An investigation of modern Kwák̓wala determiner systems
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2009, University of Victoria

1. Introduction
This is a report on an ongoing study to clarify the description of Kwák̓wala determiners—or words for a, the, this, and that—with the broader aim of supporting language learning. Our investigation focuses on central Kwák̓wala varieties of Fort Rupert, Alert Bay, and Kingcome Inlet, and incorporates new data from Kingcome. Our results include empirical observations about determiner forms, thoughts on the meanings of determiner distance, and directions for future work.

In this project, we are most interested in determiner shapes, and in the meanings that they express, especially regarding the distance and visibility of their referents. In comparing older Kwagu’l data from work by Boas and Hunt on the one hand (Boas 1947), with modern data from Alert Bay and Kingcome Inlet on the other (U’mista 1981b, Sewid-Smith 1988, Nun’wa’kola 2006, Chung 2007), we find significant differences that point to developments in the language over the last century.

Another result of the investigation has to do with the three degrees of distance from speaker that are expressed on determiners. Based on how distance is used to refer to things, places, and times, we offer a spatial approach to their meanings, suggesting the translations ‘here’, ‘around’, and ‘not around’, together with directions for further investigation into the more formal definitions of these notions.

We begin in section 2 with some background on Kwák̓wala determiners, and the questions that have guided our research. We then discuss our findings concerning determiner shapes (section 3) and distance (section 4). Section 5 concludes the report.

We intend this document not only as a technical report, but also as an introduction to determiners for non-specialists. Accordingly, we use the spelling adopted by the U’mista and Nun’wa’kola Cultural Societies (see appendix A), and seek a plain style that accurately describes our research, but is at the same time as accessible as possible. For a glossary of technical terms, see appendix B.

2. Background to the study

2.1 Preliminaries
We introduce the study, first, by saying what we mean by determiner. We then discuss some of the different varieties of Kwák̓wala, and how these have been represented in the literature on determiners. We then offer an overview of English

* We would like to thank our consultants Beverly Lagis, Gloria Nicolson, Ernest Scow, Gertrude Robertson, and Freda Shaughnessy for their participation in this project. This work was supported in part by a 2008-2009 Jacobs Funds Grant entitled Kwák̓wala Determiners, and was greatly facilitated by the Nun’wa’kola Cultural Society, and by Gloria Nicolson. This is the final version of this report.
determiners as background (2.2), then go on to summarize the Kwak'wala determiner system as described in previous work (2.3), as well as a couple of different analyses of it (2.4). Those already familiar with Kwak'wala determiners may wish to proceed directly to the statement of our research questions in 2.5.

Kwak'wala determiners have no straightforward translation, but correspond roughly to words like a, the, this, that, and help to say which one. Here, the determiners -xwa, -ex, -x say which woman is being talked about, and where Gilford is:

(1) Ma/uni0331xwa/uni0331la/uni0331ntla [-xwa ìsàdaq -ex].
   I admire [-D2 woman-D2]
   I admire this woman (around).

(2) Gi’sm ⁁-i la [-x Gwayasda’s].
   live at-D3 to [-D3 Gilford ]
   He lives at Gilford (not around).

Our point of departure is the variety of determiner systems described in the literature (Boas 1947, U’mista 1981b,c, Anderson 1984, 2005, Sewid-Smith 1988, Bach 2006, Chung 2007), and exemplified in the Boas and Hunt texts (e.g. 1902, 1921). To these, we add further data from Nun‘wa’kola (2006), and from our fieldnotes.

Since our data come from several sources, some remarks are relevant concerning different varieties of Kwak’wala. While Boas and Hunt’s work was based mainly on the early twentieth-century dialect of the Kwagu’l people of Fort Rupert (Tsaxis), most later materials are based on varieties spoken in and around Alert Bay (Y̓alisa), which is the largest modern Kwakwa’wa’kwa community, and has the most living speakers (Anonby 1997). Our own consultants are from Kingcome Inlet (Gwayi).

According to recent classifications, the varieties of these and other central communities constitute ‘Kwak’wala proper’, beside four or five other dialects (Sewid-Smith 1988:8-9, Anonby 1997:3, First Peoples’ Language Map):¹

(3) dialect present location and origins

Gwa’sala Tsulquate Reserve, from Smith Inlet
Nákwa’la Tsulquate Reserve, from Seymour Inlet, Blunden Harbour
T̲hał̲tasíḵwala Alert Bay, from Hope Island
Guksala Quatsino reserve, from Quatsino Sound area
Kwákwa’la Alert Bay area, also Fort Rupert, Kingcome Inlet, Gilford Island,
                          Hopetown, Village Island, Turnour Island, New Vancouver
Liq̲wala Campbell River area, also Cape Mudge, Comox

¹ Sewid-Smith distinguishes Gwa’šala and Nákwa’la based on their origins, but Anonby and the First Peoples’ Language Map group them as Nákwa’la, based on their amalgamation at Tsulquate.
As this indicates, most modern groups are amalgamations of several earlier villages, and of diverse local dialects. Nevertheless, reports indicate that these differ mainly in vocabulary—and, presumably, in pronunciation—rather than in grammar (Grubb 1977, Sewid-Smith 1988). Even in the early 1900s, Boas observed just two dialect groups, a southern one comprising modern Kwak’wala and Liq’wala, and a northern one comprising all others, though ‘Minor differences between the villages of each group are not lacking’ (1966:37).

Moreover, our information concerning determiners comes almost exclusively from central varieties, or Kwak’wala proper. Within these data, the most significant differences are between Boas and Hunt’s early Kwagu’ł data on the one hand, and more recent data from modern central sources on the other. We therefore distinguish these as representing early central and modern central Kwak’wala, respectively.

It remains unclear whether the differences between early and modern central determiner systems are primarily geographic—that is, characterizing Fort Rupert as opposed to Alert Bay—or diachronic, reflecting twentieth-century developments shared throughout central varieties, and encouraged by amalgamation. This question will not be answered in this report, but see 3.6 for some speculation on the subject.

Last, some clarification may be called for concerning the various names for the Kwak’wak’wa’kw people and their language. Boas called both people and language ‘Kwakiutl’, from Kwagu’ł (or Kwaguł), who are the people of Fort Rupert. Nowadays, the names Kwak’wak’wa’kw (people) and Kwak’wala (language) are used generally for all groups, though these too derive ultimately from Kwagu’ł.

Further, as explained above, most groups also have more specific, local names. Just as Kwak’wala can refer in a narrow sense to the Kwagu’ł dialect, the dialect of the Liq’w’išdaʔxw, for example, is called Liq’w’ala.

Another general name for the language that is favoured by some of our consultants as more neutral than Kwak’wala, is bakwamk’ala, or ‘Indian language’. However, as this has yet to gain widespread support, we continue to use the generally favoured and familiar Kwak’wala.

2.2 Determiners, adjectives, and nouns

We will say first how determiners are different from adjectives and nouns, and how these different kinds of words work together. In both Kwak’wala and English, we talk about people, things, places, and times using noun phrases (NPs). An NP gets its name from the fact that it consists minimally of a noun (child, canoe, day), but can also include adjectives (beautiful, long) and other descriptive words:

(4) \[ \text{NP child} \]  (5) \[ \text{NP beautiful child} \]
(6) \[ \text{NP canoe} \]  (7) \[ \text{NP long canoe} \]
(8) \[ \text{NP day} \]  (9) \[ \text{NP day after tomorrow} \]

In addition, both languages use determiners to give further information about NPs. Determiners are short words like a, the, this, that that determine which thing is
being talked about. Determiners differ from adjectives in that adjectives describe nouns, while determiners say which one:

(10) **this** [NP beautiful child]
(11) **a** [NP long canoe]
(12) **the** [NP day after tomorrow]

Furthermore, some determiners can occur either with an NP, or alone, with no NP:

(13) **This** [NP beautiful child] is my daughter.
(14) **This** is my daughter.

The following *tree diagram* shows one way of analyzing how a determiner (D), adjective (A) and noun (N) combine to refer to something being talked about:

(15)   DP  
     |     
    D  NP  
  this A  N  
        |        
     beautiful  child

This bracketed representation conveys the same information as the tree diagram, but in a more compact format:

(16) [DP [NP [A beautiful] child]]

According to this analysis, the closer relationship is between adjective and noun, which form an NP that describes the *concept* of a beautiful child. The job of the determiner is to determine *which* child is being talked about. Together, determiner and NP form a *determiner phrase* (DP) that refers to a particular individual, or *referent*.

We will revisit this kind of diagram in 2.4, in connection to formal syntactic analyses of the structure of Kwakwala DPs.

2.3 *The Kwakwala determiner system*

Kwakwala determiners are more complex than English determiners in several ways. For example, they consist of several parts, come both before and inside NPs, and distinguish among referents in ways that English determiners do not. We therefore speak of the various forms that determiners take, together with patterns in their use and word order in the sentence, as constituting a determiner *system*.

The following table gives a representative fragment of the determiner system (for more complete charts, see 3.1, 3.2). These forms are explained further below.
(17) Some Kwak'wala determiners

<table>
<thead>
<tr>
<th>distance</th>
<th>pre-NP</th>
<th>NP-internal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>nonspecific</td>
<td>specific</td>
</tr>
<tr>
<td>D1</td>
<td>-ga</td>
<td>-gada</td>
</tr>
<tr>
<td>D2</td>
<td>-uxw</td>
<td>-uxwda</td>
</tr>
<tr>
<td>D3</td>
<td>-i</td>
<td>-ida</td>
</tr>
</tbody>
</table>

This table lays out some of the forms that determiners take depending on a referent’s distance (D1, D2, or D3), specificity (specific, nonspecific), and visibility (visible, invisible). It also distinguishes the parts of determiners that come before a noun phrase (pre-NP), from those that come inside the NP (NP-internal).

A few examples will help to illustrate these properties. Perhaps most noticeably, in Kwak'wala one must specify a referent’s distance from the speaker by means of determiners. Determiners distinguish three degrees of distance, which we will refer to by the neutral terms D1, D2, and D3. Roughly speaking, these indicate progressively greater distances from the speaker (see section 4):

(18) **Digila** [-ga Maya-x ] k’a’ans.
make tea[-D1 Maya-D1] for us
Maya (here) is making tea for us.

