-VPT representations. We see that Type 8 combinations — using multiple articulators

where each articulator represents a different character, both seen from C-VPT — are well-formed in ASL. Gestures of this type are also seen in the narratives I studied, and therefore this combination should be included in the typology of D-VPT combinations.

When multiple articulators are used, the D-VPT is accomplished through *body partitioning*, which is when part of the body represents one entity, and another part represents a different entity (Dudis 2004). Dudis proposes four main partitionable zones: the two manual articulators (hands), the oral articulators, and facial expression. Though less explicitly stated, Dudis provides examples in which the body, and gaze as divided from the rest of the facial expression, are also partitionable zones. This is a key assumption that will become important to the account of D-VPT gestures I present here. Additionally, in Parrill's account, she includes an example of a speaker's legs acting as a partitioned articulator (Parrill 2009 p. 282). Body partitioning, though introduced by Dudis in respect to ASL, can easily be applied to gesture studies as well, as he himself acknowledges. The availability of multiple partitionable zones of the body is not limited to signed language users, and similar strategies are used in gesture systems as well as signed languages. Certain parts of the human body have "functional autonomy", as Dudis says, and all speakers and signers take advantage of this.

Previous accounts skirt around the connection between these D-VPT combinations and the use of body partitioning in signed languages, but they fall short of developing a satisfying discussion. Parrill (2009:287) acknowledges in the conclusion of her paper that body partitioning may be "another avenue of research," though does not do this herself. Quinto-Pozos and Parrill (2015), makes explicit mention of the fact that American Sign Language users combine certain classifiers in O-VPT with depictions in which their bodies are C-VPT stand-ins for characters, but do not call these combinations dual-viewpoint nor even address this as a possibility. I question why this has not been done, and I

hope to further explore the relationship between strategies typically used in signed languages and those used in gesture.

One reason previous authors have not done this could be the relative rarity of D-VPT gestures in the existing literature; with so little data it is possible that this comparison would not be fruitful. Another factor may be the properties of the D-VPT gestures themselves. The corpus used by Parrill either does not contain speakers' use of classifiers, or if they do exist, she does not mention it in her work. This lack of classifier forms may result in a smaller overall number of D-VPT gestures. However, in Section 4.1.2 we saw that speakers do appear to use classifier forms, and we will see in Section 5.3 that the frequency of D-VPT gestures is much higher than in other gesture studies.

5.2. Viewpoint representations in Dr. Peter's narratives

In this section I present key examples of D-VPT gestures and give the breakdown of all gestures coded in the three narratives. Dr. Peter displays five out of the eight possible viewpoint combinations in her narratives: Types 1, 2, 5, 7, and 8.

Example 34: Type 1 – C-VPT + O-VPT, one articulator

Character + same character's trajectory



Figure 49: Type 1 D-VPT gesture, holding fish and going home

ni' tst 'uw' kwunut 'ul' tthu sts'esht sutst 'uw' 'akw'ut yelh sutst hwkw'ast
nem' t'ukw'stuhw.

*So we would get a stick and hook it on, **and then he'd drag it home.***

Gesture: RLH, gripping, pll, spread: move R, then bounce back L; RH raise up higher than LH. (LW 92.10:56–10:58)

Here, Dr. Peter is talking about when she and her brother would go fishing in the nearby creek when they were kids. The gestures shown in Figure 49 occur with the second half of the sentence. In this example, since both of her hands are doing the same action in parallel, I take them to be one articulator acting together. Her hands are in C-VPT, representing her brother holding his fishing hook and the salmon he has caught. Dr. Peter bounces her hands along from left to right, and show in O-VPT the trajectory that her brother takes while walking home.

Example 35: Type 2 – C-VPT + O-VPT, one articulator

Character + another character's trajectory

In the narratives I studied, there was one single instance of a Type 2 D-VPT gesture. Note also that this is the type that Parrill (2009) identified as a possible viewpoint combination despite not finding any examples in her data. As I have no point of comparison, I am hesitant to call this a true Type 2. However, I do believe this is what a Type 2 gesture would look like.



Figure 50: Type 2 D-VPT gesture, pushing child and child falling

wulh kwunutus tthu na'nuts'a' kwus thaxtul' tthu'ne'ullh, thaxtul' ni.i.i thxutus 'i' ni' wutl'uts'.

