BC Indigenous people's *Chinuk pipa* script: History, analysis, and texts[1]

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This study is the first to structurally analyze and trace the history of the endangered *Chinuk pipa* script, as used circa 1900 by Salish people of southern interior BC. This 'shorthand' grew from 19th-century intellectual trends toward maximal efficiency. This first community literacy was adopted with an enthusiasm unusual for a pidgin-associated writing system. Reasons for the brevity of its vogue are traced, relating to the increasing dominance of English. As examples, texts written by Salish people in two of their native languages and in Chinook Jargon are presented.

t'íxʷəɬ ɣ-ʔ-[χ-]q'y-n'-tén *'You[r] way of writing is unusual' [said in the Shuswap Salish language about shorthand] (Kuipers 1974:241)*

1   Introduction

This study provides the linguistics literature's first historical description and structural analysis of the *Chinuk pipa* script. The name means 'Chinook writing' in a local dialect ('Kamloops Chinúk Wawa' or KCW) of Chinook Jargon (CJ) (Robertson 2011, 2012). This shorthand-based writing system was, from 1891 to circa 1915, the first community-wide literacy for thousands of BC's Interior Salish people. They employed this writing system primarily for communication in CJ, but an important lesser use was for writing in Salish languages. This endangered alphabet has not been described systematically in the literature (cf. Johnson 1978:50ff, Vrzić 1999:75ff).

Increasing the awareness of *Chinuk pipa* among scholars has clear value. For example, a voluminous amount of Kamloops Chinúk Wawa is preserved in this alphabet. There are thousands of published pages of KCW: about 250 issues of the newspaper *Kamloops Wawa (KW)* and dozens of other publications written by Jean-Marie-Raphaël Le Jeune, OMI. My research has turned up approximately 600 unpublished texts written by Indigenous people, most brief but in total over 35,000 'words' or morphemes of spontaneous written language. The material in this dialect thus constitutes something like 50% to 75% of known CJ, which is dominated by much-plagiarized wordlists

(cf. Johnson 1978). Its having not been examined in any depth constitutes a serious gap in the scholarly literature on CJ in particular and on pidgin languages in general.

A significant amount of material in eight Salish languages is also preserved in this writing system: Shuswap, Thompson, Okanagan, Lillooet, Stó:lō, Squamish, Sechelt and Sliammon (Le Jeune 1892, 1893, 1896a-c, 1897a-c, 1925). This material too has been unstudied by linguists; compare Zwartjes on 'the historiographical neglect of missionary linguistics' (2011:2-4).

The present study seeks to remedy this situation by briefly introducing the historical background of *Chinuk pipa* writing (§2), then describing its structure and function (§3). A summary follows (§4), including evaluations of both the adequacy of this writing system for representing the languages written in it, and of issues involved in present-day work on a font (electronic character encoding) for this endangered writing system. An Appendix illustrates Indigenous-written texts of various genres in Shuswap, Thompson and Chinook Jargon.

2   History

Oblate Catholic missionaries, who made their first sporadic visits to the territory of the modern-day province of British Columbia in the early 1840s (Whitehead 1988:25), were regularly working among the southern Interior Indigenous by the 1860s (Fisher 1977:138). Education of BC's Indigenous children was a longstanding priority, resulting in the construction of schools on the lower Fraser River and at Victoria, Williams Lake, and Cranbrook (Cronin 1960:68ff, 99ff, 112ff, 205ff). The first school for Indigenous people in the area, founded by Marie-Charles Pandosy, OMI, in 1859, made for an inauspicious start, failing soon after its opening (cf. pp. 68-69). But the Oblates retained their desire to create Indigenous-language literacy to help spread Christian knowledge. They saw literacy as a tool of great potential value for missionaries who might visit a given village only once every few months (pp. 169-179).

By 1885 Adrien-Gabriel Morice, OMI, appeared on the scene. He introduced a syllabic script for the Carrier Dene/Athabaskan language (Cronin 1960:160). He had managed to interest numerous people in reading and writing, and was self-publishing a newspaper for them titled *Test'les Nahwelnek* ('The Paper that Relates', in the translation of Johnnie and O'Hara 1992). Soon Oblates elsewhere in BC began experimenting with syllabics for Salish languages and Chinúk Wawa. Some 500 'books' of such syllabic productions were said to have existed in the late 1880s at the Oblates' headquarters in New Westminster (*KW* #260, March 1916).[2] These documents, which were among the earliest for the province's Indigenous languages, have unfortunately not yet been found in archives.

By June 15, 1890, according to *Kamloops Wawa* (#150, March 1897), at a retreat of BC's OMI missionaries at New Westminster, discussion turned to Morice's success with his Carrier syllabics. At that meeting, John Chiappini,

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[2] No further Dene/Athabaskan languages are mentioned as occurring in these materials.

OMI, asked, "Why not try shorthand instead? It's much simpler and quicker to write" (ibid.; cf. Mulhall 1986).[3] Monsignor Paul Durieu, OMI, responded approvingly, and Le Jeune, having learned the Duployan shorthand in France 20 years before, took this on (*KW* #150, March 1897).

The Abbé Emile Duployé's stenography, launched in 1860 (cf. Duployé 1860a,b) had been used by many thousands of Francophones around the world, including Canadian parliamentary and court reporters (viz. *Sténographe Canadien* 1889-1910; *KW* #63, 29 January). (See Appendix: Figure 1.) Periodicals and books devoted to the subject were numerous (e.g. Brandt 1901, Navarre 1905, Brück 1910).   International shorthand competitions and exhibitions were frequent (cf. *Sténographe Canadien* 1892, *KW #*68, 5 March 1893).

The shorthand served an important function. Politicians and others in the nineteenth century initiated a sustained intellectual drive to make written communication, both personal and published, more 'efficient'. This was presumably a byproduct of the Industrial Revolution, a historical epoch characterized by the introduction of labour-saving technologies (cf. Deane 1965, Hindle and Lubar 1986). The devotion to efficient expenditure of time and effort common to the various shorthands invented in the 1800s—including the still well-known Gregg, Pitman, and Sloan—is captured in Isaac Pitman's aphorism, "Well arranged time is the surest mark of a well arranged mind" (Baker 1908). Coeval expressions of the same intellectual trend include Alexander Melville Bell's phonetic 'visible speech' (Bell 1867), the Deseret Alphabet introduced by the Church of Latter-Day Saints in preference to standard English orthography (cf. University of Deseret 1868), spelling reforms such as the Shavian script (cf. Read 1964-), Morse and other telegraph codes for long-distance communication, as well as the invention and continued refinement of mechanical aids to writing such as typewriters through the century (Beeching 1974) and mimeographs toward its end (A.B. Dick Company 1890), both of which came to be used by Le Jeune in disseminating his *Kamloops Wawa*. (See Appendix: Figure 2.)

As will become clear below, Le Jeune took on the task of implementing a writing system for Kamloops Chinúk Wawa. The result can be seen in Table 1 below. It is possible that he saw Chinook shorthand as a mechanism for rationalizing communication—making it highly regular and logical in structure—paralleling the contemporary search for an artificial universal language (cf. Anonymous 1887). It is known that CJ was labeled, for example, an 'International Idiom' (Hale 1890), a '(Western) Volapük' (Osborn 1900:37), and the 'Oregon Esperanto' (Fee 1941). Another widespread pidgin of similar function, Plains Indian Sign Language, was characterized similarly by contemporary writers, for example as a 'Volapük of the Plains' (Ralph 1892:23) and again a 'Western Volapük' (Seton 1918). Le Jeune certainly was acquainted with these ideas. In *Kamloops Wawa* he reported on a newspaper article discussing Chinúk Wawa as a 'universal language' (*KW* #128, May 1895). What remains unestablished is whether he himself actually embraced such thought.

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[3] *Pourquoi pas plutôt essayer de la sténographie? C'est beaucoup plus simple et plus court à tracer.*

By August 1, 1890, Le Jeune had started experimenting with lessons of simple *Chinuk pipa*, listing letter-sequences such as *a, ah, ha, aha, ah ha, hha, haha, ap, apa, papa, pah, paha, pahata, ta, tata, tatata, tah, taha, tahata, taht, tahpa* (*KW* #153, June 1897).[4] No later than December of that year, while Le Jeune was visiting Indigenous villages south of Kamloops, "a poor Indian cripple, named Cha[r]lie Alexis Mayoos [május] [Lottie Lindley, p.c.], from the Lower Nicola, saw the writing for the first time, and got the intuition of the system at first sight" (*Kamloops Wawa* 1895h; #153, June 1897). Mayoos was Le Jeune's model student. The priest saw him as the first Indigenous person to successfully learn the *Chinuk pipa* (cf. *Kamloops Wawa* 1893h). Figure 3 in the Appendix (shown reduced, as are all the following illustrations) is part of a shorthand letter written by Mayoos in his native Thompson Salish.

Back at Kamloops in January 1891, Le Jeune began preparing some notebooks of basic shorthand lessons for Thompson Indians. He also distributed these among the Shuswap peoples through his colleague J.M. Le Jacq, OMI. When Le Jeune next traveled among villages such as Coldwater, he found the shorthand idea taken root there (as remembered in *KW* #153, June 1897). By Easter of 1891, he described the "Indians" as having made good progress, specifically due to the personal direction of Mayoos, who died not long after (about April 20, 1893) at approximately 25 years of age.

From that point onward, *Chinuk pipa* continued to catch on. Soon the Indigenous people were posting notes to one another (*KW* #128, May 1895), writing numerous letters, scribbling graffiti (*KW* #113, February 1894), marking graves (Tepper 1987), creating calendars (Linda Smith, p.c.), and reportedly keeping diaries (Lucas Damer, p.c.). Literacy blossomed to such an extent that Le Jeune in May 1891 felt the need to launch a periodical, *Kamloops Wawa*, devoted to spreading knowledge both of the writing system and of Christianity. In this venue additional uses for the script arose such as letters to Le Jeune (e.g. *KW* #137, February 1896) and want ads (e.g. *KW* #126, March 1895). People also began to sign their names in shorthand on the newspaper, and making marginal notes. Figures (4-6) in the Appendix illustrate some of these uses.

All of the above-mentioned functions of shorthand literacy were characteristically fullfilled in one language, Kamloops Chinúk Wawa. That is, few texts from Indigenous people in their native Salish languages have been found: these total around a half-dozen each in Thompson and Shuswap (Robertson 2007). Equally few *Chinuk pipa* texts in other languages are known. They number about a dozen letters, or parts of non-*Chinuk pipa* letters, written in English or French by Oblate priests and now located in the Archives Deschâtelets. The domination of *Chinuk pipa* by KCW may be a mark of the script's 'language dependency', in Coulmas' terms (1989:42ff). This is the idea that scripts historically tend to be invented for a particular language. They may then become the vehicles of the spread of writing to other cultural groups. In such a case, Coulmas considers that a script is often first borrowed *together* with the language normally written in it. That is, it is typically only after this step that the writing system will be adapted to the borrowing group's native language.

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[4] These are not necessarily meaningful sequences, though many resemble Le Jeune's shorthand spellings of Salish words.

> Borrowing the script only and adapting it to the respective native language might have been more trouble than borrowing the script *and* the language for whose writing it was used in the first place. (Coulmas 1989:43.)[5]

In this light a reminder is in order that the name of the shorthand was, literally, 'Chinook writing'. *Kamloops Wawa* was published primarily in KCW (with smaller amounts of English, Salish, and other languages) in shorthand, until 1904, when it switched to English and French only. The next, and final, publications using *Chinuk pipa* were two isolated booklets aimed at a non-Indigenous readership (Le Jeune 1924, 1925).

Reasons for the decline of KCW and *Chinuk pipa* likely include the success of Le Jeune's stated program of what might now be called planned obsolescence. In a series of articles in *KW* (#60-67, 8 January-26 February 1893), the editor had described the purpose of this literacy as bringing Indigenous people with minimal effort to knowledge of the English language and its alphabet. Various evidence suggests that that goal had been effectively achieved, at least among younger generations of Salish, soon after the turn of the century. While Salish chiefs (presumably an older generation) still required an English interpreter and signed their names with **X**'s as late as circa 1920 (Wendy Wickwire, p.c. 2009), Indigenous texts in *Chinuk pipa* are quite rare after 1900.[6] Attestations from local histories likewise suggest that the heaviest KCW use occurred before then (as summarized by Robertson 2005).