(19) **Yum** [-uxw Brendan-x ].
that (D2)[-D2 Brendan-D2]
That’s Brendan (around).

(20) **Angwaxtl** [-ida gananam]? called who[-D3 child ]
What is that child’s (not around) name?

By way of comparison, English determiners distinguish two degrees of distance, as in *this* versus *that*. Moreover, this distinction is optional in English, because *this* or *that* can be replaced by *the*, which gives no indication of distance. Last, English does not mark distance on names (*Maya*, *Brendan*), while in Kwak'wala one must.

Examples (18) to (20) also illustrate determiner specificity. Generally speaking, a referent is specific when the speaker has a particular one in mind. For example, the phrase *-ida gnanagm* ‘that child’ picks out a particular child. However, proper nouns (that is, names for people and places) take nonspecific determiners, perhaps because their referents are understood to be specific, as in -ga Maya-x ‘Maya (here)’.

Regarding NP-internal determiners, it might seem at first that these come after the NP. However, with NPs of two or more words, these appear inside the NP, following its first word. Here, the NP *alumas gwitgwela* ‘new clothes’ is interrupted by the
determiner -e’, which indicates both the referent’s distance (D3), and that it is invisible, or may not even exist:

(21) Kalxwatlantla[dp- x [np alumas-e’ gwilgwela]].
    I will buy [ -D3 [ new -D3 + invisible clothes ]] I will be buying new clothes. (Nun’wa’kola 2006:46)

Apart from the different word order of pre-NP and NP-internal determiners, another difference between them is that only pre-NP determiners indicate a referent’s specificity, while only NP-internal determiners express visibility. On the other hand, both indicate distance. See the tables in (17), (22).

Determiners also give information about a referent’s function, or role in the sentence. Kwak’wala distinguishes three sentence functions. These are the subject, or main referent of a sentence, plus two kinds of objects. We call these x-objects and s-objects, because their determiners begin with x and s, respectively.

This table compares some determiners for subjects, x-objects, and s-objects:

(22) Some subject and object determiners

<table>
<thead>
<tr>
<th></th>
<th>pre-NP</th>
<th>NP-internal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>subjects</td>
<td>x-objects</td>
</tr>
<tr>
<td></td>
<td>nonsp. specific</td>
<td>nonsp. specific</td>
</tr>
<tr>
<td>D1</td>
<td>-ga</td>
<td>-xga</td>
</tr>
<tr>
<td>D2</td>
<td>-uxw</td>
<td>-xuxw</td>
</tr>
<tr>
<td>D3</td>
<td>-i</td>
<td>-x</td>
</tr>
</tbody>
</table>

Although this is not a complete table of determiner forms, it illustrates that function is marked only on the pre-NP parts of determiners. NP-internal determiners, by contrast, are the same for all three functions.

Here, kadayu ‘pencil’ is an s-object, and Mike is an x-object:

(23) Ŧ sola’t[-sgada kadayu-xw] la [-xuxw Mike-ex ].
    give [-D1 pencil -D1] to [-D2 Mike-D2] Give this pencil to Mike.

Last, in addition to function, distance, specificity, and visibility, determiners can also provide information about whether a referent is possessed, and by whom.

(24) Ix [-ganu’xw ńala-x ].
    good[-D1+ our day -D1] Our day is good here. (said over the telephone)
However, as possession is a complex topic in its own right, especially in how possessive endings combine with other determiner parts, we do not address it further here.

To summarize, we have looked at the parts of Kwakwala determiners that express function, distance, specificity, visibility, and possession. This gives some idea of the complexity of the system, and the challenge in reducing it to simpler concepts.

2.4 Formal analyses

Next, we will look at some approaches to analyzing determiners in terms of formal structures. This provides tools that clarify determiners' morphology and word order, as well as a framework for our research questions in 2.5.

Take as a point of discussion the D2 determiners \( -\text{xuxwda} \), \( -\text{ex} \):

One way of understanding the structure of determiners is according to a template, or a sequence of slots corresponding to determiners’ various meaningful parts. These slots take on different realizations depending on the particular features being expressed. For example, this template (adapted from Chung 2007) analyzes \( -\text{xuxwda} \), \( -\text{ex} \), beside some other determiners, in terms of five morphological slots:

Another type of formal analysis is the tree diagram introduced in 2.2. The trees in (29) and (30) offer a simplification of Chung’s (2007) tree-based analysis, which aims to explain not only the ordering of determiner parts, but also how these combine in a meaningful way. The idea is that each meaningful part—including distance, specificity,
and visibility—is a separate node in the tree, but that movement from node to node combines them into chunks, obscuring their real positions:

(29) \[ \text{DP} \]
\[ \text{D} \]
\[ -\text{uxw} \]
\[ \text{D} \]
\[ -\text{da} \]
\[ \text{NP} \]
\[ -\text{ex} \]
\[ \text{A} \]
\[ \text{N} \]
\[ \text{waladz} \]
\[ \text{bagwanam} \]

(30) \[ \text{DP} \]
\[ \text{D} \]
\[ -\text{uxw} \]
\[ \text{D} \]
\[ -\text{da} \]
\[ \text{NP} \]
\[ \text{waladz-ex} \]
\[ \text{A} \]
\[ \text{N} \]
\[ \text{waladz} \]
\[ \text{bagwanam} \]

More specifically, all determiners are above the NP (\text{waladz bagwanam}), in the sense that they do not contribute any meaning until the meaning of the NP is calculated (29). However, NP-internal determiners (-ex) have the peculiarity that they combine with the first word of NP, producing their NP-internal order (30).

While we find that such formal analyses help us to conceptualize the structure and patterns of the Kwakwala determiner system, those studying Kwakwala will judge to what extent these shed light on the problems discussed in this report.

### 2.5 Research questions

Having reviewed some of the properties of the Kwakwala determiner system, and some of its formal analyses, we present here the questions that have so far guided our research. These have to do with determiner shapes, combinations of distance and visibility, and the meanings of the different degrees of distance.

First, our simplest question has to do with the shapes that determiners take:

- **Question 1** (determiner forms): How similar or different are the determiner forms found among modern central speakers, compared to those described elsewhere?

Our second question also has to do with determiner shapes. In principle, three degrees of distance (D1, D2, D3) times two kinds of visibility (visible, invisible) yield six potential combinations of distance and visibility on determiners. However, it seems that not all of these are attested with the same frequency.

While D3 determiners often convey either visibility or invisibility, D1 and D2 determiners are only rarely used with invisible referents. Take these Kwagu'ł examples, which we reproduce in Boas and Hunt’s transcription on the first line, followed by an interlinear transliteration in U’mista spelling (see appendix A):

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2 In fact, Chung (2007:112) identifies the parts of determiners with five different categories: Case, Loc, Det, Vis, and Temp. Of these, Det (‘determiner’) corresponds to our ‘specificity’.
(31) He’k!alag·ada xesa’lax·dg·a’.
Hikala [-gada xasalaxd -ga’].
make noise[-D1 disappeared-D1 + invisible]
They made that noise, these who had disappeared. (Boas 1947:252)

(32) K·a’yadzâx·i/uni029Faxox wi’saq!.
Kay/uni0313adzoxitla[-xu’x wis -ak].
drive away [-D2 boy-D2 + invisible]
Drive away this boy. (Boas 1947:253)

Here, we ask to what extent such examples are found in modern varieties:

- **Question 2** (feature combinations): Are all six combinations of distance and visibility found in modern central determiner systems?

  Our last question has to do with the meanings of distance. While it is clear that Kwak’wala determiners express three distinct degrees of distance (D1, D2, D3), there is some question as to what these mean, and how exactly they are different:

- **Question 3** (distance): What do the three degrees of distance mean?

  This concludes the descriptive and theoretical introduction to this report. In the following sections, we present the results of our research to this point.

3. **Determiner shapes**

3.1 **The early central Kwak’wala determiner system**

Two of our research questions concern determiner shapes. Specifically, (Q1) what differences are observed in determiner forms across dialects, and (Q2) are all combinations of distance and visibility attested? We begin with the determiner system of early Kwagu’l, a central dialect of around 1900, as it is the most thoroughly documented, and provides a baseline of comparison for other systems.

This is the early central system as described in Boas (1947):
### Early determiners (adapted from Boas 1947:252-253)

<table>
<thead>
<tr>
<th></th>
<th>pre-NP</th>
<th>x-objects</th>
<th>s-objects</th>
<th>NP-internal</th>
</tr>
</thead>
<tbody>
<tr>
<td>subjects</td>
<td>nonspecific</td>
<td>nonspecific</td>
<td>nonspecific</td>
<td>visible</td>
</tr>
<tr>
<td>D1</td>
<td>-ga</td>
<td>-xga</td>
<td>-sga</td>
<td>-k</td>
</tr>
<tr>
<td>D2</td>
<td>-ux</td>
<td>-xua, -xw</td>
<td>-sx, -sa</td>
<td>-i, -x</td>
</tr>
<tr>
<td>D3</td>
<td>-i</td>
<td>-x</td>
<td>-s</td>
<td>-i, -∅</td>
</tr>
<tr>
<td>specific</td>
<td>nonspecific</td>
<td>specific</td>
<td>specific</td>
<td>invisible</td>
</tr>
<tr>
<td>D1</td>
<td>-gada</td>
<td>-xgada</td>
<td>-sgada</td>
<td>-ga’</td>
</tr>
<tr>
<td>D2</td>
<td>-uxda</td>
<td>-xuda, -xwa</td>
<td>-sa</td>
<td>-ak, -ax</td>
</tr>
<tr>
<td>D3</td>
<td>-ida, -a</td>
<td>-xa</td>
<td>-sa</td>
<td>-i, -a</td>
</tr>
</tbody>
</table>

For further background, see 2.3, 2.4. Regarding our transcription, see appendix A.

