Article title: North Wakashan Comparative Root List (Updated)

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North Wakashan Comparative Root List (Updated)

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Abstract

This inventory of North Wakashan roots is a revised edition of a similar work published in 1980. Where applicable a root is cross-referenced to its occurrence in the earlier edition. For each root is shown the form(s) it takes in the four major varieties of North Wakashan and its known meanings. In selected cases editorial comments are added in footnotes. These comments may use phonemic and/or morphophonemic transcriptions whose interpretation requires experience with North Wakashan and for which the reader may wish to consult the literature referred to in the introductory paragraphs preceding the root list.

Keywords

Wakashan, Heiltsuk, Oowekyala, Haisla, Kwakwala, comparative linguistics

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1. Introduction

1.1 North Wakashan divides into four main varieties hereafter called Heiltsuk, Oowekyala, Haisla and Kwakwala and referred to generically as isolects to avoid the language or dialect issue. Introductions to their phonemics and morphophonemics are provided in Rath (2020), a paper the reader is assumed to be familiar with. It can be viewed and downloaded at [www.ScienceOpen.com](https://www.scienceopen.com) (direct link: <https://www.scienceopen.com/search#author/ca9f5ab9-8d36-41b4-9bfc-49629f3c1cbb>).

North Wakashan lexical words can consist of just a root with or without internal modifications but usually they begin in a root followed by one or more elements that for present purposes can all be called suffixes. This paper lists the forms and meanings of the roots identified to date, in selected cases with additional information in footnotes. It is a revised edition of Lincoln & Rath (1980) and incorporates fresh data, particularly from Haisla. The paper's data is extracted from an MS Access-based all-North Wakashan lexicographic database maintained by this writer. Upon request the derivatives of particular roots including their morphophonemic analysis can be made available in spreadsheet format. On-line accessibility of the database is a future project.

The Heiltsuk and Oowekyala in the database stems from this author's fieldwork since 1974. Most of the Haisla data was collected in the early 1980's in cooperation with Neville Lincoln of SFU. The Kwakwala data is from Franz Boas's Kwakiutl Grammar (1947) and unpublished Kwakiutl Dictionary (n.d.) but always checked against Neville Lincoln's unpublished Kwakwala dictionary of more than 22,000 lexical entries which he has kindly made available to this writer.

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2. Abbreviations and Other Notational Conventions

HE		Heiltsuk
OO		Oowekyala
HA		Haisla
KW		Kwakwala
sb.		somebody
sth.		something

In phonemic and morphophonemic transcriptions this paper uses the notational conventions applied in the MS Access-based database. The following table shows how they differ from those applied in Rath (2020).

Rath (2020)		This paper
λ (a lambda with a stroke)		£ (pound sterling sign)
ǰ		р (a Cyrillic character)
ǰ̃		χ
apostrophe above a glyph, as in p̣, ạ		superscripted 3 after the glyph as in p ³ , a ³
^w (raised little w signaling lip rounding as in ǰ ^w , q ^w , k ^w)		v (as in rv, qv, k ³ v)
ṁ, ṇ, ḷ (letter m, n or l with dot underneath)		м, н, л (Cyrillic characters)

The elimination of diacritics allows print to stay legible even at small point sizes and avoids the problem that an apostrophe may not print properly or at all above a tall glyph.

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Names of people and places are written with an initial capital letter. This concerns only obstruents and consonantal resonants as only these can occur word-initially. As capitals corresponding to λ , ʃ , r , χ are used Λ , ʃ (no special capital), Γ , X .

No italics are used in this paper because they can be hard to read. In comments on roots phonemic transcriptions are surrounded by slants, as in OO /bipgvan m /, and morphophonemic ones by swung brackets, as in OO {[by]bkv-%hnm}. Submorphemic components of morphophonemic structures are however cited between verticals, as in |%|.

When citing a series of cognate forms from different isolects, no commas separate the individual forms. Thus, HE /pkv'u/ OO /pkvu/ HA /bkvu/ "to borrow a boat" KW /bku/ "to borrow" and not HE /pkv'u/, OO /pkvu/, HA /bkvu/ "to borrow a boat," KW /bku/ "to borrow."

An asterisk after a phonemic or morphophonemic transcription means the item was found in literature but could not be re-elicited. An example is KW {bns-}* "bashful, embarrassed." The cases concerned are practically all from KW. An asterisk before a transcription means it is a hypothetical form. Thus, the policy regarding asterisk use differs from that stated in Lincoln & Rath (1980:50-51). The warning given there bears repeating: one should be distrustful of KW forms that occur in materials collected by Franz Boas and George Hunt but could not be re-elicited by Neville Lincoln, numerous as they regrettably are.

In this paper the phoneme /h³/ is written /ḥ³/ when the result of a morphophonemic process and not a lexical constituent of a morpheme. Example: HA /pp'aḥ³ʎa/ "swallow (bird)" (< {[p]phl³-lh} < {[p]pḥ³+lh}).

A root may have two or more variants that are not derivable from a common form in which case they are displayed one above the other, as in the following example:

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HE	OO	HA	KW	Gloss
byx-	byx-	byx-	byx- bx-* myx-	to glow, sparkle, phosphoresce, emit light

It may be undecidable which of several possible forms a root has. In these cases the alternatives are also listed one above the other but with a forward slash after the final hyphen, as in the following example:

HE	OO	HA	KW	Gloss
		myk-/ myk ³ -	myk-*/ myk ³ -*	(?)

A gap in a set of cognate roots may be filled with a semantically similar but formally different root written between parentheses, see the following example from HA:

HE	OO	HA	KW	Gloss
h ³ lkv-	h ³ lkv-	(blk-)	h ³ lkv- h ³ lxv-	blood, to lose blood, to bleed; (OO also:) precious

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3. Root List

Attention! The same root form can be listed under multiple root numbers. To find a particular root form in the below listing, first look up its number(s) in the alphabetic index of root forms at the end of this paper.

Root #	Old #	HE	OO	HA	KW	Gloss
10	1		bns-		bns-*	bashful, embarrassed
20	2	(wnq ³ -)	(wnq ³ -)	(wnq ³ -)	bn ³ -	down, under, below, lower ¹
30	3	bn ³ -	bn ³ -			close, to fit closely
40	4				bs-	to bend metal
50	5	bl-	bl-	bl-	bl-	to forbid, prevent
60	7	(h ³ lkv-)	(h ³ lkv-)	blk-	(h ³ lkv- h ³ lxv-)	blood, to lose blood, to bleed; (OO also:) precious ²
70	8	blxv-	blxv-	blxv-	blxv-	Bella Coola (place name)
80	54			plq-	blq-*	bud, excrescence, blossom; abalone ³
90	9				blχ-*	scatter, spread (feathers, moss, down, roots)
100	10	by-	by-	by-	by-*	abandoned place
110					bys-	(?) ⁴
120	11			był-	był-	pull apart (moss, etc.), scatter, spread
130	12	byk-	byk-	byk-	byk-	to transfer fire

¹ KW uses {wnq-} for "deep."

² Root occurs also in a few OO endearing terms for infants.

³ KW only in /błłina/* "humpbacked whale"

⁴ In KW /bisa/ "to pick-up trifles, small things needed for some purpose." Could be an alternant of root no. 120.

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Root #	Old #	HE	OO	HA	KW	Gloss
140	13 120	byx-	byx-	byx-	byx- bx- [*] myx-	to glow, sparkle, phosphoresce, emit light
150	14	pkv-	pkv-	bkv-	bkv-	(?) ⁵
160	15 70 317	dkv- pkv- bhkv-	bkv- pkv- bhkv-	bkv-, bhkv-	bkv- bhkv-	human, having personality (like humans and supernatural beings); male; (KW also:) testing, tough, unbending character, macho ⁶
170	16	bw-	bw-	bw-	bw-	leave, abandon, flee, escape
180	17			bwt-		(?) to swell, bulge, bud ⁷
190	18	bws-	bws-		bws-	to swell (esp. when pregnant)
200	19	(m ³ w£- m ³ wł-)	(m ³ w£- m ³ wł-)	(m ³ w£- m ³ wł-)	bw£- bwł-	to swell, to bulge, to boil (tide), to bud or flower ⁸
210	20	bwł-	bwł-	bwł-	bwł-	head or front going down, to topple, to stumble
220	21	bwxv-	bwxv-	bwxv-	bwxv-	pregnant (esp. illegitimately)
230	22 23 24	bwqv-	bwqv-	bwqv-	bwqv- [*]	to swell (like bud, knob or when pregnant), swelling or

⁵ Only in HE /pkv'u/ OO /pkvu/ HA /bkvu/ "to borrow a boat" KW /bku/ "to borrow."

⁶ HE {dkv-} OO {bkv-} are diagnosable only in HE {[dy]dkv-%hnm} > /d'itgv'an'm/ OO {[by]bkv-%hnm} > /bipgvam/ (plurals of HE /tgv'an'm/ OO /pgvanm/ "person, man," a term with the same ambiguity as French "homme").

⁷ All examples refer to female genitals.

⁸ {bw£-} only in KW /bu£kmala/ "heaping full." Some examples of {bwł-} refer to female reproductive power.

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Root #	Old #	HE	OO	HA	KW	Gloss
						pressurized container discharging its contents ⁹
240	25	pqv-	pqv-	bqv-	bqv- bhqv-	(?) ¹⁰
250	26 27			bχ-	bχ-	to slit, slash, lance cut; (according to Boas (1948:116):) to cut towards body with a straight knife
260		bh- mh- my-	bh- mh- my-	bh- mh- by-	bh-	(?) favoured, desired ¹¹
270	28				bhs-	wear through; chafe (rope, strap, one's skin or tongue)
280	6 29	bh£-	bh£-	bh£-	bh£- bh£-*	to spread arms or fingers, to measure using spread arms or fingers; to spread wings or fins, albatross ¹²

⁹ Also in KW {bw[b]qv-%ay³} > /bubrvε³/* "gum of spruce or pine (believed to make one pregnant when chewed)" HA {[bw]bwqv-dy³} > /bub'uχydi/ "white pitch inside spruce wood."

¹⁰ {pqv-, bqv-} occurs with presumed suffixes {-+t, -+c³, -+t} in a stem meaning "sleepy, drowsy" and, in HE, "moth." {bhqv-} occurs in KW /baq³vlawi/ "bat."

¹¹ In feeding-related baby talk, endearing terms (e.g. for a grandfather) and possibly in the KW place name /Ba³a³s/. What could be a metathesized form of this root, sc. the set {hm-, hp-, etc.} listed as root no. 22540, is also associated with desire for something. A meaning difference is associated with HA {bh-} and {mh-}, the former being used for a male and the latter for a female.

¹² {bh£-*} may occur in KW /basbлi³/* or /basbлε³/* "side fins of fish or porpoise."

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Root #	Old #	HE	OO	HA	KW	Gloss
290	30	bhkv-	bhkv-	bhkv-	bhkv-	(?) wing, extending flaps or wings from an axis ¹³
300	31	bhkv-	bhkv-	bhkv-	bhkv-*	(HE/OO/HA) to gather and preserve food; (KW) to fish for halibut
310	32		bhkv-		bhkv-	(?) to stay filled, replenish
311	33	bhkv-	bhkv-	bhkv-	bhkv-	(?) ¹⁴
320	34	bhxv-	bhxv-	bhxv-	bhxv-	to rise, swell, increase in size, take shape; (KW also:) visible, easily seen
330	35				bhxv-*	to leave, abandon ¹⁵
340	36				bhxv-	human (as opposed to supernatural), secular, profane, uninitiated
350	37	bhqv-	bhqv-	bhqv-		to separate things that are joined together (e.g. pull cap from pen, toque from one's head)
360	38			bhχv-		to overload one's mouth
370	40		pt-		pt-	to give or take medicine ¹⁶
380	41	pn-	pn-	pn-	pn-	to fill sth., to pour in, to pour out
390	42	pnc-	pnc-	pns-	pns-	bud, knob, swelling, blister

¹³ In a stem referring to skate or ray fish.

¹⁴ In the HE/OO/HA/KW stem {[bhkv]bhkv-} which refers to a mythological being associated in HE/OO/KW with cannibalism but in HA with always having food.

¹⁵ Only in baxva* [2] 'to leave' which is from the Koskimo dialect.

¹⁶ OO only in /pt³i/ and /pt³a³i/ "medicine."

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Root #	Old #	HE	OO	HA	KW	Gloss
400	43	pnɬ- pn³ɬ-	pnɬ- pn³ɬ-	pnɬ- pn³ɬ-	pnɬ-	filled up, satiated, swollen, stout, big with child
410	44	pnqv-, pnq-	pnqv-	pnqv-	pnqv-	satiated, filled with food
420	45				pnχv-	swollen (like face after crying)
430	46				pnq-*	to glare, to shine, to light (like a match)
440	39 48 49 87 88 99	ps- phs-	ps- p³s- phs-	ps- phs-	ps- p³s- phs- p³hs-	1. (HE/OO/HA/KW {ps-}, OO {p³s-}, KW {phs-}:) clear (of obstacles, pollutants), tidy, clean, smooth, supple, not offering resistance, easy; 2. (HE/OO/HA/KW {phs-}, HA {ps-}, KW {p³s-}:) flat in shape, layer-like (e.g. skin, bark, flounders), to handle flat layer- like things, to rip sth. flat off; ¹⁷ 3. (OO {p³s-} KW {p³s-, p³hs-}:) to receive at potlatch ¹⁸

¹⁷ HA {ps-} meaning "flat" is attested only in HA /pssi³ud/ "to split dry ooligans in two" elicited from George Paul Wilson, a speaker of the Kitamaat dialect. The Kitlope consultant used HA /p'assi³ud/ instead whose root {phs-} usually means "flat (etc.)" but also alternates freely with {ps-} "not offering resistance, easy, etc." as in KW {phs-m-hlh} > /pasmala/ and KW {ps-m-hlh} > /psmala/ "to obtain easily."

¹⁸ OO {p³s-} is attested only in {p³s-m-hlh} "obtain without exerting oneself" {p³s-lh} "a kind of potlatch" and the man's name {p³[hh]s-lh} > /P³aasɬaɬ/ all of which are likely KW borrowings. The association of {p³s-, p³hs} with potlatching could be through "obtaining easily/freely" and the flat things (blankets) exchanged at potlatch.

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Root #	Old #	HE	OO	HA	KW	Gloss
450	50	pɬ-	pɬ-		pɬ- pɭ- bɭ-*	flat body part (e.g. palm of hand, sole of foot, flap, fin, wing) ¹⁹
460	51	pl-	pl-	pl-	pl-	thin and flat (said of sheets or layers of sth.) ²⁰
470	52		plk-		plk-	flat thing is located somewhere, moving or being handled
480	53	plq-	plq-		plq-	flat thing is located somewhere, is moving or being handled
500					pk-	to burst (like a balloon), blow off (steam), to lose patience ²¹
510	56 57 58 59	px-	px-	px- tx-	px-	warm, hot, to heat; (HA and possibly KW also:) fierce, fiery, red, dangerous, scary, off-putting ²²

¹⁹ In KW alternates with {pɬ-} "flat, to flatten." KW {bɭ-}* occurs possibly in /basɬɛ³/* 'side fins'. See also {ɬp-, bhɬ-}.

²⁰ In HE/OO/HA root occurs also augmented to {pl³-} and {pl[∞]-}.

²¹ KW consultants only gave glosses referring to losing patience. Boas's glosses however also refer to bursting and blowing off. This root may be an alternant of {px-}.

²² Lincoln (n.d.) indicates KW /pxa/* 'to bleed sb.' occurs in the Boas-Hunt materials but consultants rejected Boas's gloss and said it means 'to heat, warm up'. Likely Boas's gloss is in error and should have been a reference to heating and becoming red hot. This root {px-} may also have an association with redness in non-reelicitable KW words to do with kelpfish, e.g. KW /pxit/* "kelpfish." Kelpfish, a.k.a. giant kelpfish, live in kelp forests and according to <http://www.sanroque.net/srstudents/foss/popeco/organismdatabase/orgpages/1122.html> their dominant colour is red although they can alter their colour slightly to blend in with the brown or golden of the kelp they live in.

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Root #	Old #	HE	OO	HA	KW	Gloss
520	63	pys- py ³ s-	pys- py ³ s-	pys-	pys-	squeaking, whistling, pinched or resonant sound
521	60 61 62 371	pys- py ³ s-	pys- py ³ s-	py ³ s-	pys- tys-	unstable, unsteady, off and on, back and forth, pliable, elastic, yielding, wavering, fluttering, fluctuating
530	64				pyɬ-	unstable, unsteady, off and on, etc.
540	65 68		pyk-		pyk- pyq-*	to whistle, to make a high pitched sound; marmot ²³
550	66 67	pyɣv-	pyqv- pyɣv-	pyqv-	pyqv-	(HE/OO/HA) to soak, dampen, sprinkle water; (KW) agreeable, pliable, soft, to soften (by soaking)
580	69 71	pkv-	pkv- p ³ kv-		pkv-	to congregate (like birds in flock, fish in school), to compact, to weave together ²⁴
590	72	p ³ xv-	p ³ xv-	p ³ xv-	pxv- phxv-	to float, to drift, to be buoyant; (KW also:) to lie dead
600	73 74	pw-	pw-	pw-	pw-	capacious, lacking filling, deep, hollow, starved for sth.
610	75	pws-	pws-		pws-	hollow, lacking filling, to starve
611	76	pws-	pws-	pws-	pws-	to expand, swell up (as through soaking), rise (like dough); (HA

²³ {pyq-}* only in KW /piradi/* "having marmots." Probably its /r/ is a spelling error and should have been /g/.

²⁴ The only HE example is possibly the place name /Pkvi³a/ the meaning of which is however not known. Note the |p| - |p³| alternation in this root and no. 590.

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Root #	Old #	HE	OO	HA	KW	Gloss
						also:) to rot (as fish after spawning)
620	77		pwɬ-	pwɬ-	pwɬ-	(OO/KW) satiated, full; (HA) paunchy, stout
630	78	pwɣv-	pwɣv-	pwɣv-	pwɣv-	to blow (with the mouth, or like whale), to inflate
640	79				pwɣv-*	(?) ²⁵
650	80				pwqv-	(?) bladder, swelling, gas-filled ²⁶
660	82				pwqv-/ pwɣv-	(?) ²⁷
670	81				pwɣv-	(?) to fill up on sth. ²⁸
680	83	pɣv-	pɣv-			to wither (plant, etc.)
690	84 94	phq-	phq-	phq-	pq- phq-	flat in shape, to handle a flat object, to lay down flat
700	26 400	pɣ-	pɣ-		pɣ- tɣ-	cedar strips, to split cedar ²⁹

²⁵ Only in KW /puxvas.m³s/* "willow tree"

²⁶ Occurs in two words referring to kelp. Because the root begins in |pw| there is a good chance it has something to do with floating or being swollen or bladder-like. Wikipedia in its article on kelp says gas-filled bladders (pneumatocysts) form at the base of blades of American kelp species such as *Nereocystis luetkeana* (Mert. & Post & Rupr.), and keep the kelp blades close to the surface, holding up the blades by the gas they contain.

²⁷ Only in KW /puɣvba/ "knife." Lincoln (n.d.) writes /puɣba/ although the plural form is written with /ɣv/, cf. KW /pi³puɣvba/.

²⁸ In words referring to getting food.

²⁹ {pɣ-} only in HE /pɣ'a/ OO /pɣa/ "cedar strip" KW /pɣa/ "to split cedar, cedar strip."

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Root #	Old #	HE	OO	HA	KW	Gloss
710	85	pχ-	pχ-		pχ- phχ-	to heal (said of shaman), to exorcise a spirit
720	86	ph-	ph-	ph-	ph-	flat in shape, lay sth. down flat; flat pieces splitting off (e.g. pieces of cedar for basket making); (KW also:) river floods/overflows
740	89 92	ph£-	ph£-	ph£- phł-	ph£- phł- ph³ł- py³ł-	flat, to flatten ³⁰
750	90	phł-	phł-	phł-	phł-	to flood, overflow (river)
760	91			phł-		(?) ³¹
770					phxv-	(?) ³²
780	93				phqv-	to put flat on a surface
790		phχ-	phχ-	phχ-		peeling off, flaking off (like dandruff, flakes from the skin), to peel potatoes or fruit
800	95		p³tk- p³dk-		p³dk-	(?) dark ³³
810	96		p³t-			dented

³⁰ {ph£-} occurs in KW also with the meaning of {p£-} "flat body part." {ph³ł-} and {py³ł-} occur only in KW /pa³łaga/ "flat dish" and its alternant /pi³łaga/.

³¹ Possibly in HA /pp'aħ³la/ "swallow (bird)" (only example).

³² Only in KW /paxva/. Term recognized by informant but meaning not remembered. According to Boas it is "lungs, heart."

³³ In e.g. OO /p³tkla/ KW /p³dkla/ "dark night, darkness reigns."

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Root #	Old #	HE	OO	HA	KW	Gloss
820	97 547	n ³ nq-	n ³ nq-	h ³ nq-	p ³ nq-	(HE/OO/HA) to moan, to groan; (KW) to gasp in annoyance
830	98 125	p ³ s- p ³ hs-	p ³ s- p ³ hs-	p ³ s-	p ³ s- p ³ hs-	bent or crooked in shape, warped; to bend and give way; to force to give way, to indent
850	98	p ³ s-	p ³ s-		p ³ s-	(?) one's ears
860	100 101			p ³ £-	p ³ £- p ³ h£-	(HA) to fling, to flap, to throw a floppy object; (KW) to spread wings, to fly
870	102	p ³ l-	p ³ l-	p ³ l-	p ³ l-	(?) applying or removing a covering layer ³⁴
880	103	p ³ l-	p ³ l-		p ³ l-	to pinch and pull an outgrowth or covering layer
890	106	p ³ l- p ³ lxv-/ p ³ lχv-	p ³ lxv-/ p ³ lχv	p ³ l-	p ³ lxv-/ p ³ lχv	(?) ³⁵
900	104 105	p ³ lc-	p ³ lc-	p ³ lc-	p ³ lc-	moss-covered ³⁶
910	107	p ³ lq-	p ³ lq-	p ³ lqv-		blunt, dull ³⁷
920	108 109		p ³ lχ-		p ³ lχ-	fluffy white layer (like fog blanketing landscape, mountain goat's fur, a goat wool blanket)

³⁴ Only in words to do with blinking or keeping the eyes closed.

³⁵ In a few words referring to a sister-in-law.

³⁶ The HA root {p³lc-} "to accompany" listed as no. 105 in the 1980 root list had only one example whose gloss "to accompany" is no doubt due to misunderstanding the informant.

³⁷ Note alternation of rounded and unrounded. Another example is HA /yχsu/ and /yχvsu/ "It's you who ..."

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Root #	Old #	HE	OO	HA	KW	Gloss
940	110	p ³ x-	p ³ k-	p ³ x-	p ³ k-	to dent (hard material), to depress
	111		p ³ x-			(sth. resilient); dented, having
	112					grooves or holes, hollow, concave; a depression
960	113	p ³ ys-	p ³ ys-		p ³ ys-	hard, harsh
970	114	p ³ yxv-	p ³ yxv-	p ³ yxv-	p ³ yxv-	to grope, to touch, to feel with the hand, to palpate
980					p ³ yq ³ v-*	to press (crush) in hand
990	115	p ³ yq-	p ³ yq-	p ³ yq-	p ³ yq-	rotten, moldy ³⁸
1000					p ³ kv-	(?) baggy, hollow
1010	116	p ³ w-	p ³ w-		p ³ w-	(?) halibut ³⁹
1020	117			p ³ ws-		to bend sth.
1030	118			p ³ wł-		(?) spread fish open ⁴⁰
1040	119	p ³ wł-	p ³ wł-		p ³ wł-	to bubble up, splash up (water, fish), to boil (tide)
1050	120	p ³ wkv-	p ³ wkv-		p ³ wkv-	white, halibut
1060	121				p ³ wqv-	to break off with the hands sth. that is attached to a stem or surface (e.g. leaves, dried fish)

³⁸ The glosses of the KW examples specify that reference is to a rope, mat or cloth.

³⁹ All examples are about halibut but the root could denote not the fish but a conspicuous property such as its flat shape or its white underside.

⁴⁰ Occurs in words to do with roasting or drying backbone of fish.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
1070	122				p ³ qv-	to be flat on sth. ⁴¹
1080	123	p ³ q-	p ³ q-	p ³ q-	p ³ q-	to taste
1090	124 130	p ³ h-	p ³ h-	p ³ h-	p ³ h-	to feel for sth., stretch out the hand for sth., to use the hand; (HE/OO/HA also:) to do work, operate on sth. (physically or magically) ⁴²
1100	132	p ³ h-			p ³ h-	(?) to wither, change colour (plants) ⁴³
1130	126 127	p ³ hɬ-	p ³ hɬ-	p ³ hɬ-		(HE/OO) to string out, to spread out from a centre, to extend from a stem; (HA) to reflect ⁴⁴
1140	128	p ³ hɬ-	p ³ hɬ-	p ³ hɬ-	p ³ hɬ-	woolly, woolly layer, moss
1150	129			p ³ hx-		(?) dark ⁴⁵

⁴¹ In KW /p³q³va/ "to be flat on sth. (e.g. stove)" and according to Boas also "to mold or press into shape."

⁴² KW uses {[h³y]h³χ-} for "to work."

⁴³ For HE the root is attested only in /p³aχv.h³'it/ < {p³h=hqv-&yɖ} "to change colour (leaves in the fall)."

⁴⁴ The HE/OO examples all involve sprawling/stringing out (roots, line), spreading open (wings, arms), reaching/bending down (branches, shirt tail hanging out). The HA examples are about cognitive reflection. Cf. the polysemy of English "reflect" ("bend off/back" > "make manifest/show," "think" etc.)

⁴⁵ In two derivatives of the stem {p³hnyχv-} "darkness."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
1170	131		p ³ hq ³ v-		p ³ hq ³ v-*	spoiled, moldy, rotten (like
	133				p ³ hq ³ -	berries on bushes) ⁴⁶
1190		mmm- hmm-	hmm-	hm-	hwm∞- hm ³ w-	(onomatopoeic) ⁴⁷
1200	134	mmk-	mmk-	hmk-	hmk-	(onomatopoeic:) to hum, to buzz,
	135		mk-			to mumble; (HE/OO also:) to emit a drumming sound ⁴⁸
1210	136	mt-	mt-	mt-	mt-	to quiver, twitch, tremble,
	137	mht-	mht-	mht-	mht-	rumble; to flick, twitch, flutter,
	138					flap (wings); to be agitated,
	139					seething (like water bubbling or
	170					boiling) ⁴⁹

⁴⁶ {p³hq³v-} occurs in OO /p³aq³vrm/ "to make the face look moldy" and non-reelicitable KW /p³aq³vrm/ "to paint the face."

⁴⁷ In the word for "pigeon" and KW /hum:hum/* "white owl, myth name of blue grouse." The male blue grouse is known for its hooting in spring, cf.

<https://nhpbs.org/natureworks/bluegrouse.htm>. So is the male ruffed grouse, cf.

<https://www.hww.ca/assets/pdfs/factsheets/ruffed-grouse-en.pdf>.

⁴⁸ Occurs also in HE /m'mk'ɬs/ OO /mmkɬs/ "ruffed grouse." In the spring the male ruffed grouse uses its wings to make a sound resembling a far-off motor boat or drumming, hence its English nickname "drummer." See Hinterland Who's Who at

<https://www.hww.ca/assets/pdfs/factsheets/ruffed-grouse-en.pdf>. {mk-} occurs only in OO /mx:mka/ "bullroarer."