Exceptions existed. A very few Indigenous families are known to have taught *Chinuk pipa* to succeeding generations, some of whom held onto that knowledge. As late as circa 1980, Aimee August of Neskonlith, born circa 1905, was still reading and writing in KCW (Ellaschuk 1990:46; Wendy Wickwire, p.c.). Carl Alexander of Lillooet (p.c., 2003) recalls his father reading *Chinuk pipa*. But the evidence suggests that the trend was indeed toward a switch to English within a generation.

Chinuk pipa, in its success, is a rare pidgin literacy. As reported by both Charpentier (1997) and Mühlhäusler (1995), writing of pidgins typically remains unstandardized, impairing teaching efforts. But as noted above, *Chinuk pipa* spellings display a great deal of uniformity, which correspondingly may have aided speedy acquisition.

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[5] There are counterexamples to language-dependency. In an ancient case of a script named for but independent of its source language, "The Greeks and others accepted, quite explicitly, the Phoenicians' writing system as the basis of their own (using the term *phoinikẽia grámmata*), **but not a single element of their language**." (Ostler 2005:45-46; emphasis added.)

[6] *Chinuk pipa* is documented as <u>not</u> being understood by whites outside the southern BC Salish missionary environment. (Cf. Le Jeune's frequent advice to Indigenous writers to address mail using the Roman alphabet: *KW* #14, 6 March 1892; #123, December 1894; #133, October 1895; #134, November 1895; #138, March 1896; etc. etc.) So it is reasonable to infer that the customary 'X' mark seemed more appropriate than actual shorthand signatures when addressing the government.

Another obstacle to pidgin literacy tends to be that it is perceived in the community as—and usually is—an idea imposed by 'expatriate outsiders' (Mühlhäusler 1995:252, 263, 267-9). Many pidgin users, whose values will have been formed by "local indigenous languages and the philosophy and world-view associated with them," "feel that…one can do without writing, felt to be foreign and another kind of interference in their local affairs" (Charpentier 1997:223). Exactly these kinds of attitude were reported by Le Jeune at various times in his newspaper. For example, in *Kamloops Wawa* (#199c, December 1901), he reported an Indigenous man as arguing that it was ridiculous to write down prayers etc., since the Indigenous people already had these in their heads; (1) reproduces his complaint:

(1)   *kaltash ukuk pipa kopa nsaika, nsaika komtaks styuil kopa nsaika latit*
        'this writing is worthless to us, we know the prayers by heart [lit. in our heads]'

One chief was reported to have burned all shorthand materials in his village when he realized this literacy threatened social norms in enabling young people to have secret romances (*KW* #128, May 1895).[7]

Yet in general, the Salish people of the southern interior of BC enthusiastically adopted *Chinuk pipa* and put it to extensive use as their first community-wide literacy, until such a time as the desired English literacy began to take hold (*KW* #60-72, 8 January-2 April 1893). Le Jeune's claims of a rapidly burgeoning Indigenous literacy and a steadily growing subscriber base— from 75 at first report, in early 1892 to 2,000 within three years' time—indicate this (*KW* #24 and 25, 08 May and 15 May 1892; #124, January 1895). Texts written by Indigenous people appear in considerable numbers in 1892, and are known from dozens of authors until past 1900, with some known to have been sent from the western front during World War 1 (Robertson et al. 2005). Additional evidence supports the view that *Chinuk pipa* was enthusiastically received. Le Jeune and his correspondent L.N. St. Onge frequently discuss 'Indians' who were corresponding with priests and seminarians in Europe and North America (*KW* #114, March 1894; #138, March 1896), as well as to each others' villages in organized letter-writing drives (*KW* #113, February 1894). Beyond its sheer ubiquity, a robust measure of the script's popularity is its use for casual purposes, apparently including love notes, cartoons, graffiti, and other diversions.[8]

This literacy was inextricably associated with Chinook Jargon, but ample evidence demonstrates that it was in active use for Salish languages too. Known native Shuswap literates included 'many Shuswaps' (*KW* #130, July 1895), including those at:

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[7] Compare text 133.014 (April 10, 1899 from Johnny Louis): *taii Shini iaka= kaltash wawa kopa* Kamlups Wawa *pipa wawa ilo tlus ukuk pipa* 'Chief Jimmy is saying bad things about the *Kamloops Wawa* newspaper, saying, "That paper is no good." '
[8] *KW* (#128, May 1895; #153, June 1897) and marginal inscriptions in items at Secwepemc Archives.

- **Williams Lake / Sugarcane**: 'several people' (*KW* #116 'bis', May 1894; #130, July 1895)
- **Kamloops** (*KW* #30, 12 June 1892) including chief Louis Clixlexqen (*KW* #115, April 1894), Elie Larue (*KW* #70, 19 March 1893) and pupils of the Kamloops Industrial School (*KW* #551, April 1917)
- **Shuswap (Lake)-area** (*KW* #30, 12 June 1892; #59, 1 January 1893; #64, 5 February 1893) including Etienne of Salmon Arm (*KW* #11, 31 January 1892)
- **Clinton and High Bar** (*KW* #167, August 1898)
- **North Thompson / Chu Chua** (*KW* #63, 29 January 1893)
- **Nicola Lake** (singing from a hymnal at the blessing of a church; *KW* #98-102, October 1893)

Native literacy in Thompson was fairly widespread, too, including these places:

- **Coldwater** (*KW* #115, April 1894), where 'several people' read and wrote (*KW* #116 'bis', May 1894; #260, March 1916) including Antoine Shanti Man, Ignace Chilchilsta, and Dyurnst (sp.?) (*KW* #66, 19 February 1893) as well as Mayoos
- **Douglas Lake** (*KW* #260, March 1916)
- **Nicola Lake reserve** (*KW* #98-102, October 1893)
- **North Bend** (*KW* #114, March 94)
- **Lytton** (presumably, since Franz Boas asked the local Native people to write down Coyote stories for $2 a page; *KW* #123, December 1894)
- **'Lillooet Meadows'** [sic] (*KW* #130, July 1895)

Salish people's learning of this additional, quite distinct, *Chinuk pipa* script and CJ in order to reach proficiency in English apparently should be seen as unusual. Pidgin literacy is a burden that Charpentier reports as typically resisted by Indigenous people in pidgin-speaking environments (1997:235ff). Mühlhäusler concurs (1995:259), reporting an unwillingness of Indigenous populations to let their children gain literacy in any language *but* English. This attitude is not apparent in the *Chinuk pipa* situation. Indigenous children at Kamloops Industrial [residential] School had at least sporadic *Chinuk pipa* lessons (e.g. in Shuswap) as well as instruction in English (*KW* #78, 14 May 1893; #128, May 1895; #148, January 1897; #551, April 1917). The Salish found the shorthand literacy well worth undertaking for as long as necessary; they repeatedly declared themselves enthusiastic about it, at the same time as knowledge of English spread among them. (Examples appear in *KW* #72, 2 April 1893; #123, December 1894; #130, July 1894; etc.)

This co-literacy supports at least one of Mühlhäusler's generalizations: "a greater share of [pidgin] literates invariably means a greater share of literates in St[andard] E[nglish]" (1995:267). Certainly *Chinuk pipa*'s very success implied its competition with, and demise in favour of, English. Even the fact that Le Jeune eventually reported both 'Indian' and English prayers to be losing favour reflects these languages' twined fates:

At several schools, for one reason or another, the prayers in Indian have been done away with, and the praying is only in English anymore. I notice that the majority, coming to school not knowing a word of English, and lacking even mediocre understanding of it till after two or more years, learn their prayers in English like parrots and keep repeating them mindlessly. When they leave school, they look down on the prayers in Indian, they have no fondness for the prayers in English, and they have soon left all of it behind.   [My translation from *KW* #269, December 1916].[9]

3   Structural description

In providing the first structural description of *Chinuk pipa*, I have found it useful to analyze the script in terms of the following parameters: the characteristically 19th-century trait of having rational, intentional structure (§3.1), broad phoneticity (§3.2), alphabeticity (§3.3), cursiveness (§3.4), direction of writing (§3.5), and subdivisions within written texts (§3.6).

The discussion of *Chinuk pipa*'s structure that follows can be cross-referenced with the alphabet chart in Tables 1 and 2 below.

CONSONANTS:

	Plain		*With diacritic (on short form)*	
Connecting letters (inherently rightward and/or downward unless specified)**:**				
STRAIGHT		*short*	*long*	*with diacritic*
	/	l	r; #5	ł
	—	t; #2	d	th
	\	f; #3	v	--
	|	p; #1	b	--
[down, left]	/	k; #4	g	k'; q
CURVED	∩		sh; #8	ch
	∪		s; #9	ts
	)		n; #7	ng
	(		m; #6	--
		Non-connectors:		
	·	h	ʾ	x

Table 1: *Chinuk pipa* consonant symbols

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[9] *Dans plusieurs écoles, pour une raison, ou pour une autre, on a discontinué les prières en Sauvage[,] on ne prie plus qu'en Anglais. Je remarque que la plus grande partie, venant à l'Ecole sans savoir un mot d'Anglais, et ne pouvant le comprendre même médiocrement qu'après deux ans et plus, apprennent leur prières en anglais comme des perroquets, et continuent ensuite à les répéter sans y penser. Quand ils sortent de l'Ecole, ils dédaignent les prières en Sauvages, ils n'ont pas de goût pour les prières en Anglais, ils ont bientôt fait de tout abandonner.*

VOWELS (*no inherent direction*)**:**

Singletons:

°	a; #connector of identical 'straight' numerals
O	o; #0
9, O	u (second form used in isolation only)
⊂	i

Diphthongs:

⊙	aw
⊖	wa
⊘	wi
\	yu

Triphthong:

☺	waw

Table 2: *Chinuk pipa* vowel symbols

In the following discussion, written forms are given *in italics.* The discussion makes especial reference to Chinook Jargon, but it applies to Indigenous people's writing in Salish languages as well (see Appendix for example texts).

3.1   Rationality

Le Jeune's goal in creating *Chinuk pipa* was to introduce a rational, easily learned script based on a logical, intentional system (cf. *KW #*60-67, 8 January-26 February 1893). Additionally, all symbols were to be written as quickly as possible, making this a tachygraphy—a system specifically designed for rapid writing—like the many other shorthands invented in the 19th century (§2). Effort too was to be conserved, by minimizing the number of strokes required to write each letter symbol by hand (*KW #*200, March 1902, p.116).

Another reason for an interest in manual efficiency lies in editor Le Jeune's need to disseminate the *Kamloops Wawa* newspaper. No typeface (*ayu tanas chikmin stamp* 'many little metal stamps') for *Chinuk pipa* existed (*KW* #128, May 1895). Therefore all publications in KCW were handwritten and laboriously printed in one of two ways. They were most frequently composed, sometimes with the help of Emma Harry, Alice Larue and Angele Edward, Indigenous women from Kamloops (*KW* #60, 8 January 1893; #64, 5 February 1893; #67, 26 February 1893), on an Edison mimeograph machine. This process took about two days of work (*KW* #128, May 1895); the newspaper was then printed as images using a roller press. For a time, when Le Jeune had access to greater monetary resources, masters were written on tablets and mailed

to 'Canada' (the eastern provinces) to be photoengraved. This gave a crisper image that resembled typeset publications.[10]

   The very basic shapes that resulted from the impulse toward *Chinuk pipa* efficiency were geometric. These included straight lines that can be imagined as compass indicators ideally in the directions Northeast, East, Southeast, South, and Southwest (2a-e respectively; '#' indicates that the symbol has an additional function as a *Chinuk pipa* numeral; cf. *KW* #160, January 1898): [11]

(2) (a) /   *l*
    (b) —   *t, #2*
    (c) \\   *f, #3*
    (d) | *p, #1*
    (e) /   *[downward]* *k, #4*[12]

There were also curves, both semicircles (3a-e) and quarter-circles (f):

(3) (a) ∩ *sh, #8*
    (b) ∪ *s, #9*
    (c)) *n, #7*
    (d) (*m, #6*
    (e) ͨ *i*
    (f) ⎝ *yu*

Circles were used also, as in (4):

(4) (a) ° *a, #connector (of identical 'straight' numerals)*
    (b) O *o, #0*

And there were two nonconnecting letters, a point and a tilde-like shape, both shown in (5):

(5) (a) · *h*
    (b) ʿ *x*

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[10] Contemporary claims that Le Jeune was typesetting in a shorthand font probably misinterpret the appearance of the photoengraved editions. These claims probably are based on Zeh (1906) (cf. Chamberlain 1911 and Bates 1912). Such publications sometimes further confused *Chinuk pipa*, which Le Jeune often taught syllable-by-syllable (cf. Le Jeune 1893), with Morice's Carrier / Dakelh Athabaskan syllabics, which had been successfully committed to a typeface (Johnnie and O'Hara 1992:21). Le Jeune added to the confusion himself by sometimes presenting the shorthand syllable by syllable.
[11] Glatte (1959:13) calls shorthands using such shapes 'geometric' as distinguished from 'cursive' ones (where symbols are simplifications of standard longhand letters). Since I discuss *Chinuk pipa*'s 'cursivity' in another sense below, that distinction is not followed in the present discussion.
[12] See §3.5 below for more information on the direction of writing.

