Onomatopoeia in Kwadacha Tsek'ene
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Introduction

Kwadacha Tsek'ene (sek) is an endangered language of the Dene (also known as Athabaskan) language family, spoken in Kwadacha, the local name of Fort Ware, British Columbia, Canada.[1] The Tsek'ene (anglicized Sekani) language is/was traditionally spoken in two other British Columbia communities, McLeod Lake and Tsay Keh (by descendants of speakers from Fort Grahame), and is closely related to the Dane-Zaa language (also known as Beaver), spoken in several communities in British Columbia and Alberta. Kwadacha appears to be a mixed language in the sense of Bakker & Muysken 1994 and Velupillai 2015, as it exhibits more than the usual amount of language mixing, extensively incorporating lexical and grammatical elements from Tahltan and Kaska into inherited Tsek'ene (Hargus 2020).[2]

Dene is a subfamily with the Na-Dene family, also known as Athabaskan-Eyak-Tlingit (Leer 2006, Leer 2010). Sapir 1915:536-7 described the morphological structure of Na-Dene[3] as follows:

> The typical Na-dene word is built up of a number of monosyllabic elements (in most cases of form cv), one of which is the main stem, about which cluster a number of subsidiary etymological and grammatical elements that may be termed prefixes and suffixes. The various elements of a word, aside from certain ones that are perhaps best considered as proclitic and enclitic particles, make up a coherent enough morphological unit, but are far from welding together in a manner suggestive of such form units as we are accustomed to in Indo-germanic or are found also in many American Indian languages (e. g., Kwakiutl, Eskimo, Yana, Southern Paiute). Most of the elements preserve a considerable share of individuality, while many can, indeed, be shown to be identical in origin with or specialized forms of independent stems.

Position of onomatopoeia in Kwadacha Tsek'ene

This description of onomatopoeia in Kwadacha Tsek'ene is based on fieldwork 1985-1986 and 1999-2019, especially with native speakers Mike Abou, Mary Charlie, Edna McCook, Eileen McCook, and Louie Tomah.[4] Previously, missionaries Dave and Kay Wilkinson

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[1]The community of Kwadacha is located between the confluences of the Fox and White Rivers with the Finlay River, and the name Kwadacha is an anglicization of **Kwùdàtą** 'White River'. According to Patterson 1994, the Hudson Bay Company established a trading post in what is now Kwadacha/Fort Ware in 1927, naming it after their employee William Ware (see also "Hudson's Bay Company Archives - Biographical Sheets").

[2]Also telling is this entry from Kari 1988:45, fieldnotes from an interview with Peggy and Charles Quock of Iskut, British Columbia: "strong lexical diffusion between Tahltan + Sek.".

[3]Sapir's Na-Dene also included Haida, now generally acknowledged to be a language isolate (Goddard 1996), not a Na-Dene language.

produced a book on literacy (Wilkinson & Wilkinson 1969b) and a set of Bible stories (Wilkinson & Wilkinson 1969a) for Kwadacha Tsek'ene. Some vocabulary for other dialects of Tsek'ene can be found in publicly available sources (e.g. Morice ca. 1900, Jenness 1937, Hargus 1985a, Davis 2008). None of these works discuss onomatopoeia and the source with the most extensive lexical documentation, Morice ca. 1900, does not appear to contain any onomatopoeia.

My fieldwork in Kwadacha resulted in some descriptive grammatical materials (Hargus 1985b, Hargus 2002, Hargus 2005b, Hargus 2005a, Hargus 2009, Hargus 2010), including a grammar in preparation (Hargus in preparation); a dictionary (Hargus 2019a) with 7,440 accompanying sound files based primarily on field materials through 2004; and texts, primarily of Mike Abou, distributed on the web ("Kwadacha Texts and Recordings") (see also Hargus 2019b). Dissemination of results is ongoing.

Description of onomatopoeia

Phonology

The bold symbols in the consonant and vowel charts in (1) are orthographic,[5] with IPA values, if different, in brackets.

(1)   Consonant and vowel inventories of Kwadacha Tsek'ene

b [p]	**t** [tʰ] **d** [t]	**tl** [tɬʰ] **dl** [tɬ]	**ts** [tsʰ] **dz** [ts]	**ch** [ʧʰ] **j** [ʧ]		**k** [kʰ] **g** [k]	**'** [ʔ]
	t'	**tl'** [tɬ']	**ts'**	**ch'** [ʧ]		**k'**	
		lh [ɬ] **l**	**s z**	**sh** [ʃ] **zh** [ʒ]	**yh** [ç]	**kh** [x] **gh** [ɣ]	**h**
m	**n**						
w					**y** [j]		

ii [i]		**oo** [u]	
i [ɪ]		**wu** [ʊ]	
e	**u** [ɐ]	**o**	
	a [ɑ]		

A subset of the vowel qualities are contrastively nasalized, transcribed with subscript ogonek: **į̇į̇ ę ų ą ǫǫ ǫ**.