They were pushing each other around—one would push the other down and then he would get up and push the other down.

Gesture: RH, gripping: quickly push outward, hold briefly, drop downward.

(TO 6.1:36–1:38)

At this point of the narrative, Dr. Peter is describing children running around and roughhousing. Her right hand clutched in a fist is a C-VPT representation of one child grabbing and pushing another child, while simultaneously it is also an O-VPT representation of the path that pushed child follows as he falls to the ground. I believe that the first outward motion is the C-VPT stage, as the first child pushes, and the downward motion is the O-VPT stage, as the second child falls. Presumably, the child would be moving his hand outwards and not downwards to push another child. Unfortunately, I was not able to consult with Dr. Peter about this example, and I acknowledge that this is my best guess at the way the gesture events unfolded.

Example 36: Type 5 – C-VPT + O-VPT, two articulators

Character + same character’s trajectory



Figure 51: Type 5 D-VPT gesture, shooting thunderbolts from eyes

ni' nem' 'u tthu 'uyul'shun smeent sus 'uw' lhaq'uthut, lhaq'uthut 'i' ni' xunuq't.
He would go to a flat boulder and lie down and then open his eyes.

'i' nilh 'uw' yu sht'es, mukw' sus xunuq't 'i' ni.i.i huy'qw.
When he did that, everything he opened his eyes on would be burning.
 Gesture: RLH, pll: gripping, move to eyes then shoot up, flicking fingers out, rep,
 hold at top after second repetition. (TO 39–40.6:53–6:55)

The gesture in this example occurred with line 40, but I have also included the text in line 39 for additional context. Here, we have the character Thunderbird who has sustained an injury to his eyes and now shoots fire out of his eyes

whenever he opens them.³⁷ In this gesture we see Dr. Peter leaning her torso back and directing her eye gaze upwards, with her body and face in C-VPT representing Thunderbird lying down on a boulder. Her hands are in O-VPT and shoot outwards and upwards from her eyes, showing the trajectory of the thunderbolts coming out from Thunderbird’s eyes when he opens them. While her hands don’t truly show Thunderbird’s trajectory, they do show the trajectory of components of him, and so I classified these gesture sequences as Type 5.

Example 37: Type 7 – C-VPT + O-VPT, two articulators

Character + another character’s trajectory

Gestures of Type 7 were the most common D-VPT combination in *Little Wren Goes Hunting*. Dr. Peter’s hand represents the character Little Wren in O-VPT and her body is a C-VPT stand-in for the character Moose. In this sequence in the story, Wren is flying in and out of Moose’s body as he attacks him from the inside. There are two separate gesture events over these two lines, but they both take the same form.



Figure 52: Type 7 D-VPT gesture, Little Wren in Moose’s body

“nem’ tsun p’e’ nuw’ilum ’u tthun’ muqsun. nus nem’ ’uw’ nuw’ilum ’u kwthun’ q’uq’i’.”

“I’m going to go into your nostril. And I will go through your innards.”

³⁷ A similar event (Thunderbird shooting firebolts) from slightly earlier in the narrative was shown in Example 15, though that example was in O-VPT only as opposed to a D-VPT combination.

Gesture 1: RH, CL1: point to R of nose, move R and down to chin.
Gesture 2: RH, CL1: point to R side of face, trace path R and down to chest.
(LW 28–29.3:48)

This line has two accompanying gestures. Gesture 1 was articulated along with the first sentence in which Little Wren describes going into Moose’s nostril, and Dr. Peter’s hand in CL1 moves around her nose but no further. In the second sentence, when describing the path Little Wren will take through Moose’s body, Dr. Peter’s hand then moves further down her chest.

Example 38: Type 8 – C-VPT + C-VPT, two articulators

Two different characters

The final example I show is the C-VPT + C-VPT combination of the sort I do not see mentioned in Parrill (2009), taken from *Thunderbird and Orca*. Dr. Peter is again talking about the young boy who shoots fire and thunderbolts out of his. His parents try to help and protect him and the surrounding people by covering his eyes with cloth.