The only letter shape consisting of more than a single stroke is the round letter *u*. It is also the only letter whose form varies, unlike the Roman alphabet, which has many formally distinct pairs such as <A a, D d, N n> etc. *U* has an alternate shape when in isolation (unconnected to other letters); both are shown in (6):

(6)　　(a)　　　　(connecting)
　　　　(b)　　　　　　　　　　(in isolation)

A corollary of shape-invariancy is that no distinction of capital from lower-case forms exists.

　　Size is another dimension along which some symbols are differentiated, as (7) illustrates:

(7)　　　　　　　　　*(shorter length)*　　　　　　　　　*(longer)*

　　(a)　　/　　　　　　　　*l*　　　　/　　*r, #5*

　　(b)　　—　　　　　　　*t, #2*　　—　　*d*

　　(c)　　\　　　　　　　*f, #3*　　\　　*v*

　　(d)　　|　　　　　　　*p, #1*　　|　　*b*

　　(e)　　/　　*[downward]*　*k, #4*　　/　　*g*

Only the straight symbols are consistently distinguished this way. The pattern is that the short member of a pair is unvoiced, and the long one is voiced (excepting of course the *l:r* set in (a)). Le Jeune advised learners to exaggerate the difference in length, making it a 1:2 or even 1:3 ratio (*KW #*136, January 1896).

　　The following discussion will make use of a concept of straight-line letter 'species'. Each symbol-form, with its characteristic spatial orientation but without regard for relative size, will be termed a species hereinafter. Each species will be named for its shorter, non-diacritically marked member. Thus the 5 species, indicated here by capital letters, are *T K P L F*.[13]

3.2　　Broad phoneticity

　　Following Duployé's approach, Le Jeune referred to his script as a 'phonography'—a way of representing the way words sound (*KW* #68, 5 March 1893). The former's French-language script had striven for isomorphy, the representation of each distinct sound with a unique symbol. In turn, Duployé was probably inspired by Pitman's (1837?) invention of what was called 'phonographic shorthand'.

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[13] I represent the species with capital letters, following the linguist's way of notating archiphonemes (neutralization of the distinction among two or more otherwise contrastive sounds).

Chinuk pipa, however, lacks a way to indicate certain phonemic distinctions, such as /e i j/ (cf. Robertson 2003), /ts ts'/, and /k kʷ/, that are present in pan-Chinúk Wawa. This fact is illustrated in (8):

(8) **KCW** **pan-CJ**[14] **gloss**
     text#

    (a) *t<u>i</u>k<u>i</u>* /tíki/ 'to want' [86]
        s<u>i</u>nts ? /sénts/ 'cents' [116]
        <u>i</u>aka /yáka/ 3rd person [124]
    (b) *<u>ch</u>ok* /tsəqʷ/ 'water' [134][15]
        <u>ts</u>im /ts'əm/ 'written' [142]
    (c) *komta<u>k</u>s* /kəmtəks/ 'to know' [3]
        mo<u>k</u>st /mákʷst/ 'two' [76]

In other phonological domains, more distinctions are made than exist in CJ, particularly in the vowel system. For example, although no special symbol exists for schwa /ə/ (a trait shared with Duployé's original French-language shorthand), this sound is written with its approximate phonetic value from word to word, as in (9):[16]

(9) (a) *w<u>i</u>ht* /wə́χt/ 'also' [109]
    (b) *skuk<u>u</u>m* /skúkəm/ 'strong' [111]
    (c) *t<u>a</u>n<u>a</u>s* /tə́nəs/ 'little' [120]

Being overspecified, vowels are written in effect as phones, that is in more detail than a strictly phonemic transliteration would use. The overdifferentiation of vowels extends to the use of certain special diphthong symbols *aw*, *wa*, *wi*, and *yu*, as shown in (10):[17]

(10) (a) *h<u>aw</u>s* /háws/ 'building' [121]
     (b) *<u>Wa</u>ii* ? /waji/ Wayi (name) [14][18]
     (c) *<u>wi</u>k* /wík/ 'not' [15]
     (d) *<u>yu</u>tl* /yutɬiɬ/ 'happy' [20]

Resultantly, no separate letters exist for glide (approximant) consonants *w y. In general, consonants are underrepresented. Consonants often function

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[14] Pan-CJ phonological forms are based on Zenk and Johnson (2003), / CTGR Chinuk Wawa Language Program (2011), except inferred forms, which are marked with '?'. Bracketed numbers indicate which text in the KCW corpus supplied the cited form.

[15] This KCW spelling norm reflects a common pan-CJ variant pronunciation.

[16] Duployé, on the other hand, implicitly analyzed schwa as a non-phoneme of French. His system never transliterated this sound with any symbol at all. Thus, his shorthand represented the masculine singular definite article *le* as <l>, and the preposition *de* as <d>.

[17] The inclusion of diphthong symbols in *Chinuk pipa* of course does not make it a syllabary, any more than the symbols *е ю я ё* /ye yu ya yo/ make Russian writing syllabic.

[18] Recorded as <Y-ee> in documents at Chase and District Museum and Archives, Chase, BC.

as archiphonemes, cover symbols for "the unit resulting from neutralization of two established phonemes in the language", Dixon (2010a:272).

Glottal stop is one possibly phonemic sound that is unspecified—has *no* representation—in *Chinuk pipa*, as the blanks in (11) illustrate:

(11) (a)   *ha̱ha̱*   ~ /χaʔχaʔ/   'holy'   [31][19]
      (b)   *tai̱i*   /tayʔi/   'chief'   [38]

KCW suprasegmentals such as stress, intonation, and juncture are essentially absent from my corpus. No KCW material from Indigenous writers or Le Jeune indicates prosody in an interpretable way. Since the much later audio recordings, Myers (1989) and Gabriel [n.d.], are sung, those are poor fallback sources for such information. The available data on KCW prosody is nearly encompassed by one consultant's memories about emphatic lengthening: Indigenous ranch hands in the Quilchena, BC area would greatly lengthen the stressed vowel of a 'Chinook' word in order to impart emphatic effect, for example [sayá::] '<u>way</u> far away' (Guy Rose, p.c., 2006).[20]

3.3   Alphabeticity

Chinuk pipa was approximately phonemic in nature, and so it is properly classified as an alphabet (Coulmas 1989:159ff). The individual short, long or diacritically marked symbols had names. For consonants, these were patterned on corresponding letters of the English-language alphabet: *bi si di if shi ich shi ki il im in pi* for 'B C D F G H J K L M N P' respectively, etc. (Note the non-uniqueness of *shi* for 'G' and for 'J'.) Vowels were named for their sounds, "ah", "wa", etc. (as written in an English-language explanation in *Kamloops Wawa* #1 and 2, 1 May and June 1891).

In writing words, *Chinuk pipa* letters are sequenced linearly, as the next section discusses.

3.4   Cursiveness

An implicit additional strategy for maximizing *Chinuk pipa*'s efficiency was to reduce the number of times the writing instrument could be

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[19] This is clearly from some Salishan language, whether coastal or interior. Cognates including this term are found in KCW as *haha milalam* 'holy communion' as well as in Coast Salish territory, where this could have originated. See Kuipers (2002:122, s.v. *x̌aʔ*). Donna Gerdts (p.c., 2011) notes the Hul'q'umi'num' / Vancouver Island Halkomelem cognate *x̌eʔx̌eʔ*.

[20] An identical hyper-lengthening is known from pan-CJ, cf. Thomas' note coincidentally about the same word: "For 'very far off'…the usual method is to express very great distance by prolonging the last syllable and saying si-a-h [sic]" (1970 [1935]:95). In fact this lexeme is a shibboleth of CJ rhetorical lengthening, with many authors as well as my fieldwork consultants making reference to it. Compare *sayá* 'far' in e.g. Zenk and Johnson 2003, CTGR Chinuk Wawa Language Program 2011 and *hiyu-u-u-u* (~'very very much') Fries 1951:319). The same phenomenon, sometimes called 'rhetorical lengthening', is found with stressed vowels in the local Salishan languages (see for example Thompson and Thompson 1992:25).

lifted from the paper. Le Jeune saw this as a way to save time. The texts in the Appendix exemplify letters joined in the cursive fashion that this dictum allowed.

One nuance of cursiveness emerges when the *K* and *L* species occur consecutively. Because these species are identical but written in opposite directions, joining one of each implies retracing over the first letter. This of course would obliterate that letter. The solution to this dilemma takes advantage of the overall rightward flow of writing, extending this principle by jogging the second letter slightly rightward. (The following discussion continues the metaphor of straight-line letters as compass pointers.) For example, in *klahawiam* 'greetings', the *k* is written to Southwest, then the *l* to about East-Northeast (rightward of the canonical Northeast) as in (12a); similarly, *arkash* 'archangel' has *r* written to Northeast, then *k* to South-Southwest (rightward of canonical Southwest), as in (b):

(12)   (a)   *kl*
        (b)   *rk*

It can be seen that within 180° of arc the writer and reader must distinguish seven directions, from North-Northeast through Southwest: five for the canonical positions of the letters, and two for situationally conditioned variants of *L* and *K*. When not delicately managed, this convention leads to the possibility of confusion in the second members of some digraphs, such that an intended *kl* can resemble *kt* as in (13a), an intended *rk* may look like *rp* as in (b), and so on:

(13)   (a)   *kl*   *kt*
        (b)   *rk*   *rp*

Sequences of identical straight-line consonants are never cursively joined; the result would be indistinguishable from a single long straight-line form. To connect two identical straight-line *numerals* (i.e. the shapes identical to letters *p t f k r*) requires a second extension of the cursive principle: a small circle identical to the letter *a* is inserted as a connecting element. Thus e.g. *11* ('eleven') is identical to the syllable *pap*, shown in (14):

(14)   *11 / pap*[21]

There are two classes of exceptions to the cursive principle. The first is the nonconnecting letters shown in (4) above, the lightning-bolt shaped *x* and (by definition) the dot / point *h*. Since this quasi-phonemic alphabet was invented by French-speakers (Le Jeune and ultimately Duployé), and there is no sound /h/ in standard French pronunciation, that letter was perhaps something of an afterthought. *X* seems to have been seen as analogous to *h*, and shares its behaviour. Two other letters include a dot, which necessitates lifting the writing instrument and prevents cursive connection, at least to the right: the diphthong

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[21] A large circle here would be interpreted as the numeral zero (cf. Table 1), resulting in a reading '101'.

symbol *aw* and the triphthong *waw*. These symbols, shown in (15), can however connect to a preceding letter as can any of the circular symbols:

(15)   (a)   ○   *aw*   *k'aw*   'to tie'
        (b)   ○   *waw*   *Kwawt*   'Quaaout' [Indian village]

        The second, related exception are those letters bearing diacritic marks. These letters, like the dotting of an *i* in the English alphabet, force the writer to lift the pen in order to make the diacritic. This mark can be a tick <u>to the side</u>, as (16) shows:

(16)   (a)   /   *l*   +tick   =   *ł*
        (b)   —   *t*   +tick   =   ⊤   *th* [23]
        (c)   / [22] *k*   +tick   =   *k'* [23]
        (d)   ∩   *sh*   +tick   =   *ch*
        (e)   ∪   *s*   +tick   =   *ts*
        (f)   )   *n*   +tick   =   *ng*

The other possible diacritic mark is a short slash all the way <u>through</u> a straight-line letter. This mark can indicate a completely distinct sound, as in the rare *q* (17):

(17)   /   *k*   +slash   =   ⊥   *q*

3.5   Direction of writing

        Chinuk pipa writing follows a generally rightward direction, with successive lines of text placed immediately below preceding ones. However, certain individual letters violate this generalization.
        Most letters, i.e. the consonants, have a specific direction in which they must be written. This is overall rightward and (with *B*, *F*) secondarily downward, following the flow of *Chinuk pipa* text in general. However, the *K* species breaks this flow, being written 'backwards' from it in a Southeast orientation. Also, *m* and *n* each curve leftward for part of their downward strokes.
        Vowels, on the other hand, lack inherent direction. They are generally written in whatever direction the writer prefers. However there is a strong tendency to write the vowel in what may be termed the most 'ergonomic' orientation for writing the consonant(s) that it is connected to. In this sense the consonant symbols are privileged.
        A second restriction on vowels' freedom of direction is that vowels joined to *L*- or *K*-species letters are strictly required to follow the dictum of

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[22] The shorthand letter for *k* is written downward, as are the instances of *k*, *k'* and *q* following.
[23] The letter *k'* tends to signal what are known from other sources to be /k'/ or /q'/, as in *k'aw* 'to tie' (compare /k'áw/) and *k'o* 'to arrive' (compare /q'úʔ/) (both comparisons are from CTGR Chinuk Wawa Language Program 2011).

rightward flow. Thus the *a* in *al* and *ak* (18a) is leftward of the relevant consonant, while in *la* and *ka* it stands rightward (b):

(18)   (a)   ∅⍴   *al*   ⌇⌇   *ak*
         (b)   ╱   *la*   δ   *ka*

This convention prevents confusion among otherwise homographic sequences, since these two consonant species are nearly identical to one another.