⁴⁹ In HE/OO the form {mht-} usually refers specifically to flying by flapping wings and, by extension, to airplanes. Only two certain examples of HA {mht-} and according to the Kitlope consultant they could be dialect borrowings from HE. Perhaps HA {mht-%wy³w} > /mad'uy³u/ "fox, bobcat" is another example of the root but it is unclear what its literal meaning, which is twitching in the middle, would have to do with the animals named.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
	215					
	216					
1211	136				mt- mht-	(?) fat ⁵⁰
1212					mn-	(?) surplus, extra, surfeit ⁵¹
1220	140				mnz-	(?) to split kindling wood
1230	141	mnł-	mnł-	mnł-	mnł-	saturated, filled to capacity, filled to excess; (KW also:) ooligan oil (grease) feast
1240	142	mnk-	mnk-	mnk-	mnk-	rust, excrement, manure
1250	143	mlxv-	mlxv-	mnxv- mlxv-	mnxv-	to smile
1260	144				mnr-*	(?) ⁵²
1270	145				mnq-	to light ⁵³
1280	146 149 151	mc-/ms-	mc-/ms-		mc- ms-	(?) ⁵⁴

⁵⁰ In KW words referring to horse clams and the word for kidney fat. Is a cross-family stem, cf. proto-Salish *mat³ay-* and *t³amay-* "horse clam" and *mət³us-* "kidney" in Kuipers (2002:70).

⁵¹ In the KW stem {mn-%yqv-} "in a big way, more than necessary or expected" in which {-%yqv-} probably refers to spreading around or showing off. Also in the KW stem {[my]mn-} (with initial |m| becoming |h|) "always, constantly."

⁵² In KW (Koskimo dialect) /mnra/* "war canoe."

⁵³ Only in KW /mhqa/ 'to light'. Unclear what exactly is meant, illuminating or igniting.

⁵⁴ In names of living creatures. For HE/OO it is not diagnosable if the root form is {mc-} or {ms-} in the few available examples. KW diagnosably has {ms-} while the stem {mc-h} specifically means "mink."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
1290	147	ms-	ms-	ms-	ms-	to crave, covet, desire, long for, lust after
1300	148	ms-	ms-	ms-	ms-	to tense, contract, throb, go back and forth, agitate, recoil, rebound ⁵⁵
	150	m ³ s-	m ³ s-	m ³ s-		
	152	mxs-	mxs-			
1320	153	mł-	mł-	mł-	mł-	to whirl, rotate, stir, mix, churn, interweave, swirl, swing;
	154	mł•-	mł•-	mł•-	mł•-	sediment resulting from agitating a liquid; ({mł-} in HE/OO and rarely KW also:) to swim ⁵⁶
	155	młh-	młh-	młh-	młh-	
	224					
	225					
1330	156		mł-		mł-	(?) ⁵⁷
					młh-	
1340	157	ml-	ml-		ml-	to depart from straight course, to slant, to go sideways, to turn around, to twirl, to twist strands together
1360	160	mlc-	mlc-	mlc-	mls-	to twist, turn, go or look sideways
1370	161			mlk-		(?) ⁵⁸

⁵⁵ {m³s-} is attested only in words to do with withering and shrinking. {mxs-} occurs only in the word for rainbow.

⁵⁶ 1. In one example KW uses {mł-} but HE/OO {młh-}, cf. KW /młiqɑ/ HE /m'al'iqɑ/ OO /maliqɑ/ "to swing in a circle etc." The only HA example of {młh-} is possibly /m'amɑł/ "soft underwool of mountain goat." In KW, {młh-} meaning "to swim" is in most cases replaced by {rlq-}. 2. The stems {mł•-} and {młh-} refer more specifically to wind. For a similar alternation see {n³xv•-} and {n³xvh-} "near." 3. Perhaps this root occurs also in {[mh]młh-yk-+-h} > HE /m'am'ahik³a/ OO/KW /mamalik³a/ "swallow (bird)."

⁵⁷ In words referring to sockeye salmon and halibut.

⁵⁸ In the HA stem {[mh]mlk-} "berries."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
1380	162			mlk-	mlk-	not following a straight course,
	163				mlx-	now here now there, lacking order
1400	164	mlqv-	mlqv-		mlqv-,	to turn, twist, fold; to curl (like
	165				mlɣv-	wave breaking); ({mlqv-} usually
	166				mlq-	figuratively:) to mull, to turn over
	167					(in thought), reminisce,
	168					remember, cogitate
1401					mlq-	to cover, to spread out over
1410	159	ml ³ -	l ³ p-	ml-	ml ³ -	to flash a light, beam a light ⁵⁹
	1245			ml ³ - l ³ p-	mhl ³ -	
1420	169		mk-		mk-	(?) sunken, down a hole, put in or
	171					take out of pit or enclosure, to
	172					bolt food ⁶⁰
1440	173	mx-	mx-	mx-	mx-	to administer a sharp blow (as
		mhx-	mhx-	mhx-	mhx-	with fist or bird's beak), to punch
1450	174	my-	my-	my-	my-	1. pointed, pointing, wedge-
	175	mhy ³ -	mhy ³ -	mhy ³ -	mhy ³ -	shaped, snouted, protruding,
	176				m ³ y-	sprouting, flaring up;
	177					2. (often but not always
	178					

⁵⁹ HA {l³p-} is attested only in (Kitamaat dialect) /l³pa/ "to flash a light" instead of which the Kitlope consultant said /mɭ³a/. HA {ml-} probably occurs in {ml-≡n³hkvɭh} > {ml∞-n³hkvɭh} > /m'ɭɭn³akvɭa/ "to shine a light on one thing after another," with |=| becoming |∞| instead of glottalizing ||.

⁶⁰ OO only in /mka/ "to pick the stems off crabapples."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
						combined with {-h}:) fish (in general), salmon ⁶¹
1460	179		myt-	myt-	myt-	to twist strands together
1470	179		myt-		myt-	to point, poke, extend a long thing ⁶²
1480	180 257	mys- m³ys-	mys-		mys- m³ys-	(?) to point, poke, protrude ⁶³
1490		mys-	mys-			meat, flesh ⁶⁴

⁶¹ The augmented form {mhy³-} occurs only in the stem {mhy³-wʃ-} "to be born, to point out of birth channel." {m³y-} occurs only in KW {m³y-ynh} > /m³ina/ "penis (baby talk)." See also comment on root no. 1530.

⁶² Only OO example is possibly /Midawis/ (name of a creek).

⁶³ (1) {mys-} occurs in words referring to smelling and kissing, and in the non-reelicitable KW /mizləɣzayu/* "penis". The kissing may in the pre-contact period have been what is known by names like Eskimo kissing and sniff-kissing, which is not rubbing noses but pressing the nose and upper lip against somebody's skin and breathing in so that his/her skin or hair gets suctioned in. Neville Lincoln said in an e-mail dated October 16, 2008, that he believes Mabel Stanley told him that the Kwagiutl kissed traditionally using the nose. (2) {mys-} likely also occurs in HE /m'aisa/ "to spear cockles from canoe"; this term has an alternant in which the root is {m³ys-} instead of {mys-}. (3) {m³ys-} occurs also in KW /m³is:m³c³a/ "chiton." According to Boas this means "penis on the rocks" which makes sense if the root means "to point etc." Wikipedia says of a chiton that "The majority of the body is a snail-like foot" and "A chiton creeps along slowly on a muscular foot."

⁶⁴ In only a few words. Root could be a foreign borrowing.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
1510	1446	(k ³ yg- k ³ yk-)	(k ³ yg- k ³ yk-)	(k ³ yg- k ³ yk-)	myg- mygh-	to caulk ⁶⁵
1520				myk-/ myk ³ -	myk-*/ myk ³ -*	(?) ⁶⁶
1530	178		myx-		myx-	pointed, pointing, snouted ⁶⁷
1531	181				myx-	to light a fire, set fire to sth., strike a match
1540	182	myx-		myx-		(?) ⁶⁸
1550	183				mykv-	(?) ⁶⁹
1560	184 502 503	myqv- nyqv- nyqv-	myqv- nyqv- nyqv-		nyqv-	murky, muddy, dirty (said of water)

⁶⁵ KW {myg-} is present in {myg-x.h³yd} > /migx.h³id/ "to start caulking" and KW {mygh-} in {mygh-y³w} > migay³u "caulking iron, caulking tool." In the other KW examples it is just not diagnosable if root is {myg-} or {mygh-} in which case {myg-} is assumed.

⁶⁶ 1. Perhaps in HA /mik³t/ "kind of hard stone used for arrows, probably obsidian" and KW /mik³a/* "to throw up feathers, shoot arrow upwards." However, the semantic connection between the two words is tenuous. 2. HA /mik³t/ could also be a loan from Bella Coola. It is glossed as "arrowhead" in Nater (n.d.:64, entry no. 769).

⁶⁷ In OO /mixt/ KW /mixədi/ "porcupine" and note that HE uses {my-} instead of {myx-}, cf. HE /m'it/ "porcupine."

⁶⁸ Only in HE /m'im'an³u/ HA /m'i:mha/ "kid (of mountain goat)" (in HA also "lamb.")

⁶⁹ In KW /migvat/ "hair seal," term reminiscent of Halkomelem Salish /mæk^wəlqəl/ "(have) coarse hair" (from a free root {mæk^w-} "stout, thick, fat, coarse" and suffix referring to hair, fur, fleece, wool); cf. Galloway (2009:311). The KW root may have been borrowed (from Halkomelem or a third party) as {mygv-} but must have been reinterpreted as {mykv-} in {mykv=hc³y} > /migvac³i/, synonym of /migvadac³i/ "container for seal."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
1570					myχv-*	(?) ⁷⁰
1580					myq-*	(?) ⁷¹
1590	185	(k ³ hł-)	(k ³ hł-)	(k ³ hł-)	myχ-	to sleep, to dream
1600	186				mkv-	(?) ⁷²
1610					mkv-*/ mxv-*	(?) ⁷³
1620	187			m ³ xv-	mxv- mhxv-	to envy, covet, desire, admire
1630	188 189	mxv-	mxv-		mxv-	fast, quick
1640	2441	mw- mhw ³ y-	mw-		mw-	(?) ⁷⁴
1641					mw-*	(onomatopoeic) ⁷⁵

⁷⁰ In KW /miχviwal³is/* "bullhead." However, bullheads are not native to the western part of North America. Lincoln (n.d.) gives the taxonomic name of *Myxocephalus polyacanthocephalus* which belongs to the great sculpin. The great sculpin lives on sand and mud bottoms. It has a blotchy brown, black and/or grey coloration and relies on camouflage for survival. Perhaps the KW name refers to its conspicuous eyes high on the forehead rising up steeply above the mouth.

⁷¹ In KW /miradi/* (a place name), /miqml/* "marriage mask."

⁷² In KW /mkva/ "to kill fleas in the teeth" and KW /ma:mk³va/ "bat."

⁷³ In KW (Koskimo dialect) /mxvstu/* "steam hole of oven"

⁷⁴ Root is probably an alternant of {lw-} (no. 11310, q.v.), and like it may have a connection to the supernatural. It is assumed to occur in OO/KW /hmumu/ "butterfly" (HE cognate /hɪ'ulu/); HE /hm'uli/ OO /hmuli/ "limpet", HE /h'am'aw³iala/ and /h'am'aw³iali/ (a limpet) and, with the root {k³h-} prefixed to it, in the compound word HE /k³'am'amu/ OO /k³amumu/ (a kind of clams).

⁷⁵ In KW /mawawu/* (crow's cry) KW /mɔ/* (cry of raven).

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
1650	190	mw-	mw-	mw-	mw-	four ⁷⁶
1660	191	mwt-	mwt-	mwt-	mwt-	balsam fir
1670	192			mwc-/ mws-	mws-	(?) ⁷⁷
1680	193		mws-		mws-	to destroy, damage, hurt, abuse, be careless or rough with ⁷⁸
1690	194	mwł-	mwł-		mwł-	to whirl, rotate, stir, mix, agitate, seethe
1700	195				mwł-*	(?) chafed, chafing
1710	196		mwł ³ -		mwł- mwł ³ - mwł ³ h- mwł ³ w-	grateful ⁷⁹
1720	197	mwkv-	mwkv-	mwkv-	mwkv-	to tie a rope to sth., tie a knot in a rope, hang sb., dangle
1730	198				mwkv-/ mw xv-	(?) ⁸⁰
1740	199	mw xv-		mw xv-		hump, lump
1750	200				mwqv-	(?) ⁸¹

⁷⁶ This root always combines with an extender {-y-}, {-±y-} or {-w}.

⁷⁷ In HA the root occurs in a stem meaning "chief's wife" and in KW in stems referring to gathering one's skirts and raising one's clothes.

⁷⁸ Occurs only in the stem {mw[mh]s-}.

⁷⁹ {mwł-} only in KW /muła/ "grateful."

⁸⁰ In some tree names.

⁸¹ In KW /muqvała/ "to stand aside."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
1760	201 202	mwqv-	mwqv-	mwqv-	mwqv- [*] m ³ wqv-	to cover over, hide, keep under wraps; (in some HE/OO/HA examples:) to contain life, animate
1770					mwqv-	(?) ⁸²
1780	203				mwqv-	(?) ⁸³
1790	204				mwχv-	(?) ⁸⁴
1791					mrν- [*]	(?) spread all over ⁸⁵
1800	205	mqv-	mqv-	mqv-	mqv-	multiple layers building a swollen bag-like structure, bulbous
1810	206 235 238	mχv- mhχv-	mχv- mhχv-	mχv- mhχv-	mχv-	rhythmic movement up and down or side to side, to undulate, shaking movement, to shake (clothes) in water, to rinse, to launder; wet, damp ⁸⁶

⁸² In words referring to fish stomach. Could be root no. 1760 and mean "covered, hidden inside."

⁸³ In KW {[mh]mwqv-=yn³-h} > /mamurvin³a / "quartzite." According to Wikipedia quartzite is white to gray if pure but can have other colours due to iron oxide or other mineral impurities. Possibly therefore the stem is a misrecording, its root being {m³wqv-} (root no. 2370).

⁸⁴ Only in KW /mυχvла/ "slovenly, dirty."

⁸⁵ Of the examples in Boas (1948:133; 1947:353) only two are listed in Lincoln (n.d.) but as non-reelicitable.

⁸⁶ {mhχv-} occurs in words referring to bobbing. It is also assumed to occur in HE /m'axvada/ OO /maχvadли/ "a sandpiper-like bird" because sandpipers are said to bob up and down when they walk on the beach. It may also occur in HE /m'aw'ak³/ OO /mawak³a/ "sea lion" because sea

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
1830	207 273		mq-	mq-		(?) ⁸⁷
1840	208				mχ-	group of hollow objects ⁸⁸
1850			mχ-			(?) ⁸⁹
1860	158 210 212 213	mh-	mh-	mh-	mh-	1. flat, layer-like in shape, sheet; to lie or put down flat; 2. covered by layer-like outgrowth, having hair, fur; 3. level, lacking variation; 4. on the bottom, on the belly; to move on or close to an expanse by crawling, squirming, slithering, wriggling or stirring fins (like fish) ⁹⁰
1890	214	mhq-	mhq-	mhq-	mhp-*	to pluck, tweeze, snatch away, snap apart (rope)

lions can move relatively well on land using all four legs but the hind legs have limited mobility and their back therefore curves sideways at every step.

⁸⁷ In OO /mq³al³ini/ "going across from point to point" OO /mqaw³is/ "way off when crossing from one point to another" HA /mr'ani/ "flying squirrel." Flying squirrels don't fly, they glide from tree to tree.

⁸⁸ Root is plural form of {hn-}.

⁸⁹ In OO /mχuc/ "long feather of eagle."

⁹⁰ The meaning "level" occurs in HA /m'aukvM/ "to always do the same thing." The root occurs possibly also in HA (Kitlope dialect) /mas:masdal'ai/ "to slide a flat object over the water" and HA (Kitamaat) /mas:maydal'ai/ "to slide a flat object over the water, to skip flat rocks."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
1920	217				mht- mhdh- mwdh-*	(?) ⁹¹
1930	231	mhnys-	mhn ³ ys-	mhn'hys-		(?) flat, exposed, unshielded ⁹²
1940	218 219 220	mhs- mhzh- mhz-	mhs- mhz-	mhs-	mhs- mhs∞-	on the side, sideways, off course, slanting, at an angle; to eat a side dish ⁹³
1950	221	mhs-	mhs-	mhs-	mhs-	stripe, striped, extending like a strip, put down lengthwise
1960		m ³ hs-	m ³ hs-	mhs-		(?) ⁹⁴
1970	222	mh£-	mh£-	mh£-		hand in hand, to shake hands, take by the hand
1971					mhl-	(?) spread out ⁹⁵

⁹¹ In some tribal and family names. Boas (1948:138) assumes the root is a borrowing from Nootka where he says it means "to fly." If the association with flying is correct, this root could be another instance of root no. 1210.

⁹² Stem possibly containing a root HE/HA {mnh-} OO {mhn³-} that is related to root no. 2200.

⁹³ {mhzh-} occurs only in HE /m'az'aiqvɫ³a/ OO /maziqvɫ³a/ "salmonberry blossom" and {mhs∞-} only in KW /masəkɔla/ "blossom, flowers." {mhs-} may also be part of a HE/OO stem {mhyɫ-} "to lift and move the end of a long thing (e.g. a plank)." Perhaps {mhs-} with the sense of eating a side dish is also present in OO /mazM/ "Indian cheese (made of salmon eggs)" and /masila/ "to make Indian cheese." Finally, it may be present in HE /m'ask'a/ the exact meaning of which is uncertain but involves one's lower back.

⁹⁴ In HA /M'as:masalanusiwa/ or /M³as:m³asalanusiwa/ (uncertain which), HE /M³as:m³as'al'anuhā/ and /M³as:m³as'al'an³ua/, OO /M³as:m³asalanuhā/ and /M³as:m³asalan³ua/ (name of the creator). For a text about the entity see Walkus (1982:157-162); however, Bella elder Beatrice Brown explained in a low voice the name had to do with eating people).

⁹⁵ In the KW stem {[mh]mhl-} > {hhmhl-} "spread all over."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
1980	223				mhl-	bitter, tart, tangy (like green potatoes)
2000	226 228	mhl-	mhl-			(?) reddish, orange
2010	229		mhk-		mhk-	close, near, next to
2020	230	mhx-	mhx-	mhx- mhl-	mhx-	(?) to take avoidance action ⁹⁶
2021	210 211	mhyt-	mhyt-		mh ³ yt-*	(?) handle a long thing ⁹⁷
2030					mhyh- mhyht- mhyh ³ x-	to value, spare, respect
2040	232	mhkv-	mhkv-	mhkv-	mhkv-	to jerk, to jig
2050	234	mhkv-			mhxv-	to tie a knot or bow ⁹⁸
2060		mhw-				meow! (onomatopoeia)
2070	236 282	mhqv-	mhqv- m ³ hqv-	mhqv-	mhqv-	blocking one's view, opaque, foggy, cover of darkness; (HA

⁹⁶ The examples are about shame, shyness and being inconvenienced by the outside world (like blinded by glare). HA {mhl-} is a free alternant of {mhx-} attested in only one example.

⁹⁷ The HE/OO stem refers to moving the end of a plank by lifting and manipulating the other end. What the KW stem refers to is not clear but could be using the tip of a long thing to draw a marking line. Possibly the stem derives from a root {myt-} because several roots beginning in |my| are about extending a long thing.

⁹⁸ {mhkv-} only in HE {mh[m]kv=htw-h} > /m'amgvatua/ "earrings, ear ornaments" (alternant of HE /m'umgvatua/).

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
						also:) blocking one's way (like uprooted tree)
2090	237				mhqv-*	(?) ⁹⁹
2100	233 283 1254 2582	mhχv- m ³ hχv-	m ³ hχv-	mhχv-	mhχv- m ³ hχv- l ³ hχv- h ³ lqv-	tongue hangs out, to wag the tongue, covered with tongue-like things or scales or plates ¹⁰⁰
2120	239				mhq-*	(?) ¹⁰¹
2130	240	(hlχ-)	mhχ- (hlχ-)	(hlχ-)	mhχ-	killer whale ¹⁰²
2140	241				mhχ-*	(?) stripe ¹⁰³
2150	227	mh ³ l-	mh ³ l-	mh ³ l-	mh ³ l-	two, both, forked ¹⁰⁴
2160	242 243 256	m ³ n- m ³ ny- m ³ hyh- (w ³ w-)	m ³ n- m ³ ny- m ³ hyh- (w ³ w-)	m ³ n- m ³ y- m ³ hyh-	m ³ n- n ³ m-	1. (all HE/OO/HA alternants and KW {n ³ m-}:) one, unit, item in a set, individual, acting alone, in unison with; to collect, congregate, build a unit;

⁹⁹ In KW /maq³vhs/*, the story name of Heron.

¹⁰⁰ {mhχv-} occurs possibly in HE /m'aw'al³as/ HA /m'aw³as/ "Douglas-fir" because the bracts on the tree's cones look like tongues or like the tail and hind legs of a small animal sticking out from between the cone's scales.

¹⁰¹ Only in KW /maqu/* "November" (a word from the Newettee dialect). Perhaps this is the root {mhq-} "to pluck etc." (root no. 1890) that occurs in HE/OO/HA.

¹⁰² OO only possibly in /Maxp³iq/ (name of a totem pole). For another case of |m| - |l| correspondence see {mw-} and {lw-} "flutter, whirl etc."

¹⁰³ In KW /maxstola/* "raccoon."

¹⁰⁴ Also in HE /m'am'alik³a/ OO /mamalik³a/ "swallow"; the root refers here to the forked tail.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
						2. (KW {m ³ n-} and HE/OO/HA {m ³ n-hq-}:) to single out, pick out ¹⁰⁵
2170	244	m ³ nc-	m ³ nc-	m ³ nc-	m ³ ns-	to compare sth. with sth., to try to
	245			m ³ n ³ c-		match a standard, to measure, to
	246					test, to try out, to attempt, to
	248					rehearse
2180	247	m ³ nc-	m ³ nc-	m ³ nc-	m ³ ns-	to motion, to gesture
2190	249	m ³ nq-		m ³ nq-		stuck in a place, to stay behind
2200	250	m ³ hnh- m ³ hnh-	m ³ hnh- m ³ hny-	m ³ nh- m ³ hnh-	n ³ mh- n ³ mhy ³ h-	even, equal, similar, simultaneous ¹⁰⁶
2210	251	m ³ c-/ m ³ s-				(?) ¹⁰⁷
2220	252	m ³ stq-	m ³ stq-	m ³ stq-	m ³ sχ-* m ³ χstq-	to drop, release, discard, let go of sth.; to release grip ¹⁰⁸

¹⁰⁵ (1) For another example of KW using a metathesized form see HE/OO/HA {nyk-} versus KW {ynk-} "to take revenge, retaliate, reciprocate." (2) HE/OO uses {w³w-} "instance of" instead of {m³n-} before the suffix {-p³n-} "times." {m³n-} and {p³n-} are probably developments of one morpheme. (3) HA usually uses {n³hvx-} instead of {m³n-} for the meaning "one, single, alone etc."

¹⁰⁶ Root is an augmented form of {m³n-, n³m-} "one, etc." (root no. 2160) but differs from it semantically in the same way Latin sem- and sim- (surviving in e.g. English "sim-ilar") differ semantically from Latin un- (surviving in e.g. English "un-ity"). HE {m³hnh-} occurs only in {m³hnh=h³s} > /m'an'as/ "prairie, flat country" (cf. OO /m³anas/).

¹⁰⁷ Only in HE /m³z'ay'u/ "stick for prying up roots."

¹⁰⁸ KW {m³sχ-*} only in {m³sχ-w-hlh} > /m³sχɔla/* "to squirt out." If this word is ignored, KW {m³χstq-} could really be {m³q-stq-h}, with root no. 2390 and suffix no. 1170. In HE/OO/HA {m³stq-} this same root {m³q-} may have lost its |q|.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
2230	253	m ³ l-	m ³ l-		m ³ l-	mountain goat colour ¹⁰⁹
2240	254	m ³ lqv-	m ³ lqv-	m ³ lqv-	m ³ lqv-	to lick, spit, transfer moist material from mouth, chew food for baby, give food on tip of the tongue; (KW also:) to flatter
2250	255	m ³ lq-	m ³ lq-		m ³ lq-	mountain goat colour ¹¹⁰
2270	258 259 260 261	m ³ y£-	m ³ y£- m ³ y ³ £-	m ³ y£- m ³ y ³ £-	m ³ y£- m ³ ył-	to fail to hit target, deviate, go off course, shift, move away; to dodge, avoid accident; to make mistake, be mistaken, be wrong; to tease, provoke, do mischief; (KW {m ³ ył-} only:) to spoil a spell or magic, to make mistake in ritual ¹¹¹
2300	262	m ³ yk-	m ³ yk-	m ³ yk-	m ³ yk-	(?) to move, movable ¹¹²
2310	263	m ³ kv-	m ³ kv-	m ³ kv-	m ³ kv- m ³ hkv-	round and/or bulky object is located somewhere, is being

¹⁰⁹ The colour is called grey in the few HE/OO examples and one KW one. It is called white in the majority of KW examples.

¹¹⁰ HE/OO only in HE /m³ʔlqi'a/ OO /m³lqia/ "grey hair, grey-haired."

¹¹¹ In HA, {m³y£-} and {m³y³£-} may seem to be in opposition in, respectively, {m³y£-h} > /m³i£a/ "to miss a shot" and {m³y³£-h} > /m³i£'a/ "to be (go) wrong, to make a mistake."

¹¹² Possibly in HE /m³am³'ikas/ HA /m³am³ik'as/ OO/KW /m³am³ikas/ "possessions, household goods."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
						handled, thrown or dropped; (HE/OO/HA also:) to hammer ¹¹³
2320	264	m ³ w- m ³ hw ³ - w ³ hm ³ -	m ³ w- m ³ hw ³ - w ³ hm ³ -	m ³ w- w ³ hm ³ -	m ³ w- m ³ hwh- m ³ hw ³ -	to transfer a load, to transport; (KW also:) to pile, amass
2330	265	w ³ hmwt-	w ³ hmwt-	(h ³ hmwy ³ -)	m ³ wt-	take home leftovers from feast
2340	266	m ³ wc-	m ³ wc-			to round the mouth, pucker the lips
2350	267 268	m ³ wɬ- m ³ wɬ-	m ³ wɬ- m ³ wɬ-	m ³ wɬ- m ³ wɬ-	(bwɬ- bwɬ-)	to heap up, rise up, swell, ferment
2360	269				m ³ wkv-*	(?) ¹¹⁴
2370	270 1913	m ³ wqv-	m ³ wqv-	m ³ wqv-	m ³ wqv-* h ³ wqv-	white, discoloured, grey, bland, stale
2380	271	m ³ w ³ qv-	m ³ w ³ qv-	m ³ w ³ qv-		(?) ¹¹⁵
2390	272	m ³ q-	m ³ q-	m ³ q-	m ³ q-	to drop, release, discard, throw away, to shoot power, transfer magical power

¹¹³ The one certain example of KW {m³hkv-} is /m³ak³vɾɛ³/ "seed, pit, core" and it alternates with /m³k³vɾɛ³/. In all other possible examples the presence of |h| in the root can also be explained as a suffix-triggered augment. HE/OO/HA often use {ɬ³k-} where KW uses {m³kv-}.

¹¹⁴ In KW /m³ukva/* "young fur seal." Term is not in Boas's dictionary but may have been found in unspecified other Boas-Hunt materials. Could be a misrecording of /m³uqva/* 'grey, whitish, blonde' which is a derivate of root no. 2370.