Kwadacha Tsek'ene is a tone language, with surface tones high (**a**), low (**à**), rising (**àa**) and falling (**aà**). All vowels transcribed without a tone diacritic have high tone, as low tone

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[5]To make this article accessible to the widest possible audience, data is transcribed in the local orthography.

impressionistically occurs on fewer roots in Kwadacha Tsek'ene than high tone as low tone is historically derived from final glottalization (Krauss 2005). The contour tones are very restricted in distribution and occur on lengthened vowels.

The onomatopoetic roots of Kwadacha Tsek'ene are for the most part unremarkable phonologically. The onomatopoetic vocabulary obeys the phonotactic and syllable formation rules of Kwadacha Tsek'ene. All contain at least one vowel and lack consonant clusters, which are highly restricted. The consonants **r f p** [pʰ] are also found in loan words, but are not attested in onomatopoeia. Most onomatopoetic roots have high tone but some have low tone, similar to the incidence of low tone in roots in the lexicon. Some onomatopoetic and non-onomatopoetic roots are nearly identical. Compare **ts'uz** (sound of a squirrel chattering), **tsuz** 'dry wood, firewood'; **dʉ̀lh** 'thump, thud', **sʉ̀lh** 'gaff hook'. However, some sounds which are rare in Kwadacha Tsek'ene are found in onomatopetic roots: (1) syllable final **k** and **kh** (**t'ok** 'pop', **bokh** (loud report from a bigger gun such as .30-.30), and (2) rising tone (**wàa** noise of laughing).

The only phonologically anomalous onomatopoetic word is **diidiidiidii** (noise of thunder), with obvious syllable repetition. Kwadacha Tsek'ene, like other Dene languages, does not employ reduplication for morphological purposes.[6]

Morphology and syntax

Although as Sapir 1915 noted, Na-Dene languages extensively employ affixation, for which the languages of the family are justly famous (Rice 2000), it is also the case that many words consist of a root alone, without affixes. In Kwadacha Tsek'ene, like other Dene languages, adverbs, numbers and many nouns (unless derived from another lexical category) are all formed this way, monomorphemic but not necessarily monosyllabic.

Most onomatopoetic words of Kwadacha Tsek'ene are likewise free, monomorphemic roots.[7] One of the onomatopoetic roots of Kwadacha Tsek'ene is an unanalyzable disyllable, **to'o** (report from a smaller gun such as .22). The other disyllable, **wughwush** (sound of stomach rumbling), appears to be an affixed form of the root **ghwush** 'expanded', and is related to the following words: nouns **wusghwush** 'bubble, foam', **nisghwush** 'soapberry'[8], **-tsìsghwusha** 'curly hair', **-lasghwusha** 'gloves', **lhik'esghwusha** 'forked stick', **-nàhkhwushè'**[9] 'short rib';

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[7]This is in contrast to other Dene languages in which the onomatopoetic vocabulary is a subclass of the verbal system (e.g. Ahtna, Kari 1979; Witsuwit'en, Hargus fieldnotes). In those languages, onomatopoetic roots are bound, and must be prefixed with **d-l-**; e.g. Witsuwit'en **d-l-bi'** 'talk without teeth' (verb lexeme), **dilbi'** 'he/she is talking without teeth' (inflected verb form).
[8]Soapberries foam up when whipped.
[9]The initial consonant of the root is voiceless after **h**.

verbs **de#d-n-ghwush**[10] 'boil over', O-**h-khwusha** 'pack O (large or disheveled load), **w-h-khwush** 'pack pl., multi-task'.

In the dictionary (Hargus 2019a), onomatopoetic words are treated as an independent lexical category, abbreviated (*ono*). Onomatopeia can be identified as such from syntactic context. Onomatopoetic words generally[11] occur as an argument to **dèjàh** 'it sounded' (2b) or **widii/wudii** 'one says' (2a,c). Only onomatopetic words occur as an argument to **dèjàh**. **widii/wudii** can introduce complements other than onomatopoetic words.

(2)   Onomatopoetic words found in spontaneously produced sentences in interviews
a.

Su-bùt	**t'àh**	**"wughwush, wughwush"**	**wi-dii.**
1SG.PSR-stomach	inside	O	AR-say

'My stomach is rumbling.'

b.