 The final restriction on vowel direction is a nonstructural yet pervasive tendency. Le Jeune reported,
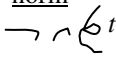
> <u>Most of the Indians learn first to read the words</u>, then, after a few days' practice, they become able to distinguish the syllables, and, last of all, the letters. But there are in every camp a few Indians who can read by spelling from the beginning, and they soon teach the others the proper way of reading and writing. (*KW* #126, March 1895) [emphasis added]

The whole-word approach taken by most learners was reported to work fairly well, partly due to the "limited number" of words in Kamloops Chinúk Wawa (*KW* #127, April 1895); including personal names, there are roughly 670 words in my KCW lexicon (Robertson, in progress). This approach, undermining the intentionally rational structure of the writing system (§3.1), brings to mind Coulmas' observation that few people at any time in the history of writing have "understood the systematic make-up" of any script they used (1989:43, also referring to Gelb 1963:110).

 The word-forms that people were copying tended to derive from the most widely available pedagogical materials. These were Le Jeune's writings, including sporadic explicit shorthand lessons, in his *Kamloops Wawa* newspaper (for example in *Kamloops Wawa* (#1-4, 1 May-August 1891). Thus Le Jeune's habitual choice of the direction a vowel was written in in a given word—which was fairly arbitrary, as the preceding discussion has noted—became the *de facto* norm. Memorized as complex shapes, individual words soon achieved nearly invariable form.

 In addition, most Indigenous people learned *Chinuk pipa* from other Indigenous people (as the above quotation points out), so Le Jeune's norms became autonomous from his own production. Successive waves of learners introduced subtle changes in some words' forms, which Le Jeune himself never produced. Consequently most Indigenous *Chinuk pipa* writing is quite uniform in its choice of vowel-direction in most instances of any given word, a uniformity that defies both random probability and structural rules because it is socially motivated.

 Support for the claim of whole-word learning may come from the countless Kamloops Chinúk Wawa words that most Indigenous writers realized differently from Le Jeune, similarly to one another, and in a form not mandated by the principles of this alphabet, such as (19ai) and especially (bi):

(19)　　　　　　　　<u>Indigenous rendition</u>　　　<u>gloss</u>

(a)　(i)　　⌐ ͡ ϟ *ti.^{li}.kom*　　'[Indian] people'

<u>norm</u>

(ii)　　⌐ ⌒ ϟ *ti.li.kom*　　"　　　"

<u>Indigenous rendition</u>　　　<u>gloss</u>

(b)　(i)　　＼ ͦ *vuki*　　'book'

<u>norm</u>

(ii)　　＼ ͦ *buk*　　"　"

Here the superscripted text indicates a part of the word that is written above the remainder of the word. The form *vuki* is most easily explained as an item learned by rote whole-word acquisition, leading literates to prioritize its <u>approximate</u> shape over its component letters' canonical spatial orientation. In other words, the normatively South *b* could now freely vary to Southeast *v*, while final *k* could even include a curving final, which in principle should represent *i*. If writers, and of course readers, of *Chinuk pipa* had been parsing this script on a strictly alphabetic basis, a great many forms such as *vuki* would have been quite unrecognizable.

　　　In order to mitigate this potentially confusing variation, I normalize transliterated KCW words written in *Chinuk pipa* in this study when showing examples of spelling and grammar. Normative forms are determined when possible by reference to Cheadle et al.'s (2006) dictionary of published *Kamloops Wawa*. Otherwise, I have taken the most frequent spelling of a given word as the standard.
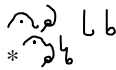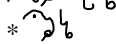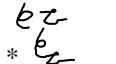
3.6　　Subdivisions in *Chinuk pipa* text

　　　Chinuk pipa writers used several techniques to subdivide text at various levels. The following subsections can be compared with the illustrative texts in Figures 4-6 above.
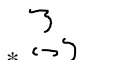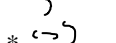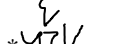
3.6.1　　Syllabification

　　　KCW writers normally subdivided words into syllables. That unit usually is definable for this corpus as a cursively joined sequence of letters containing one of the vowel symbols. Syllabification is suggested in Le Jeune's words, "Whereas a character [sc. an English or French longhand grapheme separated from others by a space] represents only a letter, it represents a syllable, or a full word" [in *Chinuk pipa*] (*KW* #127, April 1895). His statement would be untrue if the word 'character' were taken literally. *Chinuk pipa* is actually an alphabet comparable to those of European language, not a syllabary such as Carrier Dene uses, nor a Chinese-style logographic writing. Clearly he meant to contrast the amount of information that one could convey with a few strokes in shorthand versus the more well-known English writing.

A small space separates syllables. Syllabic dividing space is represented by a period in example (20), which shows that unsyllabified versions of the same words are not found in the corpus:

(20)   (a)   [symbol]   *[symbol]   *chinuk pipa*   'Chinúk Wawa writing'
                                        chinuk pipa   ”   ”   ”   ”

        (b)   [symbol]   *[symbol]   *kom.takst*   'to know'
                                        komtakst   ”

Words typically left unsyllabified include proper names of persons and of months (less often of places), such as the examples in (21):

(21)   (a)   [symbol]   *[symbol]   *Itiin*   'Etienne'
                                        I.ti.in   ”

        (b)   [symbol]   *[symbol]   *Siptimbir*   'September'
                                        Sip.tim.bir   ”

As with spelling and vowel direction, syllabification tends to match Le Jeune's own writing in the newspaper *Kamloops Wawa*. His decision to syllabify Kamloops Chinúk Wawa was probably didactic in intent. He was not, for example, in the habit of splitting words in this manner in his (Duployé) shorthand French, written for non-Indigenous native speakers (cf. *KW* #148, January 1897). Syllabification must have been a compromise with the Indigenous whole-word learning tendency mentioned at §3.5). While Le Jeune taught the script letter-by-letter at first (*KW* #1, 1 May 1891), he quickly shifted to the larger syllable unit to speed learners' acquisition of *Chinuk pipa* while still minimizing the number of graphical units to memorize (viz. *KW* #1, 1 May 1891; #24 and 25, 08 May and 15 May 1892).

3.6.2   Word spacing

Larger spaces separate words. For this corpus, 'word' can usually be equated with 'morpheme' (be it a root, prefix, clitic or grammatical particle, cf. Robertson 2011 chapter 3). The distinction between KCW syllable- and word-spacing in *Chinuk pipa* is plainly visible in all texts reproduced in the Appendix. Kamloops Chinúk Wawa is an isolating / analytical language, and there is virtually no variation among the writers with regard to the placement of word boundaries.

3.6.3   Larger units: punctuation

Punctuation was usually omitted by Indigenous writers. Therefore indications of higher-level structures like 'sentences', already a concept that is hard for linguists to agree on but that can be impressionistically correlated with 'utterances', are usually lacking. Compare Dixon's evaluation that "no simple definition is feasible" of 'sentence' (2010b:430), although some languages may

have e.g. intonational or grammatical markers of sentence boundaries (2010b:132ff.).

Since small spaces were used to separate syllables and larger ones between words, it might be expected that an even greater space signified the end of a unit that might be taken as a sentence, paragraph, etc. But this is not observed. The strongest tendency correlating with sentential boundaries is that many writers started new 'utterances' at the left edge of the paper, but this is a weak guideline at best. Most extant texts authored by Indigenous people occupy a single piece of paper, often leading the writers to fit text in wherever they could. This sometimes seems to have led them to end compositions abruptly.

Among the punctuation marks found in Kamloops Chinúk Wawa texts, two are highly characteristic of *Chinuk pipa*. An **<x>** shape (variant form: **<+>**), when used, tends to mark phrase- or sentence-boundaries, as (22) demonstrates (underlined punctuation in the translation reflects its position):[24]

(22)   (a)   *Luis Andri iaka sik **<+>** iaka tiki pus msaika hilp*   [127]
                iaka kopa styuil
                'Louise Andrew is ill. She wants you folks to help
                her through prayers.'
    (b)   *…tlus maika wawa kopa naika man ikta naika*   [136]
                *wawa **<x>** naika tlap sik naika tomtom…*
                '…tell my husband what I say. I'm upset…'
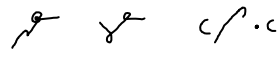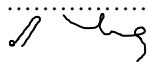
Equals sign, <=>, used by Le Jeune as a line-final break in the middle of a word, is instead for the Indigenous writers another way of signaling phrasal or sentential boundaries. Examples are given in (23):

(23)   (a)   *iaka tiki mamuk kopa <1200> tala <=> iaka wawa*   [116]
                pus mamuk ilip tlus kopa Knim Lik Sondi +
                haws iakwa
                'He wants to do the job for $1,200. He promises to
                build better than the Canim Lake church here.'
    (b)   *pus k'o Istir Sondi <=> nsaika komtaks kah son*   [147]
                maika k'o…
                'When it gets to be Easter, we'll know which day
                you'll be arriving…'

Many other punctuation marks are used sporadically—most of them more or less unique to individual writers. For example <:> appears in Text 3 in the Appendix, and other marks include < . ≡ | > and so forth.

Rarely, proper names were given a dotted underline, as in (24):

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[24] Material not in the *Chinuk pipa* alphabet in the original text is enclosed in <angled brackets>. *Chinuk pipa* punctuation marks are here shown in angled brackets to distinguish them from similar shorthand letters (such as *x*) and from analytical conventions of the present study (such as + indicating compounding and = indicating clitics). Word-by-word glosses are omitted from the following examples because they are not directly relevant to the subject at hand.

(24)　(a)　　　　*Lilwat Falat ilihi*　　[72]
　　　　…………….…………..　'Lillooet Flats village'

　　(b)　　　　*Alik Samsan*　　[72]
　　　　…..…………　　　'Alec Sampson'

Other devices sporadically found appear to be nonce inventions by Indigenous writers. These include single or a few stacked horizontal bars topped by one or more dots, placed above a word apparently to indicate emphasis. This device is approximated in (25):

(25)

nanich maika tsim iawa chinuk pi wiht maika tsim iawa　　[127]

tkop man tsim
'Look, write *Chinuk [pipa]* there and also write white man's writing there'

　　　Structurally salient features of KCW that are not found to be represented by any orthographic devices include compounding, affixation and cliticization.