To help contextualize the determiners, we also give in (34) the early central pronouns—that is, words that can take the place of names and noun phrases. A look at the third-person pronouns—that is, words for he, she, it, they—shows that these are very similar in form to determiners:

### Early pronouns (adapted from Boas 1947:252-256)

<table>
<thead>
<tr>
<th>person</th>
<th>subjects</th>
<th>x-objects</th>
<th>s-objects</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 I</td>
<td>-an(tla)</td>
<td>gaən</td>
<td>-an(tla)</td>
</tr>
<tr>
<td>1 we (and you)</td>
<td>-ants(a)</td>
<td>gaənts</td>
<td>-ants(a)</td>
</tr>
<tr>
<td>1 we (not you)</td>
<td>-anuxw(a)</td>
<td>gaənu’xw</td>
<td>-anuxw(a)</td>
</tr>
<tr>
<td>2 you</td>
<td>-as(i)</td>
<td>-utl</td>
<td>-us</td>
</tr>
<tr>
<td>3 he/she/it D1</td>
<td>-k, -ga’</td>
<td>-kak, -xga’</td>
<td>-sak, -sga’</td>
</tr>
<tr>
<td>3 he/she/it D2</td>
<td>-ux, -u’</td>
<td>-kw, -kw, ku’</td>
<td>-sux, -su’</td>
</tr>
<tr>
<td>3 he/she/it D3</td>
<td>-i, -i’</td>
<td>-k, -ki’</td>
<td>-s, -si</td>
</tr>
</tbody>
</table>

Although we do not discuss here the formal analysis of pronouns, several parallels between pronouns and determiners will help to illustrate some of the differences between early and modern Kwak’wala.

#### Modern central Kwak’wala determiner systems

Next, we look at determiners in some modern varieties, especially as they differ from the Kwagu’ł that Boas and Hunt knew. As explained in 2.1, the descriptions in

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3 The parenthesized portions of some pronouns, as in `an(tla)`, are connective elements that appear when they are followed by other pronouns and determiners. See Boas (1947:255-256), and section 3.5.
U’mista (1981b) and Sewid-Smith (1988) are based primarily on Alert Bay speech. To these, we add further data from the closely related speech of Kingcome Inlet.

The following table summarizes the determiners for subjects and \( \chi \)-objects in modern central varieties, according to these sources:

(35) Modern determiners\(^4\)

<table>
<thead>
<tr>
<th></th>
<th>pre-NP</th>
<th>NP-internal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>subjects</td>
<td>( \chi )-objects</td>
</tr>
<tr>
<td>nonspecific</td>
<td>-( \text{ga} )</td>
<td>-( \text{x} \text{ga} )</td>
</tr>
<tr>
<td></td>
<td>-( \text{ux}\text{w}(a) )</td>
<td>-( \text{ux}\text{xw} )</td>
</tr>
<tr>
<td></td>
<td>-( \text{i} )</td>
<td>-( \text{x} )</td>
</tr>
</tbody>
</table>

|        | specific |            | invisible |
| nonspecific | -\( \text{gada} \) | -\( \text{xgada} \) | -\( \text{ga} \text{'} \) |
|        | -\( \text{ux}\text{wda} \) | -\( \text{ux}\text{xwd}\text{a}, -\text{xwa}, -\text{xwada} \) | -\( \text{e}\text{'}\text{x}, -\text{a}\text{'}\text{x} \) |
|        | -\( \text{ida} \) | -\( \text{x}, -\text{ixa}, -\text{ixa} \) | -\( \text{e}', -\text{a}', -\text{o}' \) |

We do not include determiners for \( s \)-objects, as these are not discussed much in our modern sources, nor have we undertaken to check them exhaustively (see 2.3).

Next, we summarize the modern pronouns:

(36) Modern pronouns\(^5,6\)

<table>
<thead>
<tr>
<th>person</th>
<th>subjects</th>
<th>( \chi )-objects</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 ( \text{I} )</td>
<td>-( \text{an(tla)} )</td>
<td>-( \text{gaxan} )</td>
</tr>
<tr>
<td>1 ( \text{we (and you)} )</td>
<td>-( \text{a}\text{ns}(a) )</td>
<td>-( \text{gaxan}\text{ns} )</td>
</tr>
<tr>
<td>1 ( \text{we (not you)} )</td>
<td>-( \text{a}\text{nu}'\text{xw}(a) )</td>
<td>-( \text{gaxanu}'\text{xw} )</td>
</tr>
<tr>
<td>2 ( \text{you} )</td>
<td>-( \text{a}\text{s}(i) )</td>
<td>-( \text{ul} )</td>
</tr>
</tbody>
</table>

| 3 \( \text{he/she/it D1} \) | -\( \text{gada} \) | -\( \text{gxada} \) |
| 3 \( \text{he/she/it D2} \) | -\( \text{uxw}(a) \) | -\( \text{kw}(u), -\text{xw}(a) \) |
| 3 \( \text{he/she/it D3} \) | -\( \text{i} \), -\( \text{i}' \), -\( \text{i} \) | -\( \text{x} \), -\( \text{ki}' \), -\( \text{x} \) |

\(^4\) The NP-internal forms D1 -\( (\text{g})\text{x} \), D2 -\( (\text{e})\text{x} \) are from U’mista (1981b), and -\( (\text{i})\text{x}, -\( (\text{i})\text{x} \) from Sewid-Smith (1988). Our consultants use D1 -\( (\text{g})\text{x} \), but vary between D2 -\( (\text{e})\text{x}, -\( (\text{i})\text{x} \), and between D2 -\( (\text{e})\text{x}, -\( (\text{a})\text{x} \).

\(^5\) Boas reports -\( \text{gnts} \), -\( \text{gnu}'\text{xw} \), whereas U’mista materials give -\( \text{gns} \), and all modern sources give -\( \text{gnu}'\text{xw} \), (U’mista 1981b, Sewid-Smith 1988, Nun’wa’kola 2006). From our consultants, we hear -\( \text{gns} \), -\( \text{gnu}'\text{xw} \).

\(^6\) U’mista (1981b) reports the \( \chi \)-object pronouns D2 -\( \text{kw}(u) \), D3 -\( \text{ki}' \), whereas our consultants use D2 -\( \text{xw}(a) \), D3 -\( \text{x} \). For further discussion of modern pronouns, see especially 3.5.
The empty cells in this table (marked with em dashes) indicate forms that we have so far failed to elicit. Although we think that some of these are indeed lacking, we have yet to establish satisfactorily whether this is the case for all our consultants.

In the rest of Section 3, we discuss some of the differences between early and modern determiner systems. While some differences in determiner forms are apparent from the preceding tables, other differences are more fundamental, and are apparent only from examples of determiners used in context.

3.3 *Minor differences among determiner systems*

We begin with several minor differences in determiner forms and pronunciation. One purely phonological difference is that some determiners that end in plosive sounds in early central Kwakwala more often end in hissing sounds in modern varieties:

(37) early modern

-\(\text{k}\) -(a)x D1 + visible NP-internal determiner
-\(\text{a`k}, -\text{a`x}\) -e`x, -a`x D2 + invisible NP-internal determiner
-\(\text{kw}\) -\(\text{xw}\) D2 + visible x-object pronoun
-\(\text{k}\) -\(\text{x}\) D3 + visible x-object pronoun
-ut\(\text{t}\) -ut, -ul 'you' x-object pronoun

The following examples illustrate this for the pronoun -ut\(\text{t}\), -ut\(\text{t}\), meaning ‘you’:

(38) He`/\(\text{maen}\) wa`l\(\text{demol}\)?
    Hima -`\(\text{an}\) wal\(\text{dam-ut}\)?
    that (D3)-my word -\(\text{you}\)
    Is that what was my word to you? (Boas 1947:258)

(39) G\(\text{awalat\(\text{ntl}-ut}\).
    I will help -\(\text{you}\)
    I'm going to help you. (U'mista 1981b:53)

(40) Ix`ak\(\text{a\(\text{n}-ut}\).
    I like -\(\text{you}\)
    I like you. (Sewid-Smith 1988:133)

(41) Łax\(\text{walanuk-w-us ump -ax lo\(\text{l}\).}
    love -your father-D1 to +\(\text{you}\)
    Your father (here) loves you.

These modern forms are examples of *spirantization*, a pattern where the plosive sounds \(\text{tl, k, kw, k, kw}\) become the corresponding hissing sounds \(\text{t, x, xw, x, xw}\) at the
ends of syllables. Although spirantization is found in all Kwak’wala dialects, dialects vary in where, how often, and to which sounds it applies.

Another difference has to do with the NP-internal D3 determiners -i, -a. Although these are rare in our modern data, the U’mista data resemble Boas and Hunt’s in having NP-internal -i:

(42) Wä, lā’laē lē’lālase’wēda yūdukwē ’nē’mēmasa ts!édaqē.
We, lala’-i tilalasāw [-ida yudukw-i nāmīmi][-sa ḋādāk -i ].
well then-D3 were called[-D3 three -D3 brothers][-D3 woman-D3]
The three brothers were called by the woman. (Boas 1921:1223)

(43) Gāsatsläntla[-xa yaxwamł -i ].
I will paint [-D3 dance mask-D3]
I will paint that dance mask. (U’mista 1981b:6)

In other modern data, by contrast, we rarely find these NP-internal determiners:

(44) Latläs la[-xa gukw-∅ ].
you will go to[-D3 house-D3]
You are going to the house. (Sewid-Smith 1988:46)

(45) Māxwālāntlä[-xa ḋādāk -∅ ].
I admire [-D3 woman-D3]
I admire that woman.

For more on the meaning and distribution of -i, -a, see Berman (1991:343-357).

A third difference has to do with the D3 determiners -xa and -xida. For early Kwagu’l, Boas reported -xa as the usual form, and the longer -xida as rare (1947:259). The U’mista data agree, using -xa, but not -xida.