Figure 53: Type 8 D-VPT gesture, covering Thunderbird’s eyes

'a.a.a, tl'i' ni' sht'es, sus 'uw' kwunutum 'i' ni' hwtqetum thu qulum's.
Oh, they were so afraid that they took him and covered his eyes.
Gesture: RLH, open: bring to eyes, palms inward, hold, move mir. to wrap around back of head.
(TO 23.3:57)

Here, Dr. Peter’s head, eyes, and facial expression are representing the young Thunderbird, while her hands are C-VPT gestures of his parents. While she is

using both hands, they are operating together, and I take them to be acting as one whole articulator. For most of Dr. Peter's narratives, her facial expression is neutral or changes very subtly, but in these lines, she is visibly frowning and scrunching her eyes closed. She does the same thing in slightly earlier lines when the boy's eyes are first injured, another sequence in which her hands represent a different character in C-VPT. I take this to be a definitive example of two articulators depicting two different characters. These Type 8 D-VPT gestures were more frequent in the *Thunderbird and Orca* narrative than in other stories.

Now that we have seen examples of each attested type of D-VPT gesture in the narratives I coded, in the next section I present a breakdown of gesture types by narrative, and discuss the patterns.

5.3. Viewpoint combinations and discussion

Basing my coding on the typology from McNeill (1992) and Parrill (2009) as discussed in Section 5.1, I identified the following viewpoint distributions and combinations in the three videos I coded. In Table 3 below I give counts of each classification of viewpoint, and further break down D-VPT into the types from Table 2. Note that this is a slightly more expanded version of Table 1 from Section 4.3; here I add D-VPT in addition to the N, C, and O-VPT.

Table 3: Gesture distributions by narrative and type

	LW	TO	QS	Total
Gestures	105	142	165	412
N-VPT	22	48	69	139 (33.7%)
C-VPT	39	25	45	109 (26.5%)
O-VPT	31	55	48	134 (32.5%)
D-VPT	13	14	3	30 (7.3%)
Type 1	1	2	–	3
Type 2	–	1	–	1
Type 3	–	–	–	–
Type 4	–	–	–	–
Type 5	–	3	–	3
Type 6	–	–	–	–
Type 7	12	2	3	17
*Type 8	–	6	–	6

D-VPT made up just over 7% of the total manual gestures in the three narratives, and gestures using multiple articulators (Types 5–8) were the most common by far, comprising 86% of all D-VPT gestures. This latter number is in line with Parrill’s results, as 95% of the D-VPT gestures in her data were using multiple articulators (Parrill 2009:279). However, the number of D-VPT gestures as a whole greatly differed. In my smaller set of data of only 412 gestures, 30 were D-VPT, or 7.3%; in Parrill’s corpus of over 4200 gestures, she found only 18 D-VPT gestures, or 0.4% (Parrill 2009:279) — this is a remarkable difference. I have included the results from Parrill’s study in Table 4 below; I reorganized the data to align with the numbered typology I use above. Recall that Type 8 was not identified in her study.

Table 4: Gesture viewpoint distributions from Parrill (2009 p. 279)

Gestures	4247
N-VPT	1639 (38.6%)
C-VPT	1331 (31.3%)
O-VPT	1259 (29.6%)
D-VPT	18 (0.4%)
Type 1	–
Type 2	–
Type 3	1
Type 4	–
Type 5	3
Type 6	9
Type 7	5
*Type 8	N/A

The majority of D-VPT gestures in my data used multiple articulators (86%, n=26), comparable to Parrill's 95% (n=17) (Parrill 2009). In Parrill's results, Type 6 were the most common (C + O, same character trajectory & manner decomposition, n=9) followed by Type 7 (C + O, character + another character's trajectory, n=5). I found no examples of Type 6 in Dr. Peter's stories, but Type 7 were the most frequent (n=17), followed by Type 8 (C + C, two different characters, n=6).

We can see that the greatest differences in Dr. Peter's gestures compared to those studied in Parrill (2009) are the distribution of D-VPT gestures, as well as the use of classifier constructions, which was discussed in Section 4.1.2. There could also be a difference in genre or culture, though the way this might be reflected in the gesture patterns is difficult to identify in any great detail.³⁸ The genres of Parrill's 2009 study and my own are not entirely different, but they also are not entirely the same. Parrill's corpus features elicited narratives that speakers told after watching cartoon clips; Dr. Peter was also telling narratives,