¹¹⁵ Possibly in HE /m³uɣvdɪ'i/ OO /m³u³ɣvdɪi/ HA /m³uɣvdɪ'i/ "scrotum; to get 'skunked' (= to have no catch)." However, the HE and HA items can also be pronounced /m³ɣvdɪ'i/ and /m³ɣvdɪi/, respectively, and it is not diagnosable if /ɣv/ before /d/ stems from |ɣv| or |qv|. Root could therefore also be anyone of {m³w³ɣv-, m³qv-, m³ɣv-} and even {m³wqv-, m³wɣv-}. The word could be an unanalyzable loan.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
2400	274	m ³ h-	m ³ h-	m ³ h-	m ³ h-	(?) ¹¹⁶
2401		m ³ hs- m ³ hysk- m ³ hhs- m ³ hhł-	m ³ hs- m ³ hy- m ³ hysk- m ³ hhs- m ³ hhł-	m ³ hs- m ³ hy- m ³ hysk- m ³ hhs-	m ³ hs- m ³ hy- m ³ hsk- m ³ hy ³ hł-	<p>1. {m³hy-} occurs in HA /m³ai/ "What?, Pardon me?" and OO/KW /m³aik³ala/ "what did ... say? (in OO used as an expression of disbelief)."</p> <p>2. {m³hs-} is attested in HE/OO/HA /m³as/ "whose? who does it belong to?" and OO {m³hs-'dm-=hs} > /m³asdm³as/ "from what kind of place?"</p> <p>3. HE/OO/HA {m³hhs-} KW {m³hs-} means "entity, something" and is glossable as "what" when used in the predicate of questions. For KW doubling of h is not diagnosable in any example.</p> <p>4. HE/OO/HA {m³hysk-} KW {m³hsk-} (which may really be {m³hhsk-}) means "to say what?, to mean what?"</p> <p>5. {m³hhł-} and {m³hy³hł-} occur in HE /m³'ał/ OO /m³aał/</p>

¹¹⁶ In the exclamation HE /m³'a/ OO/KW /m³a/ "What?, Pardon me?" In KW also attested with some category B suffixes added. Is a component of the hard to analyze stems ending in |s| or |ł| and listed as root no. 2401.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
						KW /m ³ ay ³ aɬ/ "where?, to which place?"
2410	275 279				m ³ hɬ- m ³ ɬ-*	(?) rough, chafing, eating away at ¹¹⁷
2420	276 277 278	m ³ hɬ-	m ³ hɬ-	m ³ hɬ-	m ³ hɬ-	(?) to recognize, to acknowledge ¹¹⁸
2430	280	m ³ hkv-	m ³ hkv-			(?) ¹¹⁹
2440	281	(yhx-)	m ³ hxv-		m ³ hxv-	(?) potlatch ¹²⁰
2450	284	dm-	dm-	dm-	dm-	salt
2460	285 482	nm-	nm-	nm-	dm- nm- n ³ m-	lasting a certain time, having duration
2470	286				dmɬ-	make a rumbling noise
2480	287	dmkv-	dmkv-	dmkv-	dmkv-	(HE/OO/HA) to hinge (like one's limbs), to bend or straighten the legs of V-shape; (HA also:) to kick; (KW) tension in muscle, cramps

¹¹⁷ {m³hɬ-} occurs perhaps in KW {m³hlykv-} "to chew" and KW /m³alizani/* "middle-sized clam with rough shell." {m³ɬ-}* occurs perhaps in the Koskimo word /mɬxvid/* or /m³ɬəxvid/* "to eat."

¹¹⁸ In HA (Kitamaat dialect) /m³am³aɬa/ (Kitlope dialect) /m³am³aɬa/ "to pity sb." and the stem HE/OO/HA/KW {m³hɬ³y-} "to recognize." See also the comment on {h³m³-, h³m³hɬ-, etc.} (root no. 23350).

¹¹⁹ In HE /m³akvaradɬ'i/ OO /m³am³akvaradɬi/ "dragonfly."

¹²⁰ The OO root occurs in proper names and is a dialect borrowing.

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Root #	Old #	HE	OO	HA	KW	Gloss
2490	288				dmxv-*	(?) ¹²¹
2500	289	dwqv-		dwqv-	dmqv-	(?) ¹²²
2510	290				dmχ-*	white eelgrass ¹²³
2520	291		dmχ-			to drone
2530	292	dn-	dn-	dn-	dn-	to pull with a rope, to haul, to drag sth.
2550	293	dnt-	dnt-		dnt-	noisy discussion
2560	294	dns-	dns-	dns-	dns-	strips being ripped off (especially red cedar bark strips)
2570					dnkv-*	fat, grease
2580	295		dnxv-		dnxv-	in a row, one after the other (in space or time), lined up; line of rope ¹²⁴
2590	296				dnχ-	to sing as an accompaniment to the dancers
2600	297		dnχ-			(?) ¹²⁵
2610	298				dn ³ -* dn ³ h-	(?) sandstone

¹²¹ In KW /dmxva/* "to touch the genitals of a sleeping woman."

¹²² In the word for "armpit." For another example of |m| - |w| alternation see HE/OO {h³m-%lhqv-} KW {h³w-%lhqv-} "quiet, faint (sound)."

¹²³ Eelgrass has ribbon-like leaves. According to Hill's Native Art's website they were bleached white in the sun and either as is or after dying used to imbricate baskets and hats.

¹²⁴ OO only in /dhwac³i/ "palette of painter"

¹²⁵ In OO /dHχa/ "to stop spawning (said of herring)."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
2620					dł-	to spread, open, unfold
2630	300				dls-	to lisp ¹²⁶
2640	301	dlk-	dlk-	dlk-		(?) ¹²⁷
2650	302	dlx-	dlx-		dlx-	damp, moist, white eruption on skin due to dampness
2670	303				dk-	to bury (in tree, cave, ground or on rock)
2680	304 305 306	dx- tx-	dx-	dx-	dx-	round, swollen, bulging; exposed, unmistakable, harsh ¹²⁸
2690	307 308	dy-	dy-	dy- dhyh-	dy- dhy- dhyh-	to wipe, sweep ¹²⁹
2700	309				dył-	(?) ¹³⁰
2710					dyk-	to dive with a flop (said of fish or sea mammal)
2720	310	dyx-		dyx-		sexually excited (said of male), having an erection

¹²⁶ Only in KW /dly³ala/ "lispering, to lisp."

¹²⁷ In HE /d'lgm/ OO /d'lgm/ HA /d'lgm/ "soft roe (milk) of fish."

¹²⁸ 1. Occurs also in words referring to owls and hooting, probably because of the size and position of an owl's eyes. 2. HE/OO {dx-} is diagnosable only before a suffix that changes |x| into a non-obstruent.

¹²⁹ Root occurs probably also in HA /d'im³al³as/ 'willow tree'. Brooms used to be made of willow in many parts of the world.

¹³⁰ In KW {dylhk-} "flopping about (fish out of water)."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
2730	311	dykv-	dykv-	dykv-		(?) yellow ¹³¹
2740	312	dyxv-	dyxv-	dyxv-	dyxv-	yellow cedar bark, yellow cedar wood ¹³²
2750	313	dyqv-	dyqv-	dyqv-	dyqv-	to pound in piles, pegs, pins, wedges
2760	314		dyqv-	dyqv-		(?) ¹³³
2770	315				dyχ-	to defecate (said of an animal)
2780	316	h ³ d-	dy ³ -	h ³ d-, rh-	dy ³ -	dear, valued, esteemed, respected, deferred to ¹³⁴
	2178	h ³ c-	dh-		dh-	
	2513	rh-	dhc-		dhc-	
	2542	rh ³ -	h ³ d-		hhd-	
	2568		h ³ c-		h ³ d-	
	2632		h ³ hc-		h ³ hd-	
			rh-		h ³ hdhc-	
			rh ³ q-		h ³ hc-	
					rh-	
					rh ³ h-	

¹³¹ Only in the term for a young duck.

¹³² Also in HE /d'ixvalas/ OO /diixvalas/ HA /daixvalas/ "golden-crowned sparrow."

¹³³ Only in OO /diq³vmy³a/ "cheek meat of fish" and HA /d'iqva/ "diseased fish with white spots in flesh."

¹³⁴ Entry is a family of roots and possibly polymorphemic but hard to analyze stems referring to one's relatives, often hypocoristically. Many of the examples are vocatives. The root {rh-} is a special case. It is comparatively productive with most derivates referring non-hypocoristically to grandparents and ancestors. The following unusual plural forms are attested for it, HE {rh³-} OO {rh³q-} KW {rh³h-}. It probably also occurs in KW /rarala/ and /rarax.h³id/* "to curry favour." The alternation of |r| and |h³| has a parallel in that between |rv| and |w³|, see the alternants of root no. 17720.

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Root #	Old #	HE	OO	HA	KW	Gloss
					rht- rhc- q ³ hc-	
2790	457	t ³ kv-	dkv- t ³ kv-	t ³ kv-	t ³ kv-	(?) ¹³⁵
2800	318	dxv- txv-	dxv- txv-	dxv-	dxv-	to jump, to bob, to move up and down (like chest when breathing)
2810	319 321	dw-	dw-	dw-	dw-*	(?) tense, tenuous (hence: 1. dangerous; 2. spanning a distance, bridging, transmitting (information), to communicate) ¹³⁶
2820	320				dw-	(?) ¹³⁷
2830	319	dwt-	dwt-	dwt-	dwt-	spanning a distance, bridging, transmitting (information), to communicate
2840	322	dws-	dws-	dws-	dws-	numb, slightly intoxicated
2850	323			dw£-		to get out of the way, make sb. get out of the way

¹³⁵ In OO /tk³vH/ (plural /ditk³vH/) "death canoe, canoe carrying a corpse" and HE /t³gv'H/ OO/HA/KW /t³gvH/ (a kind of canoe).

¹³⁶ In {dw-%nt} > HE /d'uht/ OO/HA /duht/ "name" and derivatives. The sense of "dangerous" occurs in HE /d'udu/ OO /dudu/ "It's hot!" and HE /dud'u/ OO /du³du/ (command to stay away from sth. hot). A morphophonemically problematic derivate of {dw-}, sc {dw³-}, is used as a proclitic with a connective function and glossable as "and," "with" or "together with." KW uses {λw³-} deriving from {λw-} (root no. 8650) for this same connective function.

¹³⁷ In KW {dw-%yxv} > /dvixv/ "yellow cedar roots, rope made of branches." Boas has several more derivatives but they could not be reelicited.

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Root #	Old #	HE	OO	HA	KW	Gloss
2860	324 461	dwł- t³wł-	dwł- t³wł-	t³wł-	dwł-	to tickle, tingle; tight, cramped, pins and needles, shocked (by electricity); numb, dizzy, delirious ¹³⁸
2870	325		dwlw-		dwlw-	to win (in a game or contest) ¹³⁹
2880	326 327	dwkv-	dwkv-		dwkv-	be dragged behind (as in trolling), be dragged along; (KW also:) to trail (like plant vine), hang loose like end of rope or fringe, straggle, dangle, stretch out
2900	328	dwxv-	dwxv-	dwxv-	dwxv-*	to sting (like nettles)
2910	329	dwqv-	dwqv-	dwqv-	dwqv-	to see, look at, look for sth., pay attention, watch, examine, consider
2920	330 394 395 396 397 398 399 468 469 2623 2624	tq- t³q- tχ- h³χ-	tq- t³q- tχ-	dq- tq- t³q- t³χ-	tq- tχ- t³q- h³χ-	1a. ({dq-, tq-, t³q-}:) to take in hand, to grasp (catch, hold, squeeze, pin down) physically or mentally, to control, to constrain, to have power, to verify; 1b. (possibly in stem HE {tq-+ł-} HA {dq-+ł-} meaning 'to itch':) affected by, afflicted with; 2. (HE/OO {tχ-} HE/KW {h³χ-}:) located somewhere, moving/be moved somewhere,

¹³⁸ {t³wł-} only in the stem {t³wł-%yx-} "intoxicated etc."

¹³⁹ From Chinook Jargon "tolu."

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Root #	Old #	HE	OO	HA	KW	Gloss
						<p>taking/be taken from. However, HE /H³χa³i/ (name of Hakai Passage) is the only non-KW example of {h³χ-}. It may be of non-HE origin because derivatives have low tone where a high one should occur if the name's structure is {h³χ-αy³};</p> <p>3. HE/OO {tχ-} HA {t³χ-} KW {h³χ-} are also used as substitutes for any lexical word stem a speaker cannot think of fast enough: "thingamajig, whatchamacallit";</p> <p>4. KW {[h³y]h³χ-} is equivalent to HE/OO/HA {p³h-} in the meaning of "to work";</p> <p>5. {t³q-} sometimes occurs as a dummy attachment for category A suffixes in the same manner as {w³w-, etc.} (root no. 17720).</p>
2930	331				dχ-	to spread (legs), open (tongs, clamshells), split (wood)
2940	332 333	dh-	dh-	dh-	dhy ³ -	to take in hand, to grasp etc. (same meanings as {dq-, tq-, t ³ q-}) ¹⁴⁰

¹⁴⁰ Occurs also in HE/OO/KW {dh[dh]-c³w-} HA {dh[d]-c³w-} "coat, coated." There are relatively few HE/OO examples of this root compared to HA/KW and they refer mostly to magical control; HE/OO usually use {sw-} for grasping, holding etc. In KW the root often

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
2950	334	dhp-	dhp-	dhp-	dhp-	to tow
2960	335	dhp-	dhp-			(?) at night, in darkness
2970	336	dhs-	dhs-	dhs-	dhs-	cover, covered, submerged, under the surface of the water
	299					
2980			dhł-		dhł-	to unfold ¹⁴¹
2981				dhyd- dlhyd- λhyd-		very, to a high degree ¹⁴²
2982					dhk-*	(?)
2990	339	dhxv-	dhxv-	dhxv-		to skewer, pin together, interlock, engage
	340					
3000	341	dhq-		dhq-		to get cedar bark (for roofing and boxes)
3010	342	dhq-	thq-	thq-	thq-	to catch ooligans
3020	338	dh ³ ł-	dh ³ ł-	dh ³ ł-	dh ³ ł-	to laugh
3030	343	tp-	tp-	tp-	tp-	resilient object is subjected to or gives way to pressure (hence: to

appears fully reduplicated as {dhdh-} and it can be difficult to tell which part is the reduplicand and which the reduplicate. Whenever in doubt, the first |dh| will be considered the reduplicate. A clear case of the first |dh| being the reduplicate is conative reduplication as in KW {[dh]dh--+h} > /dada³a/ "to try to grab." KW {[dy]dh-} occurs in a few terms referring to property and credit.

¹⁴¹ Only OO example is possibly the place name /Dalik/.

¹⁴² These free stems are the counterparts to {w³w-hlh} > HE /w³u'ala/ OO /w³uala/ KW {h³w-hlh} > /h³ola/ "real(ly), true, truly, actual(ly), very"; they may be a foreign borrowing. {dhyd-} and {dlhyd-} alternate freely, with |dl| being substituted by |λ| in rapid speech.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
						squeeze, squash, shatter, crush; to burst, explode)
3040	344				tm-	to vibrate, quiver ¹⁴³
3050	345				tms- tmxs•-	to vibrate, quiver, shake down
3060	346		tml-		tml-	to shake, throb ¹⁴⁴
3070	347	tmx-	tmx-		tmx-	to bud, sprout
3080	348 349	tmkv-	tmkv-	tmkv-	tmkv-	(HE/OO/HA possibly:) crunchy (like cured salmon eggs); (KW) to crunch, chop off, bite off
3090	350	tmxv-	tmxv-		t ³ mxv-	gooseberries
3100	351 403	tmqv- thm ³ hqv-	tmqv- thm ³ hqv-	thm ³ hqv-	tmqv-*	to splash, to dip into water violently to make it spatter (as when kicking with the feet when swimming or plunging into the water to chase the fish back into the net) ¹⁴⁵

¹⁴³ In KW {tm-ynhs} > /tminas/ "squirrel" and the name KW /Tmina³ustɔlagil³akv/* which is said to mean "squirrel." Quivering is a characteristic of squirrels. They do it e.g. when an intruder moves into their territory. Body jerks and tail flicks are additional responses to an intruder. Cf. www.env.gov.yk.ca/wildlifebiodiversity/mammals/redsquirrel.php.

¹⁴⁴ OO only in an ethnic name borrowed from KW.

¹⁴⁵ The augmented root form {thm³hqv-} means "to drip" in HE/OO but "to drift (like a seine net)" in HA.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
3110	406			tmχv- thχv-	thχv-	to force one's way through, to slog, proceed against resistance ¹⁴⁶
3120	352	tmq-	tmq-			to snap, crack (wood or ice)
3130				tmq-/ tmχ-		(?) to hop ¹⁴⁷
3140	353		tn-		t ³ n- t ³ hnh- t ³ hny ³ -	close to each other (in space or the lineage) ¹⁴⁸
3150	354	tn- tns-	tn- tns-	tn-	tn-	(?) to agitate ¹⁴⁹
3160	355 356	tnk-	tnk-		tnk-	mound, lump, heap, swelling; to rise up, to boil
3170	357	tnx-	tnx-	tnx-		to vibrate, quake, rumble
3180	358			tnχ-		(?) close to each other, tightly together
3190	360	ts-	ts-	ts-	ts-	to push, press against; (KW also:) persistent action

¹⁴⁶ All KW examples are about wading, with one example mentioning "in water up to knees."

¹⁴⁷ In HA /T'mχ.w³isla/ (chief's name referring to Eagle hopping up the shore on one leg)

¹⁴⁸ OO {tn-} is attested only in the expanded form {thhn³y-}, cf. OO {thhn³y-rw} > /taan³iru/ "close to each other (as two people passing)."

¹⁴⁹ {tn-} occurs only augmented to {thnh-} as in {t[h]n[h]=ys} > HE /t'an'is/ OO/KW /tanis/ HA /t'anis/ (name of a dance and dancer). {tns-} is attested only in HE /t'hzac³i/ OO /thzac³i/ "ceremonial dwelling of the HE /t'an'is/ OO /tanis/."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
3200	359	tlc ³ -	tlc ³ -	tlc ³ -	tlc ³ -	(?) to warm oneself ¹⁵⁰
	47	plc ³ -			tlt•-	
3210	361	ty ³ sx-	ty ³ xs-	tys-	tlx•-	to sprinkle, splash
	372	ty ³ sx•-	ty ³ xs•-		tylx•-	
3220	362				tlp-	(?) ¹⁵¹
3230	363				tlkv-	Oregon grape
3240	364				tlkv-*	to run
3250	365				tlkv-*	to splash
3260	366	tlqv-	tlqv-	tlqv-	tlqv-	soft, padding
3270	367		tlqv-		thqv-*	to eat beforehand (before a trip or main course)
3280	368	tk-	tk-		tk-	pressurized, tense, cushioned,
	369	t ³ k-	t ³ k-		tyk-	resilient, rebounding, spring-
	374		t ³ x-			loaded
	433					
	434					
3281	370				tk/ tx-	(?) ¹⁵²
3290	373	tyl-	tyl-	tyl-	tyl-	bait, to bait, catch prey with a baited hook

¹⁵⁰ HE/OO/HA |ɛ| and |ɪ| are often elided before |c³|, as happens in derivatives of this possibly polymorphemic stem and e.g. in HE/OO/HA {mh³ɪ-c³q-lh} > HE /mac³qɪ'a/ OO /ma³c³qɪa/ HA /mac³qɪ'a/ "two long things travelling together." (KW counterpart /ma³ɪc³aqla/.)

¹⁵¹ In KW /tɪpa/ "heart beats in excitement, go meet a girl in the woods, one who follows a woman"

¹⁵² In KW {tx-m³hs} > /tx.m³as/ and {tx-m³hs} > /txm³as/ "gall, bile" and KW {tx-p³-h} > /txp³a/* bitter taste."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
3310	375	tyx-	tyx-	tyx-		(?) ¹⁵³
3320	376 377 378 379	tykv-	tykv-	tykv-	tykv-	precarious, unstable, falling, dangling, unsteady, unsupported; (KW also:) not serious, in jest
3330	380 381	tyq-	tyq-	tyq-	tyq-	(HE/OO/HA and some KW examples:) to crack, shatter, explode; (KW) released or escaping from restraint, dropping off, falling
3350	382	tyχ-	tyχ-	tyχ-	tyχ-	yellowish-green (like top of hemlock needles, animal urine)
3360	383 384 385				tkv-	tight, fitting tightly (like deerskin leather), tense, elastic, spanning a distance, astringent (like thimbleberry leaves and roots), to contract, to throb (like boil), to beat (heart)
3400	386	tw-	tw-	tw-	tw- thw ³ -	to walk, travel on land; (HA/KW also:) to press forward, close in on a target (as e.g. in an attack or mountain goat hunting)
3410	387 459 696	t ³ wp-	t ³ wp-	twp- t ³ wp-	twp- t ³ wp-	speck, dot, to be speckled, spotted; {t ³ wp-} also:) fleabite
3420	388	(χvt-)	(χvt-)	tws-	t ³ ws-	to cut with a knife ¹⁵⁴

¹⁵³ Only in the stem {tyx-=yq-} > {tynyq-} "to become covered with sweat or dew."

¹⁵⁴ A root {t³ws-} occurs in HE/OO/HA too but refers to cedar withes.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
3430					twł-*	(?) ¹⁵⁵
3440	389			twqv-		Indian rhubarb ¹⁵⁶
3441	390			twχv-	twχv-*	to bunch up, concentrate, cluster together ¹⁵⁷
3450	391 392 393	tqv-	tqv-	tqv-	tqv- tq-*	soiled, dirty, dark; blackish ink cloud ejected by octopus
3470	402	th-	th-	th-	th-	to wade
3500	405	thqv-	thqv-	thqv-	thqv-*	to cover (especially with a sheet)
3520	407 408	t ³ p-	t ³ p-	t ³ p-	t ³ p-	(KW) to rise and cover (like tide over a rock), to envelop (like water a swimmer); (HE/OO/HA) to catch, hook, latch on, clasp (as when fishing by trolling a baited hook through the water and (in HE/OO) when gripping a pole or

¹⁵⁵ In KW {twłhs-}* probably meaning "to chop up or break up into many pieces" and occurring in three non-reelicitable derivatives.

¹⁵⁶ Perhaps this root is an alternant of {twχv-} (no. 3441) because Indian rhubarb's many small flowers form a cluster atop a stalk that emerges from the ground in spring. The flower stalks are followed by leaves up to 24 inches across. The stalks grow in clusters so that "the foliage forms a vase-like clump, 4 feet tall and 3 feet wide," see

<http://www.finegardening.com/plantguide/darmera-peltata-indian-rhubarb.aspx>.

¹⁵⁷ Only in {twχv-h} > HA /t'uχva/ "to bunch up (said of nets when dragged by the tide)" KW /tuχva/* "to spin wool on thigh."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
						tree with the hands for climbing ¹⁵⁸
3540	409 410 418	t ³ m- t ³ hm ³ -	t ³ m-	t ³ m-	t ³ m-	to pin or sew together, to lace, to lash; to lock, to use a bolt, to insert rod in shaft, to drill in wood or metal; to plunge headlong into the water (like kingfisher for prey) ¹⁵⁹
3550	411 412 413 414 415	t ³ ms- t ³ m ³ s-	t ³ ms- t ³ m ³ s-	t ³ ms- t ³ m ³ s-	t ³ ms- t ³ m ³ s-	tense, tight, taut; to tighten (one's skin, drum skin, string), to pull at a tight string; snare drum; bunchberries ¹⁶⁰
3560	416		t ³ mł-			tight, tense ¹⁶¹
3570		t ³ mkv- t ³ hm ³ hkv-	t ³ mkv-	t ³ mhkv-		(?) ¹⁶²
3580	417	t ³ mkv-	t ³ mkv-	t ³ mkv-	t ³ mkv-	to shrink, curl, shrivel, cramp
3590	419		t ³ mq-	t ³ mq-	t ³ mq-	to pin or lace together, to close opening
3600	420	t ³ nc- t ³ ns-	t ³ nc- t ³ ns-	t ³ nc- t ³ ns-		cold, cool, to chill

¹⁵⁸ Root's core meaning could be "to overwhelm, to capture."

¹⁵⁹ The form {t³hm³-} occurs only in the Klemtu HE word for a kingfisher.

¹⁶⁰ The connection between bunchberries and tenseness is in the backward flipping petals of their flowers, see the comment on the record for KW /t³msa/ HE /t³ms'a/ OO /t³m³sa/ HA /t³ms'a/ "pick bunchberries (etc.)"

¹⁶¹ In OO /t³młła/ "to tighten one's muscles (as when having to stop suddenly)."

¹⁶² Perhaps in the word for kingfisher (bird).

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
3610	421	t ³ ns-			t ³ ns-	sheltered (from the elements, from societal pressure); (KW also:) within the clan ¹⁶³
3620	422	t ³ nx-	t ³ nx-	(t ³ nx-)	t ³ nx-	at an angle, branching off a shaft; hard, dense (like a knot of wood)
3630	424				t ³ nqv-*	(?) ¹⁶⁴
3650	423	t ³ nχ-			t ³ nχ-	tense, rigid, stiff (like muscles); elevated, erect, raised (like ridge between grooves) ¹⁶⁵
3660	425	t ³ s-	t ³ s-	t ³ s-	t ³ s- t ³ hs-	to impact with heavy force (hence: to crack (shells), bang (head), pound with a rock, to crash)
3670	472	t ³ h ³ s-	t ³ h ³ s-	t ³ s- t ³ hs-		to shiver, quiver, vibrate, shake
3680	426 427	t ³ l-	t ³ l-	t ³ l-		to uncover, open up, lay bare, unveil; to show itself; a sheet splits and the parts pull apart (like stage curtain, fish tail)
3690	428	t ³ lc- t ³ ls-	t ³ lc- t ³ ls-	t ³ lc- t ³ ls-	t ³ ls-	(?) ¹⁶⁶

¹⁶³ HE only in {t³ns-lh} > /t³hsl'a/ "shelter against rain" and one derivate. Their matching OO structures however refer to a cool shaded place so contain the alternant {t³ns-} of root no. 3600.

¹⁶⁴ In KW /t³hqv-a/* (name of a dance).

¹⁶⁵ HE only in /t³hχl'a/, a word whose meaning wasn't remembered except that it had to do with a cliff.

¹⁶⁶ In words referring to berries identified by informants as cranberries, highbush cranberries and chokecherries. According to https://en.wikipedia.org/wiki/Viburnum_trilobum highbush cranberries are not really cranberries but their red fruits look superficially like cranberries. Boas

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
3700	429	(t ³ hɫ-)	(t ³ hɫ-)	(t ³ hɫ-)	t ³ ls-	to slice (fish or meat)
3710	430	t ³ lxv-	t ³ lxv-	(ys-)	t ³ lxv-	to pound, to club, to soften by pounding
3720	431				t ³ lq ³ -	roe, spawn in fish ¹⁶⁷
3730	432			t ³ k-	t ³ k-	earth, dirt, soil, dirty
3740	435 437	t ³ x-	t ³ x-	t ³ x-	t ³ x-	path, trail, door, way, custom ¹⁶⁸
3750					t ³ x-	(?) ¹⁶⁹
3760	436	t ³ x-	t ³ x-	t ³ x-		(?) ¹⁷⁰
3770	438	t ³ y-	t ³ y-	t ³ y-	t ³ y-	to weigh down, ballast, stabilize, anchor; to handle stones and heavy things
3780	439	t ³ hy ³ -	t ³ y- t ³ hy ³ -	t ³ y- k ³ hy ³ -	t ³ y- t ³ hy ³ -	out of reach, out of sight, concealed, hidden; (KW also:) sheltered, protected (from heat, light) ¹⁷¹

(Bella Bella Texts, p. 221) identifies the berries as Viburnum berries which is ambiguous because it could mean Viburnum trilobum (American highbush cranberry), the very similar Viburnum opulus (European highbush cranberry) or Viburnum edule (squashberry), cf.

https://en.wikipedia.org/wiki/Highbush_cranberry.

¹⁶⁷ The 1980 root list posits {t³lq-} but the two available derivatives point to {t³lq³-}.

¹⁶⁸ Possibly also in HA /t³xəɫba/ "sewing needle."

¹⁶⁹ In KW {t³x- = hbyzəy³} > /t³habizε³/ "pain in leg."

¹⁷⁰ Possibly in HA /t³h'ixv.l³as/ "maple" HE /t³h'ixv.l³as/ OO /t³hi³xv.l³as/ (name of a tree, possibly a maple).