In other modern data, by contrast, one observes both forms, with what seems to be a subtle difference in meaning between -xa and -xida. Sewid-Smith describes this difference as one of visibility, or of being in the speaker’s presence:

(46) Latlän la-xa kālwilas.
I will go to-D3 store
I am going to the store (not in speaker’s presence). (Sewid-Smith 1988:118)

(47) Latlän la-xida kālwilas.
I will go to-D3 store
I am going to the store (seen at a distance). (Sewid-Smith 1988:118)

Somewhat differently, one of our consultants describes the meaning difference as having to do with detail or focus. Although both -xa and -xida are ‘specific’ D3
determiners, contrasting with nonspecific D3 -x, the phrase laťa kalwilas ‘to the store’ seems to focus on the going more than on the store itself, while laxida calls for a more detailed description, such as padilas ‘drugstore’, or hańga’elas ‘restaurant’:

(48) Latlān la-xida padilas.  
I will go to-D3 drugstore  
I’m going to the drugstore.

(49) Latlān la-xida Denny’s hańga’elas.  
I will go to-D3 Denny’s restaurant  
I’m going to Denny’s.

Yet another of our consultants recognizes -xida, but does not use it, identifying it with the Cape Mudge dialect—that is, Liq’ala. Progress on the distribution and meaning of -xida therefore requires further investigation.

Finally, some of our consultants also use a couple of forms that, as far as we know, are not attested in early materials. These are D2 -xwada, D3 -xada, which are apparently identical in meaning to D2 -xuxwda, D3 -xida, respectively:

(50) Ix’akańtla[-xwada bagwanam-x ].  
I like [-D2 man -D2]  
I like this man.

(51) Gāx -i gāwala le’e’axala[-xada ląkwa].  
come-D3 help work [-D3 wood ]  
He came to help them work on the firewood.

Since these forms are not attested in early Kwagu’l, it is not clear whether they are innovative, having evolved over the last century, or reflect a difference between Kwagu’l on the one hand, and Kingcome on the other.

Next, we address some other trends that may point to more fundamental differences in the organizations of early and modern determiner systems.

3.4 **Combinations of distance and visibility**

Recall from 2.5 that Boas describes NP-internal determiners in early central Kwak’wala as expressing all six combinations of distance (D1, D2, D3) times visibility (visible, invisible). In modern central varieties, by contrast, while both visible and invisible D3 referents are common, invisible D1 and D2 referents are not.

To begin with early Kwak’wala, the following examples of invisible D1 and D2 referents may be added to those already cited in 2.5:
(52) G·a´deg·anu/x̣ a´leg·a`.  
Gadi [-ganu/xw atli -ga’].  
this (D1)[-D1 + our inland-D1 + invisible]  
This is what is inland from us. (Boas 1947:258)

(53) La bêwe´x̣witsox wi´sax.  
La bêwixwit [-suəx wis-ax].  
then became pregnant[-D2 boy-D2 + invisible]  
Then she became pregnant with this child. (Boas 1947:252)

(54) Ha´g·a/uni1D4B, /uni1D4Băxk·!a´lax/uni1D07nts g·o´kw/uni1D07lotax.  
Haga’, axkala[-xants gukwalut-ax].  
go ask [-D2 + our tribe -D2 + invisible]  
Go and ask our tribe. (Boas 1947:255)

By contrast, modern descriptions typically report examples only of visible D1 and D2 referents (U’mista 1981b, Sewid-Smith 1988).

As for our own consultants, we have never observed them to volunteer an invisible D1 or D2. Attempts to reelicit examples like those above generally result in restatements in terms either of visible D1 or D2, or of invisible D3. Compare this example from Boas, and the rephrasing suggested by one of our consultants:

(55) ‘Ma´s’anawiseg-en ñek·ile´g·aen?  
Mas’anawisi [-gan taki -ga’ -an]?  
what is the matter[-D1 + my belly-D1 + invisible-my]  
What may be the matter with my belly? (Boas 1947:254)

(56) Mas’anawisa [-gan taki -x ]?  
what is the matter[-D1 + my stomach-D1]  
I wonder what’s wrong with my stomach?

We therefore doubted at first that such combinations exist in modern central Kwakwala. However, we eventually arrived at contexts where our consultants agreed that invisible D1 and D2 were possible, though they have yet to volunteer one. For example, in this conversation between A and B at a dance performance, B can reply with (59) if Beth is right next to her, but hidden behind a dance curtain:

(57) A: Angw-ida makalatla?  
who -D3 next  
Who’s next?
(58) B: Getli [-ga Beth-ax ].
this (D1) + future [-D1 Beth-D1 ]
It will be Beth (here, visible).

(59) B: Getli [-ga Beth-ga’ ].
this (D1) + future [-D1 Beth-D1 + invisible ]
It will be Beth (here, behind a dance curtain).

As further examples, (60) is possible as a question about something recently said in the speaker’s presence, (61) can refer to a woman who is not physically present, but whose voice is heard over a radio that is present, and (62) can refer to someone who is in the same village as the speaker, but not visible:

(60) Wàt̪šalaʔnasi[-χwa wałd̪am-a’x ]-a?
 you hear [-D2 word -D2 + invisible ]-question
Did you hear what was (just) said?

(61) Mayaxal̠ant̪la[-χux̔wda isâdak -e’x ].
I respect [-D2 woman-D2 + invisible ]
I respect this woman (talking on the radio).

(62) Łaxw̬alanukẉant̪la-su’xw.
I love -D2 + invisible
I love him (in the present village).

It seems, then, that combinations of D1 and D2 plus invisible do exist in modern Kwak’wala, but perhaps with more restricted usage than in the earlier Kwak’wala described by Boas. Moreover, it seems likely that even in earlier Kwak’wala, invisible D1 and D2 were less common, judging from the fact that in one of his earliest reports on the language, Boas (1891:659) observes only four combinations—namely visible D1, D2, D3, and invisible D3—though in later reports he describes six.

Before concluding this discussion, we may point out that the trend we have discussed with respect to determiners seems to be more advanced with respect to pronouns. Whereas the visible-invisible distinction is still strong in D3 determiners, some of our consultants either fail to use, or reject outright, explicitly invisible pronouns. Instead, such speakers use the pronoun -i for D3 subjects, and -x for D3 x-objects, regardless of whether they are visible or invisible:
Take this conversation about Rory. Even though he is not visible, the preferred B response is (65), with -i, whereas only some speakers could say (66), with -i’:

(64) A: Gaxm-e’e Rory? (modern)  
    come-D3+question Rory  
    Has Rory come? (said indoors)

(65) B: Gaxm-i gwasułala.
(66) B: ? Gaxm-i’ gwasułala.
    come-D3 approach  
    He’s on his way here (outdoors and not yet visible).

Similarly in this exchange, the default pronoun -x is preferred, with only some speakers accepting the explicitly invisible pronoun -ki’:

(67) A: Hamx’idaṇami-xa /pi’apa’omas? (modern)  
    you ate -D3 berries  
    Did you eat the berries?

(68) B: E, ḥamx’idaṇantla-x.
(69) B: ? E, ḥamx’idaṇantla-ki’.
    yes I ate -D3  
    Yes, I ate them.

To summarize, all six combinations of distance times visibility are attested on determiners. However, two of these, invisible D1 and D2, are unusual and rarely encountered. Further, this is even more so for the pronouns, to the extent that forms that explicitly pick out invisible D3 referents are dispreferred by some speakers.

3.5 **Determiners versus pronouns**

Determiners and pronouns are undergoing parallel developments in other ways as well. In this section, we draw attention to the different uses of determiners and pronouns in modern Kwak’wala. The picture that emerges is that the modern language seems to be moving away from a separate pronoun system, and toward a system of phonologically independent determiners.
To see this, let us begin by reviewing the difference between determiners and pronouns. Whereas determiners occur with a noun phrase (NP), pronouns occur alone—that is, without an NP. Compare the determiner \( -i \) (70) to the pronoun \( -i/\text{uni1E35} \) (71). While both pick out D3 subjects, only \( -i \) introduces an NP:

(70) … là́ê Têwî́x-i’lakwê axstô’dxa t!êxî’läsêda g-ô’kwê…
… la’ \([ \text{-i Tàwixilakw-}\text{i} ] \) axstud[\(-x\) iàxâle ][-sida gukw-\text{i} ]…
… then[\(-\text{D3 Tàwixilakw-D3}\)] open \([\text{-D3 door + D3}\] [-\text{D3 house-D3}]... … then Tàwixilakw opened the door of the house... (Boas and Hunt 1902:15)

(71) Hê’/\text{uni1D4B} meq.
Him \(-i/\text{uni1E35}\).
that (D3)-D3
That is it. (Boas 1947:252)

Similarly in (72), the pronoun \(-k\) stands alone, while the determiners \(-\text{gada}, -\text{kw}\) occur with the noun phrase halayu ësàlësal ò ‘death-bringing feather’:

(72) Wä, la’èm-k. làèjg-a’da halâ’yukù ts!è’lts!èbk. lôl... (early)
We, la’am-\text{k} latlì \([-\text{gada halayu} -\text{kw ësàlësal}]\) lutl...
well then \(-\text{D1} \) will be[\(-\text{D1 death-bringer-D1 feather }\] to+you...
This will be your death-bringing feather... (Boas and Hunt 1902:19)

The following table lays out some of the early central Kwak’wala determiners and pronouns side by side. This makes apparent that there is a clear difference between the two categories. For example, the subject determiners \(-\text{ga}, -\text{ux}, -\text{i}\) are similar to, but distinct from, the corresponding pronouns \(-\text{k}, -\text{ux}, -\text{i/\text{uni1E35}}\):