³⁸ Storytelling for Dr. Peter was central to her traditional culture, and she was known to be a particularly effective storyteller in her community, as were her parents. It is possible that her gesture patterns are modulated by this cultural difference (see e.g. Marentette et al. (2004) via Earis & Cormier 2013:318), as compared to Parrill's data, though I cannot be certain, as I do not know the details about the speakers from Parrill's study. In order to say anything conclusive, I would need to not only know the background of speakers in other studies better, but also learn more about the culture of storytelling and gesturing in Hul'q'umi'num' itself.

though without any stimuli, and perhaps cannot be directly compared to Parrill's data. However, since Parrill's is the only systematic study of D-VPT gestures, I content myself with comparing my research to it where possible. Much of the literature studying gestural viewpoint uses the cartoon-retelling method, as opposed to naturalistic conversation or oral narratives from memory.

We should ask, now, why does Hul'q'umi'num' show a higher number of dual-viewpoint gestures? The difference is substantial given the size of my data set. I am working from a corpus of 412 gestures from a single speaker, while Parrill's corpus contains over 4200 gestures from 131 speakers. I have a few thoughts as to why the difference in numbers is so great between my data and Parrill's, and contentions to raise with some points she puts forward.

Part of the difference here may be due to the articulators active in the D-VPT gestures I identify. While the basis of Parrill's extensions to McNeill's work on D-VPT gestures rests on including gestures in which "the body takes on one [point of view] and the hands another" (Parrill 2009 p. 276), in later examples in the paper, they disregard cases in which the body acts as one C-VPT articulator and the hand(s) as another C-VPT articulator for a different character. One of their arguments for excluding facial gestures and gaze is because the relationship between the hands and body and facial gestures does not have well-established coding schemes, but I find this dissatisfying. The face is an articulator in signed languages, and additionally both speakers and signers use facial gestures alongside their utterances (Barberà 2012; Dudis 2004; Sandler 2009; Vermeerbergen & Demey 2007). There is no reason why the face should not be considered in D-VPT gesture studies as well. There are multiple examples of D-VPT gestures in the narratives I study here in which it would be difficult to deny that the head/body are representing a different character than the hand(s). Additionally, the use of classifier constructions could be affecting the number of D-VPT gestures. There is an increased potential for D-VPT gestures if the speaker can represent an entire character in O-VPT on one hand, particularly once we take the face and body into account as articulators.

Perhaps there is something particularly salient about a D-VPT combination conveying the location and trajectory of two different characters. It may be more efficient to represent these kinds of events simultaneously, or more visually descriptive and easier to perceive and understand rather than a single-viewpoint gesture or a D-VPT combination of another type. The perceptual and cognitive implications of gesture use are factors I have not delved into yet in my study, and this remains a potential avenue for future research.³⁹

It has been noted by previous authors that using body partitioning to depict multiple viewpoints at once allows for a more nuanced and detailed representation of events (Dudis 2004; Liddell 2003). As Dudis says, “one of the main purposes of [dual viewpoint] is to produce rich and vivid demonstrations” (Dudis 2004 p. 224). He goes on to explain that if an interlocutor were to pay attention to only one viewpoint, they would not infer the appropriate amount of information about the event as a whole. When a speaker or signer uses body partitioning and dual viewpoint, they are conveying many distinct pieces of information simultaneously that sum up to a full picture of the narrative.

³⁹ But see Goldin-Meadow (1999), Hostetter and Alibali (2008), Kita (2010), and So et al. (2009).

Chapter 6.

Conclusion

Over the course of this thesis, I have explored how Hul'q'umi'num' speakers use gestures in storytelling. Chapter 2 set the stage with background information on gesture studies quite generally, and covered some terminology from linguistics of signed languages that was woven through the thesis. In Chapter 3, I focused on how speakers structure the physical space around them to convey locational and referential meanings, tied to both real-world and in-fiction spaces. In Chapter 4, I also analyzed how speakers use gestures to express events from different viewpoints, such as that of a character enacting the event or an observer watching it take place. Some of the gesture strategies Hul'q'umi'num' speakers use when conveying viewpoints look very much like how classifiers and role shift are used in signed languages, and I discussed the similarities, as well as how these signed language mechanisms have been compared to co-speech gestures in previous work. Chapter 5 paid special attention to cases where viewpoints are combined and expressed simultaneously, and highlighted how Hul'q'umi'num' stands out from previous studies of dual viewpoint.