3.6.4　Other symbols

　　　Abbreviations are possible in *Chinuk pipa*. These are realized by the convention of crossing letters over one another instead of the usual cursive joining that created 'phonographic' words. Some abbreviations are frequently found, such as those in (26):

(26)　(a)　　*SShB*　*Sin Shon Batist*　'North Thompson'[25]　[79]

　　(b)　　*ST*　*Sahali Taii*　'God'[26]　[4]

　　(c)　　*ShK*　*Shisyu Kri*　'Jesus Christ'　[4]

　　(d)　　*ShB*　*Shon Batist*　'Jean-Baptiste'[27]　[21]

Graphemes without phonological significance are also used, one of them frequently. This is shown in (27):

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[25] This is a Secwépemc / Shuswap village, now known as Chu Chua. The abbreviation is of the name of the Catholic mission there, 'St. John the Baptist' (cf. example (d)). (Simpcw First Nation 2006.)
[26] This means literally 'the high chief'.
[27] This is a local personal name.

(27)   ⊕   represents   *likalisti*   'eucharist'   [16][28]

Tangentially mentioned in Table 1 and in the discussion of symbol-shapes above is the set of shorthand numerals. These, like punctuation, were hardly used by the Indigenous writers. A rare instance is the date shown in (28):

(28)   ϛ,�   (a)   *Mi 4 1892*   'May 4, 1892'   [61]
                 (b)   *Mi k pshst*   [nonsense]

They were quickly replaced by the numerals of standard written English. ('Arabic' numerals.) A problem was that shorthand numerals were identical to shorthand letters (q.v.), and thus it could be difficult to tell a word from a number. (Example 28 would cause consternation in the reader who parsed it as the nonsense string (b).) A second problem was that exceptional rules applied to shorthand numerals, e.g. to connect two identical straight numerals, one inserts a small circle identical to shorthand *a*. Overall, the shorthand numerals turned out to be an unnecessary complication of *Chinuk pipa*, and all writers preferred English numerals, which they used with reasonable facility.

4   Discussion and conclusions

In parallel with a recent trend of re-evaluating missionaries' linguistic analyses (cf. Zwartjes 2011:18), we can ask how well *Chinuk pipa* reflected the sound systems of the languages written in it. Two conflicting observations serve to answer this question in a nuanced way.
    First, certain features reinforce the alphabet's ability to represent the sounds of the languages written in it. Its very structure shows the inventor's awareness of sounds that are unknown in European languages. The existence of distinct letters *k'*, *ł*, *q* demonstrates Le Jeune's intention of representing Indigenous phonemes. His letter for *ts*, a sound far more frequent in the Pacific Northwest than in Europe, is similarly suggestive. (See Thompson and Kinkade 1990:42-44 on the region's areal phonological traits.) In addition, many sounds occur in common among the Salish languages, Chinook Jargon and the Indo-European languages that Le Jeune was familiar with. This effectively guaranteed the selection of most of the letters in his alphabet: *a, b, ch, d, f, g, h, i, k, l, m, n, ng, o, p, r, s, sh, t, th, u, v, x*. As noted above, the shorthand vocalic orthography has a tendency not only to represent but to overspecify, often indicating separate phones. Moreover, certain letters and combinations conventionally represent Northwest language sounds, such as *kr* for /q'/ and *ro* for /ʕʷ/. There are even signs that writers were incipiently innovating a way to show /xʷ/, via *yu* with a diacritic identical to *h* (albeit only in coda position, and only in the environment /i_/; see the Thompson text in Appendix). Also, the Indigenous writers' recognition and targeting of spelling norms, noted above, reduced the need for painstaking phonemic accuracy.
    Second, and interfering with *Chinuk pipa*'s adequacy, there is an obvious lack of a way to distinguish several PNW sounds, such as glottalized

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[28] The reference of this symbol is known from its use and definition in *Kamloops Wawa*.

resonants, most ejectives, and glottal stop (not to mention stress). Le Jeune's French-influenced vowel orthography, with its Vw and wV diphthongal symbols, makes it difficult to represent labialized consonants in the shorthand, particularly in coda position. Similarly, spelling of a palatal glide is limited to his letters *yu* and *i*, the latter denoting also the phonemes /e/ and /i/ (Robertson 2003). As noted above, there was no symbol available for schwa, and the consonant symbols in general tended to underdifferentiate phonemes, missing the uvular versus velar contrast.

On balance, this shorthand alphabet was a nonlinguist's conscious effort to accurately convey the sounds of a variety of languages typologically different from the ones in which he had formal training. *Chinuk pipa* apparently functioned well enough for personal communication and for prompting readers' memories while singing hymns, reciting prayers, etc. from Le Jeune's "Manuals" (Le Jeune 1892-1897c).

Chinuk pipa, despite its orientation toward efficient communication, has resisted mechanical encoding, i.e. physical typefaces or electronic fonts. Even the mass-produced *Kamloops Wawa* newspaper and associated books and pamphlets were all written out by hand on a mimeograph. Thus, all *Chinuk pipa* forms shown here are rough approximations created with Microsoft Word's command *Insert > Picture > New drawing* (then *Autoshapes > Lines > Scribble*), and are always transliterated into a practical Roman-alphabet orthography.

It would have been preferable to create an electronic font for word-processing Kamloops Chinúk Wawa, reproducing the original texts as faithfully as possible. Such a font would benefit research on KCW, on Le Jeune's newspaper, and on the numerous languages he wrote with it. Also standing to benefit is the revitalization of these endangered BC Indigenous-associated language varieties, because it would be historically appropriate for learners to know how to read and write KCW and Salish the way preceding generations did. A grammatical description such as Robertson (2012) would be able to teach the writing system along with the language, which could be disseminated in print and online.

At the time of *Kamloops Wawa*, publication in *Chinuk pipa* was limited to image reproduction of handwritten texts. First the Edison mimeograph, and later the process of photoengraving, were used to create mass print runs of a great deal of material in Kamloops Chinúk Wawa and other regional languages. (Cf. Le Jeune's bibliography of his KCW writings: "All of this comes to at least 3500 pages in total…There are easily a thousand more pages…but those have mostly disappeared.")[29] So no *Chinuk pipa* font was ever invented (cf. *KW*#128, May 1895), and *Chinuk pipa* is one of relatively few scripts in the world (about 80) that have yet to be encoded as fonts (Karen Stollznow, p.c., February 17, 2006; Script Encoding Initiative 2007). Dissemination of materials in it is correspondingly constrained.

As useful as such a font would be, there are major reasons why one has been very difficult or impossible to create. For example, the flow of writing alters direction frequently instead of following a strict linear sequence. As

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[29] *Tout cela ensemble constitue 3500 pages au moins…Il y a bien 1000 autres pages…mais elles ont disparu pour la plupart* (*KW* #260, March 1916).

discussed above, this leads sometimes to stacking of letters vertically instead of simply following the general left-to-right flow of writing. (E.g. *Bob* is a descending sequence.) Also, the choice of which side of a consonant to adjoin a vowel to, while in principle usually free, is in best practice determined by pragmatic factors. As noted above, vowels tend to be inserted in the most ergonomic position as well as in completely unpredictable positions, the choice of which relies on the idiosyncratic preferences of Le Jeune having become norms for the entire *Chinuk pipa* community.

Fontmaking has been beyond the scope of the present project. But a technically skilled volunteer has in fact recently appeared, independently leading an effort to create a *Chinuk pipa* font in Unicode (Van Anderson, p.c. February 2009). Mr. Anderson has at this writing (early 2012) just been informed by the Unicode organization that this proposed encoding has been accepted for implementation.

When, with the help of Mr. Anderson's encoding, now-scattered paper documents of 'Chinook writing' (such as those in the Appendix) can be electronically shared, indexed and searched, the benefits of such newly usable data to Indigenous and other Canadians, and to the scholarly community of linguists, historians and anthropologists, will potentially be considerable.

References

A.B. Dick Company. 1890. *Mimeography, invented by Mr. Thomas A. Edison*. Chicago: [n.p.].

Alexander, Carl. 1998. p.c.

Anderson, Van. 2009. p.c.

Anonymous. 1887. [Untitled note on American Philosophical Society's committee on potential use of Volapük in science, headed by Daniel G. Brinton]. *Science* 11(272):184.

Baker, John. 1908. *The life of Sir Isaac Pitman (inventor of phonography)*. London: I. Pitman and Sons.

Bates, William N. 1912. Archaeological discussion. *American Journal of Archaeology* 16(2) (April):253-317.

Beeching, Wilfred A. 1974. *Century of the typewriter*. London: Heinemann.

Bell, Alexander Melville. 1867. *Visible speech: The science…of universal alphabets, or self-interpreting physiological letters, for the writing of all languages in one alphabet*. London: Simpkin, Marshall and Co.

Brandt, C. 1901. *Duployan shorthand adapted to English*. [N.l.]: [n.p.].

Brück, Herbert. 1910. *Lehrbuch der deutschen Stenographie nach dem System Duployé: Mit Genehmigung des Institut sténographique de France*. Paris: F. Nathan.

Chamberlain, Alexander F. 1911. Periodical literature. *American Anthropologist* 13(4) (October-December):625-721.

Charpentier, Jean-Michel. 1997. Literacy in a pidgin vernacular. In Tabouret-Keller, Andrée, Robert B. Le Page, Penelope Gardner-Chloros and Gabrielle Varro (eds.), *Vernacular literacy: A re-evaluation*: 222-245. Oxford: Clarendon.

Cheadle, Kyle, Lucas Damer and David Robertson. 2006. [A preliminary dictionary of *Kamloops Wawa* Chinúk Wawa.] Ms., University of Victoria.

Coulmas, Florian. 1989. *The writing systems of the world*. Malden, MA: Blackwell.

Cronin, Kay. 1960. *Cross in the wilderness*. Vancouver: Mitchell.

CTGR Chinuk Wawa Language Program. 2011. *Chinuk Wawa kakwa nsayka ulman-tilixam ɬaska munk-kəmtəks nsayka: As our elders teach us to speak it*. Grand   Ronde, OR: Confederated Tribes of Grand Ronde.

Damer, Lucas. 2006. p.c.

Deane, Phyllis. 1965. *The first industrial revolution*. Cambridge: Cambridge University Press.

Hindle, Brooke and Steven D. Lubar. 1986. *Engines of change: The American industrial revolution, 1790-1860*. Washington: Smithsonian.

Dixon, R.M.W. 2010a. *Basic Linguistic Theory. Volume 1: Methodology*. New York: Oxford University Press.

Dixon, R.M.W. 2010b. *Basic Linguistic Theory. Volume 2: Grammatical topics*. NewYork: Oxford University Press.

Dulog, H.G. 1903. Story of a Stump. *Forest and Stream*, December 5, 1903:438-439.

Duployé, Emile. 1860a. *Sténographie-Duployé, écriture plus facile, plus rapide, et plus lisible que toute autre, s'appliquant à toutes les langues*. Lyon: [n.p.].

Duployé, Emile. 1860b. *Sténographie Duployé, ou l'art de suivre avec l'écriture, la parole, etc*. [N.l.]: [n.p.].

Ellaschuk, Vera. 1990. Life in a deserted church. *Shuswap Chronicles* [Celista, BC], vol. 3:45-47.

Fee, Chester Anders. 1941. Oregon's Historical Esperanto: The Chinook Jargon. *Oregon Historical Quarterly* 42:2 (June): 176-185.

Fisher, Robin. 1977. *Contact and conflict: Indian-European relations in British Columbia, 1774-1890*. Vancouver: University of British Columbia.

Fries, Ulrich E. 1951. *From Copenhagen to Okanogan: The autobiography of a pioneer*. Caldwell, ID: Caxton.

Gabriel, Louise. [n.d.] [Audio recording of Okanagan and 'Chinook' prayers and hymns. Penticton, BC.]

Gelb, Ignace J. 1963. *A study of writing*. Chicago: University of Chicago.

Glatte, H. 1959. *Shorthand systems of the world*. New York: Philosophical Library.

Hale, Horatio. 1890. *An international idiom: A manual of the Oregon trade language, or Chinook Jargon*. London: Whittaker & Co.

Hindle, Brooke and Steven D. Lubar. 1986. *Engines of change: The American industrial revolution, 1790-1860*. Washington, DC: Smithsonian Institution.

Johnnie, Moise M. and William R. O'Hara. 1992. *The paper that relates: Father Morice's syllabic newspaper for the Carrier Indians of British Columbia*. Prince George, BC: William R. O'Hara.

Johnson, Samuel V. 1978. *Chinook Jargon: A computer assisted analysis of variation in an American Indian pidgin*. PhD dissertation, University of Kansas.

KW = Kamloops Wawa. 1891-1918.