Si-lìdii-yè'	**nu#d-ìs-tl'iid-i**	**'èh**	**su-dzèè'**	**dùlh**	**dèjàh.**[12]
1SG.PSR-tea-PSD	spill#spill-s.PF-spill-REL	then	1SG.PSR-heart	O	it.sounded

'My heart went thump when my tea spilled.'

c.

Kwùsǫ	**na#gh-d-ùs-detl.**	**Zutl**	**wi-dii.**
probably	back#3PL.SUB-forth-S.PF-pl.go	O	AR-say

'They must have gone home. It's quiet (in the house).

Spontaneously produced sentences like those in (2) could be considered mini-texts. Some onomatopoetic words were produced in longer, more formal texts. In (3)b., the onomatopoetic word **ghųtl** is syntactically isolated, also sometimes seen with onomatopeia.

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[10]The symbol # marks the disjunct boundary, separating outer verb prefixes from inner ones (Li 1946).

[11]There is also one example of an onomatopoetic word occurring in a sentence with the verb **'udii** 'says thus' and another example of an onomatopoetic word used with regularly conjugated forms of **d-nii** 'say' (see Semantics for both examples).

[12]The morphological structure of **dèjàh** cannot really be ascertained without related forms of this verb, but this verb cannot be conjugated for subject or tense. The root is **–jàh** 'happen', which is found in a number of verbs.

(3)   Onomatopoetic words found in texts

a.

Nuso#d-nu-get-de   **bokh**   **dejàh.**

turn#turn-turn-crawl-when   O   it.sounded

'When it (black bear) turned around, there was a gunshot.' (*Early Travels*)

b.

Kwa,   **lhį̀įdò̧**   **m-a-tiiya#w-ìì-jàh-ii**

finally   nearing.end   3SG-P-tired-AR-PF-happen-REL

lhìghè'   *too close*   **'u#y-ìì-làh-ii**,

one   do.to#3SG.OBJ-PF-do.to-REL

du-k'à'   **kìihdladii**   **'èh,**   **ghų̀tl.**

                        kù#ii-h-dlad-ii

3SG.REFL.PSR-arrow   out-GH.PF-yank-yank-REL   and   pow

'Finally as he was getting worn out, one of them came too close, so he whipped out his own

arrows and pow.' (*Nats'oodalh 8*)

        The example in (4), also from a text, is considered spontaneous sound imitation rather

than onomatopoeia, because the form **sh** lacks a vowel, and seems to be an imitation of the sound

of breathing, referred to in the preceding sentence.

(4)   Sound imitation

Mu-dul-è'   **dune**   **tsììkhò̧'**   **'è#h-t'e.**

3SG.PSR-blood-PSD   person   brain   resemble-resemble-resemble

'Its blood looked like a person's brains.'

Boy I guess   **'ujììh**   *eh*.

            D-yììh

            breathe

'I guess it was breathing.'

Gee   "**sh, sh**"   **wi-dii**.

                    AR-say

'It was making a sh, sh sound.' (*Grizzly Story*)

The example in (4) could perhaps be considered a stage in the lexicalization of **sh** as imitative of the sound of a grizzly (or other large animal?) breathing. It is noteworthy that **sh** is a consonant of Kwadacha Tsek'ene, and the verb of the sentence is **widii**, which introduces other more clearly onomatopoetic words.

Semantics

The corpus of onamotapoetic words in Kwadacha Tsek'ene (see Appendix) is not large. One reason for this is that Kwadacha Tsek'ene is an endangered language, and the speech community was never very large to begin with. The indigenous people of this part of British Columbia were characterized by movement and migration, as noted by several sources (Morice 1892-1893[13], Morice 1912, Jenness 1937, Friesen 1985), compared to the indigenous people west of the continental divide, who lived in drainages with annually returning populations of salmon. Another reason for the small corpus of onomatopoetic words is that onomotapoeia was not systematically elicited. These are words that essentially turned up randomly in interviews and texts.

The most common type of sound expressed by onomatopoeia in Kwadacha Tsek'ene is an exploding/thumping sound: heart beat, thunder, gun shot, pop, explosion, objecting hitting antoher object. We even find two onomatopoetic words that overlap in meaning: **t'elh** = **dừlh** (strong beat of the heart). (**dừlh** also refers to the sound made by hitting a solid object). A small number of onomatopoetic words express animal noises: squirrel (2 synonymous words), rabbit, mouse, sparrow. Perhaps the most interesting concept expressed in the onomatopoetic vocabulary of Kwadacha Tsek'ene is the absence of sound, lexicalized in **zutl**.