¹⁷¹ {t³y-} only in HA {t³y-hlh} > /t³i'ala/ "to wait for sth. or sb." and OO/KW {[t³h]t³y-hlh} > OO /t³at³iala/ "to meet sb. coming in" KW /t³at³εla/ "to lie in wait, to try to conceal oneself." HA

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
3800	440 441	t ³ yp-	t ³ yp-	t ³ yp-	t ³ yp-	to step, tread on; (HE/OO/HA also:) fern root (found by feeling with the feet)
3810	442	t ³ ys-	t ³ ys-	t ³ ys-	t ³ ys-	stone, made of stone, stony; (mostly in HE/OO/HA also:) to weigh down, ballast, anchor
3820	443	t ³ yl-	t ³ yl-	t ³ yl-	t ³ yl-	to soak (for softening)
3830	446				t ³ yk-	to sharpen (knife)
3840	445	t ³ yx-	t ³ yx-	t ³ yx-	t ³ yk-	to lean on back, to lie on back, lean or lie back against
3850	448	t ³ yx-	t ³ yx-	t ³ yx-	t ³ yx-	to carry a round or bulky thing on shoulder
3860	449				t ³ yx-*	(?) ¹⁷²
3870	450	t ³ yk _v -	t ³ yk _v -	t ³ yk _v -		to hook (hence: to raise with lever, pitch fork or gaff hook; to fish with line and hook; to hang on pin or nail, to dangle)
3880	451	t ³ yx _v -	t ³ yx _v -	t ³ yx _v -	t ³ yx _v -	bruised, darkened; (HA also:) black bear
3890	452	t ³ yq _v -	t ³ yq _v -	t ³ yq _v -	t ³ yq _v -*	(HE/OO/HA) to smear, handle syrupy or mushy substance; (KW) to sip from spoon
3900	453				t ³ yq _v -	to use stones (in diving to sea bottom or for cooking)

{khy³-} is really an augmented form of {k³y-} (root no. 13200). To facilitate cross-dialect comparison derivatives of {khy³-} are listed under root no. 3780.

¹⁷² In KW /t³ixa/* (name of a fish, perhaps the Pacific wolf eel).

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
3910	454	t ³ yq-	t ³ yq-	t ³ yq-	t ³ yq-	bent backwards (head, body)
3920	455	t ³ yχ-	t ³ yχ-	t ³ yχ-		dead weight, ballast, to use as ballast
3930	444	t ³ y ³ ł-		t ³ y ³ ł-		(?) ¹⁷³
3940	447	t ³ y ³ k-	t ³ y ³ k-	t ³ y ³ k-	t ³ y ³ kv-	to set, thicken, curdle (said of a liquid)
3950	456	t ³ kv-	t ³ kv-	t ³ kv-	t ³ kv-	to scratch, scrape, claw, grab or pull with hooked fingers or claws
3960	458	t ³ w-	t ³ w-	t ³ w-	t ³ w-	(?) ¹⁷⁴
3970	460	t ³ ws-	t ³ ws-	t ³ ws-		cedar withes
3980	462				t ³ wxv-*	(?) ¹⁷⁵
3990	463	t ³ wxv-	t ³ wxv-	t ³ wxv-	t ³ wxv-	waves, breakers, ocean swell
4000	464	t ³ wqv-	t ³ wqv-	t ³ wqv-	t ³ wqv-	narrow, slim
4010					t ³ wqv-*/ t ³ wχv-*	(?) ¹⁷⁶
4020	465				t ³ wχv-*	(?) ¹⁷⁷
4030	466	t ³ qv-	t ³ qv-	t ³ qv-	t ³ qv-	clover or cinquefoil root

¹⁷³ In words referring to saskatoon berries (*Amelanchier alnifolia*).

¹⁷⁴ In HE /t³ut³u³a/ OO /t³ut³u³a/ KW /t³ut³u/ "star" HA /t³ut³u³a/ "north star" and a place name said to mean "star receptacle." Perhaps also in the non-reelicitable names of a speckled hawk and sea food that is unfit to eat.

¹⁷⁵ Only in KW /t³uxva/* "to cut out intestines."

¹⁷⁶ In KW /t³uχv.h³id/* "to spin."

¹⁷⁷ In KW /t³uxva/* "to spear salmon guided by its wake" and "to mark trail in snow only."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
4040	467	(q ³ vwt-)	(q ³ vwt-)	(q ³ wt-)	t ³ q-	berry cake
4060	470	t ³ h-		t ³ h-	t ³ h-	to lean, fall over (said of long vertical object) ¹⁷⁸
4070	471		t ³ h-		t ³ h-*	to cover with a layer ¹⁷⁹
4071	473	t ³ hł-	t ³ hł-	t ³ hł-	(t ³ ls-)	to slice fish
4080	474 840	t ³ hk- t ³ hx-	t ³ hk- t ³ hx-	t ³ hk-	t ³ hk- c ³ hk-	soft material, lining, padding, bedding, to pad, to caulk a canoe; (figuratively:) to lay foundation for dinner courses to follow ¹⁸⁰
4100	475 476	t ³ hkv-	t ³ hkv-		t ³ hkv-	(?) to handle a stick ¹⁸¹
4110	477				t ³ hqv-	(?) ¹⁸²
4120	404 478				t ³ hqv-* thqv-*	to spear salmon ¹⁸³

¹⁷⁸ HE only in {t³h-k}t³h-k-h} > /t³'axt³aka/ "to doze, be drowsy."

¹⁷⁹ In OO /t³a³kv/ "sth. covered with a layer of sth." and in KW non-reelicitable terms referring to gathering a blanket over one's shoulder.

¹⁸⁰ {t³hx-} only in {t³h[∞]x-} > HE /t³'ax/ OO /t³aax/ "gun powder." HA /t³aak/ "gun powder" is derivable from {t³hk-}).

¹⁸¹ Specific senses: to bend down sth. that sticks up (e.g. fingers when counting, a dog its ears), to smooth down (e.g. hair), to move a stick held vertically (as in bursting a blister, counting sticks lying side by side)

¹⁸² In KW /t³aqva/ "to belittle."

¹⁸³ The form {thqv-}* occurs only in KW {thqv-h} > /taqva/* to spear salmon" which could be a misrecording of /t³aqva/* [2] "to throw a spear in upward curve, to spear salmon."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
4130	479	t ³ hq- t ³ hχ-	t ³ hq- t ³ hχ-	t ³ hq-	t ³ hq-*	to distribute, spread, divide, scatter; to detach particles from a cluster
4150	480	t ³ h ³ χ-	t ³ h ³ χ-	t ³ h ³ χ-	t ³ h ³ χ-	to turn or hold right side up (hollow thing)
4160	481 1202	np-	np-	np-	np- nhp- lp-*	(HE/OO/HA) to knock down, smash, hammer; to collapse (like house); (KW) to throw or fall (round or bulky object) ¹⁸⁴
4180	483 484				nms-	(?) to move sideways, to cross diagonally, to hit broadside
4190	485			nt-	nt-	(?) ¹⁸⁵
4210	486	nn-	nn-	hn-		to sing
4211					nnxw-	to walk alone ¹⁸⁶
4220	509		nnkv-			(?) ¹⁸⁷
4230	508				nnkv-	to order sth., to send for sb. or sth.
4240	487				ns- nhs-*	rank, putrid, decomposing
4250	488			nł-	nł-	to wobble, to rock sth.

¹⁸⁴ {lp-} only in KW (Koskimo dialect) /lpa/* "to throw stones" and /lp³id/* "to strike with stones."

¹⁸⁵ In KW /nt³id/ "to pierce skin inflammation with needle" and HA words referring to decapitation with the guillotine trap.

¹⁸⁶ Unanalyzable stem occurring in KW {nnxw-hlh} > /nhxɔla/ "to walk alone."

¹⁸⁷ Possibly in OO /nan³va/ "to sing" (< {[nh]nnkv-+-h}).

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
4260	489		nł-		nl-*	to sing
	490		nl-			
4290	493		nk-		nk-	mountain ¹⁸⁸
4300	494	nx-	nx-		nx-	naughty, mischievous; (HE also:) to beat sb. Up
4310	495	ny-	ny-	ny-	ny-	to shake, tremble, wobble (as in earthquake), to lean over
4320	496	nys-	nys-	nys-	nws-	belonging to 1st person
4330	497	nys-			nys-	to pull (especially hair, roots, grass; and into water for magic revenge) ¹⁸⁹
4350	499	nył-	nył-	nył-	nył-	to report, tell, reveal, expose, disclose, show, show off
4360	500	nyk-	nyk-	nyk-	ynk-	to take revenge, retaliate, reciprocate
4370	501 507	nykv-	nykv-	nykv-	nykv- n ³ ykv- nkv-	nightly, to act at night ¹⁹⁰
4380	504	nyχ-	nyχ-	nyχ-	nyχ-	(KW) to pull; (HE/OO) to pull (esp. by the hair); (HA) to lift fish by the gills ¹⁹¹
4390	505	ngv-	ngv-	ngv-	ngv-	in-law
4400	506	nk v-	nk v-	nk v-	nk v-	salal berry

¹⁸⁸ OO only in proper names of likely KW origin.

¹⁸⁹ HE possibly in the place name /N'ic³a/.

¹⁹⁰ {n³ykv-} only in KW /n³ix:n³k³vs/ "streetlights."

¹⁹¹ KW {nyχ-} has the productivity of HE/OO {wht-}.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
4420	510	nw- nwyh- nynwyh- nhwh-	nw- nwyh- nhwh-	nw-	nw-	power, control, awareness ¹⁹²
4421	518	nwgvh-	nwgvh-	nwgvh-	nw- nwgvh-	It is I/we (1st. person reference) ¹⁹³
4430	511	nwt-	nwt-	nwt-	nwt-	spoiled, polluted, poisoned, bitter
4440	512				nwn∞-	wolf (myth name)
4450	513 514	nws-	nws-	nws-	nws-	traces of past events, to reveal the past, to tell story
4460	515	nwl- nwl•-	nwl- nwl•-	nwl- nwl•-	nwl- nwl•-	obsessed, possessed, disorderly, crazy, not controlling self, confused, uneasy, spooked, scared
4470	516	nhl-	nhl-	nwl-	nhl-	ling cod
4500	519 521	nwk v-	nwk v-	nwk v-	nwk v-	worried, anxious, concerned
4510	520	nwk v-	nwk v-	nwk v-		fur seal
4520	522				nwxv-	(?) fuzzy, confused
4530	523	nqv-	nqv-	(h ³ hs-)	nχv-	soapberries, frothy (like whipped soapberries)

¹⁹² Derivates are about controlling oneself (as one who is old, mature, wise, integrated in society); controlling the world (as when working magic); being possessed, controlled by the other world (as when singing); uncertainty, danger

¹⁹³ {nw-} as a 1st person reference is attested in two KW examples. {nwgvh-} is probably a combination of {nw-} and {#gh} (suffix no. 3190).

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
4540	525			nq-		tired of sth.
4550	526	nq-	nq-	nq-	nɣ-	(?) ¹⁹⁴
	529	hnq-	hnq-	nhq-		
	531	h ³ nq-	h ³ nq-	hnq-		
	2460			hnh-		
	2565			h ³ nq-		
4560	528	nɣ-	nɣ-	nɣ-	nɣ-	flexible, elastic (like one's limbs), adjusting to adverse force (as when bucking the wind, paddling against tide)
4580	531		nh-		nh-	(?) ¹⁹⁵
4590	530	nh-	nh-		nh- n ³ h-*	(?) ¹⁹⁶
4600	532	nh-	nh-	nh-	nh-	(?) soft ground, yielding underfoot ¹⁹⁷
	543					
4610	534			nhp-	nhp-	hole, opening
	572					
4611	535	nhn-	nhn-	(shk- shx-)	nhn-	grizzly bear ¹⁹⁸

¹⁹⁴ In HA /nrc³ai/ "fox" and names of ducks, geese and a monster identified by the OO consultant as a large fish that could swallow a whole canoe and by the HA (Kitlope) consultant as a monster that could swallow people.

¹⁹⁵ In OO /nask³axdi/ "tail of bird" KW /na³ɣsde³/ "rear end of bird, 'parson's nose.'"

¹⁹⁶ In words referring to daring and exclamations expressing affection, pain or fear. {n³h-}* only in KW /n³an³a/* "shame on you!"

¹⁹⁷ In words for "snow" and possibly KW /na³ɣla/ "swampy, soggy underfoot, quicksand, soft (swampy, loose) ground."

¹⁹⁸ The KW form is in many derivates regularized to {nn-}.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
4640	536	nhs-			nhs-	overlay, covering layer
4650	537	nhk-	nhk-	nhk-		to wiggle (tail, hands)
4660	538			nhx-		(?) to do sth. to excess, to brag
4670	539	nhxv-/ nhχv-	nhxv-/ nhχv-	nhxv-/ nhχv-		(?) ¹⁹⁹
4680	540	nhxv-	nhxv-	nhxv-	nhxv-	vulva, shaped like a vulva
4690	541	nhq-	nhq-	nhq-	nhq-	to thirst, to ingest or handle liquid, to quench thirst, to drain off liquid
4700	542	nhq-				(?) ²⁰⁰
4710	544	n ³ n-				sling, use the sling
4720	545	n ³ nk- n ³ k-	n ³ nk- n ³ k-		ynk- ynk ³ - y ³ nk-	sling, use the sling ²⁰¹
4730	546	n ³ nk-	n ³ nk-			(?) ²⁰²
4740	548	n ³ Ǝ-	n ³ Ǝ-	n ³ Ǝ-	n ³ Ǝ-	to lie on back, to put on back, lean backwards
4741	491				n ³ l-*	to fly

¹⁹⁹ In HE /n'aw'ac³i/ OO /nawac³i/ HA /nawac³ai/ "butterball duck = bufflehead duck."

²⁰⁰ In HE /n'aq³i'ukv/ "den of bear."

²⁰¹ {n³k-} only possibly in {[n³h]n³[h]k--h} "to try to use the sling" which could however also be a euphonic adjustment of {[n³h]n³nk--h}. The form of the KW root is problematic because informants seem to be confused between using {ynk³-} and {y³nk-}.

²⁰² In HE /n³'hk³'aut/ OO /n³hk³ut/ "to select a berry-picking spot" and perhaps the place name HE /N³'hk³'aχv/.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
4742	492				n ³ ls-*	to whine
4750	550				n ³ lχ-	(?) damaged, bruised, sore, chafed (said of body parts)
4760	549				n ³ lh-	(?) ²⁰³
4770	552		n ³ k-		n ³ k-	(?) steam, to use steam
4780	553 1612	n ³ y- y ³ y-	n ³ y- y ³ y-	n ³ y- h ³ y-	n ³ y-	to string up (fish, beads), thread (needle), put rope through (hole)
4790	554		n ³ y-/ n ³ yk-			creaking sound ²⁰⁴
4800	498	n ³ ys-	n ³ ys-		n ³ ys-*/ nys-*	(?) ²⁰⁵
4810	551 555 556 557	n ³ yk- n ³ k-	n ³ yk- n ³ ykV-	n ³ yk-	n ³ yk- n ³ ył-	conduit, to let through, to let out (hence 1. spout, mouthpiece; 2. to say, tell, utter; to think (= say in mind); 3. to permit to happen, allow, obey; 4. to give permission, tell to do, command, instruct) ²⁰⁶

²⁰³ In KW /nла/ "laughing goose."

²⁰⁴ In OO /n³ik³ala/ "sound of creaking." Root could be onomatopoeic.

²⁰⁵ In HE /n³'isa/ OO /n³isa/ "to poke devilfish (underneath boulders, their hiding place, in order to get halibut bait)" and in non-reelicitable KW words referring to red cod, devilfish, octopus. Some of the latter derive from {nys-} according to Boas and some from {n³ys-}.

²⁰⁶ 1. KW {n³ył-} is attested only in two derivatives of {[n³h]n³ył-} and could be a blend of {nył-} "tell, reveal, etc." and {n³yk-}. OO {n³ykV-} occurs only in {n³ykV-%m} "beneficiary of permission." 2. At least in HE/OO/HA, {n³yk-} meaning "to say, utter" and derivatives can be joined enclitically to a direct quotation. In HE this has the effect that e.g. /n³ik/ "said so-and-so"

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
4840	558	n ³ ykv-		n ³ ykv-		to carry on the shoulder
4860	580				n ³ xv- n ³ hxv-	covered with a layer-like thing (e.g. blanket, mat, lid), veiled, shielded, skirted (like house stilts)
4870	559	n ³ xv•- n ³ xvh-	n ³ xv•- n ³ xvh-	n ³ xv•- n ³ xvh-	n ³ xvh-	near, close, in the vicinity; low (like building)
4880	560				n ³ w-	tense, cocked, on edge, ready to go off; to aim; really or pretendedly ready to strike, to feign an action
4890	561 2546	n ³ w- n ³ w ³ s- h ³ n ³ w-	n ³ w- n ³ w ³ s- h ³ n ³ w-	n ³ w-	n ³ w-*	light in the dark (from fire, torch, moon), to carry fire (for lighting the way or starting a fire somewhere), to stoke the fire ²⁰⁷
4900	562 2614	n ³ wł-	n ³ wł-	n ³ wł- h ³ wł-	h ³ wł-	(HE/OO/HA) to push or lean with the shoulder or the side; (KW) to diverge from straight course, to lean, to incline, to turn a corner ²⁰⁸

is pronounced /_n³k/. The latter has started behaving like a root different from {n³yk-} in HE { [n³h]n³[h]k-+-h } > /n³'an³ak³a/ "to try to say."

²⁰⁷ HE/OO {h³n³w-} corresponds to HA/KW {[n³]n³w-}, compare HE/OO {h³n³w-h} > HE /h³h³u'a/ OO /h³h³ua/ and HA/KW {[n³]n³w-h} > {h³n³w-h} > HA /h³h³ua/ KW /h³h³ɔ/* "to use torch to fetch fire from another house." HE/OO {h³n³w-} may ultimately stem from the same {[n³]n³w-} as assumed for HA/KW but the dissimilation of |n³n³| to |h³n³| is not usual morphophonemically in HE/OO. Related to this root no. 4890 is {h³n-} (root no. 23410).

²⁰⁸ Boas reports five supposedly HE examples of {h³wł-} on p. 187 of Bella Bella Texts. No text reference is given for any of them.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
4910	563	n ³ wlh-	n ³ wlh-	n ³ wlh-	n ³ wlh-	(?) sticking out, outstanding ²⁰⁹
4920	564				n ³ wxv-	(?) ²¹⁰
4930	565				n ³ wxv-	(?) ²¹¹
4940	1806 1813	wnyqv-	wnyqv- wnχv-	ywnwqv-	n ³ wqv-* n ³ wyqv- wnyqv- wnhqv- wnqv-*	to scorch, to burn, to apply heat (e.g. poultice), to get burned ²¹²

²⁰⁹ In terms referring to an elder sibling, the middle finger and a flood (metaphor for potlatch) that rises higher than the last one.

²¹⁰ Only in KW /n³uxva/ "to aim."

²¹¹ In words referring to a small kind of blueberries.

²¹² 1. The difference between HE/OO/KW {wnyqv-} and HA {ywnwqv-} is reminiscent of that between HA {-p³nyxvls} and HE/OO {-p³ynyxvls}. {wnyqv-} and {wnhqv-} could be augmented forms of {wnqv-} the one example of which is KW /wHχv.h³H/* "made of red pine" which could not be reelicited. {wnhqv-} occurs only in the KW word for red pine. Red pine bark "is thick and gray-brown at the base of the tree, but thin, flaky and bright orange-red in the upper crown; the tree's [English] name derives from this distinctive character. Some red color may be seen in the fissures of the bark" (according to https://en.wikipedia.org/wiki/Pinus_resinosa). 2. {wnχv-} occurs in OO {wnχv-!!sywh} "to scorch through" and {wnχv-&y d} "to become scorched"; it could be a backformation from OO {wnyqv-!!sywh} > /wHχvsiwa/ "to scorch through." A root {wnχv-} also occurs in one KW word referring to oil passing through one's body but its semantic relationship to scorching and burning is not clear and it is catalogued as a separate root.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
4950	566	n ³ qv-			n ³ qv-	(?) ²¹³
	567					
4970	568	n ³ χvh- h ³ χvh- h ³ nhχvh-	h ³ nhxvh-	n ³ χvh- h ³ χvh- h ³ χv- h ³ ynhxvh- h ³ nhχv- h ³ χ-		contingency, possibility ²¹⁴
4980	569	n ³ h-	n ³ h-	n ³ h-		to pick berries
4990	570	n ³ h-	n ³ h-		n ³ h-	day, daylight, sky, weather
5000	571		n ³ h-	n ³ h-		(?) ²¹⁵
5010	573	n ³ hs-	n ³ hs-		n ³ hs-	(?) ²¹⁶
5020	574	n ³ h£³-	n ³ h£³-		n ³ h£³-	wolverine ²¹⁷
5030	576				n ³ hł-	(?) ²¹⁸

²¹³ In two KW words glossed as "to swallow" and possibly in HE {n³qv-=kv-&yd} > /n³qvxxv.h³it/ "to redeem a spouse or unborn child from clan membership."

²¹⁴ Proclitics often glossable as "if," "when," "lest." HA {h³χ-} is only attested in combination with subject deictics and glossable as "it should be prevented from happening that ..."

²¹⁵ In OO /n³aas/ "an eldest son's eldest son" and HA /n³aka³u/ (endearing name for a grandchild).

²¹⁶ In HE /n³ask/ OO /n³askv/ KW /n³asəkv/. HE/OO elders said it refers to a kind of blueberries growing on high hills and tasting different from HE /si'ak³vhat/ OO /siak³vhat/. The KW item can refer to blueberries that grow on high hills (mountains) but also to salal berries.

²¹⁷ In HE /n³a£³'ay'a/ OO /n³a£³a/ KW /n³a£³ε³/ 'wolverine'.

²¹⁸ In KW /n³an³ɽ³imas/ "berries (of any kind)."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
5040	575	n ³ hlh- n ³ hl∞-	n ³ hlh- n ³ hl∞-	n ³ hlh- n ³ hl∞-	n ³ h- n ³ hlh- n ³ hl∞-	1. upriver; 2. (HE/OO/KW) south; (HA) north ²¹⁹
5050	577 2548	n ³ hk-	n ³ hk-	n ³ hk-	n ³ hk- n ³ hk ³ -	(HE/OO/HA) to keep an eye on sth., to check, to watch out for sth. (prey, trespassers); (HA also:) 1. to look at, to look in the mirror, to inspect; 2. to look for, search for; (KW) expecting, anticipating, apprehensive ²²⁰
5060	578		n ³ hkv-		n ³ hkv-	(?) ²²¹
5070	579	n ³ h xv-	n ³ h xv-	n ³ h xv-	n ³ h xv- n ³ hk ³ v-*	collectivity, inclusiveness, all-encompassing; (HA/KW also:) one, alone ²²²
5090	581	n ³ hqv-	n ³ hqv-	n ³ hqv-	n ³ hqv-	bright light, daylight, moonlight; (HE/OO/HA also:) world, sky, atmosphere, weather
5100					n ³ hqv-*	(?) ²²³

²¹⁹ KW {n³h-} occurs possibly in {n³h-hl-h} > /n³ala/ "facing south." In all KW examples of {n³hl∞-}, |∞| becomes a replica of |l| and merges with it.

²²⁰ KW {n³hk³-} attested only in {n³hk³#q³hlh} > /n³ak³q³ala/ "to really expect." KW {n³hk-} occurs only in the free stem {[n³]n³hk-} > {h³n³hk-} "to have learnt one's lesson (and not trying again), to desist."

²²¹ Only in names referring to the Seymour Inlet people.

²²² KW sometimes uses {n³h xv-} also when HE/OO/HA use {h³hg-}. KW {n³hk³v-*} occurs only in /n³ak³vi³sta/* likely meaning "integrated, encompassing every aspect."

²²³ In KW /n³an³arvala/* "to help pack."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
5110	582	n ³ hχ-	n ³ hχ-		n ³ hχ-	steep climb (as when after mountain goat)
5120	583			zblx-		to fight ²²⁴
5130	585	zm-	zm-	zm-	zm-	to inter, cover with earth or sand;
	587	zhmy-	zhmy-			(KW also:) to plant ²²⁵
5140	636	zhm ³ -	zhm ³ -	zhm ³ -	zm-* zhm ³ -	breast, to suckle, milk ²²⁶
5150	586		zmxv-	zmxv-	zmxv-	(OO/HA) to suckle, give or draw breast milk; (KW) milky, cloudy, muddy; breast milk ²²⁷
5170	588	ct-	ct-	zt-	zt-	to split, pull apart (roots, twigs), to part company
5180	635			zn-		(?) to pierce, to sting ²²⁸
	592					
5190	589				znk-	stinging nettles, to sting (like nettles or with words)
5200	590				znq-	to shore up with poles
5210	591				znq-*	(?) ²²⁹

²²⁴ This stem is dimly reminiscent of "se battre" and may have been borrowed from French through some intermediary language(s).

²²⁵ An expanded form of {zm-} occurs probably in HE /z'am'i/ OO /zami/ HA /zam³in'as/ "squirrel."

²²⁶ The unaugmented root occurs possibly in KW /zm³isp³a/* < {zm-=ys-p³-h} "taste of milk"; in all other examples it is augmented to {zhm³-}.

²²⁷ OO only in /zmxvstu/ "milky."

²²⁸ Possibly in HA /zH'awi/ "hummingbird" and HA /zaH/ "harpoon for catching seal."

²²⁹ In KW /ZHZHΓəχsla/* (name from the Newettee dialect meaning "smell of canoe" according to Boas; no indication what it is the name of).

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
5211	592	zn ³ -	zn ³ -	zn ³ -	zn ³ -	emotionally attached, loyal to
5212					zc-/zs-	(?) ²³⁰
5220	593	(χvws-)	(χvws-)		zs-	to foam, ferment, start to boil, simmer, bubble ²³¹
5230	594				zł-	(?) to spread out, reach out ²³²
5240	595	zlk-	zlk-	zlk-	zlk-	(?) white, mouldy ²³³
5250	596 755	zlx-	zlx-	c ³ lx-	c ³ lx-	(HE, OO, HA) to stoop, lean forward; (KW) fish swimming upriver to spawn
5260	597				zlxv-	to run on foot
5270	598 653 656	zlχ-	zlχ-	zlχ-	cnqv- cnq-	(HE/OO/HA) to bend over to move forward, to stoop; (KW) to hang the head, to stoop
5280	599	ck-	ck-	zk-	zk-	to rub, to knead
5300	601				zk-	iron, silver
5310	602 603				zx-	(?) to repel, fight off ²³⁴

²³⁰ Perhaps in KW /zs.h³qv/ "young cedar."

²³¹ Probably onomatopoeic. See also root no. 5730.

²³² Possibly in KW /zɪ³at/ "lake" and a small number of non-reelicitable words including KW /zɪm/* "tentacles of squid" and KW /zla/* to spread out (small pieces), to spread out property that is piled up."

²³³ In words referring to old deteriorating salmon.

²³⁴ In KW /zxila/* "to make war" and possibly KW /zxina/ "maidenhair fern" because maidenhair fern fronds repel water according to <http://en.wikipedia.org/wiki/Adiantum>.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
5320	604	zy-				(?) ²³⁵
5321					zyp-	(?) ²³⁶
5330	605				zyt-*	(?) ²³⁷
5340	606				zyt-	to spread (legs, fingers), to split stick
5350	607				zys-*	(?) ²³⁸
5360	608				zyl-	fresh (meat or fish), new
5370	600 609 611	zyk-	zyk-	zk- zyk-	zyk-	(HE/OO/HA) to push or poke with a stick, to prod, to spur; (KW also and mainly:) to lever up (as in digging for clams, prying up roots or using sprit to hoist sail), to push with long thing in cooking berries, to talk in a pushy way ²³⁹
5380	610	zyx-	zyx-	zyk-		to give a feast ²⁴⁰

²³⁵ In HE /z'izizi'ala/ "chickadee"; probably onomatopoeic.