Kuipers, Aert H. 1974. *The Shuswap language: Grammar, texts, dictionary*. The Hague: Mouton.

Kuipers, Aert H. 2002. *Salish etymological dictionary*. Missoula, MT: University of Montana. (UM Occasional Papers in Linguistics, number 16.)

Le Jeune, J.M.R. 1892. *Prayers in Thompson or Ntlakapmah*. Kamloops: [St. Louis Mission].

Le Jeune, J.M.R. 1893. *Prayers in Shushwap*. Kamloops: [St. Louis Mission].

Le Jeune, J.M.R. 1896a. *Sheshel manual*. Kamloops: [St. Louis Mission].

Le Jeune, J.M.R. 1896b. *Skwamish manual*. Kamloops: [St. Louis Mission].

Le Jeune, J.M.R. 1896c. *Slayamen manual*. Kamloops: [St. Louis Mission].

Le Jeune, J.M.R. 1897a. *Okanagan manual*. Kamloops: [St. Louis Mission].

Le Jeune, J.M.R. 1897b. *Stalo manual*. Kamloops: [St. Louis Mission].

Le Jeune, J.M.R. 1897c. *Lillooet manual*. Kamloops: [St. Louis Mission].

Le Jeune, J.M.R. 1924. *Chinook rudiments*. Kamloops: [St. Louis Mission].

Le Jeune, J.M.R. 1925. *Studies on Shuswap*. Kamloops: [St. Louis Mission].

Lindley, Lottie. 2006. p.c.

Mühlhäusler, Peter. 1995. Attitudes to literacy in the pidgins and creoles of the Pacific area. *English World-Wide* 16(2): 251-271.

Mulhall, David. 1986. *Will to power: The missionary career of Father Morice*. Vancouver, BC: University of British Columbia.

Myers, Helena. 1989. [Audio cassette of "Tsilhqut'in elder from southern BC singing five 'Chinook' hymns passed on to her by her parents." March 5.]

Navarre, A. 1905. *Méthode de sténographie Duployé perfectionnée par l'Institut sténographique de France et règles de placement des voyelles*. Montréal: Sténographe Canadien.

Osborn, E.B. 1900. *Greater Canada: The past, present and future of the Canadian North-West*. London: Chatto & Windus.

Ostler, Nicholas. 2005. *Empires of the word: A language history of the world*. New York: HarperCollins.

Pitman, Isaac. 1837?. *Stenographic sound-hand*. London: Samuel Bagster.

Ralph, Julian. 1892. *On Canada's frontier: Sketches of history, sport and adventure and of the Indians, missionaries, fur-traders and newer settlers of western Canada*. London: J.R. Osgood.

Read, Kingsley. 1964-. *Shaw-Script; a quarterly in the Shaw alphabet*. Worcester, England: [n.p.].

Robertson, David. 2003. What there is to {C} in *Kamloops Wawa* shorthand. *Papers   for ICSNL XXXVIII: The thirty-eighth International Conference on Salish and Neighbouring Languages.* Vancouver: University of British Columbia. (University of British Columbia Working Papers in Linguistics 11.)

Robertson, David. 2004. *Early texts in Thompson*. Report under SSHRC
        Salish Contrast Project, SSHRC award #410-2003-1523; ms. in
        possession of author.

Robertson, David. 2005. Chinook Jargon in local histories of the Okanagan
        country. *Okanagan History* 68: 112-119.

Robertson, David. 2007. Shorthand Secwepemctsín texts. Ms.,
        University of Victoria [Secwepemc Culture and Education Society /
        Simon Fraser University at Kamloops].

Robertson, David. 2008. Toward a metric of representativeness for naïve texts,
        or, comparing versions of a Kamloops Chinúk Wawa shorthand letter.
        (Paper presented at the forty-third International Conference on Salish
        and Neighbouring Languages, North Vancouver, August.)

Robertson, David. 2011. *Kamloops Chinúk Wawa,* Chinuk pipa*, and the
        vitality of pidgins*. PhD dissertation, University of Victoria.

Robertson, David. 2012. *Chinook Jargon language (Kamloops Chinúk Wawa
        dialect): Grammar*. Book draft; ms. in author's possession.

Robertson, David. (in progress). *Chinook Jargon (Kamloops Chinúk Wawa
        dialect): Ethnohistorical dictionary*. Book draft; ms. in author's
        possession.

Robertson, David, Jodi Crew and Omeasoo Butt. 2005. *Kamloops Wawa* index.
        Ms., University of Victoria.

Rose, Guy. 2006. p.c.

Script Encoding Initiative. 2007. *List of scripts needing encoding*.
        http://linguistics.berkeley.edu/sei/list.html, retrieved January 24, 2007.

Seton, Ernest Thompson. 1918. *Sign talk: A universal signal code, without
        apparatus, for use in the army, the navy, camping, hunting and daily
        life*. Garden City, NY: Doubleday, Page.

Simpcw First Nation. 2006. *Simpcw First Nation*.
        http://www.simpcw.com/Services .htm, retrieved December 6.

Smith, Linda. 2005. p.c.

Sténographe Canadien. 1889-1910. Montréal: J. de Larochelle.

Sténographe Canadien. 1892. Volume IV, number 3.

Stollznow, Karen, p.c., February 17, 2006

Tepper, Leslie Heyman. 1987. *The interior Salish tribes of British Columbia: A
        photographic collection*. Ottawa, ON: National Museums of Canada.
        (Mercury Series number 111.)

Thompson, Laurence C. and M. Dale Kinkade. 1990. Languages. In
        Sturtevant, William C. and Wayne Suttles (eds.), *Northwest Coast*.
        Washington, DC: Smithsonian Institution. (Handbook of North
        American Indians, volume 7.)

Thompson, Laurence C. and M. Terry Thompson. 1992. *The Thompson
        language*. Missoula, MT: University of Montana. (UM Occasional
        Papers in Linguistics, number 8.)

Thompson, Laurence C. and M. Terry Thompson. 1996. *Thompson River
        Salish dictionary*. Missoula, MT: University of Montana. (UM
        Occasional Papers in Linguistics, number 12.)

University of Deseret. 1868. *Deseret first book*. [Salt Lake City?]: University
        of Deseret.

Vrzić, Zvjezdana. 1999b. *Modeling pidgin and creole genesis: Universals and contact influence in Chinook Jargon syntax.* PhD dissertation, New York University.

Whitehead, Margaret. 1988. *They call me Father: Memoirs of Father Nicholas Coccola.* Vancouver: University of British Columbia.

Wendy Wickwire. 2009. p.c.

Zeh, Lillian E. 1906. Indian shorthand writers of British Columbia. *Pacific Monthly* (December):692-696.

Zenk, Henry B. and Tony A. Johnson. 2003. *Chinuk-Wawa: Kákwa ntsayka úlman tílixam ɬaska munk-kə́mtəks ntsáyka / As our elders teach us to speak it.* Grand Ronde: Confederated Tribes of the Community of Grand Ronde.

Zwartjes, Otto. 2011. *Portuguese missionary grammars in Asia, Africa and Brazil, 1550-1800.* Amsterdam: John Benjamins. (Amsterdam Studies in the Theory and History of Linguistic Science, Series III. Studies in the History of the Linguistic Sciences, volume 117.)

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Appendix
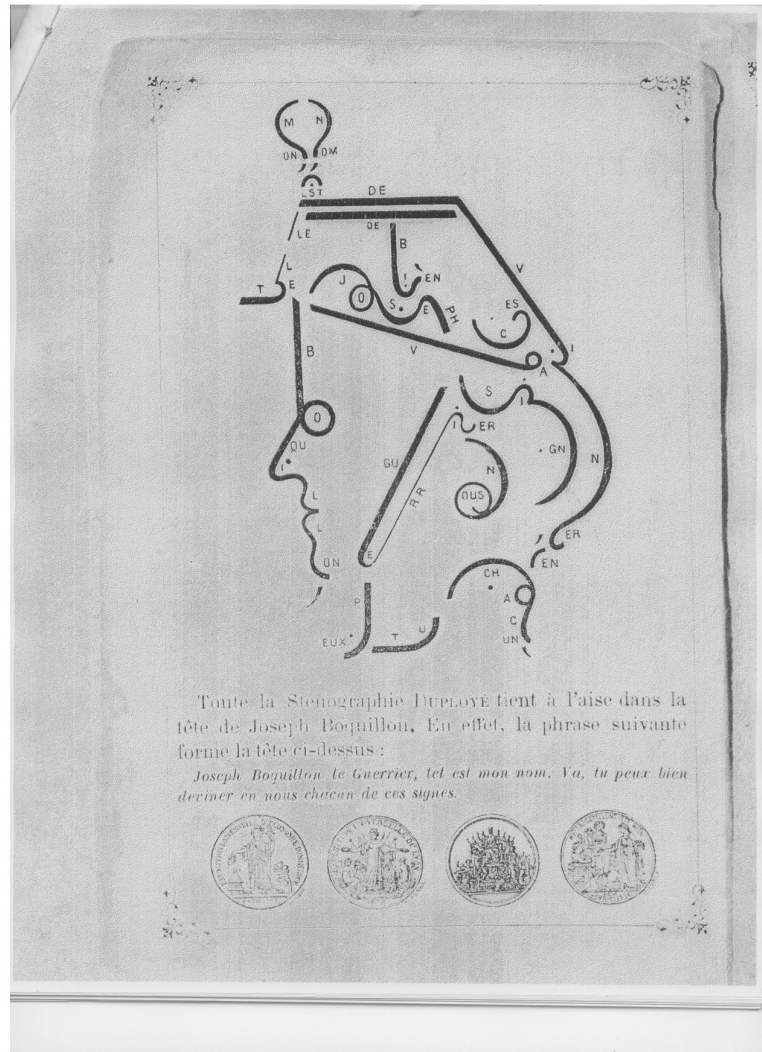
Figure 1: Illustration of the original Duployan shorthand (from Duployé 1860b).

Figure 2: the Edison mimeograph (from www.ebay.com).

Text 1: Thompson (Mayoos letter)

From Robertson (2004). Written in Nɬeʔkepmxcín (Thompson River Salish), published in *KW* (#82, 11 June 1893:93) with a CJ and English translation, as shown in the interlinearization. (In parentheses below the CJ version, I provide in parentheses a literal English translation thereof.)

This letter is interesting because it was supposedly the "last writing" of [Charley Alexis] Mayoos/Mayous, a "poor Indian cripple, the first Chinook Writer in shorthand among the natives of British Columbia…said to be 25 years old" (ibid.). He died shortly before this letter was published, leaving this note apparently directed at his family, who still followed their traditional religion. The published version of this letter is in essentially Chinook Jargon shorthand, so that instead of the *x* that is common in Thompson shorthand, the letter *h* is used (see Appendix). It was said that this letter was found "among his papers" (loc.cit.); my archival research has located more of Mayoos' writing.

The transcription of this text uses certain Americanist symbols (*č, š, xʷ*) to ease comparison with standard reference works on Salish languages, including Thompson and Thompson (1992, 1996). (The novel symbol *xʷ* is formed by adding a diacritic dot to standard C*hinuk pipa*'s letter *yu*.) The provisional morphemic analysis follows Thompson and Thompson's (ibid.).[30]

1   *o l ha l kukpi,*
    ʔoo ɬ /xéʔ   -ɬ-   /kʷú[·kʷ]piʔ
    oh   EP above/rise -LIG- manage [·DIM]
    CJ version: 'O S[ahali]T[aii]'
                           ('Oh God')
    English version: 'O my God,'

2   *hatlšama nšawa(.)*
    /xəƛ̓' -t -sém -è /ncéweʔ
    care.for -TR -1.s.OBJ -IMP 1.s.EMPH
    CJ: 'mamuk klahawiam kopa naika:'
                   ('have mercy on me')
    English: 'have mercy on me,'

---

[30] Where a line with parenthesized information follows the morphemic gloss, it represents a plain-English gloss of the complex form above. Abbreviations for the Thompson text: 1 first person, 2 second person, 3 third person, AFF affective, AUG augmentative, CAU causative, CJV conjunctive, DIM diminutive, DIR direct complement marker, DSCR descriptive, EMPH emphatic, EP established in the past, IM immediate, IMP imperative, IND indirective, INTR intransitive, LCL localizing, LIG ligature, MDL middle, NEARBY near speaker and hearer, NOM nominalizing, OBJ object, OBL oblique, O.C out-of-control, POSS possessive, PRC perceptual [evidential], PTZG particularizing, RFL reflexive, s singular, SPZG specializing, SUBJ subject [/agent], TR transitive, UNR unrealized.