In general, other sounds that might be onomatopoetic in other languages are expressed in one of two ways in Kwadacha Tsek'ene. 1. There is a lexical verb which expresses the concept, as in (5). However, unlike Dene languages like Ahtna and Witsuwit'en, there is no morphological or syntactic evidence that sound-expressing verbs are a distinct subclass of Kwadacha Tsek'ene verbs:

(5)   Some verbs which express sounds

'udehkhòḥ   'he/she is snoring'

duzulh   'he/she is shouting, it's growling, hooting'

dukwus   'he/she is coughing'

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[13]Morice 1892-1893:184 noted that the Tsek'ene were "entirely nomadic".

dudlòw	'he/she is laughing, smiling'
widudèh	'he/she is talking'
yahtich	'it (dog) is barking'

A variant on this pattern, perhaps, is the lexicalization of the additional onomatopoetic sound, the sound of sneezing, which is expressed with the verb **d-nii** 'say', conjugated as usual for person, number and TAM, along with an onomatopoetic word, **khu'ayhii** or **khu'àhii**, which varies depending on speaker.

(6) **khu'ayhii/khu'àhii d-nii** 'sneeze' (lit. 'say atchoo')

a. **Lhadzè'** **khu'ayhii** **di-nii.**
elsewhere atchoo say-say
'Sneeze somewhere else.'

b. **'Udoo** **su-k'èh** **khu'àhii** **di-nii.**
NEG 1SG-on atchoo say-say
'Don't sneeze on me.'

2. The agent or force that produces the sound is the subject of an intransitive sentence containing the verb **'udii** 'says thus, emits (sound), makes (noise)' (related to **widii/wudii** 'one says', and both related to **d-nii** 'say'):

(7) Intransitive sentences containing **'udii**

Diih chow **yìdighè** **'u#dii.**
blue.grouse up.there thus-say
'A blue grouse is making noise up there.'

Tahtl'ah **dzè'** **too tsughii** **'u#dii.**
headwater there loon thus-say
'There's a loon crying at the head of the lake.'

Kuda **'u#dii** **d-ì-s-ts'ugh.**
moose thus-say hear-hear-1SG.SUB-hear
'I hear a moose calling.'

Nàhtunii   **'u#dii**   **d-ì-s-ts'ugh.**

thunder   thus-say   hear-hear-1SG.SUB-hear

'I heard the thunder making noise.'

The example in (8) is based on this pattern, but is a little different, containing what is analyzed here as an onomatopoeic word **dòòwa** (noise of a crowd).[14]

(8)

Ghùje   **yìdighè**   **dòòwadii**

                        dòòwa#u-dii

goose   up.there   O   thus-say

'A gaggle of geese is making noise up there.'

Conclusion

        Kwadacha Tsek'ene has a relatively small but grammatically coherent set of onomatopoeic forms, which are for the most part free roots which are morphologically underived and do not participate in morphological derivation. We have also noted one example of sound symbolism which occurs in one of the contexts in which onomatopoeia is found.

Appendix

	onomatopoeia	meaning	English translation
1	**diidiidiiidii**	noise of thunder	
2	**dlęh**	sound of a squirrel chattering	
3	**ts'uz**	sound of a squirrel chattering	
4	**k'wę**	sound of a rabbit in distress	
5	**ts'ǫǫs**	sound of a mouse squeaking	
6	**t'elh**	strong beat of the heart	
7	**dùlh**	strong beat of the heart; sound of hitting a solid object like a table, causing a vibration	thump, thud

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[14]In), dòòwa has phonologically fused with the verb. This is a common process in Kwadacha Tsek'ene for verbs whose initial prefix is ''u# 'thus'.

8	tòòts	sound of diarrhea	
9	wughwush	sound of stomach rumbling	
10	zel	sound of a bell or tapping on glass; sound of a sparrow	ding, dang
11	bokh	loud report from a bigger gun such as .30-.30	bang
12	to'o	report from a smaller gun such as .22	bang
13	doots	sound of a heavy object hitting the ground (animate or inanimate)	thump, thud
14	gwùch	sound of hitting a hard object like a rock or a head	
15	tootl	sound of a hard object hitting water	splash
16	ghųtl	sound of a hard object (arrow, rock) hitting a solid object	pow
17	gwun	a hollow or exploding sound	boom
18	t'ok	a popping sound	pop
19	wàa	noise of laughing	haha
20	zutl	silence, absence of sound	
21	khu'ayhii, khu'àhii	sound of sneezing	atchoo
22	dòòwa	noise of a crowd (kids playing, geese honking)	

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