(73) Early determiners and third-person pronouns

<table>
<thead>
<tr>
<th>subject determiners</th>
<th>subject pronouns</th>
</tr>
</thead>
<tbody>
<tr>
<td>nonsp. specific</td>
<td>visible invisible</td>
</tr>
<tr>
<td>D1 -ga -gada</td>
<td>-k -ga’</td>
</tr>
<tr>
<td>D2 -ux -uxda</td>
<td>-ux -u’</td>
</tr>
<tr>
<td>D3 -i -ida, -a</td>
<td>-i/\text{uni1E35} -i’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(\text{x-object determiners} )</th>
<th>(\text{x-object pronouns} )</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1 -xg-a -xgada</td>
<td>-\text{kak} -\text{xa’}</td>
</tr>
<tr>
<td>D2 -\text{ux}x, -\text{wx} -\text{ux}xda, -\text{ixa}</td>
<td>-\text{kw} -\text{kw, ku’}</td>
</tr>
<tr>
<td>D3 -\text{x} -\text{xa}</td>
<td>-\text{k} -\text{ki’}</td>
</tr>
</tbody>
</table>
However, our modern data present a different picture. Although the details are complex, generally speaking the modern pronouns are more similar to determiners. The pronouns -gada, -xgada, -uxw(a), -i, for example, are identical to determiners:

\[(74)\] Modern determiners and third-person pronouns

<table>
<thead>
<tr>
<th></th>
<th>subject pronouns</th>
<th>subject determiners</th>
</tr>
</thead>
<tbody>
<tr>
<td>nonsp.</td>
<td>visible</td>
<td>invisible</td>
</tr>
<tr>
<td>specific</td>
<td>-gada</td>
<td>-gada</td>
</tr>
<tr>
<td>D1</td>
<td>-ga</td>
<td>-gada</td>
</tr>
<tr>
<td>D2</td>
<td>-uxw(a)</td>
<td>-uxwda</td>
</tr>
<tr>
<td>D3</td>
<td>-i</td>
<td>-ida</td>
</tr>
</tbody>
</table>

\[
\begin{array}{|c|c|c|}
\hline
\text{D1} & -gada & -gada \\
\hline
\text{D2} & -uxw(a) & -uxwda \\
\hline
\text{D3} & -i & -ida \\
\hline
\end{array}
\]

x-object determiners x-object pronouns

<table>
<thead>
<tr>
<th></th>
<th>x-object pronouns</th>
<th>x-object determiners</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-xgada</td>
<td>-gada</td>
</tr>
<tr>
<td></td>
<td>-kwx(u), -xw(a)</td>
<td>-uxw(a)</td>
</tr>
<tr>
<td></td>
<td>-i</td>
<td>-i', -i</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>-kwx(u)</th>
<th>-uxw(a)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-xgada</td>
<td>-gada</td>
</tr>
<tr>
<td></td>
<td>-kwx(u), -xw(a)</td>
<td>-uxw(a)</td>
</tr>
<tr>
<td></td>
<td>-x</td>
<td>-ki', -x</td>
</tr>
</tbody>
</table>

In fact, among these modern pronouns only D3 -i', D3 -ki', and D2 -kwx(u), -xw(a) are distinct from determiners. But even these vary with other forms that are identical to determiners, namely -i, -x, and -xwada. This variation is of two kinds. It results, first, from the replacement of invisible D3 -i', -ki' by their visible counterparts -i, -x (see 3.4), and second, of D2 -xw(a) by the D2 determiner -xwada:

\[(75)\] early modern

<table>
<thead>
<tr>
<th></th>
<th>early</th>
<th>modern</th>
</tr>
</thead>
<tbody>
<tr>
<td>pronoun</td>
<td>-i'</td>
<td>-i, -i'</td>
</tr>
<tr>
<td>determinant</td>
<td>-i</td>
<td>-i</td>
</tr>
<tr>
<td>pronoun</td>
<td>-ki'</td>
<td>-x, -ki'</td>
</tr>
<tr>
<td>determinant</td>
<td>-x</td>
<td>-x</td>
</tr>
<tr>
<td>pronoun</td>
<td>-kw</td>
<td>-kwx(u), -xw(a)</td>
</tr>
<tr>
<td>determinant</td>
<td>-uxxda, -xwa</td>
<td>-uxxwda, -xwa, -xwada</td>
</tr>
</tbody>
</table>

Such replacement represents a conflation not only of visible and invisible pronouns, but also of the more general categories of pronouns and determiners.

In the rest of this section, we will further illustrate the general loss of contrasts in the pronoun and determiner systems, then offer a generalization as to what may be happening here. We will look first at some examples where determiners serve as pronouns, and second, at the apparent loss of xes and other sounds that connect determiners to the words that come before them.

To begin with, modern Kwâk'wałâ does not entirely lack pronouns. The pronouns -xw, -x, for example, replace D2 and D3 referents, respectively:
Mayaxałantla-xw.  (modern)
I respect -D2
I respect him/her/it (around).

Duḵwalamantla-x.  (modern)
I see -D3
I see him/her/it (not around).

Conversely, even in early Kwagu’l, determiners sometimes serve as pronouns. Here, the determiners D1 -gada and D3 -ida appear without a following NP:

Ga’ams ganam -gada.
This (D1) + you woman-D1
This is the one who is your wife. (Boas 1947:258)

He’mas gukw -ida?
that (D3) + you house-D3
Is that what is your house? (Boas 1947:258)

In this use, -gada, -ida replace the early pronouns -k, -ik, respectively.
But whereas in early Kwagu’l this is observed mainly with -gada and -ida, among modern speakers we find other lone determiners as well. These include D2 -xwada (replacing the pronoun -xw), and D3 -xida, -xada (replacing -x):

Ix’akantla-xwada.  (modern)
I like -D2
I like this.

Ix’akantla-xida.  (modern)
Ix’akantla-xada.
I like -D3
I like that.

This is in addition to the more conservative use of -xwada, -xida, -xada as determiners—that is, with an accompanying noun phrase:

Mayaxałantla[-xwa gigame’-x].  (modern)
Mayaxałantla[-xuxwda gigame’-x].
Mayaxałantla[-xwada gigame’-x].
I respect [-D2 chief -D2]
I respect this chief.
(86) Laxd-i la [-xa nánwatsola]. (modern)
(87) Laxd-i la [-xida nánwatsola].
(88) Laxd-i la [-xada nánwatsola].
    went-D3 to [-D3 school ]
    He went to the school.

In short, while the modern language retains some of the richer pronoun system of early Kwakwala, it more frequently uses determiners in place of pronouns. However, whether this reduction of contrast between pronoun and determiner forms is accompanied also by a change in determiner meanings is not yet clear.

Next, we will look at the loss of connecting sounds from between determiners and the words that precede them. One such sound is the \( \chi \) in \( \chi \)-object determiners. The determiner \( -\chi gada \), for example, is sometimes pronounced \( -gada \):

(89) Dukwálama\(\)si[-\(\chi\)gada busi-x ]? (modern)
(90) Dukwálama\(\)s [-\(\chi\)gada busi-x ]?
    you see [-D1 cat -D1]
    Do you see this cat?

(91) Dax'idalaga-\(\chi\)gada!
    take -D1
    Do take this! (Sewid-Smith 1988:109)

(92) Dukw'idas-gada.
    you look -D1
    You look at this. (Sewid-Smith 1988:91)

Moreover, when \( \chi \) is lost, we sometimes observe that the connecting portion of a preceding word is lost too. Examples (90) and (92), for example, are missing not only an \( \chi \), but also the \( i \) that normally connects the ending \(-s(i) \) 'you' to a following determiner. Another connector that may drop is the \( t\(\)a\) in \(-n(t\(\)a) \) 'I' (94):

(93) A\(\)x'e\(\)xs\(\)dant\(\)la[-\(\chi\)wa k\(\)w\(\)a'sta-x ]. (modern)
(94) A\(\)x'e\(\)xs\(\)dan[-\(\chi\)w\(\)a da k\(\)w\(\)a'sta-x ].
    I want [-D2 cup -D2]
    I want this cup (around).

However, there is considerable variation in the droppability of connecting sounds. Some cases are completely rejected by our consultants:
Still, one kind of $\chi$-dropping that is frequent enough to show a rough pattern is that found in time expressions. To begin with, references to times before or after today typically take the nonspecific D3 determiner $-\chi$ (see 4.3):

\begin{enumerate}
\item[(97)] Ka/-lxwa/-/n-tła -/i\[g /n-\añutl]. (modern)
   I buy $-\D3$ night
   I bought that one (not here) last night. (U’mista 1981b:26)
\item[(98)] Ki’/sa/ñi ka/-lxwa -/x/ dzagat-a’  kéo -/e Bopa/-/x/-ñañwäl ].
   I not buy $-\D3$ jacket -D3 for-D3 Bob $[-\D3$ yesterday]
   I didn’t buy a jacket for Bob (not here) yesterday. (U’mista 1981b:40)
\end{enumerate}

This $-\chi$ is never missing in the U’mista data, whether the preceding word is another pointing word ($-\x/ki’$), a predicate ($k\ñxwa$), or an object ($Bo/b$).

In other sources, this $-\chi$ is sometimes present, and sometimes dropped:

\begin{enumerate}
\item[(99)] Oh! K\ñtidu’ñantla-ñ/ ganutl].
   Oh  I wrote $-\D3$ yesterday
   Oh, I wrote to her yesterday. (Sewid-Smith 1988:101)
\item[(100)] T\ñams’/duluñtase $-\chi$ Tom $[-\emptyset$ $-\ñañwål ]$.
   you telephoned-D3 Tom $[-\D3$ yesterday]
   You telephoned Tom yesterday. (Sewid-Smith 1988:103)
\item[(101)] Olakala ik -i ninoka’/e’ gaxa’e neñakw/is ump $[-\emptyset$ ganutl].
   They are very happy because their father came home last night.
\end{enumerate}

As with variation between $-\x/gada$, $-gada$, consultants sometimes give conflicting judgements on the possibility of $\chi$-dropping, or may accept both alternatives:

\begin{enumerate}
\item[(102)] Duxwätlañ-ñ/ gala $-\chi$ ganutl].
\item[(103)] * Duxwätlañ-ñ/ gala $[-\emptyset$ ganutl].
   I saw $-\D3$ bear$[-\D3$ night $]$
   I saw that bear last night. (consultant 1)
\end{enumerate}
Yet despite this variation, we find a rough pattern, which is that -x seems to be less droppable when it follows a predicate, and more droppable when the -x, if pronounced, would follow a non-predicate. Compare these data from a single consultant, who judged -x undroppable after the predicate gax/uni0331ntła- 'I come' (108), but preferred to drop it following the object tlątł̓am̓i 'hat' (110):

(108) Gax̱ntł̓a[-x ̀ganutł]. (modern)
(109) * Gax̱ntł̓a[-∅ ̀ganutł].
I come [-D3 night ]
I came last night. (consultant 2)

(110) Kalxwāntł̓a-xad ĭ tl̓at̓̓aml̓-i [-∅ ̀ł̓answ̓ał ].
(111) * Kalxwāntł̓a-xad ĭ tl̓at̓̓aml̓-i [-x ̀ł̓answ̓ał ].
I buy -D3 hat -D3 [-D3 yesterday]
I bought that hat yesterday. (consultant 2)

In this respect, auxiliary verbs like la 'go, to, at', and complex predicates like la sāpila 'go to the movies' and gax bagw̓q̓ns 'come to visit', behave like other predicates. That is, they usually require that a following -x be pronounced:

(112) Lān sāpila [-x ̀ganutł]. (modern)
(113) * Lān sāpila [-∅ ̀ganutł].
I go watch movies[-D3 night ]
I went to the movies last night.