3 *aphčima takam us*
/ʔep' -x -t -s(ə)m -è /tékm w -s
wipe -IND -TR -1.s.OBJ -IMP all CJV -3.INTR
a kist
e /k'ís -t
DIR bad.AUG -IM
CJ: 'mamuk ilo kanawi ikta masachi'
   ('eliminate all evil things')
English: 'wipe out all my'

4 *a h a n šu :*
e x e n- s- /cú
DIR PTZG DIR 1.s.POSS- NOM- do/make
nohwantana
n- /xʷən -t -éne
LCL- believe -TR -1.s.SUBJ.3.OBJ
(accept.what.s.o.says/have.faith.in.s.t.)
CJ: 'naika mamuk. Naika mamuk nawitka kopa'
   ('that I do. I believe in')
English: 'sins. I believe'

5 *takam us h a skwa(l)inšut,[31]*
/tékm w -s x e s- /qʷin -cút
all CJV -3.INTR PTZG DIR NOM- talk -RFL
CJ: 'kanawi ikta maika wawa:'
   ('everything you say:')
English: 'all you have revealed;'

6 *sosot a n š (h)wakuk*
zuʔ· /zúʔ -t e n- s- /xʷákʷ~xʷékʷ ·ukʷ[32]
AUG- strong -IM DIR 1.s.POSS- NOM- heart ·O.C
wawi
[…] (h)eʔwí
[…] 2.s.EMPH
CJ: 'Iaka skukum naika tomtom kopa maika'
   ('I am resolved toward you')
English: 'I firmly hope that you'

---

[31] If the orthographic form indeed contains *l* as seems clear, this is likely to be a loan using a root */qʷel-* in another Salish language where, unlike in Thompson, original *l* had not developed into *y*. Because a very large amount of material has been borrowed into Thompson from Okanagan (according to notations throughout Thompson and Thompson's 1996 dictionary), that language may be the likeliest source. No such root is attested in the dictionary, where only the native Thompson */qʷin-* (historically from */qʷey-n-*) appears.

[32] 'Strong heart': this idiom is absent from the 1996 dictionary, but it and the *Kamloops Wawa* CJ *skukum tomtom* 'be resolute, have made up one's mind' stand in a calquing relationship.

7   *ks hwis kinšamuh*
       k   s-   /xʷúy' -s   /kən -t   -sém   -xʷ
       UNR NOM- go   -3.INTR help -TR -1.s.OBJ -2.s.SUBJ
       a ks
       e   k   s-
       DIR UNR NOM-
       CJ: 'pus maika mamuk hilp naika pi'
                  ('that you will help me and')
       English: 'will help me so that'

8   *tluhtana l ha l timx:*
       /ƛ'əxʷ -t   -énè   ɬ   /xéʔ   -ɬ-   /tmíxʷ
       win   -TR -1.s.SUBJ.3.OBJ LIG above/rise -LIG- earth
       CJ: 'naika tolo Sahali Ilihi;'
                  ('that I will win Heaven;')
       English: 'I may gain heaven:'

9   *hawsšin³³ hawi*
       /xʷəz -s   -t   -sí   -(ə)n   x   /(h)eʔwí
       love   -CAU -TR -2.s.OBJ -1.s.SUBJ PTZG 2.s.EMPH
       tuhwa
       tuʔ   (-)xʷ e
       from DIR out.of
       CJ: 'naika tiki maika ilip kopa'
                  ('I love you before')
       English: 'I love you above'

10   *takam us, awi tas*
       /tékm w   -s   /(h)eʔwí   […]
       all   CJV -3.INTR 2.s.EMPH […]
       CJ: 'kanawi ikta, kopa ukuk'
                  ('everything, for this reason')
       English: 'all because'

11   *hosšamuh nšawa ta kia(.)*
       /xʷəz -s   -t   -sém   -(e)xʷ   /ncéweʔ   t(e) /kíyeʔ³⁴
       love   -CAU -TR -1.s.OBJ -2.s.SUBJ 2.s.EMPH OBL precede
       CJ: 'maika ilip tiki naika.'
                  ('you love me first.')
       English: 'you loved me first.'

---

³³ Possibly to be read as *xosšin* (in the Manual often *xoccin*), which is a better match for the appropriate root 'love'. Cf. line 11 following.

³⁴ I do not find a discussion of the comparative or superlative degrees (or indeed of adjectives) in Thompson & Thompson 1992 or in Kroeber 1999, and the use of */kíyeʔ* as a generalized formant of those degrees is unattested in the 1996 dictionary. The phrase *te kíyeʔ* and local CJ *kopa ilip* '(at) first' (Robertson, in progress) are word-for-word translations, i.e. calquing occurred from one language to the other.

12 *konunu(k) a n š*
/qʷ(ə)nú[·n[’]]xʷ   e n-   s-
sick [·DIM [SPZG]] DIR 1.s.POSS- NOM-
(be.a.little.sad)
hwakuk wa
/xʷákʷ~xʷékʷ ·ukʷ[35] […]
heart   ·O.C. […]
CJ: 'Iaka sik naika tomtom kopa'
   ('I am sad about')
English: 'I am very sorry for'

13 *takam us a kist a*
/tékm w -s e /k'ís -t e
all CJV -3.INTR DIR bad.aug -IM DIR
n šu[.]
n-   s- /cú
1.s.POSS- NOM -do/make
CJ: 'kanawi ikta masachi naika mamuk;'
   ('all the bad things I've done;')
English: 'all the bad I have done.'

14 *ošna ha takam t(i)k*
/ʔús -t -(e)nè   x e /tékm t(ə)k
discard -TR -1.s.SUBJ.3.OBJ PTZG DIR all DSCR
CJ: 'naika mash kanawi'
   ('I reject all of')
English: 'I detest them all,'

15 *tohtoht – hatlsta ta*
təxʷ· /tóxʷ -t /xəƛ' -s -t -Ø -è t(e)
AUG- straight -IM care.for -CAU -TR -3.OBJ -IMP OBL
(right/honest)
CJ: 'ukuk: [Drit kakwa.][36] = Mamuk klahawiam'
   ('them: It's really so. Have mercy')
English: 'for good. By all means, have mercy'

16 *nuk ha nš nuknukwa tata*
nukʷ xeʔ(e) n-   s-   nək'ʷ· /núk'ʷeʔ tə· /téʔ
PRC NEARBY 1.s.POSS- NOM- AUG- friend AFF- not
(noticeably   friend/close.relative.not.in.family)
CJ: 'kopa naika tilikom[,] ilo'
   ('on my people, who do not')
English: 'on my people, who'

---

[35] Possibly *konunuk (a n) š hwakuk* is a calque on or cognate of Chinook Jargon *sik (nayka) támtəm* '(I) feel sorry'. The phrase, albeit not in the diminutive as here, is attested in the 1996 dictionary, where it is glossed as 'be sick at heart, sad, have sorrows'.
[36] This is a Chinook Jargon interpolation, with no apparent counterpart in the Thompson text.

17   *ks   iahamšis;*
        k   s-   /yəx̣   -(e)m   -s   -cí   -s³⁷
        UNR NOM lucid.AUG -MDL -CAU -2.s.OBJ -3.SUBJ
            (know.s.o.,s.t.)
        kinšama
        /kən -t   -sém   -è
        help -TR -1.s.OBJ -IMP
        CJ: 'komtaks maika: Mamuk hilp kopa naika'
                ('know you: Help me')
        English: 'know you not. Help me'

18   *nšawa (a ks)³⁸ aska ks*
        /ncéweʔ   […] k   s-
        1.s.EMPH […] UNR NOM-
        CJ: 'pus'
                ('so that')
        English: 'to'

19   *tluhtana ha nš*
        /ƛ'əxʷ -t   -énè   x   e   n-   s-
        win   -TR -1.s.SUBJ.3.OBJ PTZG DIR 1.s.POSS- NOM-
        CJ: 'naika tolo naika'
                ('I win my')
        English: 'win all my'

20   *nuknukwa wawi.*
        nək'ʷ·/ núk'ʷeʔ […] (h)eʔwí
        AUG- friend   […] 2.s.EMPH
        CJ: 'tilikom kopa maika.'
                ('people over to you.')
        English: 'relatives and friends to thee.'

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³⁷ A form with /yex̣- better matches the orthographic form here, but in the 1996 dictionary
such a form is attested only with the meaning 'know s[ome]t[hing]'. The form using the
corresponding ablaut root /yix̣- (lucid.AUG[mentative]) is attested with the meaning
'know s[ome]o[ne]', but is a poorer match for the word as written in shorthand.
³⁸ '*a ks*' appears to be crossed out.

Text 2: Shuswap (William Celestin letter)

Written by William Celestin of the Salmon Arm area (born circa 1865), a prolific shorthand writer. The husband of Adèle, he remained an active *Chinuk pipa* writer for longer than any other known Indigenous person. Texts [007], [020], [032], [034], [036], [044], [045], [056], and [062] in the Kamloops Chinúk Wawa corpus (see Robertson 2011) can be attributed to him. The Chinook Jargon letter below may also have been written by him.

William is mentioned several times in the *Kamloops Wawa* newspaper, working on the altar of the new Shuswap [Lake] church (#14, 6 March 1892), subscribing to the paper (#24, 1 May 1892e), corresponding with Father Louis-Napoléon St. Onge back east (#30, 12 June 1892; #199c, December 1901), serving as 'watchman' of the eucharist, i.e. a proselyte, at Salmon Arm (#112, January 1894), becoming a widower (#144, September 1896), winning a diploma in an international shorthand competition (#159, December 1897), known as Big William at about 50 years of age (#257/'157', December 1915), owning a chapel at his place (#261, April 1916), and visiting at Head Lake in Okanagan territory for holiday celebrations (#'2', April 1918).

The date of this text is unclear. This text is the parting salutation in a Chinook Jargon letter. A majority of the known Secwepemctsín *Chinuk pipa* texts are a combination of these two languages, often with the closing in Salish.

The morphemic analysis follows that of Kuipers (1974). The forms of the morphemes are as in Robertson's text collection (2007), in an orthography bridging the shorthand and Kuipers' phonological representation.[39]

1   *patah*
    put   -ux^w
    greet   -?
    'Goodbye,'

2   *katša Pir Lišyun konkwantšama*
    kača Pir Lšyun   dupCC- kwan -t   -šam -a
    father Père Le.Jeune ?-   poor (?) -TR -1sO -IMPER
    n TK as ioriot n
    n-   TK   as   dupCC- ior   -t   n-
    LOC- God (in.order.)to ?-   strong -state 1sP-
    'father, Père Le Jeune. Have pity on me in God so that my heart will be strong,'

---

[39] Abbreviations: 1 first person, 2 second person, 3 third person, ActDet=, CAUS causative, IMPER imperative, IClitic intransitive clitic, ISfx intransitive suffix, LOC locative, NOM nominalizer, O object, P possessor, PersDeix personal deixis, PresAbsol present absolute, Rel relative, s singular, S subject [/agent].

3   *pusmin as tas*
        puš   -min   as   ta   s-
        heart(?) -implement (in.order.)to not(?) NOM-
        trhwanšams a kist piin
        tlhw   -ant -šam -s i   kis -t   piin
        beat.in.game -TR -1sO -3S ActDetPres.Absol bad -state now
        nko tl šitkrit
        nko   tl   šitkrit
        one   ActDet.Rel   day
        'so that evil will not overcome me today,'

4   *as tikamtošis a*
        as   t- komt   -uš -ws   a
        (in.order.)to ?- always (?) -?   -3Isfx if/when
        hwihwiišin anoi :
        dupCC- hwii   -st   -š   -n   a-   nui
        ?-   to.like/love (?) -CAUS   -2sO -1sS 2sP- PersDeix
        a lisivik kinowanšim
        a   lisivik kinuhw -ant -šam
        if/when bishop to.help -TR -1sO
        'so that I will always love you; so that the bishop helps me;'

5   *konkwanšama. tikomtošis*
        dupCC- kwan   -t -šam -a   t- komt   -uš -ws
        ?-   poor (?)   -TR -1sO -IMPER   ?- always (?) -?   -3Isfx
        maš konkwanšin nis
        ma   s-   dupCC- kwan   -čin   n-   s-
        intention/expectation NOM- ?-   poor (?) -mouth   LOC- NOM-
        'have pity on me; I will always pray'

6   *hwihwiihts šitkrit konkwant kin*
        dupC- hwai -t   -s šitkrit dupCC- kwan   -t   kin
        ?-   all -state -3P day   ?-   poor (?) -state 1sIClitic
        'every day; I am pitiful.'