²³⁶ Possibly in KW /zibusa/ "irked, annoyed."

²³⁷ In KW /zidaq/* "milky sea eggs."

²³⁸ Possibly onomatopoeic. Occurs in words referring to a sea otter's whistling, a bird's cry and a kind of bird called a cape pigeon. (Cape pigeons are however from the Antarctic area.)

²³⁹ HA {zk-} said to occur in the Kitamaat dialect only.

²⁴⁰ The HA root could be a semantic extension of root no. 5370. The HE/OO root occurs only in a proper name that is likely a dialect borrowing.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
5400	612				zyx-	(?) spotted ²⁴¹
5410	615	zykv-	zykv-	zykv-		to move, function, operate
5420	613 614 616	zyqv-	zyqv-	zyqv-	zykv- zyqv-*	leg or spine-like thing sticking out, to stretch legs, to poke with the leg ²⁴²
5430	617	zyq-	zyq-	zyq-		to stop vocal noise (speaking, singing, crying)
5440	618				zyq-	(?) to smirk
5450	619	zxv-	zxv-	zxv-	zxv-	silver (coho) salmon
5460	620	zw-	zw-	zw-	zw-	(?) groove, rib ²⁴³
5480	584 621 645 812	zwp-	zwp- cp- c ³ wp-	zwp-	zp- cp- zwp- c ³ wp-	soft material (such as cloth) stuffed into sth. or spread out (like coat lying on floor); to plug an opening (with soft material but also e.g. cork) ²⁴⁴

²⁴¹ Possibly in KW /zinuma/ and /zinumara/ "(probably:) spotted ratfish" and its synonym /zinəl/ from the Nakoaktok (= Blunden Harbour) dialect.

²⁴² {zykv-} occurs also in KW /zik³vi³s/ which refers to the oil of catfish, perch and seal. They are creatures with prominent barbels, a spiny fin and whiskers, respectively. KW {zyqv-}* means "prong, spear, point" in its examples.

²⁴³ In the word for cockles. Almost all cockle shells have radial ribs. Root could also have the form of {zxv-} or {zχv-} but {zw-} is more likely in view of HA {zws-} "to dig for cockles."

²⁴⁴ Only three examples of {zp-}. {cp-} only in KW /cbam³a/* "old cedar bark blanket" and OO /cpa/ (meaning not remembered but had to do with cedar bark). {c³wp-} only in OO/KW /c³up³ax/ "glove, mitten" and derivatives.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
5481					zwmyg-, zwmyk-	pole (for holding out sail or punting) ²⁴⁵
5490	622				zwt-*	(?) ²⁴⁶
5491	630	zwnh-	zwnh-		zwnh-	(?) ²⁴⁷
5500	623 624 625	zws-	zws-	zws-	zws-	(HE/OO/KW) to dig under the surface, to hollow out; grooved (like cockle shells); (HA) to dig for cockles ²⁴⁸
5510	626 631	zwxv-	zwxv-	zwxv-	zwxv-	pole, post, log
5520	627		zwxv-		zwxv-	(?) to attract attention to a desirable good, to advertise a benefit ²⁴⁹
5540	628	zwqv-	cwqv-			(?) ²⁵⁰
5550	629				zwqv-	to bend (stiff, flat, long things)
5560	633				zqv-*	(?) ²⁵¹

²⁴⁵ In just four words one of which is listed in Boas (1948:197) among derivatives of {zwxv-} "pole, post, log."

²⁴⁶ In KW /zudʒa/* "to have to let go, unable to hold on."

²⁴⁷ Possibly in KW{zwnh-wqv-} which refers to a sasquatch-like creature with puckered lips.

The only HEOO example is associated with a mask and magic power; it may be a dialect borrowing because the OO word for a sasquatch-like creature is /h³zi/ and the HE one /tʰaʎa/.

²⁴⁸ Also in OO and KW words referring to platforms in dug-out house.

²⁴⁹ In KW words to do with raising a copper to show it off and promising a potlatch; in OO only in /zuxvzuxvzuxv/ (cry to call chickens, as when going to feed them).

²⁵⁰ In HE /zʰuq³vqlʰa/ OO /cuq³vqla/ "rain and snow mixed."

²⁵¹ In KW /zrvat/* "dried sockeye salmon."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
5570				zqv-		opening, clearing
5580	632	cq-	cq-	cqv-	zqv-	soil, dirt, mud, earth, dust, dirty, filthy
5590	634		cχ-	zχ-	zχ-	to split, crack (wood, bark)
5600			zhc-/ zhs-			(?) ²⁵²
5610	637	zhs-	zhs-	zhs-	zhs-	bruised, darkened, blue
5620	638	zhkv-	zhkv- zhxv-	zhkv-	zhkv-	V-shape widens (as elbow straightening, blade of jackknife opening), to spread apart, to cock ²⁵³
5630	639				zhxv-	(?) to bend, bent ²⁵⁴
5640	640	zhxv-	zhxv-	zhxv-	zhxv-	ooligan (candlefish, <i>Thaleichthys pacificus</i>)
5641					zhwhdly-	robin call (unanalyzable)
5650	641				zhqv-	evening
5660	642	zhq ³ v-	zhq ³ v-		zhq ³ v-	wind off the sea
5670	643	zhq-	zhq-	zhq-		stained, darkened
5671					zh ³ nχ-	to nod head in pity ²⁵⁵

²⁵² In OO /zas.h³it/ [2] "to emerge before going deep (as a whale)."

²⁵³ OO {zhxv-} only in {zhxv-'sm-d} > /zaxvsm/ "to stretch the legs onto e.g. a box, table, stool."

²⁵⁴ In KW /zaxva³la/ "bent" KW /zaxvba/ "bent point" and perhaps KW /zaxvs.h³id/ "to break apart, tear to pieces."

²⁵⁵ In KW /za³nχa/ and /za³nχ.h³id/ "to nod head in pity for sb."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
5680	644				zh ³ l-	heavy swell ²⁵⁶
5700	646	cm-	cm-	cm-		(?) ²⁵⁷
5710	647 648		cmkv-		cmkv-*	lump, hump
5720	649	cmxv-	cmxv-	cmxv-		trickle, slow or controlled flow of water
5721	646				cm ³ wt-*	quiet, silent
5730	650	cyst- sss-	ct-	cysd-	cy-	to hiss (onomatopoeic) ²⁵⁸
5740	651 717	cnt-	cnt-	cnt-		to roll (ball, hoop, tire), to revolve
5750	652	cns-	cns-		cns-*	(?) club, stalk with a ball at the end ²⁵⁹
5770	654 655	cnq-	cnχv- cnq-	cnq-	cnχv-	({cnχv-}:) fat (of animal), blubber, lard; fat as opposed to lean; ({cnq-}:) to cook in fat or oil, to fry ²⁶⁰

²⁵⁶ In KW /za³lɪa/ 'heavy swell' and KW /za³la/* 'heavy swell'.

²⁵⁷ Possibly in HE /c³ic³a/ OO /c³ic³/ HA /c³ic³/ "bored and fed up."

²⁵⁸ In HE /c'istχa/ OO /ctχa/ HA /c'isdχa/ "to attract attention by hissing" HE {sss-χ-+xsyh} > /sssy.ħ³xsi'a/ "to say 'sss' through the teeth, to 'whistle' through the teeth" KW /cici/ "noise used to make children pee."

²⁵⁹ In words referring to devil's club (*Oplopanax horridum*). The plant's small flowers form a cluster at the end of a stalk attached to a central flower stem.

²⁶⁰ OO {cnχv-} is likely a borrowing from KW since it occurs only in OO /c³ħħχv/ "greaves, cracklings (of fat)."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
5800	657		cs-	cs-	cs-	to swarm, flock together, act as a group, form a school, gang up; to press in on sth.
5810	658		cs-			(?) ²⁶¹
5820	659 743 746	c ³ sk-	c ³ sk-	c ³ sk-	csqv- c ³ sqv- c ³ s-* c ³ sk-* c ³ skv-*	to chirp, twitter (perhaps onomatopoeic) ²⁶²
5830	660 661	cl-	cl-		cl-	to make light of sth. ²⁶³
5840	662		cl-			(?) ²⁶⁴
5850	663				clc-	(?) ²⁶⁵
5860	664		clt-			to tear (cloth)
5870	665 666 687	cyχv-	clqv-/ clχv- cyχv-	cyχv-	clqv- clχv-	sour, fermented; crabapples ²⁶⁶
5880				clq-		shingle

²⁶¹ In OO /csa/ (meaning not remembered by consultant but had to do with splitting branches or roots).

²⁶² In words referring to various small birds.

²⁶³ In HE /cl'iqɑ/ OO /cliqɑ/ "to deny, doubt, disbelieve" and KW words referring to women being good-natured, jolly or mischievous.

²⁶⁴ In OO /clɑ/ "to cut through water."

²⁶⁵ In KW /clslɪ/* (name of a scarlet-coloured berry)

²⁶⁶ KW {clqv-} only in /clɪrvzu/ "place where crabapples grow." OO {clqv-/clχv-} (not diagnosable which) only in /clχvp³a/ "having a fermented taste" which is likely a loan from KW.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
5890	667	clχ-	clχ-	clχ-	clχ-	hail, spell of hail
5900	668 713				ck- chk-	to slash (like with machete when cutting a trail), to mow (like with scythe), to chop, to cut straight across; ({chk-} also specifically:) to chop into and split sea urchins
5901	669				ck-/ cx-	(?) ²⁶⁷
5910	669			cx-		to go up a difficult mountain for goats
5920	670 671 681 768	cy- c ³ y-	cy-	cy- c ³ y-	cy-	to transfer liquid or particled solid (berries, pellets, fish), to draw water, to dip up, to use the brailer (e.g. in transferring fish), to serve at table ²⁶⁸
5930	671				cyp-	(?) squeezed together ²⁶⁹
5940	672			cyp-		(?) ²⁷⁰

²⁶⁷ In KW /cxc³ɔla/ "shotgun." Root could be no. 5900 in view of the broad sweep of the pellets from a shotgun cartridge.

²⁶⁸ HE {c³y-} only in {c³y-xc³h³s} > /c³'ixc³as/ "open place with moss in the woods"; its root is associated with drawing water because its HA counterpart /c³'ixc³as/ "meadow" is said to be so called because water appears when stepping on it.

²⁶⁹ Possibly in KW /cɛp/ "halibut or cod roe" and "apron." Perhaps the many buttons of a dancing apron have been associated with roe. Boas (1948) does not explain the association. KW /cɛp/ could have a structure {c[h]yp-} or {c[h]y[h]p-}; {c[h]yp-} is assumed. The root {cyp-} could be a cross-family root occurring in proto-Salishan as *-c³ip³- "to squeeze (shut), pinch" (Kuipers 2002:31).

²⁷⁰ In two words referring to a person limping.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
5950	673				cymh-*	(?) ²⁷¹
5960	674	cymh- cm ³ s-	cymh-	cymh-		(?) ²⁷²
5970	675	cyt-	cyt-		cyt-	to tilt, lean, list, slope
5980				cyn ³ -		to cook shellfish
5990	676 680 778	cył-	cył-	cył-	cys- cył- c ³ ył-*	rough, frayed, unravelled, ruffled, bushy; blunt (point) ²⁷³
6000	677				cys-*	(?) ²⁷⁴
6010	678		cys-			(?) ²⁷⁵
6020	679 683	cyx-	cyx-	cyx-	cył- cyx-*	water running (in stream, flood or trickle) ²⁷⁶

²⁷¹ In KW /cimavla/* "to have a slight disagreement."

²⁷² In words referring to horse clams. Root may mean "to point," like {c³m-} (no. 6440), in reference to their conspicuous siphons.

²⁷³ 1. All KW examples contain {cys-} except KW /ciłla/ "rough, frayed, unravelled, bushy" KW {cył-&ył} > /cił.h³id/ "to start fraying, become unravelled" and KW /c³ila/* "to put loose things somewhere." The latter example's /c³/ is likely a typing error by Boas. For an example where it is HE/OO/HA that have |s| but KW |ł| see suffix no. 4250. 2. This root parallels proto-Salishan *-cix- in *cix-ups "fisher (animal)" (Kuipers 2002:26). Kuipers only says -ups means "tail" but *-cix- no doubt means "bushy," fishers having a bushy tail.

²⁷⁴ In KW /cis/* "long round fish-basket (for salmon-trap)" and derivatives.

²⁷⁵ In OO /cišla/ "water bug."

²⁷⁶ The KW root comparable to HE/OO/HA {cyx-} in terms of productivity and semantics is {cxv-} (root no. 6140). Boas (1948) gives four examples of KW {cył-} but they could not be reelicited. The only elicited example of KW {cył-} is KW {cył-hx-h} > /ciłaxa/ "to sprinkle

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
6050	682				cyx-	to burn sth. off, to singe, to cauterize
6070	684				cyx-	(?) out of place, disarranged ²⁷⁷
6080	685		cykv-		cykv-	to shovel, to scoop, to lever up sth.
6090	686		cyqv-			(?) ²⁷⁸
6100	801			c ³ yq-	cyq- c ³ yq-	to scoop out of the water, to skim ²⁷⁹
6110	688 689 690	cyχ-	cyq- cyχ-	cyχ-	cyχ-	1. to use heat to extract, preserve or purify fat; to fry sth.; 2. to sting ²⁸⁰
6130	691 692	ckv-	ckv- cxv-	ckv-	ckv-*	rock fence, fish trap made of stones
6140	693	(cyx-)	(cyx-)	(cyx-)	cxv-	running water (like tide, current, waterfall, overflow)

down." KW {cyx-}* occurs in /cixla/* mentioned in Lincoln & Rath (1980:146) as a place name meaning "water flowing down."

²⁷⁷ In KW /cixała/ "tilted" KW /cixcxsmala/ "having ruffled feathers."

²⁷⁸ In words referring to curdled blood.

²⁷⁹ In HA /c³iqa/ "to fish with a dipnet, to scoop (fish) out of the water" KW /ciruła/ "to skim off from surface with spoon" and possibly KW /c³iris/ "sea monster" KW /c³irac³i/* "monster receptacle" (name of door of /Q³umugva/'s house)."

²⁸⁰ The meaning "to sting" is preserved in two words from Boas (1948) that refer to killing wounded game but could not be reelicited. This root is a cross-family one. Its proto-Salishan correlate is *-c³iχ- "1. prickly, stinging; 2. burn, fry; 3. cold" (Kuipers 2002:33).

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
6150	694 702	cxv-	cxv- cwxv-		cχv-*	quick chopping motions (as when adzing off fine chips), quick time-beating ²⁸¹
6160	695				cxv-*	(?) to gather mussels, to pry off mussels ²⁸²
6170					cxv-*	(?) ²⁸³
6180	696 697	cwp-	cwp-	cwp-	cwp- swp-	spotted, with black or dark spots (like fledgling robins)
6181					cwm ³ ws-*	to break or crush sth. brittle
6190	698			cwt-	cwt-*	(?) ²⁸⁴
6200	699	cws-	cws-	cws-	cws-	dried-out, brittle, easily broken
6210	700				cwł-	to shatter, crumble ²⁸⁵
6220	701	cwkv-	cwkv-		cwkv-	to shatter, crumble
6240	703	cwqv-	cwqv-	cwqv-		to beg, to go and ask for sth.
6250	704				cwqv-*/ cwxv-*	(?) ²⁸⁶

²⁸¹ Lincoln & Rath (1980:147) mistakenly identifies the KW root as {cxv-}* instead of {cχv-}*.

Boas (1948:200) lists {cχv-}*.

²⁸² Only two examples. Root could be a misspelled alternant {cyxv-} of no. 6080.

²⁸³ Perhaps in KW /cxva³mt/* "heat (in poetry)" but the suffix would also be unknown.

²⁸⁴ In HA /c'ut³gał/ "to become silent" KW /cudχa/* "getting numb by hard exertion (holding pen, etc.)." The KW item is suspiciously similar to /zudχa/* "to have to let go, unable to hold on" (only example of {zwt-}*) and the HA example may not really be HA, said one of the consultants it was elicited from.

²⁸⁵ In KW /culiχa/ "to shatter on impact (canoes), to crush up into fine pieces."

²⁸⁶ In KW /cuχv.h³He³/* "slime on body."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
6260	705				cw ³ kv-	flute- or trumpet-shaped, puckered (lips)
6270	706 824	cqv-	cqv-		c ³ qv-	(?) ²⁸⁷
6280	707	cχv-	cχv-	cχv-	cχv-*	(HE/OO/HA) to flap (like fish when caught); (KW) stranded (like whale or fish) ²⁸⁸
6290	708				cq-	thimbleberry (<i>Rubus parviflorus</i> Nutt.)
6300	709				cχ- chχ-	to walk with quick short steps (in dancing), quick time-beating
6310	710				ch-*	(?) ²⁸⁹
6330	711	chs-	chs-	chs-	chs-	to throw (pour, channel, move) a liquid ²⁹⁰
6340	712	chs-				(?) ²⁹¹
6350	714				chk-	(?) ²⁹²

²⁸⁷ Possibly in HE /cq³v'ɬc/ OO /cq³vɬc/ "whetstone" KW /c³q³vɬɬ³s/ "diabase (mineral)."

²⁸⁸ Boas's examples of the KW root may all be typing errors, their root really being {cxv-}, alternant of {ckv-} (root no. 6130).

²⁸⁹ In KW {ch=hs} > /Ca³as/* (place name glossed as "place of flowing") and unanalyzable KW /Ca³imiχuɬ/* (name of a place in Nimpkish country). See also the comment on root no. 6400.

²⁹⁰ Probably occurs also in KW /cas.ħ³He³/ "fish tail" where it refers to the water displaced when the tail fin moves to generate thrust.

²⁹¹ Possibly in HE /c'aixvsmkv/ (name of a small light-coloured bird with dark spots all over the body).

²⁹² In words referring to bracken fern and sword fern. Unclear what the root might refer to; could be the rhizomes or the fronds ("leaves").

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
6360	715	chk-	chk-		chk-*	(HE/OO) to hop, jump on one
	716	khk-				foot; (OO also:) to poke with one
						leg (like dog scratching an itch);
						(KW) (a kind of drum rhythm) ²⁹³
6370	718	chxv-	chxv-	chxv-	chxv-	to leak, drip ²⁹⁴
	719			c ³ hxv-	c ³ hxv-	
	807					
6380	720				chq-	rising up steeply (like wall,
						partitioning board, roadblock)
6390	721	chq-	chq-	chq-		to chase away, to dismiss
6400	710				chχ-	(?) ²⁹⁵
6410	722				ch ³ x-	oily, slippery; wet ²⁹⁶
6411				c ³ bdy ³ -		(onomatopoeia, in bird names)

²⁹³ HE {khk-} was used instead of {chk-} by younger speaker Doreen Robinson. KW in /cakla/* and /cagasil³ela/* which refer to ways of time-beating Boas (1948:201) explains with musical notes.

²⁹⁴ 1. Occurs also in the HE/OO word for mother of pearl, a substance secreted continuously by molluscs' mantle tissue. 2. In Boas (1948:219) several derivatives of KW {c³hxv-} are mistakenly listed with the rounded uvular fricative instead of the rounded velar one.

²⁹⁵ In KW {chχ-αy³} > /caχε³/ "a rapid" KW {chχ-=ys} > /Caχis/ "Fort Rupert" and some personal and place names deriving from {chχ-=ys}. Not diagnosable if the stem {chχ-} is monomorphemic or analyzable as {ch-hχ-} (root no. 6310 plus suffix no. 6200). That the glosses for some {chχ-}-derivates refer to rapids or a stream flowing down could be folk-etymology influenced by {c³h-hχ-} "mass of water running down."

²⁹⁶ The same connection between "oily/slippery" and "wet" occurs with proto-Salishan *-c³al-, *-c³als- and *-nis-, *-nos-, *-nas- (Kuipers 2002:30, 71-72).

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
6420	723	c ³ p-	c ³ p-	c ³ p-	c ³ p-	({c ³ p-}:) to dip food (in oil, water, syrup); ({c ³ hp-}:) 1. to dangle (like rope, wet hair, cedar branch, wick), to dip in a liquid; 2. (KW only:) brush (i.e. dangling flexible things (like hairs) or rigid things (like bristles) held together at the top), to use a brush, to scrub ²⁹⁷
	832	c ³ hp-	c ³ hp-	c ³ hp-	c ³ hp-	
6440	724	c ³ m-	c ³ m-	c ³ m-	c ³ m- c ³ hm ³ -	to stick out, point, poke (like with index-finger), to point out sth. ²⁹⁸
6450	725	c ³ mt-	c ³ mt-	c ³ mt- c ³ nt-	c ³ mt-	to stretch out straight, standing up straight, to stand on tiptoes
6470	727	c ³ mk-	c ³ mk-	c ³ m ³ k-	c ³ mk-	to be careful with food, ration, distribute sparingly
6480	728				c ³ mx-*	(?) ²⁹⁹
6490	729	c ³ mqv-	c ³ mqv-	c ³ mqv-	c ³ mqv-	to force through a narrow opening ³⁰⁰
	730	c ³ mq-	c ³ mq-	c ³ mq-		

²⁹⁷ Proto-Salishan correlates: *-zəbł- "eyebrow, eyelash" (Kuipers 2002:24) and *-c³aba7χ- "cedar root" (ib.:31). The latter supposed root is near-identical in form to HE/OO/KW {c³hp-+hχ} HA {c³hp-+hq} (HE/OO) "leaves of red cedar" (HA) "branches of red cedar (used as diarrhea medicine)" (KW) "leaves or branches of red or yellow cedar (for dipping in water to collect herring eggs)."

²⁹⁸ The augmented form {c³hm³-} occurs in KW words referring to icicles and a kind of transparent stone that is used as ear ornament and probably icicle-like in shape. Proto-Salishan correlate: *-c³əm- "sharp, pointed." (Kuipers 2002:30).

²⁹⁹ In KW /c³mx-a/* "to feel for sth. (e.g. lice) with the finger."

³⁰⁰ In words referring to swallowing whole, crawling through a small hole and eel.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
6510	853	c ³ hχ-	c ³ hχ-	c ³ hχ-	c ³ mχ-	fibre (from nettles or fireweed) ³⁰¹
	854					
6520	731				chm ³ -* c ³ m ³ - c ³ hm ³ -	to melt, thaw, dissolve, wear away; be consumptive ³⁰²
6521					c ³ dhq-	woman ³⁰³
6530	732	c ³ t-	c ³ t-	c ³ t-	c ³ t-	to crack, split, burst, fissure; to open up (so inside shows), to reveal
6540	733	c ³ l-	c ³ ld-	c ³ t-	c ³ t-	liquid or muck expelled under
	745	c ³ x-	hc ³ -	hc ³ t-	c ³ s-	pressure, to squirt, spout, sneeze,
	767	hc ³ s-	c ³ yt-	c ³ yt-	h ³ s-	diarrhoea ³⁰⁴
	773	c ³ yt-		c ³ ht-	h ³ hs-	
	774				c ³ yt-	

³⁰¹ Proto-Salishan correlate: *-c³uyχ-, *-c³ayχ- "fireweed" (Kuipers 2002:34).

³⁰² {chm³-} occurs in the stems {chm³hqv-} and {chm³lqv-} "water dripping" of which altogether five examples occur in Boas (1948:201) but none of which could be reelicited. Proto-Salishan correlate: *-c³əmyχ "disappear, wear away" (Kuipers 2002:31).

³⁰³ Boas reports (1948:208) that KW /c³daq/ is interpreted locally as meaning "split in crotch," in other words, that it analyzes as {c³t=hq} with root no. 6530 and suffix no. 6100. He indicates with a question mark that he is distrustful of this interpretation. Indeed the term could as well contain the alternant {c³t-} of root no. 6540 so that it means "squirted at crotch." Nor is the suffix necessarily no. 6100, if there is a suffix in {c³dhq-} at all. It could be a borrowing.

³⁰⁴ Alternants other than {c³yt-} and HE {c³x-} HA {c³ht-} are followed by an element {-x-} or {-x•-} of uncertain meaning but treated as a suffix because attested also after roots without formal or semantic connection to this one. The alternants beginning in |h| specifically refer to sneezing. {c³yt-} occurs mostly in words to do with cormorants, known for their runny droppings.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
	833 2463					
6550	734	c ³ n-	c ³ n-	c ³ n-	c ³ n-	to proceed in file (as in a procession), to be part of a sequence of events, to move in mass rapidly (like tidal rapids, clouds or wind)
6560	736 747 751 838	c ³ nld- c ³ ld-	c ³ nld- c ³ ld-	c ³ l•-	c ³ nd- c ³ l-	(?) ³⁰⁵
6570	735		c ³ nt-			(?) ³⁰⁶
6580	737	c ³ nc-	c ³ nc-	c ³ nc-		beads (of sweat), bubbles (as of gas in a liquid), bumps on the skin
6590	738				c ³ nx-	to singe ³⁰⁷
6600	739 740	c ³ lkv-	c ³ lkv-	c ³ nkv- c ³ lkv-	c ³ nkv-	(?) agitation, in turmoil ³⁰⁸

³⁰⁵ In words referring to being surprised, startled, shocked, frightened.

³⁰⁶ In OO /c³hta/ "lean salmon." See comment on {c³ynh-} (root no. 6870).

³⁰⁷ In KW /c³hxa/ "to singe." A possible additional example is KW /c³hkv/ [1] "furious, angry" if its structure is {c³nx-=kv}. It could however also be {c³x-=kv}, with root no. 6800.

³⁰⁸ In KW {[c³n]c³nk-} "to wash one's hands" KW {c³nk-} "angry, furious" KW {c³nk-%m} "cause of anger" and HE/OO {c³lk³vł-} HA/KW {c³nk³vł-} "to wriggle, squirm (like worm), to churn (like stomach content when nauseated). HA {c³lkv-} occurs possibly in /c³лс³лхvp³ika/ (a kind of woodpecker).

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
6610	741	c ³ lkv-	c ³ lkv-	c ³ lkv-	c ³ nkv-	to pay out line, stream out, stream towards, wind off (rope, net)
6620	767				c ³ n ³ yχv-* c ³ n ³ yχ-*	(?) ³⁰⁹
6630	742 744	c ³ s-	c ³ s-	c ³ s-	c ³ s-	bowels, offensive in odour (like bowel content), filthy, long and tube-shaped (like bowels)
6640					c ³ sqv-*	(?) ³¹⁰
6650	748	c ³ l-/ c ³ l-	c ³ l-/ c ³ l-	c ³ l-/ c ³ l-	c ³ l-/ c ³ l-	(?) to shine, reflect light; a flash of light ³¹¹
6660	749	c ³ l-	c ³ l-	c ³ l-	c ³ l-	to weave ³¹²
6670	751	c ³ lt-		c ³ lt-	c ³ lt-*	to split, divide, move apart (e.g. stack of papers, crowd, dried ooligans on sticks), to split with the grain (wood) ³¹³
6680	752 750				c ³ ls-	to ration, use or distribute sparingly
6690	753 754	c ³ lk-	c ³ lk-	c ³ lk-	c ³ lk- c ³ lx-	interwoven, intertwined, interlocked (like strands in cloth,

³⁰⁹ In non-reelicitable words from the Koskimo dialect referring to barnacles and intestines.

³¹⁰ In KW /c³ic³sqvanabalas/* "sons of men who have given potlatch" and /c³srVHwε³/* "sth. small attached on sth., stomach of porpoise."

³¹¹ Perhaps in the stem {c³lyq-} "to shine, reflect light" and in HA only {c³lhq-+my³-h} > /c³л'aq³my³a/ "argillite (the black slate used by Haida carvers)." The HA stem {c³lhq-} is reminiscent of OO {k³l-+hq} > /k³л³aq/ "natural crystal."