(114) Gax̱m̓an bagw̓ansa[-x ̀ganutł]. (modern)
(115) * Gax̱m̓an bagw̓ansa[-∅ ̀ganutł].
I come visit [-D3 night ]
I came to visit last night.

But what do these patterns—namely, the use of determiners as pronouns, and the dropping of connecting sounds—say about modern Kwák̓wala determiner systems?
We would like to suggest that these may point to a more general development in modern Kwak'wala toward independent determiners.

More specifically, in early Kwak'wala, determiners were morphologically and phonologically dependent, in that they usually co-occur with a following noun phrase, and are always pronounced as a unit with a preceding word. In modern Kwak'wala, by contrast, determiners are more independent, in that they more frequently occur without an NP, and are pronounced with a weaker connection to the preceding word.

If this is correct, such a trend might explain, first, the use of larger forms like D2-χwada, D3-χada, which sound better as independent words than smaller, dependent -χwa, -χa. Second, the loss of connecting sounds between determiners and preceding words may reflect the lack of phonological connection between them. Third, as determiners occur more frequently without an NP, they increasingly fulfil the function previously reserved for pronouns, causing pronouns to fall into disuse.

In these respects, modern Kwak'wala determiners more closely resemble English determiners like this, that, which occur both with an NP, and alone (see 2.2):

(116) [This canoe] arrived yesterday.  (117) I love [that idea].
(118) This arrived yesterday.  (119) I love that.

It therefore seems likely that the development of independent determiners has come about through the influence of English. However, before proceeding to such conclusions, we would like to see firmer evidence for the phonological independence of determiners, such as from word stress, and hope to investigate this in future work.

3.6 Summary

In section 3, we have presented the results of our investigations into the first two research questions identified in 2.5, which had to do with the shapes of determiners in modern Kwak'wala, and with how they express distance and visibility. In doing so, we have identified several trends in the modern data.

After summarizing the determiner and pronoun systems of early (3.1) and modern (3.2) central Kwak'wala, we remarked on some minor differences between these (3.3). On the phonological side, modern determiners more frequently end in hissing sounds. On the morphological side, the modern data frequently omit the NP-internal determiners -i, -a, but at the same time exhibit other forms that are rare or unattested in early Kwak'wala, in particular D2-χwada, D3-χida, -χada.

Next (3.4), we discussed our findings concerning the marking of invisibility on determiners, which were that all six combinations of distance times visibility are indeed attested, but that invisible D1 and D2 are rare. Moreover, invisibility is marked even more rarely on pronouns, for all three degrees of distance.

Last (3.5), we discussed a couple of patterns that we took to be symptomatic of a trend in modern Kwak'wala toward independent determiners. These were that determiners more frequently occur without an NP, and are sometimes pronounced without certain sounds that would otherwise connect them to preceding words.
Further, as determiners increasingly take on the role of pronouns, one sees fewer modern pronoun forms that are distinct from determiners.

We have little to say concerning the source of these differences between early and modern determiner systems. However, a comparison with Boas's early descriptions indicates that the rarity of some invisible forms in modern Kwakwala probably continues a similar pattern from early Kwakwala (see 3.4). On the other hand, new forms like -wada, -wada, and the move toward independent determiners, may reflect influence from English over the last century (see 3.5).

4. Distance on determiners

4.1 Introduction

The third research question identified in 2.5 had to do with the meanings of determiner distance. We have seen that one of the things that Kwakwala determiners convey about their referent is its distance from the speaker, along a scale of three degrees of distance, which we have called D1, D2, and D3. In this section, we say some more about what these might mean.

We begin in 4.2 by reviewing a couple of previous approaches to the meanings of distance on determiners, and offer a new hypothesis that we call the spatial approach. Then in 4.3, we say why we think the spatial approach more accurately characterizes the different meanings, functions, and morphology of determiner distance.

4.2 Approaches to the meanings of determiner distance

The determiner parts that convey distance are, roughly speaking, the elements -ga, -w, and -i. We have called these by the neutral names D1, D2, and D3, respectively, to approximate the fact that they indicate increasing distance from the speaker. However, more precise characterizations of their meanings vary.

Boas characterizes the meanings of the degrees of distance as analogous to the distinction among first, second, and third persons:

(120) Boas on distance (1947:251)

D1 near first person (speaker)
D2 near second person (hearer, or person spoken to)
D3 near third person (person spoken of)

In other words, these mean ‘near me’, ‘near you’, and ‘near him, her, it, or them’. Let us call this the person-based approach to distance.

The U’mista Learning Kwakwala Series, by contrast, offers explicit translations of the different degrees of distance:
Let us call this the scalar approach to distance, since it differentiates D1, D2, and D3 in terms of their positions along a one-dimensional scale of distances.

Sewid-Smith also takes a scalar approach, describing the differences among D1, D2, and D3 in terms of explicit English concepts of near and far:

D1 close by, in, or beside the speaker
D2 near the speaker
D3 seen at a distance (visible), or not in the speaker’s presence (invisible)

So far, a couple of points are apparent from this overview of translations of D1, D2, and D3. First, these do not refer to absolute distances from the speaker (such as one metre, two metres, etc.), but represent conceptual categories. As such, their boundaries are flexible, growing or contracting to fit the context.

Second, regarding the meanings of these categories, the characterizations of D1, at least, are probably as accurate as they can be. Glosses of D1 referents as ‘here’, ‘near speaker’, or ‘within reach of speaker’, seem correct and more or less equivalent. On the other hand, characterizations of D2 and D3 vary significantly, indicating that it is still not well understood exactly how these differ from D1, and from each other.

What we would like to propose is that the important difference between D2 and D3 is that D2 referents, like D1 referents, lie inside some contextually relevant frame of reference, whereas D3 referents do not. We call this frame of reference the D2 space, and this approach the spatial approach to distance:

D1 in the D2 space, and near the speaker
D2 in the D2 space, but not near the speaker
D3 not in the D2 space

Or, in terms of plain English translations, we suggest that the three degrees of distance can be paraphrased as ‘here’, ‘around’, and ‘not around’, respectively.

This differs from previous approaches in a couple of significant ways. First, D2 is not midway between D1 and D3, but rather shares something with D1 that neither shares with D3. Second, D3 is not defined positively, either in terms of some person or a particular distance, but negatively, by lacking what unites D1 and D2.

To see this graphically, consider the diagram in (124), which portrays the speaker as a dot, and the D2 space as a circle. Here, the difference between D2 and D3
consists not in being near to a second versus a third person, nor nearer versus farther away, but rather within versus outside some relevant frame of reference:

In what follows, we discuss some more specific examples that reveal the shortcomings of the person-based and scalar approaches, and say why we think these point to a categorical distinction between D1 and D2 referents on the one hand, and D3 referents on the other, which can be characterized in terms of a D2 space.

4.3 Arguments for the spatial approach

Our arguments for the spatial approach to distance are based, first, on how determiners are used to refer to things, places, and times, and second, on some observations on the morphology of distance.

One argument against the person-based approach is that D2 and D3 referents are not necessarily near a second or third person. Take the following examples of D2 referents. While the food in (125) is indeed closer to the hearer, Maya in (126) can be the same distance from speaker and hearer, or even closer to the speaker, as long as she is not right next to the speaker:

(125) ḥaṃx’idaga’[-ux̂s ḥaṃa’yi-x]!
    eat [-D2 + your food -D2]
    Eat your food! (Nun’wa’kola 2006:20)

(126) Dīgīl [-uxw Maya-x] k̲a’āns.
    make tea[-D2 Maya-D2] for us
    Maya is making tea for us (in this room).

D3 referents, moreover, might not even be assumed to exist:

(127) ḥax’e̱xsdām̲a̱sî[-x di -’e’]?
    you want [-D3 tea-D3 + invisible]
    Do you want some tea?
It does not seem correct to say that this tea is near any person. Nor is it, strictly speaking, far away. It is distinguished not by any positive property, but negatively, by its lack of any immediate properties that affect the conversation. This is how the spatial approach defines D3—negatively, by non-inclusion in the D2 space.

Next, we offer a couple of arguments from how determiner distance is used to refer to places and times. The essence of these arguments is that the boundary between D2 and D3 referents is sometimes categorical, as opposed to gradual, in the sense that it matches a particular place or length of time. This indicates that the difference between D2 and D3 is based on some categorical concept, such as the D2 space.