7   *patah hwihwait lisivik: patah hwihwait*
        put -ux^w dupC- hwai -t   lisivik put   -ux^w dupC- hwai -t
        greet -?   ?-   all -state bishop   greet -?   ?-   all -state
        kalma patah Pr Lišyun našawa Waliam
        k'almoh   put -ux^w Pir Lšyun   na- šawa   Wiliam
        human.being   greet -?   Père Le.Jeune 1sP- 1sPersDeix William
        'Goodbye, all [you] bishops; goodbye, everyone; goodbye, Pere Le
        Jeune. I am William.'

Text 3: Chinook Jargon (anonymous letter)[40]

There is evidence that this was written by William Celestin, who also authored the Secwepemctsín text above. This letter reads:

1   *Samin   Arm   Mach   12   193* [sic]
     Salmon   Arm   March   12   193
     'Salmon Arm, March 12, 1893 [or 1903?]'

2   *naika   tlus   papa   Pir   Lshyun*
     1SG   good   father   Pére   Le.Jeune
     'My dear father, Père Le Jeune'

---

[40] Abbreviations for the KCW texts: 1 first person, 2 second person, 3 third person, AGR person agreement, CAUS causative, CMPL completive, CONJ conjunction, DEM demonstrative, DIM diminutive, IMPFV imperfective, IRR irrealis, NEG negative, PL plural, PREP preposition, PRES present, SG singular.

3   *naika tiki   wawa kopa maika*
        1SG   to.want to.say PREP 2SG
        'I want to tell you'

4   *nawitka aias lili   naika lisi kopa mamuk= pipa*
        indeed   very long.time 1SG   lazy PREP CAUS=   writing
        'Indeed for a long time I've been too lazy about writing'

5   *kopa maika: nawitka naika kwash maika: maika*
        PREP 2SG   indeed 1SG   to.fear 2SG   2SG
        'to you: indeed I'm shy of you: you'

6   *wawa kopa klaska pus klaska ilo   piii   iaka pipa wik- kata*
        to.say PREP who? IRR who? NEG to.pay 3   paper NEG- how?
        'told the people that if they didn't pay for their newspaper "There's no way" '

7   *naika pa(t)lash pipa okuk naika kwash pi   ilo   naika ma[-]*
        1SG   to.send   paper DEM 1SG to.fear CONJ NEG 1SG CAUS=
        ' "that I can send the newspaper." This is what I'm shy about, so I haven't writ-'

8   *muk= tsim   kopa maika: alta   naika   tlap   wan tala*
               writing PREP 2SG   PRES 1SG   to.get one dollar
        'ten to you: [but] now I've got one dollar'

9   *shikmin naika mamuk= pipa   kopa maika: pus naika*
        money 1SG   CAUS= writing PREP 2SG   IRR 1SG
        'of money. I'm writing to you: in order to'

10   *piii   naika pipa wan iiri pi   naika tlap   sitkom tala*
        to.pay 1SG   paper one year CONJ 1SG   to.get half   dollar
        'pay for my newspaper, one year, and I've got a half dollar'

11   *pi   iht kwata maika wawa okuk sitkom tala kakwa lakit*
        CONJ one quarter 2SG   to.say DEM half   dollar like   four
        'and a quarter. You said that this half dollar is like four'

12   *shikmin pi   okuk kwata lakt shikmin kakwa <8> talasi*
        coin   CONJ DEM quarter four coin   thus   8   dollar
        'coins and this quarter is four coins, so it's eight coins'

13   *kanamokst pus maika mamuk kakwa drit   yutl naika*
        together   IRR 2SG to.do   thus   really glad 1SG
        'all together. If you do it like that, I'll be very happy'

14   *tomtom kopa okuk tanas shikmin pus shako*
         heart   PREP DEM little coin   IRR to.become
         'about these little coins, if they become'

15   *ayu   shikmin okuk: wiht naika wawa kopa maika*
         much money DEM   also 1SG   to.say PREP 2SG
         'a lot of money: I'm also telling you'

16   *okuk   somil + min iaka= wawa kopa naika spus*
         DEM   sawmill   man 3AGR= to.say PREP 1SG IRR
         'that the sawmill man asked me to'

17   *naika mamuk= sim   mori lokis   kopa   iaka pi   iaka mamuk*
         1SG   CAUS= writing more log (?) PREP   3   CONJ 3 to.make
         'consign (?) more logs (?) to him and he made'

18   *lam   + patlach kopa naika pi   naika   mamuk ayu*
         alcohol gift   PREP 1SG   CONJ 1SG   to.make much
         'a gift of alcohol to me and I made [over] a lot'

19   *lokis kopa iaka il(i)p iaka mamuk   lam   + patlach naika*
         log   PREP 3   first 3   to.make alcohol gift   1SG
         'of logs to him. First he made a gift of alcohol. I am'

20   *piii   okuk kanawi ilo   klaksta hilp   kopa   naika*
         to.pay DEM all   NEG who?   to.help PREP 1SG
         'paying for all of this, nobody is helping me'

21   *kopa ikta   spus naika piii   okuk hwait min mamuk kopa*
         PREP what? IRR   1SG   to.pay DEM white man to.work PREP
         'in any way to pay this white man who is working'

22   *nsaika pi   pus   naika piii   kakit ol   min Makhtawt*
         1PL   CONJ IRR 1SG   to.pay only old man Makhtawt
         'us,and in order for me to pay, only old man Makhtawt'

23   *[pi]ii iht tala pi   sitkom shikmin iaka patlash kopa naika*
         to.pay one dollar CONJ half   money 3   to.give PREP 1SG
         spus naika
         IRR   1SG
         'paid; one dollar and a half of money he gave me so that I could'

24   *piii   okuk sama   pi   kakit:*
         to.pay DEM white.person CONJ finished
         'pay this white man, and that's all.'

Text 4: Chinook Jargon (Mrs. Gaspar signature)

The signature at top reads *Misis Gaspar Dog Krik* 'Mrs. Gaspar, Dog Creek'.

Text 5: Chinook Jargon (anonymous grave marker)

Photo courtesy J. Veillette; second line begins *iaka mimlus* '(s)he died'.

Text 6: Chinook Jargon (anonymous inscription on a tree stump)

From Dulog (1903), an article about a hunting trip on Cadwallader Creek (between Mount Currie and Gold Bridge). This genre of *Chinuk pipa* text—messages left in the forest—is also known anecdotally from Father Le Jeune's detailed narrative of a camping trip in the North Thompson (Shuswap country), in which an Indigenous party ahead of his kept leaving notes attached to or carved into trees. (See *KW* #132, September 1895.)

Unlike all Indigenous letters published in *KW*, this one is not edited (cf. Robertson 2008). It is barely legible, however, being inexpertly hand-copied by an outsider to the community who was not literate in *Chinuk pipa*. For this reason, my transliteration of the text incorporates my inferences of what the shorthand author 'Joe' intended to write. (The following analysis of the text first appeared in the blog http://chinookjargon.wordpress.com.)

This text is unique also in being accompanied by an English translation that was supplied by Indigenous readers of it. The lowest [bracketed] line in the interlinearization, helpful in deciphering the original, is this rather free

rendering. Dulog reports having created it by compromising between those provided by Aleck and Major, his two St'át'imc hunting guides; he calls the former "far the better" "Chinook scholar". He explains that he "omit[ted reproducing in shorthand] only" what he considers "the flat and unprofitable advice at the end" of his translation.

1   *Kadwaldar   Krik*
        Cadwallader Creek
        'Cadwallader Creek'
        'Sept. 13, 1902.' [sic]

2   *Siptambar <13 1902>*
        September 13, 1902
        'September 13, 1902'
        'Cadwalader Creek.' [sic]

3   w*al nsaika drit   klahawiam*
        well 1PL   really pitiful
        'Well, we've been really pitiful'
        'Well, we had a hard time here.'

4   *kopa iakwa kwanisim drit*
        PREP here   always   really
        'around here, (we) keep feeling really'
        'Here we got low spirited.'

5   *sik   tomtom kwanisim kopa iakwa*
        upset heart   always   PREP here
        'sorry all the time over here.'
        'It was like that all the time.'

6   *ilo   kopa ikta   nsaika klahawiam*
        NEG PREP what? 1PL   pitiful
        'It's not for any reason that we're pitiful.'
        'There was no good cause for misfortune.'

7   *nsaika ilo   mamuk ikta <3>   dis*
        1PL   NEG to.do   what? three day
        'We haven't done anything for three days.'
        'We did nothing for three days.'

8   *nsaika li   dawn kopa pit*
        1PL   to.lie down PREP bed
        'We were lying down in bed.'
        'We lay in bed.'

9   *nsaika mamuk= mimlus ayu   mawich*
       1PL   CAUS= to.die   much deer
       'We bagged a lot of animals.'
       'Afterwards we killed lots of game.'

10   *nsaika ayu   makmak mawich pi   nsaika*
       1PL   much to.eat   deer   CONJ 1PL
       'We ate lots of venison, but we'
       'We ate lots of game.'

11   *klahawiam kopa   iakwa nsaika*
       pitiful   PREP here   1PL
       'were pitiful around here. We'
       'We have a camp a little above—about fifty yards from this stump.'

12   *kamp   kopa   tanas= sahali klunas <50>*
       to.camp PREP DIM=   above perhaps 50
       'camped somewhere a bit above, maybe 50'
       'We are six camping there.'

13   *iach kopa   iakwa iawa nsaika*
       yard PREP here   there 1PL
       'yards from here. That's where we'
       'This is one story if anybody passes on this trail.'

14   *kamp   nsaika <6> pus nsaika kanawi*
       to.camp 1PL   six IRR 1PL   all
       'camped. There are 6 of us if we're all here.'
       'We had been traveling in another quarter.'

15   *pi   kakwa wik   nsaika wawa pus*
       CONJ thus   NEG 1PL   to.say IRR
       'And so we haven't spoken (met) if'
       'We had two horses.'

16   *klaksta kikuli kopa   ukuk*
       who?   below PREP DEM
       'anyone is below this'
       'We were short of water and we looked for a creek.'

17   *ilihi   wal iawa   nsaika kikuli*
       place well to.say 1PL   below
       'place. Well then, we were down'
       'We reached it and drank, and a little bird came near and sang, "Well!
       well! well!" '

18   *kopa iht ilihi nsaika kamp   aiak   pi   nsaika*
          PREP one place 1PL   to.camp quickly CONJ 1PL
          'at one place; we were stopped for a bit and we'
          'Then he sang "He! he! he!!" '

19   *ayu=   makmak chok pi   nsaika plashash kopa*
          IMPFV= to.eat   water CONJ 1PL   ?   PREP
          'were drinking water and we (?) at'
          'That little bird made us merry. Then we all laughed.'

20   *chok nsaika makmak iht kalkala iaka=*
          water 1PL   to.eat   one bird   3AGR=
          'the water we were drinking, a bird'
          'If anybody passes this trail, don't get low spirited.'

21   *iaka=* [sic] *wawa kopa nsaika iaka wawa*
          3AGR=   to.say PREP 1PL   3   to.say
          'talked to us. It was talking,'
          'If a man gets low spirited he may get sick.'

22   *wawa wawa wawa pus kopit   nsaika wawa kopit*
          to.say to.say to.say IRR CMPLT 1PL   to.say CMPLT
          'talking, talking, talking. When we stopped talking, (it) just'
          'I say that for everybody.'

23   *wawa wawa iaka wawa ihihihihihih*
          to.say to.say 3   to.say laughlaughlaugh
          'talked, talked. It said "Hehehehehehe." '
          'JOE.'

24   *ukuk kalkala iaka=   patlach yutl*
          DEM bird   3AGR= to.give glad
          'That bird made'

25   *tomtom kopa nsaika pi   wal nsaika kopit*
          heart   PREP 1SG   CONJ well 1PL   finished
          'us happy and well, we're done.'