³¹² In HE /c³л'a/ OO/HA /c³ла/ KW /c³лε³/* "spruce root basket."

³¹³ HE possibly in /c³л³ta/ "heart of a tree."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
						osiers in basket, barbs in feather) ³¹⁴
6710	756				c ³ lkv-	to forbid ³¹⁵
6720	757	(kvwxv-)	(kvwxv-)	kwkv- kwxv-	c ³ lqv-	hot, heat
6730	758				c ³ lχv-	(?) ³¹⁶
6740	759	c ³ lq-	c ³ lq-	c ³ lq-		to crack, split (wood, china, window)
6750	760	c ³ lq-	c ³ lq-	c ³ lq-	c ³ lq-	to shine, reflect light
6760	761				c ³ lχ-	to go head-first
6770	762	c ³ k-	c ³ k-	c ³ k-	c ³ k- c ³ hk-	awake, attentive, watchful ³¹⁷
6790	763				c ³ x- c ³ hx-	sick, hurt
6800	764 765	c ³ x-	c ³ x-	c ³ x-	c ³ x-	to singe, roast on an open fire, trim hair by singeing
6810	766				c ³ x-* c ³ hx-*	(?) ³¹⁸

³¹⁴ KW {c³lx-} is attested only as the free form /c³лх/ "feather."

³¹⁵ In a stem that needs reeliciting because it is uncertain if it is {c³lgvhl-} < {c³lkv-=hl-} or {c³lgvl-} < {c³lkv-=l}.

³¹⁶ In KW {c³lχv-%hq-} "to praise, to pray" and two other derivatives of {c³lχv-} referring to speaking softly (like whispering)."

³¹⁷ Also probably in KW {c³k-+hl-} and {c³hk-+hl-} HE/OO/HA {[c³y]c³k-&hl-} "to tell news." The meaning of the suffix in these stems is problematic; it is assumed to be suffix no. 2790.

³¹⁸ In KW /c³xas/* "new (said of a mat or blanket)" KW /c³axay³M/* and /c³axa³M/* "new-made thing."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
6830	769	c ³ y-	c ³ y-	c ³ y-		to push or throw with the horns
6840	770 771	c ³ yp-	c ³ yp-	c ³ yp- c ³ y ³ p-		wide, broad, moving sideways ³¹⁹
6850	772			c ³ ymhws-		old driftlog ³²⁰
6870	788		c ³ ynh-		c ³ ynh-	(?) ³²¹
6880	775				c ³ ys-	to roast at the side of the fire (sea eggs, clams, shellfish), to use roasting tongs
6890	776 777	c ³ ys- c ³ y ³ s-	c ³ ys- c ³ y ³ s-	c ³ ys- c ³ y ³ s-	c ³ ys-	to aggregate, hoard, concentrate (e.g. property); to retrieve, collect, put away; to wind in, coil or tangle up one's line
6910	779	c ³ ył.w ³ -	c ³ ył.w ³ - c ³ yłχv-		c ³ ył.w ³ -	famous, talked about ³²²
6920	780 784	c ³ yk- c ³ yk ³ v-	c ³ yk- c ³ yk ³ v-	c ³ yk- c ³ yk ³ v-	c ³ yk- c ³ yk ³ v-	to squeak, screech, chirp, cheep ³²³

³¹⁹ Also in HA /c³ic³buy³u/ "shiner perch - *Cymatogaster aggregata*" (a fish whose sides are wide compared to its length).

³²⁰ Unanalyzable stem. May contain a root {c³ymh-}.

³²¹ In OO /c³ina/ OO/KW /c³inas/, both of which mean "lean (meat)." Perhaps {c³ynh-} is an augmented form of {c³n-} and related to {c³nt-} in OO /c³hta/ "lean salmon".

³²² {c³yłχv-} only in OO /c³iłχva/ "to cause rumours" which could be a backformation from {c³ył.w³-hlh} > HE /c³'ił.w³'al'a/ OO /c³ił.w³ala/ KW /c³ił.w³ala/ "famous." It is not possible to derive {c³ył.w³-} from {c³yłχv-} as *{c³yłχv+hlh} would yield HE */c³'iłu³'al'a/ OO */c³'iłu³ala.

³²³ Onomatopoeic root. {c³yk-} occurs in words for seagull and KW /c³ixc³ika/ "baby buggy." {c³yk³v-} occurs in the generic term for "bird" and HE /c³ixvc³ikv/ "cart, four-wheeled vehicle." Proto-Salish correlate: *-c³ixvc³ixv- "osprey, fish hawk" (Kuipers 2002:33).

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
	794					
	795					
6930	781				c ³ yk-*	(?) ³²⁴
6940	782	c ³ yk-	c ³ yk-	c ³ yk-	c ³ yk-*	to remove obstacles, clear a surface
6950	783			c ³ yk-		dirty
6960	785	c ³ yk ³ hl-	c ³ yk ³ hl-	c ³ yk ³ hl-		battle, fighting, rioting ³²⁵
6970	786 1432	k ³ yp-	k ³ yp-	k ³ yp-	c ³ yx-	elderberry (Sambucus melanocarpa) ³²⁶
6980	787				c ³ yx-	to grill, roast ³²⁷
6990	789 790	c ³ yx-	c ³ yx-	c ³ yx-	c ³ yx-	(?) teasing, troubling, preoccupying, irritating, boring ³²⁸
7000	791				c ³ yx-	(?) ³²⁹
7020	793	c ³ ykv-	c ³ ykv-	c ³ ykv-	c ³ ykv-	shellfish (esp. clams)

³²⁴ Perhaps in KW /c³igulas/* "crosswise dimension."

³²⁵ Could contain root no. 6940.

³²⁶ Alternation of HE/OO/HA [k³] and KW [c³] occurs also in the suffix for "hand and forearm."

Alternation of [p] and [x] occurs in HE/OO when a root ending in [p] reduplicates completely, cf. OO /daxdapa/, frequentative of /dapa/ "to tow." Proto-Salish correlate: *-c³ikv- "elderberry."

³²⁷ Only in KW /c³ixa/ [2] "to grill, roast (dried fish)" and KW /c³inah³an³ue³/ "stick on which fat is roasted."

³²⁸ Possibly in {c³ynhkv-} HE/OO/HA "cat's cradle" (a string game) KW "annoyed" and HE/OO/KW {c³ynyq-} (KW also {c³ynyχ-}) "annoyed, irritated."

³²⁹ In KW /c³ixa/ [3] "boiled blood."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
7030	798	c ³ yqv-	c ³ yqv-	c ³ yqv-	c ³ yqv-	narrow (in width, in one's ways, in comprehension), constricted, astringent (like mountain ash bark); narrowing, tapering, narrow extension; shortcut; (KW {c ³ yqv-} also:) trail, traveling on a trail ³³⁰
	799	c ³ yq-	c ³ yq-	c ³ yq-	c ³ yq-	
	800					
7040	792	c ³ yχv-		c ³ yχv-	c ³ yχv-/	at the end, exhausted; wastage, offal ³³¹
	796				c ³ yχv-	
	797					
7070	802	c ³ yχ-	c ³ yχ-	c ³ yχ-	c ³ yχ-	precipitation stops
7080	803	c ³ kv-	c ³ kv-	c ³ kv-	c ³ kv-	short, compact, truncated
7090	805	c ³ kv-	c ³ kv-			to invite ³³²
7100	804	c ³ kv-	c ³ kv-	c ³ kv-		(?) spiny ³³³
7110	806	c ³ xv-	c ³ xv-	c ³ xv-	c ³ xv-	to stab, spear, push stick into; to descend steeply (like bluff) ³³⁴

³³⁰ Possibly also in HE /c³i'aqva/ "person who does not eat very much."

³³¹ In HA words referring to fatigue, HE /c³'ac³iχvmq³a/ "to be tired of waiting" KW /c³u³χλε³/ "umbilical cord" and several non-reelicitable KW terms listed by Boas (1948) and referring to the anal fin and cutting out guts. In none of the KW examples is it diagnosable if root ends in |xv| or |χv|. Boas (1948:223) lists one (non-reelicitable) word that could be taken as evidence for |xv| but it could well be a typing error; see the comment on lexical entry KW /c³iχv³akv/* "cut out (guts)."

³³² In HE /c³kv'i/ OO /c³kvi/ "to walk through the village inviting people."

³³³ In words referring to sea urchins, sea eggs. Root could be an alternant of {c³xv-} (no. 7110).

³³⁴ {c³wxv-} (root no. 7210) could be an alternant of this root.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
7130	808	c ³ w-	c ³ w-	c ³ w-	c ³ w-	to bend, curve, circulate; to recur, reciprocate; to give, put in possession ³³⁵
	809	c ³ hw ³ -	c ³ hw ³ -	c ³ hw ³ -		
7140	726	c ³ ws-	c ³ w-	c ³ ws-	c ³ w-	small outgrowth on a surface (e.g. boil, pimple, barnacle) ³³⁶
	811	c ³ w ³ s-	c ³ ws-	c ³ wws-	c ³ ms-	
	816		c ³ w ³ s-		c ³ w ³ s-	
7160	813	c ³ wt-	c ³ wt-	c ³ wt-		fresh (said of food)
7170	814				c ³ wnh-	(?) ³³⁷
7180	815				c ³ ws-	to poke in the ground to dig up roots
7190	817	c ³ wł-	c ³ wł-	c ³ wł-	c ³ wł-	black
	818					
7200	810	c ³ wkv-	c ³ wkv-	c ³ wkv-	c ³ wkv-	(?) to recur, reincarnate ³³⁸
7210	819				c ³ wxv-	(?) to insert, push in ³³⁹
7220	820	c ³ wqv-	c ³ wqv-	c ³ wqv-	c ³ wqv-	to rattle, to ring (like metal), to jingle

³³⁵ {c³hw³-} occurs in OO /c³aw³ikał/ "a ceremonial blanket" HE /c³'aw³ikałba/ "nose of octopus" (i.e. bulbous front part of octopus swimming head first with arms trailing behind) HA /c³'aw³ikał/ "snowshoes."

³³⁶ {c³w-} occurs likely in OO/KW /c³uc³um³a/ "barnacles." It could be a cross-family stem since it resembles proto-Salish *c³uŋ^w "sore", cf. Kuipers (2002:35). {c³w³s-} and {c³wws-} are augmented forms of {c³ws-} both stemming from {c³w[∞]s-}.

³³⁷ In KW /c³una/ "thunderbird" and KW /c³unañ³as/* "thunderbird place."

³³⁸ In words referring to grandchildren.

³³⁹ Could be an alternant of {c³xv-} (root no. 7110) but only three examples and their glosses do not all support this interpretation.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
7230	807	c ³ wχv-	c ³ wχv-	c ³ wχv-	c ³ wqv-	sloshing of water; to splash into
	821				c ³ wχv-	water, to wash, to launder ³⁴⁰
	822					
7240	823	c ³ qv-		c ³ qv-		(?) ³⁴¹
7250	825				c ³ qv-*	(?) ³⁴²
7260	826	c ³ q- c ³ hq-	(m ³ q-)	(m ³ q-)	c ³ q- c ³ hq-	to throw (e.g. a ball), to fall (said of inanimate objects); (HE also:) to propel violently, to smash; (KW also:) to throw away, discard ³⁴³
7270	827	c ³ χ-				(?) ³⁴⁴
7280	828	c ³ χ-	c ³ χ-	c ³ χ-	c ³ χ-*	elastic, pliable, slack; taking it easy; (KW also:) durable, tough, resisting wear and tear
7290	829				c ³ χ-	(?) ³⁴⁵
7300	830	c ³ h-	c ³ h-	c ³ h-	c ³ h-	mass of water moving, water flowing (as a stream, in a flood, as a tide or as runoff (from e.g. one's raincoat), current

³⁴⁰ {c³wqv-} occurs only in KW /c³urvayu/ "soap."

³⁴¹ Only in HE /c³χvc³rv'atu'a/ HA /c³rv'atui/ "wax in the ears."

³⁴² In KW /c³rvhwε³/* "stomach of porpoise."

³⁴³ HE {c³hq-} only in /c³'ar'iɬa/, alternant of /c³r'iɬa/ "to throw into a house."

³⁴⁴ In two words referring to low bush blueberries.

³⁴⁵ In KW /c³χu³/ and /c³χu³i/ "ling cod."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
7310	831	c ³ h-				to stagger, lurch, move to and fro ³⁴⁶
7350	834 835	c ³ hs-	c ³ hs-		c ³ hs-	elastic, stretchable; to stretch to the limit, at the tail end; to strain, to work hard; eelgrass (<i>Zostera marina</i>) ³⁴⁷
7370	836			c ³ hs-		to deceive, to disappoint
7380	837				c ³ hs-	curved, curving motion ³⁴⁸
7400	839	c ³ hk-	c ³ hk-	c ³ hk-	c ³ hk-	(?) spearhead ³⁴⁹
7430	841	c ³ hk-		c ³ hk-		to melt, thaw; to lose weight ³⁵⁰

³⁴⁶ In HE /c³'ac³'an³akvɫa/ "to stagger."

³⁴⁷ HE/OO only in {[c³h]c³hs-=m} > HE /c³'ac³'aym/ OO /c³ac³aym/ "eelgrass, sea grass."

Eelgrass has long ribbon-like leaves that are still used industrially in some countries, among other things as mattress filling and in the production of mats, rugs and baskets, cf. (1)

http://www.nrcs.usda.gov/Internet/FSE_PLANTMATERIALS/publications/mdpmcfs10921.pdf,

(2) <http://en.wikipedia.org/wiki/Seagrass> and (3) p. 314 of The Chemical Composition and Technological Properties of Seagrasses a Basis for Their Use (A Review) by N. A. Milchakova, Benno Böer, L. I. Boyko, D. V. Mikulich, shown at

http://link.springer.com/chapter/10.1007/978-94-007-7411-7_22#page-1.

³⁴⁸ In words referring to somersaulting and to a whale surfacing (as for blowing).

³⁴⁹ Possibly in HE /c³'akh/ OO /c³akh/ "point of seal or salmon spear" HA /c³'akh/ "harpoon for catching fish (made of baby goat horn)" KW (Koskimo dialect) /c³akhχ/* "point of double-headed harpoon."

³⁵⁰ The HE examples of {c³hk-} meaning "to melt etc." are from the Klemtu informant and not accepted by Bella Bella informant Angus Campbell.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
7440	842				c ³ hx-	(?) ³⁵¹
7450	843				c ³ hx-*	(?) ³⁵²
7460	844	c ³ hx-	c ³ hx-			(?) to veer off, to turn sideways ³⁵³
7470	845		c ³ hx-		c ³ hx-*	(?) ³⁵⁴
7471		c ³ hyq-	c ³ hyq-		c ³ hyq-	1. shaman, Indian doctor, medicine man; 2. Indian dancer; 3. to sing; (KW also:) 4. winter ceremonial ³⁵⁵

³⁵¹ In KW /c³axhs/ (probably:) "ironwood plant." According to

http://en.wikipedia.org/wiki/Holodiscus_discolor also known as ocean spray and creambush and noted for the strength of its wood that is often used for making spears, arrows, bows, harpoons and nails.

³⁵² Possibly in two derivatives of {c³hnws-}* "netting or snaring of deer, seal, ducks."

³⁵³ Possibly in HE /c³'an³'it/ OO /c³an³'it/ "tail of fish" and OO /c³axsistayu/ "turned by the tide or back eddy."

³⁵⁴ In four derivatives of {c³hnwqv-} "to hush, soothe, comfort."

³⁵⁵ 1. The large majority of KW derivatives of this stem have a gloss referring to the winter ceremonial. 2. If the stem is monomorphemic its structure is likely {c³[h]yq-} because e.g. *{c³[h]y[h]q-%m} would yield HE */c³'ay'arM/ OO */c³ayarM/ and not the attested HE /c³'airM/ OO /c³airM/ "1. shaman's song; 2. song text (of any kind)." If the stem is polymorphemic its root could have the form of {c³h-} or {c³hs-}, with unclear meaning. Those taking a dim view of shamanic religion may want to identify the root as the {c³hs-} "to deceive, to disappoint" which occurs in HA (root no. 7370). There is however no evidence for this interpretation not counting one non-reelicitable term from Boas (1948:221) whose gloss could be made up by-Boas and not provided by an informant, cf. KW {c³hyq-=kv} > /c³airkv/* "pretended." 3. Most likely the stem is monomorphemic and has a structure {c³[h]yq-} because Sapir & Swadesh (1939:306) list a South Wakashan (Nuuchahnulth) stem {c³i:q-} "singing a secret chant with accompaniment of

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
7480	846	c ³ hy ³ -	c ³ hy ³ -	c ³ hy ³ -	c ³ hy ³ -	younger sibling ³⁵⁶
7490			c ³ hkv-		c ³ hkv-	(?) ³⁵⁷
7500	847				c ³ hw∞-	(?) beaver ³⁵⁸
7510	848				c ³ hqv-*	(?) ³⁵⁹
7520	849				c ³ hqv-*	alive, (keeping) well ³⁶⁰
7530	850	c ³ hqv-	c ³ hqv-	c ³ hqv-	c ³ hχv-	to stretch, make taut
7540	851	c ³ hr-	c ³ hr-	c ³ hr-	(m ³ l-)	mountain goat
7550	852	c ³ hq-		c ³ hq-	c ³ hq-	outer bark of cedar
7551					c ³ hq-	drifting with tide or current

rattle". Who borrowed from whom is unknown. Jacobsen (1968) lists /c³a·yiq/ "doctoring ceremonial."

³⁵⁶ Some derivatives have confusing glosses due probably to the decline of the traditional kinship system.

³⁵⁷ In OO/KW /C³agvala/ (indigenous name of Chuckwallah River in the Rivers Inlet area)

³⁵⁸ 1. All derivatives of this root refer to beaver except that according to one informant KW /c³awi/ doesn't mean "beaver" but "fur seal." Possibly therefore the root has a more general meaning than "beaver." 2. That this root does not have the form of {c³hxv-} or {c³hχv-} is supported by the unfortunately non-reelicitable person's war name /C³ɔgvɫis/* < {c³hw∞-gɫ=ys} which Boas glosses as "born to be beaver" (though with a question mark after it). If the root ended in |xv| or |χv| the first suffix would have the form of {-Δɫ-} rather than {-gɫ-}. 3. This root could be cross-family, cf. Proto-Salishan *-k³am- "beaver" (Kuipers 2002:140).

³⁵⁹ In KW /c³aqva/* "lean (said of salmon)."

³⁶⁰ Derivates are archaic according to Boas.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
7560	855	c ³ h ³ q-	c ³ h ³ q-		c ³ h ³ χ-	(HE/OO) water dripping; (KW) (?) ³⁶¹
7570	856	sp- sbh-	sp-	sp-	sp-	to traverse a distance quickly and suddenly (like flash of light or burst of sound); to jut out (like sharp edge), shoot forward (like boat gaining headway) ³⁶²
7580	857	sp ³ -		sp ³ -		(?) ³⁶³
7590	858				smp-	to swear
7600	859	sms-	sms-	sms-	sms-	mouth
7610	860	smk-	smk-	smk-	smk-	to extract oil from ooligans
7620	861			st-		to eat meat
7630	862	sn-	sn-	sn-	sn-	to ponder, deliberate, think about sth.; to plan, foresee, fret, to commit, promise
7640	863	sn-	sn-	sn-	sn-	whole, complete, intact, undamaged; spanning a whole period (e.g. day) from beginning to end ³⁶⁴

³⁶¹ KW perhaps in /c³a³χələtu/ or /c³a³χəltu/ "to choke on liquid" (transcription in source document ambiguous).

³⁶² The HE alternant {sbh-} occurs only in {[sp]sbh-} > {sxsbh-} "sharp" which likely is a metathesized form of {sk-} derivate {[s]sk-b-h} "sharp" that survives as such in HA.

³⁶³ In HE /sp³ul'i/ "cherry-sized inedible red berries causing itchy anus when eaten" HA /sp³auli/ "kind of small red berries growing close to the ground."

³⁶⁴ Also possibly in some stems referring to asking back lent-out property.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
7650	864			sn-		to mention a name, to bestow a name ³⁶⁵
7660	865	snt-	snt-	snt-	snt-	to pick off nits
7670	866 879				sny ³ - sly ³ -	to pick out
7680				snkv-		to stick out of a tangled mass (e.g. branches from thick brush, hair from one's head)
7690	867	snq-	snq-	snq-	snq-	to peel off cedar bark ³⁶⁶
7700	868				ss-	washing is stiff (when frozen or starched)
7710	869 870	sł-		sł-	sł-*	(?) reluctant to commit, avoiding work and responsibility
7720	872				sł-*	(?) ³⁶⁷
7730	871				słbxv-	to squirt
7740	874				sł-/sl-	(?) ³⁶⁸
7750	873 874 921	sl-	sl- shlh-	sl-	sl- shlh-	to drill (e.g. with sticks to make fire), to turn a crank; wound up, furred (like fiddleheads = young fern's fronds)

³⁶⁵ Could be root no. 7630.

³⁶⁶ The HA examples refer specifically to red cedar but the other ones to young cedar or just cedar.

³⁶⁷ In KW /słmiqvɫa/* "to move a little (said of a person)."

³⁶⁸ Only in KW /słɪm/ [2] "berries of oval-leaf blueberry (Vaccinium ovalifolium)." Root may be related to {sls-} (root no. 7800) which refers to an (unidentified) kind of blueberry.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
7760	874	slp-	slp-	slp-	slp-	to twist, to turn (as in drilling)
7780	876				slt-	to drill ³⁶⁹
7790	877				slt-	still, quiet, inactive
7791	875				slt ³ h-	little finger ³⁷⁰
7800	878	sls-	sls-		sls-	(?) an (unidentified) type of blueberry, colour of these berries
7810	880			slq-	slqv-	twisted ³⁷¹
7820	881	slχv-		slχv-		(?) ³⁷²
7840	882	sk-	sk- shk-	sk-	sk-	to spear, to harpoon, to poke with sth. sharp
7850	883	sk ³ h-	sk ³ h-	sk ³ h-	sk ³ h-	five
7860					sx-*	(?) ³⁷³
7880	884 885	sy-	sy- shy ³ -	sy-	sy-	narrow long thing (pole, hair) sticking out or into sth.; to push, poke or propel with pole or stick; (KW also:) vertical or horizontal

³⁶⁹ In KW /slsat.m³ut/ "refuse from drilling."

³⁷⁰ Unanalyzable free form.

³⁷¹ The two HA examples have |q|, not |qv|.

³⁷² In HA words referring to whistling through the teeth and in the name of the varied thrush, a bird with a whistle-like single pitch song. HE possibly in /s'lw'ilas/ "roof of the mouth."

³⁷³ In KW /sxла/* "to want very much."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
						poles supporting a roof; putting up a stanchion ³⁷⁴
7890	886 887	syt-	syt-		syt-	to use a bar to pry, dislodge or split; (hence these attested meanings:) (HE/OO) to poke through an opening (like toothpick) or into a surface; (KW) to split partially off a flat surface or log (e.g. sliver still attached to floor)
7900				synh-	synh-	(?) sideways, oblique ³⁷⁵
7910	888	sys-	sys-	sys-	sys-	(?) ³⁷⁶
7920	889	sył-	sył-		sył-	to move in a winding manner (like snake, like meandering river), to slither, snake along
7930	890				sył-	(?) ³⁷⁷
7940	891	syx-	syx-	syx-	syx-	to peel (fruit, sprouts), strip off, clean off

³⁷⁴ Also in {sy-k³hq-} "to walk with a cane" in which the suffix {-k³hq} may be an alternant of {-c³q} and {-c³hq} "long object."

³⁷⁵ HA possibly in /sin'ai/ glossed by consultant as "spider crab" but probably referring to some other crab species because spider crabs are confined to Japanese waters. KW possibly in the stem {synwqv-} "oblique, slanting, bevelled, on a bias."

³⁷⁶ In HE /s'isi'uł/ OO /sisiuł/ KW /sisiuł/, /sisuɬ/ and /sisiu³ł/ (name of the mythical double-headed serpent) and HA /s'isiuł/ "prawns."

³⁷⁷ Possibly in KW {sył=hn∞} > /silah/ "one's grandchild's spouse." The term's /ah/ is an irregularity. Lincoln & Rath (1980:170) uses the regularized form /silh/.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
7950	892	syx-	syx-		syx-	(?) ³⁷⁸
7960	893	sykv-	sykv-	sykv-		blueberry
7970	894	syχv-	(q ³ ws-)	(£hk-)	syχv	to travel (in any vehicle), to paddle ³⁷⁹
7980	895	syq-	syq-	syq-	syq-	(HE/OO/KW) to dry in the sun; (HA) left high and dry by the tide
7990					sy ³ x-	bowel or labour pains
8000	896		sy ³ kv-	sy ³ kv-		crooked, to zigzag
8010	897				skv-	leaning forward, bent over, to bend to wishes, to comply
8020	898				skv-	(?) ³⁸⁰
8040	900 905	sw-	sw-	sw-	sw-	to get, take, hold, carry in one's hand; to control, to hold on to sth.; one's cultural assets; to be seized by sth. ³⁸¹
8050	901	sw-	sw-		shwh-	(?) to rumble; rattling noise, clatter ³⁸²
8060	902	(q#sw)	(q#sw)	(yχv#sw yχ#sw)	sw-	it's you (who is/did ...)

³⁷⁸ In OO {syx-c³hs} "ambitious, having the will to achieve sth." and the HE/OO/KW free stem {syx=-ht} "purpose, reason, rationale, action plan."

³⁷⁹ HE possibly in the place name /S'iw'ac³i/.

³⁸⁰ In KW /skva/ "to eat dry food."

³⁸¹ Productive root in HE/OO but only three possible HA examples. Only two of the possible KW examples found in Boas (1948) could be reelicited.

³⁸² Possibly in HE /su³'a/ OO /su³a/ "thunder" and the KW stem {shwlt-} "(to make) rattling or clattering noise."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
8070	903				swp-	to chop with an axe
8080	904	swł-			swł-*	to twill
8090					swkv-	(?) white ³⁸³
8110	906	swqv-				(?) ³⁸⁴
8120	907 929		sqv- shqv-	shqv-	sqv- sχv- sq ³ v- shq ³ v-	to peel, pry or tear off; to remove covering layer (skin, bark, clouds) ³⁸⁵
8130	908 909				sq-	at an angle, leaning (like house, chair, the back of a sitting frog or toad)
8150	910	sχ-	sχ-	sχ-		to crawl (like worm, insect)
8160	911	sχ-	sχ-	sχ-	sχ-	(?) ³⁸⁶
8170	912 913 914	sh-	sh-	sh-	sh-	level, even, lacking highs and lows; (hence:) 1. levelheaded, wise, sensible, temperate; 2. flat

³⁸³ In KW /st³ukv/ "widgeon duck" and its synonyms /st³uk³va/*, /sisuk³va/* . According to <http://www.ducks.ca/learn-about-wetlands/wildlife/american-wigeon/>, "The American wigeon was formerly known as Baldpate because the white stripe on the head resembled a bald man's head."

³⁸⁴ In HE /s'urvar'i/ "loin cloth."

³⁸⁵ Could be same root as no. 8130, with shared meaning "peel back, set at angle." Is also a cross-family stem, cf. proto-Salish *-səq³- glossed as "to split, crack" in Kuipers (2002:99) but should have included "opening up."

³⁸⁶ In HE /sχ'm/ "grey sawbill duck" OO /sχm/ "Chinook canoe, race canoe" HA /sχm/ "sawbill duck" KW /sχm/ "figurehead of boat."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
						in shape, layer-like cover, covered by a layer-like thing (e.g. cloth, mat, board); 3. (mostly in KW:) to stretch across or around sth. (like lining, sheath), to stretch out (e.g. one's arm), to reach out, to reach a certain point ³⁸⁷
8200	915	shp-	shp-	shp-	shp-	to remove a covering layer (skin, veil, skirt, curtain); (KW also:) to wear a covering layer
8210	916		sht-		sht-	(?) ³⁸⁸
8240	917	shc-/ shs-	shc-/ shs-	shc-/ shs-	shs-	spring salmon
8250	918	shs-	shs-	shs-	shs-	offspring (of one couple)
8260	919	shł-	shł-	shł-	shł-	mental anguish, in love, in mourning, jealous ³⁸⁹
8270	920	shł-	shł-			(?) ³⁹⁰

³⁸⁷ In HE/OO/HA the root occurs also as alternant of {lh-} in interrogative perfective constructions, e.g. HE /sas l'axd'mn'ukv/ "Do you have a place to stay yet?" The root may occur also in HA /saxg/ "to want to."