Regarding place, we find that the boundary between D2 and D3 often corresponds to the boundaries of the village or town that the speaker is in. When one speaks about Gwa'yi, for example, Gwa'y is takes a D2 determiner if the speaker is in Gwa'y (128), but a D3 determiner if she is not (129):

(128) Olakala ik -sga'xi ḷən la [-xuxw Gwa'y] -x].
very good-D1 that I in[-D2 Kingcome Inlet-D2]
It's very good to be in Kingcome. (said in Kingcome)

(129) Latłan ne'nakwtl la [-x Gwa'y] ḷənstłe'.
I will go home + future to[-D3 Kingcome Inlet] tomorrow
I'm going home to Kingcome tomorrow. (said in Victoria)

In terms of the spatial approach, it seems that for the purpose of talking about location, the language favours a D2 space that corresponds to the present town. Still, this seems to be possible only when the domain of discussion is larger than the present town. In contexts where the domain of discussion is entirely contained within the present town, then things in the town can be D3:

(130) Latłan la [-xa Health Centre].
I will go to[-D3 Health Centre]
I will go to the Health Centre (tomorrow, in the present village).

(131) Tłumən əx’e’sd ḷən le’ən la [-xa såbilas].
I really want that I go to[-D3 theatre]
I really want to go to the show (in the present town).

Similarly, determiners that refer to times, as opposed to people and things, tend to treat the present day as the boundary between D2 and D3, so that times that lie within the present day take D2 determiners:

(132) Ik [-uxwda ḷala-x].
good[-D2 day -D2]
It's a good day (today).
(133) Wiqilaxdasi [-xwa ga’ala -x ]?
you did what[-D2 morning-D2]
What did you do this morning?

(134) Walas-uxw wadal[-uxwda ganutl -ex ].
big -D2 cold [-D2 evening-D2]
It’s very cold this evening.

By contrast, times preceding or following the day of utterance are D3:

(135) Laxd-i Lorna la-x Gwayi [-∅ langs’al ].
went-D3 Lorna to-D3 Kingcome[-D3 yesterday]
Lorna went to Kingcome yesterday.

(136) Latl -i Lorna la-x Gwayi [-∅ langs’ -e’ ].
will go-D3 Lorna to-D3 Kingcome Inlet[-D3 tomorrow-D3 + invisible]
Lorna will go to Kingcome tomorrow.

(137) Wiqilatlasi [-x ga’alatl -a’ ]?
you will do what[-D3 tomorrow morning-D3 + invisible]
What will you do tomorrow morning?

To summarize, while the distinction between D2 and D3 is flexible, changing with the context, its tendency to snap to the present town or day indicates that it rests on some general, but categorical concept. In the spatial approach, the D2 space is such a concept. In the scalar approach, by contrast, D2 and D3 are relative points on a continuum, and not separated by any categorical boundary.

Last, we offer an argument from determiner morphology that supports the negative definition of D3. Consider this fragment of the determiner system:

(138) pre-NP | NP-internal
| D1  | -gax | -xga | -sgax | -(a)x | -ga’ |
| D2  | -uxw | -xuxw | -suxw | -(e)x | -e’x, -a’x |
| D3  | -i   | -x   | -s    | -i, -a, -∅ | -e’, -a’, -o’ |

As we have seen, determiners consist of several meaningful parts, variously indicating function, distance, specificity, visibility, and possession. However, the following template analysis (see 2.4) of some of these determiners shows that, while D1 and D2 determiners explicitly indicate distance, D3 determiners do not:
To be precise, all D1 determiners contain either ga or x, while D2 determiners contain uxw or x. Since these are constant across determiners of the same distance, but differ between D1 and D2, we may conclude that it is these parts that indicate distance. By contrast, the D3 determiners -x, -s contain no distance portion, since their entire content indicates their function—that is, x-object and s-object, respectively. They are recognizable as D3 only because they are neither D1 nor D2.

Although this is not as clear for other D3 determiners like -i, -a, -e', -a', there are reasons to think that these likewise contain no distance portion. For example, the NP-internal D3 determiners -e', -a' are identical to D2 -e'x, -a'x minus the x that signals D2, which suggests that the parts e', a' signal invisibility, not distance.

It is possible that the D3 determiners -i, -a explicitly signal distance, but another possibility is that they are default endings, used when no more explicit ending is appropriate. For one thing, NP-internal -i, -a are frequently missing (see 3.3). For another, whereas ga, uxw occur both alone and with preceding x, s (as in -xga, -sga), pre-NP -i occurs only alone, when no other determiner part is present.

We suggest that these observations on the morphology of D3 determiners indicate that D3 is not a separate category of distance, but rather the absence of the meanings or features conveyed by D1 and D2. In other words, D3 is defined negatively, which we take to support the spatial approach to the meaning of distance.

4.4 Summary
In section 4, we have proposed a new approach to defining distance on determiners that we call the spatial approach. This approach defines distance in terms of nearness to speaker, and with respect to a frame of reference that we call the D2 space. Whereas D1 and D2 are defined positively with respect to one or the other of these properties, D3 is defined negatively with respect to both properties.

We then offered some observations on determiner use and morphology that we think are problematic for traditional person-based and scalar approaches to determiner distance, but support the spatial approach. First, D2 and D3 referents are not necessarily near a second or third person.

Second, the boundary between D2 and D3 tends to snap to the present town in discourses about location, and to the present day in discourses about time, indicating that this boundary is based on some categorical concept like the D2 space, as opposed
to a gradual conception of distance as in the scalar approach. Last, D3 determiners sometimes or always lack a portion that explicitly signals distance, supporting our contention that D3 is defined negatively.

We expect that further progress on the spatial approach will consist in more precise and formal definitions of the semantics that distinguish the three degrees of distance. Although we have suggested that these can be defined in terms of two features, roughly ‘near speaker’ and ‘in the D2 space’, much remains to be said regarding the nature of these notions, and how they adjust to the context.

5. Conclusions

In this report, we have tried to offer some useful background on Kwak’wala determiners, and have presented the results of our investigations into modern determiner systems. While most of our results had to do with differences in determiner forms between early and modern central Kwak’wala, we also offered some observations on the meanings of determiner distance.

Our principal findings concerning modern determiner forms, and the sections where these are discussed, are summarized in the following points:

- Modern forms more often end in hissing sounds (-χw, -χ, -e’χ, -a’χ, -uł) (3.3).
- The NP-internal D3 determiners -i, -a are less common in modern data (3.3).
- There may be a meaning difference between the D3 forms -χa, -χida (3.3).
- Some speakers use the apparently new forms D2 -χwada, D3 -χada (3.3).
- Combinations of D1 and D2 plus invisible are unusual (3.4).
- Invisibility is marked less often on pronouns than on determiners (3.4).
- Modern determiners are more frequently used as pronouns (3.5).
- Modern determiners have less phonological connection to preceding words (3.5).

In the course of our investigations, we were also struck by certain patterns in the uses of the three degrees of distance that are marked on determiners. In section 4, we argued that these support a spatial approach to the interpretation of distance, whereby D1, D2, and D3 are defined with reference to the speaker, and to a contextually determined D2 space. Based on this approach, we proposed for D1, D2, and D3 the glosses ‘here’, ‘around’, and ‘not around’, respectively.

We see several directions for further work on modern determiner systems. First, we have yet to thoroughly catalogue the modern forms of s-object determiners, of pronouns, and of determiners and pronouns in contact with other words. Next, further comparison of speakers from different generations might shed light on the origins of some of the differences that we have found between early and modern speech. Last, the proposed spatial approach to determiner distance requires a more rigorous semantic treatment before it can be considered conclusive.
Appendix A. Kwak’wala alphabets and transliteration

A.1 **Alphabets**

There are several alphabets that have been used to write Kwak’wala. This can be an obstacle to learning the language, and to making use of the full range of available materials. We therefore offer this summary of spelling systems both as a key to the spelling used here, and as a reference tool for the reader (and for ourselves!).

We compare five systems that we refer to as the U’mista, Grubb, Liq’wala, IPA, and Boas alphabets. After summarizing these in table form, we offer some observations on their differences, and on our transliteration of Boas and Hunt’s materials.

These are the forty-two consonants and six vowels of Kwak’wala in five alphabets, arranged to put similar alphabets closer together, and in alphabetical order according to the U’mista letters:7

(140) Five Kwak’wala alphabets

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<tr>
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<th>a</th>
<th>ą</th>
<th>b</th>
<th>d</th>
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<td>dl</td>
<td>dz</td>
<td>e, e</td>
<td>g̣</td>
<td>g̣w</td>
</tr>
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<td>/uni1D07, ă, î, ŭ</td>
<td>b</td>
<td>d</td>
<td>dz</td>
<td>e</td>
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<td>k’</td>
<td>kw, k’</td>
<td>kw’</td>
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<td>q</td>
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</table>

In U’mista materials, ts is alphabetized before tl, and the sounds ‘l, ’m, ’n, ’w, ’y (l, m, n, w, y) are not treated as separate letters, making the total number of consonants there thirty-seven. See appendix A.2.

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7 In U’mista materials, ts is alphabetized before tl, and the sounds ‘l, ’m, ’n, ’w, ’y (l, m, n, w, y) are not treated as separate letters, making the total number of consonants there thirty-seven. See appendix A.2.
For explanation regarding how to pronounce the sounds of Kwak’wala, see U’mista (1981a), *The Sounds of Kwakwala*.

These spelling systems differ in both obvious and subtle ways, most of which do not concern this report. However, we will offer here some further background on each alphabet, as well as some clarification of our own spelling.

The Boas alphabet was the first accurate Kwak’wala alphabet, and is used in the linguistic and ethnographic materials produced by George Hunt and Franz Boas. While a knowledge of the Boas alphabet is necessary for one to take advantage of these important, early sources, it is more complicated than necessary for most purposes, and is the most unlike any other in use today.

The U’mista alphabet is a practical alphabet made to be writable on a normal typewriter. It is based on the practical alphabet for Northwest languages devised by Randy Bouchard (1970-1977), and adapted for Kwak’wala by David Grubb (1972a, 1972b, 1977) and U’mista (1981). It has been adopted by the U’mista and Nun’wa’kola Cultural Societies, of Alert Bay and Kingcome Inlet, respectively. We use the U’mista system here because we feel it is the most accessible to the most people.

Very close to the U’mista alphabet is the one used in Grubb’s (1977) Kwak’wala dictionary. This is another practical alphabet, and differs from the U’mista one only in a few symbols, and in its placement of apostrophes on hard sounds.