This thesis contributes to the cross-linguistic picture of how gesture and gestural viewpoint are utilized, adding a Salish language to the discussion for the first time. I hope that my work encourages other researchers and language champions, both within Salish studies and Indigenous language studies more generally, to undertake gesture studies. Not only as a point of comparison to other languages but also to record and highlight how speakers use gestures within a given language.

The use of gesture in the narratives I studied resembles that of other languages in many ways, but also differs in a few key factors. Dr. Peter's gestures are cardinally aligned based on where she was located when telling

narratives, a phenomenon which is relatively understudied in the gesture literature. Other Hul'q'umi'num' speakers appear to align their gestures in the same way, in our preliminary analyses. As in other languages, Hul'q'umi'num' co-speech gestures can be used to highlight certain referents by placing them to one side in gesture space, but Hul'q'umi'num' speakers seem to have more consistency in the anchors for these referents than in other studies.

Dr. Peter's gesturing shows consistent use of gaze changes for role shift as compared to previous work. The use of classifier-like constructions in Dr. Peter's storytelling also stands out from previous work on gesture, especially within discussion of D-VPT gestures. The two constructions seen in Dr. Peter's gestures, using CL1 and CLF handshapes, add to the larger picture of strategies shared across signed languages and co-speech gestures. We also found that the CL1 handshape and construction are used by other speakers of Hul'q'umi'num'. Understanding the ways gestures and space are used will allow us to construct Hul'q'umi'num' terminology, which can then be added to immersive narrative and discourse structure courses. For example, we could use the word *hwtsustuhw* for 'locating,' which means 'put where/where did you put it;' and *huy'qwoon'stuhw* for 'spotlighting,' which means 'shine a light on it' (Webb & Gerdts 2022). Similarly, we can find Hul'q'umi'num' ways to describe different viewpoints, how a speaker's gestures can convey these viewpoints, and how this helps learners both understand and perform stories.

According to Claxton (2020), following manual gestures and gaze helped her to learn and perform one of Dr. Peter's stories. Dr. Peter's use of gestures aided Claxton in tracking locations and characters, and visualizing actions that the characters undertake. Claxton talks about how learning through actions has been a part of her language learning since she was young. Stewart (2019) also points out the importance for gestures in language learning. She addresses how the language methodology AIM (Accelerative Integrated Methodology, developed by Wendy Maxwell) was adapted and implemented for teachers and learners of Upriver Halq'eméylem, a sister dialect to Hul'q'umi'num'. This methodology uses

gestures to scaffold and facilitate second language learning, and educational kits are available for multiple languages.⁴⁰ Stewart found that some gestures needed to be modified from their forms in the database to be culturally appropriate, and new gestures needed to be developed for high frequency words of Upriver Halq'eméylem.⁴¹ With the knowledge gained from my work on Hul'q'umi'num' gestures, it will be possible to develop a database of culturally-specific and familiar gestures that would benefit language learners on their path to becoming authentic Hul'q'umi'num' storytellers. I hope that my thesis helps build a descriptive foundation for learners and teachers to study and work with in their language journeys.

In this project, we were tasked with understanding more about how gestures are used in Hul'q'umi'num' so that L2 speakers can learn to tell stories the way their Elders did. The research presented here is one piece of the picture. We are grateful to the late Sti'tum'at, Dr. Ruby Peter, and all Elders that were willing to be recorded to share their stories and knowledge. We are happy to use the films in the way they intended: to help the younger generations become fluent Hul'q'umi'num' storytellers.

⁴⁰ Further information is available at <https://www.aimlanguagelearning.com/>.

⁴¹ This was done through collaborative discussions with students enrolled in an Upriver Halq'eméylem Learning Focus group.

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Appendix.

Abbreviations used in annotation and coding

Gesture					
RH	right hand		mir	mirrored	
LH	left hand		pll	parallel	
RLH	right and left hands		rep	repetition	
R	right/rightward		L	left/leftward	
U	up/upward		D	down/downward	
CL1	handshape; index finger extended, rest of hand closed		CLF	handshape; palm flat with fingers held straight, close together	
Viewpoint					
C	character		O	observer	
D	dual		N	none	
Event Structure					
Tr	trajectory	Hnd	handling	Aff	affect
Referent Accessibility					
FM	first mention	Re	reintroduced	Act	active