³⁸⁸ In a small number of words whose semantic relationship is problematic, cf. KW /sata/* "desired as food" KW /sadjvɫa/* "to be greedy, to devour" KW /sadjik³va/ "horsefly" OO /satzi/ "belly button."

³⁸⁹ Also in HA /s'aɫa/ "jealous (and refusing to accept invitation to feast)."

³⁹⁰ In HE /s'al'iqti/ and /s'al'iqvti/ OO /saliqti/ and /saliqvti/ "lips (of one's mouth)."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
8290	922				shlh- shyhł-	blind, visually impaired ³⁹¹
8300	923	shl ³ -	shl ³ -	shl ³ -		(?) ³⁹²
8310	924	shk-	shk-	(gn-)	shk-*	(HE/OO) supplementary, additional, extra; (KW) low on reserves ³⁹³
8320	925	shk-	shk-	shk-	shk-*	(HE/OO/HA) to travel in a vehicle (e.g. boat, plane); (HA also:) to move forward jerkily (like baby moving in a sitting position), to inch forward, to nod the head forward (as when falling asleep in a sitting position); (KW) to use a canoe, to give away a canoe ³⁹⁴
8340					shk-	(?) joint (of box) ³⁹⁵

³⁹¹ {shlh-} is attested in KW /sala/* "blind (not totally)", a term from the Newetee dialect, and possibly in KW /salaxda³iliqał/* "half blind" which is a term reported by Boas (1948:187; 1947:328) and has a structure {shlh-xdh³lyq-hł-h}. A stem {shyhł-} rather than {shlh-} may be present in the synonyms KW {shyhł-=yq-hł-h} > /sailiqał/ and KW {shyhł-=yq-stw-hł-h} > /sailixstuał/ "half blindness of a drunk person."

³⁹² Possibly in HE /s'al³u/ and /s'al³au/ and /s'al³a/ OO /sal³u/ and /sal³a/ HA /s'al³i/ "ring finger."

³⁹³ Possibly also in HE /s'ay'akɬuda/ "labour strike."

³⁹⁴ Root may originally have referred to a sitting paddler bending forward before each stroke but subsequently became associated with canoe use, travelling in general and forward motion.

³⁹⁵ In three words listed in Boas (1948:183) as derivatives of {sk-} (no. 7840) although their glosses do not seem to relate to root no. 7840.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
8360	926	(nhn-)	(nhn-)	shk- shx-	(nhn-)	grizzly bear ³⁹⁶
8370	927		shx- sh ³ x-		shx-	to appropriate, to lay one's hands on sth.; greed
8380	913			shkv-		(?) ³⁹⁷
8390	928	sh ³ kv-	sh ³ kv-	shkv- sh ³ kv-	sh ³ kv-	animal, mammal (esp. seal), animal products (e.g. skin, meat, oil); (KW also:) to prepare animal products (skinning, butchering, carving)
8391	899		shkv-		shkv- skv-	bracken fern root (Pteridium aquilinum) ³⁹⁸
8400				shxv-		to use dip net for sea eggs
8410			shxv-/ shχv-			(?) ³⁹⁹
8430	930			shqv-		grass
8440	931	shχv-	shχv-	shχv-	shχv-	isolated, by oneself, separated from one's group, unique, one of a kind

³⁹⁶ {shk-} only in HA (Kitamaat dialect) /saak/ and HA (Kitlope dialect) /sak/ "grizzly bear." The root form {shx-} is attested in HA (Kitlope) {shx-y³s} > /san³is/ "grizzly fat." Possibly HA /saak/ and /sak/ are a loanword of unknown origin and because its /k/ is automatically fricativized word-finally the form {shx-} could result from backformation.

³⁹⁷ Perhaps in HA {[sh]shkv-+h} > {shyhk³v-h} > /saik³va/ "to want to get sth. (game, company or whatever)."

³⁹⁸ The only example of the form {skv-} is KW /skva/ attested in Lincoln & Rath (1980:171) and could be an old misrecording or typing error.

³⁹⁹ Possibly in OO /sawht/ "to suspect."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
8450	932				shq-	to smart, to sting
8460	933			shq-		to shove, slide, skate
8470	934				sh ³ χv-	oval, oblong, elongated, stretched
8480	935	λm-	λm-	λm-	λm-	scab, sore, pock mark
8490	936				λms-	to pinch with the finger nails, to pick a scab, to switch light on/off
8500	937 964 977	£mxv- £hmw-	£hmw-		λhmh- λhmlhw ³ - λmxv- £mxv-	(?) spotted ⁴⁰⁰
8510	938 940	λn-	λn-		λn-	to grip with the teeth (like fish the bait, dog a stick), to take a small bite, to nibble, to peck
8520	939	λn-	λn-		λn-*	(?) across (like a barrier or a crosspiece keeping things together) ⁴⁰¹

⁴⁰⁰ In words referring to fish identified by informants as perch or shiner. The perch, a freshwater fish, and the shiner perch, a saltwater fish, belong to the order of the Perciformes and "perci-" means "spotted." A spotted appearance of perch and shiner perch would link this root's heterogenous forms to {λm-} "scab etc." However, the identity of the fish in question is uncertain. It could also be Pacific ocean perch (*Sebastes alutus*) a.k.a Pacific rockfish, Rose fish, Red bream or Red perch and belong to a different order. Then again it could also be the Striped seaperch (*Embiotica lateralis*) which does belong to the Perciformes and whose stripes are series of spots.

⁴⁰¹ Uncertain root because the examples clearly pointing to the form {λn-} are from Boas but could not be elicited. Among them is KW /λhy³u/* "crossbar for barring door." The examples

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
8530	940				λns-	(?) to nibble ⁴⁰²
8540	941				λn£-	to peck
8550	942		£nk-		λnk-*	to peck ⁴⁰³
8560	943				λnqv-*	to peck ⁴⁰⁴
8580	944	£k-	£k-	λk-	λk-	cinquefoil (<i>Potentilla pacifica</i>)
8590	945	£k-	£k-	λx-	λx-	to use a long thing as a barrier, thwart or lever; to position crosswise; to steer (boat with tiller, car with steering wheel) ⁴⁰⁵
	946	λx-	λx-			
	995	£x-	£x-			
		£x•-	£³yx•-			
8600	947	λy-	λy-			to invite people from another village to a potlatch
8601			λy-			(?) ⁴⁰⁶
8610	948				λys-	mosquito, mosquito bite
8620	949	λykv-	λykv-	λy³kv-	λykv-	to borrow ⁴⁰⁷
	967				λhkv-	

that could be elicited involve a stem {λnyk-} "to lock door inside with pin, bolt or bar" which may contain either {λn-} or {λx-} (root no. 8590).

⁴⁰² In KW /λhsa/* "to nibble" KW /λhs.h³id/* "to take a nibble" and possibly KW /λhsola/ "bow of boat is lower than the stern."

⁴⁰³ In OO /£hka/ "to hold while pecking" KW (Newetee dialect) /λhka/* "to peck."

⁴⁰⁴ In KW (Newetee dialect.) /λhqva/* "to peck."

⁴⁰⁵ HE {£x•-} OO {£³yx•-} only in HE /£x'al'a/ OO /£³ixala/ "go-between who patches up quarrels."

⁴⁰⁶ In OO /λincila/ "thicket" (synonym: /£³ic³s/).

⁴⁰⁷ {λhkv-} only in KW /λakubs/ "fond of borrowing."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
8630	950	λyq-	λyq-		λyq-	one's name; renown, scenario or image one is associated with; reputation; to give a name to sb., to call sb.'s name, to call the next line to be sung
8640	951		£kv-	λkv-	λkv- £kv- λhkv-	thick in girth, voluminous, full ⁴⁰⁸
8650	952	λw-	λw-	λw-	λw-	proximity, contiguity, continuity, recurrence, closeness, kinship ⁴⁰⁹
8670		λws-	λw- λws-	λws-		luck, good fortune, supernatural power
8680	953 955	λwgv-	λwgv- λwkv-	λwgv-	λwgv- λwkv--	touched by the supernatural, lucky, spooked, alarmed
8690	954				λwgv-	using the paddle to steer the canoe
8700	956	£qv-			λqv-	defloration with the finger
8710	957				λqv-*/ λq-*	(?) ⁴¹⁰
8730	958	λχ- £χ-	λχ- £χ-	λχ-	λχ-	to slip, slide, shove; to gain headway (said of canoe)

⁴⁰⁸ {£kv-} occurs in OO /£gvit/ "thick-bodied, thick in girth (like a tree)" KW /£kvM/ "brazen, arrogant" (= "thick-faced").

⁴⁰⁹ Occurs also in the KW proclitic connective /λu³/ "and, and also, along with, together with, accompanied by." Instead of it HE/OO/HA use proclitic /du/.

⁴¹⁰ In KW {λqv/q-=kv} > /λrkv/* "harpoon point." Could be a misspelling of /£gkv/* < {£k-=kv} (with root no. 9060). The latter means "notched" and can refer to a harpoon point that is notched to create barbs. See Boas (1948:427).

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
8740	959				λχ-*	(?) ⁴¹¹
8750	960 961 962 966	λh-	λh-	λh-	λh-	1. erect, to stand up (like pole), to stick out (like handle), to protrude, to stand out (like accomplishments); 2. to raise by wedging; to wedge apart, to drive in wedge, to cut a wedge out of a tree (as in logging); to chop down a tree ⁴¹²
8760	963	λhp-	λhp-	λhp-		to dig for clams or cockles
8761		λht-			λht-*	wedge, use a wedge, wedged in ⁴¹³
8770	965	λhk-	λhk-	λhk-		chopping motion (as of gillnet being lowered vertically into the water), ridge (as on rock cod's head)
8800	968				λhχv-	to go to get food
8810	969	λhχv-	λhχv-	λhχv-	λhχv-	to stand (said mostly of humans), upright; sticking up, sticking up for, to volunteer; to stand still, barrier, to stand in the way; rank, standing

⁴¹¹ In KW /λχα/* "to have a pungent smell."

⁴¹² Root may occur also in HE /λ'ara/ "basking shark" and refer to the vertical gill slits that almost encircle the fish's head, and in HA /λ'axdala/ "grey cod" where it refers to the barbels hanging down from the lower jaw.

⁴¹³ HE possibly in /Λ'atul³'asbala/ (name of a point of land near Bella Bella).

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
8820	970				λh³p-	to nail, to peg
8830	971	£p-	£p-	£p-	£p- £hp-	to spread out (like cloth, sail, wings), unfold, open up, split apart, burst open; (HA also:) to fly)
8840	972	£m-			£m-*	(?) ⁴¹⁴
8850	973				£ms-*	to turn away in shame
8860	974				£mł-	to burst, blast, blow up
8870	975				£mk-	wedge, to wedge, to split with wedge
8880	976	£mkv-	£mkv-	£mkv-	(qk-)	bunchberries (<i>Cornus canadensis</i>) ⁴¹⁵
8900	979				£mq-	proud, haughty, arrogant
8910	980			£mq-	£mq-	(?) ⁴¹⁶
8920	981				£t-	floppy material covering sth. (e.g. head or face) and overhanging
8930	982				£t-*	(?) ⁴¹⁷

⁴¹⁴ Perhaps in the man's name HE /£M'aba/ and in KW /£Mała/* "having the head backward."

⁴¹⁵ {£mkv-} may really refer to the springiness of filaments under a bunchberry flower's petals. See the comment on {qk-} (root no. 20620).

⁴¹⁶ In KW /£Mqu/ "female sawbill duck" and perhaps HA /£mq³'auli/ (a kind of berries identified by the informant as bunchberries although the HE/OO/HA root referring to bunchberries is {£mkv-}). The KW term may refer to the duck's spiky crest.

⁴¹⁷ In KW /£tsə/* "hole drilled in a slanting direction."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
8940	983				£n-*	never ⁴¹⁸
8950	984 1055				£ns- £ny ³ -*	(?) to split wood ⁴¹⁹
8960	985	£nkv-	£nkv-	£nkv-		(?) ⁴²⁰
8970	986	£nqv-	£nqv-	£nqv-		(?) ⁴²¹
8980	987 988 1161	£nqv-	£nqv-	£nqv-	£nqv- £nq-*	lacking vigor, falling apart ⁴²²
8990	989				£nq-*	(?) ⁴²³
9000	990 1042	£s-	£s-	£s-	£s- £h ³ s-	to slip, slide, glide; to skim over a surface ⁴²⁴
9010	991				£l-	to chip off (paint, rock, bowl, etc.) ⁴²⁵

⁴¹⁸ In KW (Newetee dialect) /£Ha/* and /£Hala/* "never."

⁴¹⁹ {£ns-} only in KW /£Hsa/* (possibly:) "to split with the grain." {£ny³-} in KW /£Hy³a/ "to split log so that the split misses heart of wood, to split wood across the grain through centre of tree" and KW /£Hy³a³akv/ "split across grain (wood)."

⁴²⁰ In HE /£'hk³v'as/ OO /£hk³vas/ (an unidentified plant without berries) HA /£'hk³vas/ "the inside of one's nose (between nose and windpipe); species of berry (said to resemble dried snot)."

⁴²¹ In HE /£'hq³v'as/ OO /£hq³vas/ (an unidentified plant with edible red berries) HA /£hq³v'as/ and /£'hq³vas/ (a plant with purplish edible berries).

⁴²² {£nq-} only in KW /£nq³a/* "downcoast, uneasy." KW uses {xvls-} for "unhappy, sad, withering."

⁴²³ In KW /£Hqala/* "standing (said of inanimate object)."

⁴²⁴ {£h³s-} in KW /£a³sa/ "slippery" and probably KW /£a³sla/ "weasel dance."

⁴²⁵ Perhaps also in KW /£i£laxsta³agvił/ "mouth of clams opened in house."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
9020	992	£³l-	£³l-	£³l-	£l-	to turn up the palms of the hands (as in dancing); to raise on flat of hands, scoop or shovel; (KW also:) to lift or carry a canoe on raised forearms
9040	1026				£lp-* £hp-*	to hesitate ⁴²⁶
9050	993		£k-		£k- £hk-	to take a break, to interrupt work, to shirk
9060	994				£k-*	to notch
9080	996	£x-	£x-			to slip, slide
9090	997 1167	£xs- £xs-		(xms)		(?) ⁴²⁷
9100	998 1010	£ys- £y³s-	£y³s-		£ys-	(HE/OO) to slap (a ball), to strike at sth. with a flicking movement, to flip; (KW) to put sth. up to dry (in sun, in smokehouse). ⁴²⁸
9110	999 1002 1175	£yl- £yx- £yx-	£yl- £yx- £yx-		£yl-	to invite to a feast ⁴²⁹

⁴²⁶ In KW /£лр³iqла/* "to think one is unable to do" and KW /£apa/* "to think sth. is insufficient, to hesitate on account of danger."

⁴²⁷ In HE /£хсл'а/ "person who does everything in a big way (eating, working), cantankerous person" HE /£хсл'а/ "fierce person, someone who eats a lot."

⁴²⁸ HE {£ys-} is attested only in the plural forms of some examples whose neutral form derives from {£y³s-}.

⁴²⁹ {£yx-, £yx-} only in HE /£'ihxv/ OO /£ihxv/ and OO /£ihxv/ "people invited to a feast" OO /£ixa/ "to feast."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
9120	1000	£yɫ-	£yɫ-		lyx-	(?) to appropriate, usurp, use without authority ⁴³⁰
	1001	£yx- lyx-	lyx-			
9130	1037	£yɫ-	£yɫ-	£yɫ-		to slap, to strike at sth. with a flicking movement, to flap ⁴³¹
9150	1003	(q³ykv-)	£ykv-	(q³ykv-)	£ykv-	to tell a lie, cheat, deceive, lure, decoy ⁴³²
9160	1004				£yqv-	to stray, to deviate, to change, to move ⁴³³
	1005					
9170	1006				£yqv-*	(?) ⁴³⁴
9190	1007	£yq-		£³yq-	£yq-	(HA) to crack, split (as wood); (KW) to carve or hollow out canoe ⁴³⁵
	1092					
9200	1008	£yχ-	£yq-	£yχ-	£yq-	to beat time, rhythmic tapping, woodpecker
	1009		£yχ-		£yχ-	
9230	1012			£wp-		to burn, scald

⁴³⁰ {£yɫ-} occurs possibly in HE (Klemtu dialect) /£'il'mħa/ "to take for oneself what is intended for others" and OO /£ilakila/ "doing sth. different from what one is supposed to be doing."

{£yx-} and {lyx-} occur possibly in HE /£'in'mħa/ OO /linmħa/ "to take back lent out property" KW /linmħa/ "to grab, snatch, take by force, abduct."

⁴³¹ Possibly in HE/OO/HA {£ylhq-} "to flap like fish caught, to slap the tail (as a halibut caught)."

⁴³² Only one derivate of the OO form. It could be a KW borrowing because {q³ykv-} occurs and is productive in OO as in HE/HA.

⁴³³ See also the polysemy of root no. 2270.

⁴³⁴ In KW /£iqvaxa/* "split down (said of salmon prepared in a certain way for drying)."

⁴³⁵ HE possibly in the place name /£'iq'an'a/.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
9240	1013				£wmh- £wm∞-	more than expected, in excess, overdoing it
9250	1014				£wł-*	to be level
9260	1015	£wy ³ -	£wy ³ -			to dress up, to decorate sth.
9270	1016				£wχv-	small long things (like sticks, bones, roots) being or moving somewhere
9280	1017	£qv-	£qv-	£qv-	£qv-	to pet, caress; to stimulate with finger or hand
9290	1018	£χv-	£χv-	£χv-	£χv-	to rub, stroke or press with flat of hand
9300	1019 1037 1039			£hq-	£q- £hq-	to slap, to clap, to hit with flat object, to pat, to patch, to flatten sth.; flat paw of bear or marten ⁴³⁶
9310	1020			£ ³ q-	£q-*	to drip, dripping wet, soaked; to droop, dangle, hang limply
9320	1021			£q-	£q-*	to catch (e.g. a ball) ⁴³⁷
9330	1022		£h-		£h-	shelf, stage, platform, scaffolding
9340	1024				£h-*	(?) to move sth. or sb. somewhere ⁴³⁸

⁴³⁶ According to <http://www.g-wow.org/en-us/pinemarten/default.aspx>, "In winter, martens grow long hairs between the toe pads on their feet which work like insulated 'snowshoes' that keep their paws warm and help them travel over deep, fluffy snow."

⁴³⁷ KW only in words referring to fishing with a basket trap.

⁴³⁸ Only three non-reelicitable derivatives and Boas (1948) associates them with {£h-} "shelf, etc." (root no. 9330). Root could be a synonym of {dh-} "to take in hand, to control etc." (root no. 2940).

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
9350	1025			£hp-		to growl, make threatening noise
9360	1023 1027	£ht-		£ht-	£ht-*	backstop, to backstop ⁴³⁹
9380	1028	£hs-			£hs-	longish thing (e.g. sliver, pin, bar) sticking out or being driven in ⁴⁴⁰
9400	1029 1030	£hs- £h³s-	£hs- £h³s-	£hs-		to slap, strike with sth. flat ⁴⁴¹
9410	1031	£hk-	£hk-	£hk-		(HE/OO) to extend a long thing, to steer with paddle; (HA) to paddle
9420	1032	£hx-	£hx-	£hx-	£hx-	to look for lice
9430	1033	£hx-	£hx-	£hx-		(?) ⁴⁴²
9440	1034 1036	£hqv-	£hqv-	£hqv-	£hqv-	to pat; flat thing (like hand) covering or pressing against sth.; (KW also:) to push, press, shove (like when kneading dough or pushing sth. underwater)
9450	1035				£hqv-	to blame, to accuse
9470	1038				£hq-	rancid

⁴³⁹ Refers in HE/HA examples to a ball bouncing off or being passed to another player. In KW it refers to a structure for sth. to rest on or against.

⁴⁴⁰ HE only in /£'ay'm/ "addition to sth.."

⁴⁴¹ Also in HA /£'alasayak/ "man-eating shark" (said to slap around with its tail). In the HE/OO examples of {£hs-} root-initial |£| is reduplicated and next reduced to |l| as in {£h[£]s-} > {£hls-}.

⁴⁴² Possibly in HE/OO {£hn³yχ-} HA {£hnyχ-} "vibrating movement."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
9480	1040				£hχ-*	(?) small long string-like objects (like cinquefoil roots)
9490	1041	£hχ-	£hχ-	£hχ-	£hχ-	to make noise (to startle, flush game, cheer)
9510	1043	£³p-	£³p-	£³p-	£³p-	opening narrows or gets plugged up (as in closing or opening of door, closing the gap between legs of clothes pin or between one's body and arms; to clutch to one's body, to squat, to clamp, to clasp, to climb) ⁴⁴³
9530	1044	£³m³s-	£³m³s-	£³ms-	£³ms-	to emit sparks, to crackle
9550	1046	£³mł-	£³mł-	£³mł-	£³mł-	irritation (of eyes or throat)
9560	1047	£³mkv-		£³mkv-	£³mkv-*	(HE/OO/HA) to go up in the air, to jump, to bounce, to walk with a bounce; (KW) ritual disposition of roof boards (in potlatch)
9570	1048	£³mkv-	£³mkv-		£³mkv-	to tap, pound, poke with a stick; (OO/KW also:) to play with stick(s) in the air
9571	978	£³mχv-	£³mχv-	£³mχv-	£³mχv- £mχv-*	(?) inflexible, tough, hard, hardy ⁴⁴⁴

⁴⁴³ Most KW examples refer to climbing.

⁴⁴⁴ HE/OO only in a few words referring to wood being hard to split. HA in /£³'mχva/ "hard, solid, durable." KW {£mχv-} is a doubtful alternant and may stem from typing errors or misrecording on the part of Boas or his staff; it occurs in KW /£mχva/* "tough, hard on surface, a boil (red around white centre)" and possibly KW /£mwige³/ which seems to have been recognized by the informant but whose meaning is uncertain. KW {£³mχv-} occurs in

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
9580	1049			£³mq-		to hop on one foot
9590	1050	£³mq-	£³mq-	£³mq-	£³mq-	1. dirt, dirty; 2. gelatinous, snotty (like the substance surrounding the seed cone inside a yew aril (= "berry"); 3. yew ⁴⁴⁵
9600	1051				£³mh-	(?) ⁴⁴⁶
9601					£³mhkv-*	(?) ⁴⁴⁷
9602					£³mhχv-	(?) ⁴⁴⁸
9603	1045	£³m³s-	£³m³s-	£³m³s-		(?) ⁴⁴⁹
9610	1052				£³t- £³ht-	to desire a woman, to flirt, to seduce
9620	1053	(£³h-)	(£³h-)	(t³yxv-)	£³ns-	black bear
9640	1057	£³nk-	£³nk-	£³nk-	£³nk-*	hemlock bark

/£³mχv.h³id/ "to become stiff, hard" KW /£³mukv/ "made brittle" and possibly KW /£³mχvstalis/* "to bathe in very cold weather."

⁴⁴⁵ 1. A HA consultant said yew is a dirty tree when it dries out. It is unclear which phenomenon this refers to, however, dirtiness is mentioned in the glosses of many of the root's KW examples. Association with the mucus in yew "berries" may explain why the root has a HA derivate referring to boiling salmon eggs. 2. The root may be the result of backformation from the tree name (HE /£³'mq³/ OO/HA/KW /£³mq³/) which occurs also in Salish, cd. Kuipers (2002:143).

⁴⁴⁶ In KW /£³mah³is/ "beach."

⁴⁴⁷ In KW /£³mak³vbōnu/* and /£³mak³vbue³/* "breast piece."

⁴⁴⁸ In KW /£³maχvɪ³a/* "largest-sized barnacles" and /£³maχvsm/ "clay jug."

⁴⁴⁹ In HE /£³msd'aic³/ OO /£³m³sdaic³/ HA £³msd'aic³/ "bog cranberry."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
9650	1056 1058	(t³nx-)	(t³nx-)	£³nx-	£³nk-	hard, tight, dense (like knot in wood); (KW also:) stuffed, filled-up (like belly) ⁴⁵⁰
9660	1054				£³ny³-*	to covet ⁴⁵¹
9670				£³nq-		to swell up (said of body parts)
9680				£³n³q-		(?) ⁴⁵²
9681	1070				£³n³q-	to prick, to poke, to push or shove long thing, to punch a hole
9690	1059 1060	£³s-	£³s-	£³s-	£³s-	deviating from main direction, branching off, sideways (like branches on tree, a sidelong glance), to roll one's eyes; (KW also:) alder tree ⁴⁵³
9710	1061				£³l-	(?) ⁴⁵⁴
9720	1062				£³l-	(?) ⁴⁵⁵

⁴⁵⁰ Most examples of the full belly association are from the Koskimo dialect.

⁴⁵¹ Possibly in KW /£³Hy³a³a/* "to covet."

⁴⁵² In HA /£³Hχ£³Hq'a/ "to go out alone in a boat."

⁴⁵³ The connection between alder trees and branching off is perhaps in the trees' female catkins which become woody cones that remain on the tree until the following spring

(<http://www.woodlands.co.uk/blog/tree-identification/alder/>). According to

http://oregonstate.edu/trees/broadleaf_genera/alder.htm, "Their peculiar woody cones (called strobiles) identify alders as surely as a flat tail identifies a beaver. They hang from the tree throughout winter like miniature lanterns."

⁴⁵⁴ In KW /£³la/ [1] "brittle" /£³l.h³id/ "brittle" and KW /£³ltu/ "stye."

⁴⁵⁵ In KW /£³la/ [2] "to fumigate the house (with spruce branches)."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
9730	1063				£³l-	to push; (in some examples:) to push up or hold up
9740	1064	£³l-	£³l-	£³l-	£³l-	to forget
9750	1065	£³l³χ-	£³l³χ-			(?) ⁴⁵⁶
9760	1066 1067	£³k-	£³k-	£³k-	£³k-*/ £³hk-*	round, bulky, lump, lumpy, to lump together, to pool resources, to join together in a unit, aggregate ⁴⁵⁷
9780	1068				£³k-*	to break (said of waves)
9790	1069				£³k-*	to be silent, to stop doing sth.
9800	1070		£³x-	£³hx-	£³x-	to poke, to prick, to flash (like lightning), to mate ⁴⁵⁸
9810	1071 1077		£³y-			cluster, tangle, mass
9820	1072	£³y- £³y³- £³hyh- £³hy³-	£³y- £³y³- £³hyh- £³hy³-	£³y- £³y³- £³hy³-	£³hy³-	to exchange, to trade (goods, places), to switch, to substitute; exchangeable (like twins), convertible (like trade beads to goods)

⁴⁵⁶ In {£³l³χnw-} "to support with one's arm."

⁴⁵⁷ KW often uses {m³kv-} where HE/OO/HA use {£³k-}. The one possible KW example of root no. 9760 is /£³ak³us/* "crosspiece of halibut hook" which may contain a root {£³k-}* or {£³hk-}* meaning "aggregate." The example isn't reelicitable and may be in error.