The alphabet adopted for Liq’ala by BC School District 72 is based on symbols in wide use among linguists in North America, representing what is sometimes called an *Americanist* transcription, and dating back to certain recommendations of Herzog et al. (1934). Since Americanist transcriptions are based on recommendations, as opposed to a standard, there are many different versions. For example, where the Liq’ala alphabet uses $d^z$, other Americanist transcriptions may use $dz$ or $z$, or may write the back sounds $g̣$, $g̣/uni02B7$, $x$, $x/uni030C/uni02B7$ not with wedges, but with underdots, as $g̣$, $g̣/uni02B7$, $x$, $x/uni030C/uni02B7$.

We also provide, for comparison, the sounds of Kwakwala in the International Phonetic Alphabet (IPA). Unlike Americanist transcriptions, the IPA is an international standard, and is maintained and promoted by the International Phonetic Association. See the IPA’s 1999 *Handbook*, or their website at [www.arts.gla.ac.uk/IPA](http://www.arts.gla.ac.uk/IPA).

### A.2 Writing the hard humming sounds

Although we use the U’mista alphabet, we differ from some other presentations of it in our writing of the hard humming sounds—that is, the glottalized versions of the plain humming sounds $l$, $m$, $n$, $w$, $y$. We write these as single letters with an apostrophe above ($l$, $m$, $n$, $w$, $y$), rather than before ($'l$, $'m$, $'n$, $'w$, $'y$). For example, Gwayi ‘Kingcome Inlet’, $maxwalan$ ‘I admire’, as opposed to *Gwa’yi, ’maxwalan*.

We do so, first, to make clear the distinction between a hard sound like $m$, and a sequence of a glottal stop (‘) followed by a plain sound. Second, representing the hard

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8 On the other hand, we have retained the spellings of Liq’ala of *Liq’ala* that are preferred in School District 72, as well as some established two-letter spellings of the hard humming sounds, in particular *Kwakwaka’wakw, Nun’wa’kola*, and *U’mista*. See appendix A.2.
humming sounds as single letters makes some sound patterns easier to describe, especially involving word stress, and where one finds the short a/uni0331 vowel.

On the other hand, the two-letter spelling ('l, 'm, 'n, 'w, 'y) helps to convey that the hard humming sounds are pre-glottalized, or pronounced with tense vocal cords at the beginning of the consonant. In this way they differ from the hard plosive sounds (p/uni0313, t/uni0313, t/uni0313ł, t/uni0313s, k/uni0313, k/uni0313w), which are ejectives, or pronounced with a stronger explosion of breath. In short, the placement of apostrophes depends partly on what sort of information one wants to convey, and partly on personal preference.

A.3 Transliteration of vowels

Last, some explanation is in order regarding our presentation of data from Boas and Hunt’s work. In this report, we have transliterated their data into U’mista spelling. While transliteration of consonants is unproblematic, vowels present certain issues.

We assume the following correspondences among vowel symbols:

(141) Vowel correspondences

| U’mista | a | ā | e | i | o | u |
| Liq’wala | a | ā | e | i | o | u |
| Boas | a, ā | e | ā | e | ē | ĩ | ī | ē | ĕ | ā | ē | ê | ā | ū | ū | o | ō | ū | ū |

However, because Boas and Hunt used so many vowel symbols, converting these to the six U’mista vowel letters results in some loss of information. Particularly difficult are the high (i, u) and mid (e, o) vowels. Corresponding to U’mista i, e, Boas and Hunt have i, i, e, ē, ĕ, ā, Ī, ī, ē, ĕ, ā, ē, ĕ, ā, ū, ū, o, ō, ū, ū. Despite this, older Kwagu’l probably distinguished only six vowels like other varieties, namely a, ā, e, ē, i, o, u (but see below). However, whereas for Boas the letters e and o represent the same phonemes as i and u, respectively, in U’mista spelling e, o represent different phonemes from i, u.

Boas was aware that i, e were a single phoneme, and likewise u, o (Boas and Hunt 1902:5). Nevertheless, we are reluctant to obliterate Boas and Hunt’s detailed transcriptions, because they are potentially informative, and convey something of the character of the Kwagu’l pronunciation of their time, as compared to the more recent pronunciation on which the U’mista alphabet is based.

Therefore, in our presentation of sentential examples, we have provided Boas and Hunt’s original transcription alongside a transliteration in U’mista letters. However, we generally present single words in U’mista spelling only.

Another issue concerns Boas and Hunt’s ē, which fails to correspond neatly to any modern symbol, and may represent a seventh vowel phoneme. To begin with, Boas and Hunt’s (1902) arrangement of vowel symbols into three rows, comprising schwa (ē), short vowels, and long vowels, suggests that ē is the long version of ē:
For comparison, we reproduce Boas’s (1947) arrangement as well, which omits ē.

On the other hand, their description indicates that ē is unique. Whereas ī is ‘i in hill’, ē is ‘a somewhat doubtful sound, varying greatly in its pronunciation among different individuals between ĕ and ē’ı’. In other words, Kwagu’l ē was sometimes closer to modern central Kwak’wala ī, and sometimes like the diphthong in English eight.

Furthermore, when we compare Kwagu’l words with ē to corresponding modern words, we find that early ē corresponds sometimes to modern ī, and sometimes to e:

(143) early modern

wē’g’a, wā’g’a’ı wige ‘Go on!’
hē, he hi, he ‘that, there (D3)’

This suggests that some speakers have (or had) a seventh vowel, pronouncing it something like ei in English eight, and that this vowel has been lost in other pronunciations, merging either with ī or with e. In any case, it seems best for the present to transliterate ē straightforwardly as ī, until more is learnt about it.

Appendix B. Glossary of technical terms

adjective: A word that describes a person or thing. Abbreviation: A.

consonant: A sound made with a partly or completely closed vocal tract. The Kwak’wala consonants include plosive, hissing, and humming sounds.

determiner (also called demonstrative, deictic, article, or clitic): A short word that can occur alone, or with a noun phrase, and helps to determine which person or thing is being talked about. Abbreviation: D.

determiner phrase: A phrase consisting of a determiner, and sometimes an NP as well, that specifies which person or thing is being talked about. Abbreviation: DP.

diacritic: An extra symbol that changes a letter’s pronunciation ( ’ ˘ ˙ ˝ ˛ ˚ ).

distance (also called location or deixis): On determiners, distance refers to how far the person or thing being talked about is from the speaker. There are three degrees of distance on Kwak’wala determiners, which we call D1, D2, and D3.

function (also called case): In this report, we refer to the different roles that subjects, x-objects, and s-objects perform in the sentence as their functions.
**glottal stop**: A catch in the throat. A consonant that consists of a closing and releasing of the vocal cords. In Kwakwala it is written as ‘, ?, ʔ, or . See appendix A.1.

**hard sound** (also called **glottalized**): A sound made with tense or closed vocal cords. Hard sounds are written with an apostrophe over them. See appendix A.2.

**hissing sound** (also called **fricative** or **spirant**): A sound made by obstructing the airflow through the vocal tract enough to cause noisy hissing (l, s, x, xw, x̌, x̌w, h).

**humming sound** (also called **sonorant** or **resonant**): A sound made with vibrating vocal cords. In Kwakwala, these include all vowels, and the consonants l, m, n, w, and y.

**morphology**: The structure of the meaningful parts of words. The study of this.

**noun**: A word that refers to a person or thing. Abbreviation: N.

**noun phrase**: A phrase consisting of a noun, plus zero or more adjectives or other modifiers, that refers to some person or thing. Abbreviation: NP.

**NP-internal** (also called **postnominal**): Appearing inside a noun phrase. NP-internal determiners in Kwakwala come after the first word of their noun phrase.

**object**: A referent that is involved in the event described in a sentence, but is not the subject. In the sentence *The father loves his son*, the phrase *his son* is an object.

**person**: A way of referring to people and things based on their relationship to the people involved in a conversation. First persons (*I, we*) include the speaker, second persons (*you*) are those spoken to, and third persons (*he, she, it, they, this, that*) are people or things spoken of, but not taking part in the conversation.

**phoneme**: A psychologically significant sound. A single phoneme can have several pronunciations within the same language, but these are treated by the sound pattern of the language as the same sound.

**phonology**: Language sounds and their interaction. The study of this.

**plosive sound** (also called **stop**): A consonant made by stopping, then releasing the flow of air in a small explosion (p, t, tt, ts, k, kw, k, kw, ‘).

**predicate**: The most important word in a sentence, which indicates the action, event, description, or state that the sentence is about. In Kwakwala, the predicate is usually the first word in the sentence.

**pre-NP** (also called **prenominal**): Appearing before a noun phrase.

**pronoun**: a single word that takes the place of a name or noun phrase. The English personal pronouns are *I, we, you, he, she, it,* and *they.*

**referent** (also called **relatum**): Something that is referred to. A person or thing picked out by a determiner.
s-object (also called instrumental or indirect object): An object whose determiner begins with s. Usually, s-objects are indirectly affected by an action or event, are the means by which an action happens, or are possessors.

specificity: On determiners, this refers to whether the speaker has in mind a specific person or thing (specific), or is only talking about that type of thing (nonspecific). Boas calls specific and nonspecific forms vocalic and consonantic, respectively.

spirantization: A change whereby the plosive sounds tl, k, kw, k, kw become the corresponding hissing sounds l, x, xw, x, xw. Plosive sounds tend to spirantize inside words when followed by another consonant, and less often at the ends of words.

subject: The main referent that a sentence is about. In the sentence The father loves his son, the phrase the father is the subject.

syntax: The structures of sentences. The study of this.

visibility: On determiners, this refers to whether the person or thing being talked about is visible to the speaker, or not visible to the speaker.

vowel: A sound made with an open vocal tract (a, g, e, i, o, u).

x-object (also called accusative, objective, or direct object): An object whose determiner begins with x. Usually, x-objects refer to people or things that are directly affected by an action, or refer to the time of an event.

References


First Peoples' Language Map of British Columbia. maps.fphlcc.ca/fphlcc.