⁴⁵⁸ OO only in /£³xila/ "to mate (said of animals)." HA possibly in /£³'af³anu/ "gooseberry"; reference may in this case be to a gooseberry plant's stem's sharp spines or the prickles on the berries.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
9830	1073	£³yp-	£³yp-	£³yp-	£³yp-	to roll up (sleeves, trouser legs, foreskin), to turn inside out
9840	1074	£³yn³h-	£³yn³h-	£³yn³h-	£³yn³h-	ooligan oil (grease) ⁴⁵⁹
9850	1075	£³yn³h-	£³yn³h-			jack pine ⁴⁶⁰
9860	1076	£³yc-/ £³ys-	£³yc-/ £³ys-	£³yc-/ £³ys-		cliff, steep rock
9880	1078 1079	£³ys-		£³ys-	£³ys-	heat, hot; to shine, to hate, to sting ⁴⁶¹
9890	1080	£³ys-	£³ys-	£³ys-	£³ys-	skin (of fish, fruit, animal, human), membrane, overlay
9891					£³yst-	(?) ⁴⁶²
9900	1081		£³y£-			(?) ⁴⁶³
9910	1082		£³yx-		£³yx-	to roll, tumble, move in a mass, fall in a heap, disintegrate, scatter about

⁴⁵⁹ For general information on ooligan grease including a note on the English name's pronunciation and wildly varying spellings see "Ooligan Grease: a Nutritious Fat Used by Native People of Coastal British Columbia," Journal of Ethnobiology, 1982, Volume 2, Number 2: 154-161.

⁴⁶⁰ See also {£³ykv-} (no. 9960).

⁴⁶¹ HA only in /£³'isla/ "capable of killing at a distance." HE probably in the stem {£³[h]ys-} "to kill with bow and arrow."

⁴⁶² In KW /£³isdaq/ "white goose, snow goose" (according to Boas); name of goose in legend according to consultants.

⁴⁶³ In OO /£³i£³M/ "whetstone."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
9920	1083 1085	£³ykv-	£³ykv-		£³ykv-	(?) ⁴⁶⁴
9960	1084 1086 1087 1088 1089	£³ykv- £³yxv-	£³ykv-	£³ykv-	£³ykv-*	to pierce, to prick (as in tattooing) ⁴⁶⁵
9961					£³ywhx-*	rattling, rumbling
9970	1090 1091 1011	£³yq-	£³yq-	£³yq-	£³yq-	particled solid (e.g. sand), fine-grained soil (e.g. clay), suspended particles (e.g. mud in water); (HE/OO/HA also:) herring eggs, herring milt)
9980					£³yq-*	(?) ⁴⁶⁶

⁴⁶⁴ Perhaps in KW words referring to chokecherries (which taste sour and make lips pucker), HE/OO {£³ykv-+hlh} > HE /£³'ik³v'al'a/ OO /£³'ik³vala/ "smacking sound as when a person chews gum or tobacco" and KW {£ykv-=kv} > /£³'igkv/* (probably:) "roe in body, eaten raw."

⁴⁶⁵ Most examples refer to tattooing and cauterizing, with Bella Bella HE using {£³ykv-} but Klemtu HE {£³yxv-}. The root also occurs in HE /£³'ik³v'as/ OO /£³'ik³vas/ HA (Kitamaat dialect) /£³'ik³v'as/ HA (Kitlope dialect) /£³'ik³vas/ "jack pine." According to HA elder Gordon Robertson tattooing and cauterizing was done with burnt jack pine twigs. For OO this tree name is the only attested instance of {£³ykv-}; the usual OO root for tattooing and cauterizing is {xvwp-} corresponding to KW {xwp-}. The only KW examples of {£³ykv-} are /£³'if³kvm/* (a species of cod fish with a barbel sticking in its chin) and /£³'ik³vqa/* "to make sure" (? = poke inside for probing).

⁴⁶⁶ In KW /£³'iqqa/* "blunt."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
10000	1093	£³yχ- £³y³χ-	£³yχ-	£³yχ-	£³yχ-	rusty, red, or buff colour; sealion ⁴⁶⁷
10010	1094	£³kv-	£³kv-	£³kv-	£³kv-	seaweed, kelp
10020	1095	£³xv-	£³xv-	£³xv-	£³xv- £³hxv-	to prepare, distribute or eat food; to eat a snack
10030	1096 1098	£³wp- £³wm³-	£³wp- £³wm³-	£³wp-	£³wp-	ripe, cooked, roasted on open fire; pus; cormorant (known for runny droppings)
10040	1097	£³wp•-	£³wp•-	£³wp•-	£³wp•-	to slacken, to fall (said of the tide)
10060	1099	£³wk³vp- £³wk³vm-	£³wk³vp- £³wk³vm-	£³wp³kv-	£³wp³k-	root
10070	1100	£³wt-	£³wt-	£³wt-	£³wt-	to arch the back, to bend the body, to make copulatory movements
10071			£³wc-			(?) ⁴⁶⁸
10080	1103	£³ws-	£³ws-		£³ws-	to chafe (also more specifically:) to rub clitoris; in love, infatuated, flirtatious
10090	1102				£³wsnhk-	(?) ⁴⁶⁹
10100	1101				£³wskv-	bald ⁴⁷⁰

⁴⁶⁷ HE {£y³χ-} only in /£³iχl'i/ "unripe berry (of any kind)."

⁴⁶⁸ Only in OO {£³wc-lh#rh} > /£³ucɬara/ which is a man's name in spite of the suffix {#rh}.

⁴⁶⁹ Boas (1948:449) says it means turning up both ends but unclear what that refers to. Lincoln & Rath (1980:200, item 1102) and Lincoln (n.d., item 23171) mention that the stem could also refer to the writhing of a snake.

⁴⁷⁰ In KW /£³uskvui/ "bald in front" and perhaps the person's name KW /£³uskva/*.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
10110	1104				£³wł-	to scold
10120	1105	£³wł-	£³wł-		£³wł-	(?) ⁴⁷¹
10130	1106				£³wk³v-	to peel, pluck or scrape sth. off bark or skin ⁴⁷²
10140	1107			£³wqv-		to imitate
10150	1108	£³wqv-	£³wqv-	£³wqv-	£³wqv-	bald (head), bare (island), barkless (tree); to cut hair, to make bare or bald
10151	1109	£³wχv-	£³wχv-	£³wχv-	£³wχv-	ice, to freeze
10160	1110	£³wχv-	£³wχv-	£³wχv-		calcified (like limestone), rock-hard (like pebble)
10161		£wχ£wχ-			£³wχv£³χv-*	oyster
10170	1111	£³w³xv•-	£³w³xv•-	(łhxv-)	(c³x-)	pain, disease ⁴⁷³
10180	1113				£³qv-	to break off branches (as for sinking them to collect herring spawn)
10190	1114	£³χv-	£³χv-	£³χv-	£³χv-*	to indicate one's guess in a game (e.g. cards or label) by pointing

⁴⁷¹ In HE /£³u³'łs/ OO /£³u³łs/ KW /£³uł³s/ "elk" KW /£³a£³ul³a/* to try to get elk."

⁴⁷² Lincoln & Rath (1980:200, item no. 1106) posits a root form with |kv| rather than |k³v| based on two non-reelicitable stems that are misspelled or copied wrong from the literature where they were found (references: C102.4 and R126.22).

⁴⁷³ In several examples |•| is not merely preventing suffix-initial |%|, |=| or |+| from coalescing with the root's |xv| but also causing them to behave irregularly. See the comments on the database records concerned.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
10200	1115				£³q-	(?) ⁴⁷⁴
	1116					
10210	1117				£³χ-	silent, quiet, hushed, not crying
	1140				£³hχ-	
10220	1118				£³χ-	(?) twisted, not straight, weaving in and out ⁴⁷⁵
10230	1139	£³hχ-	£³hχ-	£³χ- £³hχ-	£³hχ-	stiff, rigid (like pole), retaining shape under pressure ⁴⁷⁶
10240	1119	£³h-	£³h-	(t³yxv-)	£³h-	black bear
10250	1120	£³h-	£³h-	£³h-		(?) pointing downhill (like logs on mountainside) ⁴⁷⁷
10280	1122				£³hbht-	cedar bark basket ⁴⁷⁸
10290	1123				£³hp-*	to dip ⁴⁷⁹
10300	1124	£³ht-	£³ht-	£³ht-	£³ht-	oil, grease; to apply oil or grease (esp. to the hair)

⁴⁷⁴ In words referring to scrofula, a form of tuberculosis causing glandular swellings and skin inflammation, especially in the neck. Possibly also in KW /£³q³χuli/ "fruit (i.e. berries) of the black twinberry (*Lonicera involucrata*).\" These berries had very many medicinal uses including to treat swelling, see http://plants.usda.gov/factsheet/pdf/fs_loin5.pdf

⁴⁷⁵ In two words referring to weaving and knitting and perhaps in KW /£³χum³əs/* "twisted stalk.\" Twisted stalk owes its name to the 90° twist in the flower stalks, cf. http://www.fs.fed.us/wildflowers/plant-of-the-week/streptopus_amplexifolius.shtml.

⁴⁷⁶ HA {£³hχ-} is attested only in HA (Kitamaat dialect) /£³aχ/ "stiff, rigid."

⁴⁷⁷ In one HE and several OO words referring to logs moving down lengthwise and in the stem HE/OO {£³h³nχ-} HA {£³hn³χ-} possibly meaning "mountain slope."

⁴⁷⁸ Cross-family stem. See Kuipers (2002:63).

⁴⁷⁹ In KW (Newettee dialect) /£³apsta/* "to dip into water."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
10301					£³hnys-* £³h³hnys-*	seagull
10310	1125			£³hs-		(?) ⁴⁸⁰
10320	1126	£³hs-	£³hs-	£³hs-	£³hs-	oil, fat, grease, blubber
10350	1127	£³hs•-	£³hs•-	£³hs•- £³hs-	£³hs•- £³hsh-	seawards, outwards, towards the central fire in the longhouse, off the wall
10360	1128	£³hł-	£³hł-	£³hł-	£³hł-	to surface (said of whale, porpoise, fish)
10361		(£wy³-)	(£wy³-)	£³hk-		to dress up, to decorate sth.
10370	1129	£³hx-			£³hx-	(?) ⁴⁸¹
10371	1120				£³hykm-	piling up, heaping up
10372					£³hyqv-	mourn, wail
10380	1130				£³hyhqv-*	(?) ⁴⁸²
10390					£³hy³-	(?) ⁴⁸³
10400	1131				£³hy³-	thin, skinny, lean
10410	1132	£³hkv-	£³hkv-	£³hkv-	£³hkv-	hinged V-shape (like elbow or knee) opens, closes, leans on or pushes against sth.

⁴⁸⁰ Perhaps in HA (Kitamaat dialect) /£³'asiagvmik/ "wolf."

⁴⁸¹ In KW /£³axm/ "wooden spoon" and KW /£³axaw³inira/* (Crow's name:) "spoon-bringing woman." Only HE example is possibly /£³'axł'agłis/ (name of a dance).

⁴⁸² In two words referring to equipment for a trap.

⁴⁸³ Possibly in KW /£³ay³a/* "monstrous, delirious" and KW /£³ax£³t³uc³a/* "big devilfish."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
10420	1133	£³h _{xv} -	£³h _{xv} -	£³h _{xv} -	£³h _{xv} -	to mark (with paint, by notching or by rubbing) ⁴⁸⁴
10421		£³h _{wq³v} -	£³h _{wq³v} -		£³h _{wq³v} -	Indian tobacco
10430	1134 1135	£³h _{qv} -	£³h _{qv} -	£³h _{qv} -	£³h _{qv} -	red, metal; (usually but not exclusively when combined with {-h}):) copper
10440	1136	£³h _{χv} -		£³h _{χv} -	£³h _{χv} -*	(?) ⁴⁸⁵
10450	1137 1138			£³h _q -	£³h _q -	angle, hook; (hence:) arranged crosswise (like logs in pyre), hook-shaped (like gaff), barbed; to fish with one hooked line or multiple parallel hooked lines reaching down from one floating line
10460	1138	£³h _q -	£³h _q -	£³h _q -	£³h _q -	to stretch out (legs, a line), pay out line
10480	1141				£³h _χ -	the least thing
10481			£³h³ _{wxv} -			(?) ⁴⁸⁶
10482	1121				£³h³ _{h£³y} -	bufflehead duck
10490	1142				£³p-	(?) ⁴⁸⁷

⁴⁸⁴ KW only in /£³axv.m³s/ "alder tree." Alder bark was used in dying and tanning.

⁴⁸⁵ In HE /£³'aχvɫ'amas/ HA /£³'aχvɫamas/ KW /£³'aχvɫamas/* "steelhead trout." Steelhead has pinkish fin tips when coming up the river and steelhead flesh can be bright red. The root may really be an alternant of {£³h_{qv}-} "red."

⁴⁸⁶ In OO /£³a³uxvɫa/ "to take care of a cry-baby"

⁴⁸⁷ In KW /£³pa/ "to drip with grease (as food after dipping)."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
10500	1143 1144	hm-	hm-	hm-	hm- hlm ³ -	curtained off, concealed; (KW also:) difficult to identify with the senses (sight, hearing, taste), dimly perceptible, indefinable, uncertain, going out of existence ⁴⁸⁸
10510	1145 1146	hm-	hm-	hm-	hm-	secured by line strung to other object (like boat anchored, moored, tied up), to string a line to sth., to mend boards
10530	1147			hmp- hwp-	hmp-	soft, soggy, baggy, sagging, loose, wrinkled ⁴⁸⁹
10540	1148		hms-		hms-	to sip
10550	1149				hmqv-	(?) to suck out sickness ⁴⁹⁰
10560	1150	hmq-	hmq-	hmq-		to tie sth. to sth. else with rope; (HA also:) to sew together
10570	1151	hmx-	hmx-	hmx-	hmx-	to inhale smoke
10580	1152				ht-	(?) 1. to reach out and pull; 2. stream, small waterway
10590	1153	hn-	hn-	hn-	hn-	lost, forgotten, to be missing sth. ⁴⁹¹

⁴⁸⁸ Most KW examples of the meaning "difficult to identify, etc." use the augmented root form {hlm³-}. Boas lists several non-reelicitable examples of a stem {hlm³hq-} "embroidery, tying" as derivates of this root no. 10500. The examples' glosses leave it uncertain but possible that reference is to covering sth. The stem's structure could be {hlm³-%hq-}.

⁴⁸⁹ HA {hmp-} only in /t'mbis/ "soft beach" elicited from the Kitamaat informant.

⁴⁹⁰ Only in KW /hmqva/ "to suck out sickness (said of a shaman)."

⁴⁹¹ HA examples of {hn-} could only be obtained from the Kitamaat consultant.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
10600	1155	ɫn-	ɫn-		ɫn-	(?) salal ⁴⁹²
	1165	ɫl-				
10610	1156	ɫnp-	ɫnp-	ɫnp-	ɫnp-	saggy, loose, soft, pliable, wrinkled
10620	1158				ɫnt-	pliable, soft (like cloth), weak (person)
10630	1157	ɫnt-	ɫnt-	ɫnt-	ɫnt-	to blow the nose; snot, snotty, slimy
10650	1160				ɫnxv-	(?) rustling sound (of leaves in the wind or as when passing through bushes) ⁴⁹³
10660	1162	ɫnq-	ɫnq-			(?) ⁴⁹⁴
10670	1163	ɫnχ-	ɫnχ-		ɫnχ-	crabapples, crabapple colours (red, green, yellow, golden) ⁴⁹⁵
10680	1164				ɫs-*	(?) to pull ⁴⁹⁶
10690	1166	ɫl- ɫl ³ - ɫhl ³ -	ɫl- ɫl ³ -	ɫl- ɫl ³ - ɫhl ³ -	ɫl ³ - ɫhl ³ -	dead, inactive, paralyzed, worn out
10700	1154				ɫx-*	(?) ⁴⁹⁷

⁴⁹² Only in words for salal bush. Root may really refer to some property of salal, perhaps the leatheriness of the leaves.

⁴⁹³ In words referring to salal, bird cherry and paper birch.

⁴⁹⁴ Only in HE /ɫ'ɲqa/ OO /ɫɲqa/ "to peel bark from a tree."

⁴⁹⁵ The root's HE/OO derivates are mostly about crabapples and actions concerning them whereas the KW derivates are mostly about the colours.

⁴⁹⁶ In KW /ɫsaχɲa/* "to pull out hair." Boas cross-refers to KW /ɫtaχɲa/ "to pull down (cedar withes, hair in mourning)" of which this item could be a misrecording or misspelling.

⁴⁹⁷ In KW /ɫɲzud/* "to scatter (roots) on a flat surface."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
10710	1168		ly-	ly-		to lie (said of a plurality of people)
10720	1169				lym ³ -*	(?) ⁴⁹⁸
10730	1170	lyt-	lyt-		lyt-	tattered, ragged, split
10740	1171	lyc-/	lyc-/		lys-	pale, blonde ⁴⁹⁹
	1173	lys-	lys-			
10760	1174	lys-	lys-	lys-	lys-	(HE/OO/HA) to find sth. accidentally, (KW) to find dead game accidentally
10770	1177 1000	lyχ-	lyχ-	lyq-	lyx-	dangling loose end or edge; to unravel, unlace, rip off, dismantle, take apart
10780	1176	lyxv-	lyxv-	lyxv-	lyxv-	ribbon or strip torn or cut from flat material such as cedar bark, cedar bark mat
10800	1178	lkv-	lkv-	lkv-	lkv-	tense, tight, to tighten; (hence:) to draw in or out (line, breath, drawer), to jerk, to yank, to jig, to pull line lengthwise (as when jigging for fish) or perpendicular to length (as when pulling one's bowstring) ⁵⁰⁰
10810	1179	lkv-	lkv-	lkv-	lkv-	old woman ⁵⁰¹

⁴⁹⁸ In KW /lim³axa/* "landslide."

⁴⁹⁹ HE/OO only in HE /t'isk³vs/ OO /isk³vs/ "young yellow cedar."

⁵⁰⁰ The core meaning "tight, to tighten" is preserved in the KW stem {lkv-+t-}.

⁵⁰¹ Root may really refer to some physical or social affliction of old women. It could be exhaustion, cf. HA {lkv-=-l-%hlysm} > /lgvɫ'alism/ "woman who has grown too old and is about

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
10820	1180				łkv-	licorice fern (<i>Polypodium glycyrrhiza</i>) ⁵⁰²
10830	1181	łxv-		łxv-	łxv-	(?) ⁵⁰³
10840	1182				łxv-	to eat sea eggs or sea urchins
10850	1183				łwm∞-*	(?) ⁵⁰⁴
10870	1184 1185	łw ³ t-		łwt-	łwt-	(HE/KW) to make copulatory movements; (HA) moving like a crippled or lame person, to move over a surface while sitting and pulling oneself along by the legs ⁵⁰⁵

to die." The root could even be the same as no. 10800 if old age is associated with osteoporosis-caused dowager's hump and the image of a tense shooting bow.

⁵⁰² Possibly the root really is no. 10800 and refers in this case to the curving of fern fronds and/or the coiling of young fronds (fiddleheads). This is suggested by KW {łkv-+y³s} > /łk³vi³s/ meaning both "bow for shooting arrows" and "small fern (likely licorice fern)."

⁵⁰³ Only in HE {[łx]łxv-+-h} > /łxłu³a/ "broad-leaved seaweed, shallow water kelp" HA {[łyyx]łxv-+-h} > /ł'iixłu³a/ "kind of kelp or seaweed with broad leaves that grows on rock" KW {[łyx]łxv-=ys} > /łix:łwis/ "sea lettuce."

⁵⁰⁴ In KW /łum/* and /łom/* "to belch, to have an aftertaste of grease." The form /łom/ fits the more frequently occurring KW pattern for two consecutive vocalic resonants. The word could be a cross-family stem, cf. proto-Salish *-łum³- "soup, to eat soup" and particularly Bella Coola łum, łuma "to sip," cf. Kuipers (2002:58).

⁵⁰⁵ The only HE example is possibly the proper name /Łut'ał/ which is said to mean "lover." The name needs to be re-elicited; the low tone of /u/ may be wrong.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
10880	1186	łwxv-	łwxv-		łwxv-	avoidance, dodging, shunning, spurning ⁵⁰⁶
10890	1187	łwqv-	łwqv-	łwqv-	łwqv-	shallow container (i.e. dish, bowl, basin); contents of shallow container
10900	1188				łwqv-	to slip, slide, scoot along
10910	1112	łqv- £hqv- łhqv-	łqv-	łqv- £qv- £³qv-	łqv-	(?) contents or core inside a hard or soft shell (e.g. seeds in fruit, brains in skull) ⁵⁰⁷
10920	1189	łq-	łq-	łq- łhq-	łq-	red laver seaweed (<i>Porphyra abbotiae</i>)
10930					łq-*	(?) ⁵⁰⁸
10940	1190				łχ-	(?) ⁵⁰⁹
10970	1191 1195	łh-			łh-	unclear, mysterious, puzzling, unexpected, surprising, dangerous ⁵¹⁰
10980	1192 1193				łhp- łht-	to glance off, to strike lightly (as when striking a match), to brush past ⁵¹¹

⁵⁰⁶ HE/OO only in HE /ł'uxva/ OO /łuxva/ "almost." Its gloss is likely wrong, cf. KW /łuxva/ "to turn head away."

⁵⁰⁷ {£hqv-} and {łhqv-} are attested only in HE /£'ałχvc³ua/ and /ł'ałχvc³ua/ "seed or pit of any fruit." HA {£qv-} was used by the Kitlope informant, {£³qv-} by the Kitamaat one.

⁵⁰⁸ In KW /łχ:łq³th/* which Boas says may refer to a small sea animal.

⁵⁰⁹ In words referring to loose or stringlike things such as grass, roots, or hair being somewhere and to throwing a cloth or net. Also perhaps in KW /łχ.h³a/ "wrecked."

⁵¹⁰ HE only in /ł'ał/ "child-snatching monster with the basket on the back."

⁵¹¹ {łht-} only in KW /łatabala/, synonym of KW /łapabala/ "to glance off, to brush past."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
11010	1194				łht- łht ³ -	to split shakes or boards off a block, to send an advance on a gift of blankets
11011	1159 1172	łhnc- łync-	łhnc-	łhnc-	łns-	one day from today ⁵¹²
11012					łhs- łhws-/ łhwhs-	(?) ⁵¹³
11013	1179				łłł-	(?) ⁵¹⁴
11020	1196	łhk-	łhk-		łhk- łyk-	(?) unknown, unexpected, surprising, dangerous ⁵¹⁵
11030	1197	łhx-	łhx-	łhx-		(?) difficulty, trouble ⁵¹⁶

⁵¹² KW form could also be {łhns-} but |h| not diagnosable. Stem can be followed by few suffixes of the kind that can follow a bound stem but is in all HE/OO/HA and most KW examples followed by suffixes of the kind that can only follow a complete word stem and/or a deictic with grammatical function, e.g. {łhnc#h} > HE /ł'аhca/ OO /ł'аhca/ "yesterday" (with grammatical deictic {#h} "near neither you nor me") and {łhnc#ł•#h#ts} > HE /ł'аhslats/ OO /ł'аhslats/ "tomorrow" (with this same {#h} and also {#ł•} "in future" and {#ts} "invisible").

⁵¹³ Perhaps in KW /łay³hł/ < {łhs-+hł} "autumn, fall" and its synonym KW /łay³hł/ (from either {łhws-+hł} or {łhwhs-+hł}).

⁵¹⁴ Possibly in KW /łalani/* "teal duck," /łalanm/ "little mallard duck" and /łalk³u/ "mallard duck."

⁵¹⁵ Possibly in HE /ł'akhxv/ OO /ł'akhxv/ HA /ł'akhkv/ "surprised/shocked by events, to wonder what could be the case" and the KW stems {łhyk-} and {łyk-} "damaged, disabled (said of a canoe)." {łyk-} is directly observable only in the synonym /łika/ of KW /łeka/ "canoe gets wrecked."

⁵¹⁶ In HE /ł'an'isla/ OO łanisla/ HA /ł'anisla/ "to moan, to groan" HE /ł'an'if/ and /ł'ay³h'if/ "to enter the wrong house."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
11050	1198	łhxv-	łhxv-	łhxv-	łhxv-	tight, strong, intense, difficult, painful, valuable, dear ⁵¹⁷
11060	1191 1199	łhq-	łhq-	łhq-	łhq-* łh ³ hq-	overhang, overhanging (in HE/OO/HA with the connotation of offering shelter (like a tent or a lean-to), in the KW examples referring to an overhanging rock or lifting the edge of a cover, as for shaking particles off a mat or blanket)
11070	1200				łhχ-	(?) ⁵¹⁸
11080	1201	łhχ-	łhχ-		łhχ-	to itch, irritated
11090	1203		łmxv-		łmxv-	dry, thirsty; high and dry, marooned ⁵¹⁹
11100	1204		łmχv-			(?) ⁵²⁰
11110	1205				łmχ-	to beat or clap on a surface
11120	1206				ls-	to pound with a stone
11130	1207	łk-	łk-	łk-	łk-	(HE/OO/HA) to play games with stones; (KW) to crush, pound or hammer with a stone; to throw

⁵¹⁷ HA uses {xmt-} for "strong" said of the wind.

⁵¹⁸ In KW /łaxła/ [1] "to defend (person)."

⁵¹⁹ OO only in /łmxva/ "dry enough (to be ironed)."

⁵²⁰ In OO /łmχva/ (precise meaning not remembered but had to do with limping or infirmity).

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
						rocks (as in stone-throwing game) ⁵²¹
11140	1208				lk-*	(?) ⁵²²
11150	1209	lyp-	lyp-	lyp-	lyp-	to roll sth., to wrap sth. up
11160	1210	lyt-	lyt-	lyt-	lyt-	to rummage in search of sth., to uncover; (HA also:) to shovel snow
11170	1211	lyn∞-/lyx-		lyn∞-/lyx-		(?) ⁵²³
11180	1212	lys-		lys-		boiled fish, fish soup
11190	1213				lyk-*	(?) ⁵²⁴
11200	1214				lyx-	(?) ⁵²⁵
11210	1215	lyx-	lyx-	lyx-	lyx-	to roll, turn over (cylindrical object)
11220	1216				lyxv-	to pull out a long thing (e.g. nail. tooth)

⁵²¹ It means "rocky" in two non-reelicitable examples from the Koskimo dialect and "to gamble" in one non-reelicitable word from the dialect of the /Gva³sɬa/.

⁵²² In KW {lk-hlhs} > /lkalas/* "thimbleberries when not quite ripe." Possibly this root is no. 11130 and refers here to pounding unripe thimbleberries.

⁵²³ In HA /liH/ "love song" HE (Klemtu dialect) /l'iH/ (an unidentified kind of song, to sing this kind of song). Not diagnosable if this is a free root {lyn∞-} or {lyx-=n}. Could be a foreign loan.

⁵²⁴ In KW /likusa/* "wild cabbage leaves (used in making berry cake)" KW /lix:lk³s/* "(kind of plant, possibly a lichen).

⁵²⁵ In KW /lixa/ [1] "only."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
11230	1217	lyqv-	lyqv-	lyqv-	lyqv-	flat thing folds onto itself, to hinge; to fold in a flat thing, to roll up a flat thing
11231		lyqv-		lyqv-	lyqv-	(?) ⁵²⁶
11240	1218	lyq-	lyq-			reef, rocky ridge
11250				lyq-		(?) lacking, missing ⁵²⁷
11260	1219	lyχ-	lyχ-	lyχ-	lyχ-*	red cedar ⁵²⁸
11270	1220 1221 1222 1223 1224	lkv- lxv-	lkv-	lkv-	lkv-	inconstant, inclined to change, unreliable (hence: 1. different, strange, foreign, wrong, evil; 2. giddy, fainting, weak, tired; 3. limping, unsteady motion, fluttering) ⁵²⁹
11300	1225	lw-	lw-		lw-*	(?) white, light, bright ⁵³⁰
11310	1225 2468	lw-		lw-	lw-	(?) instability, unrest (of motion, light or sound), fluttering,

⁵²⁶ In the name of the Lekwiltok division of Cape Mudge and Campbell River on Vancouver Island. Also likely in HA /l'i:lqvalis/ "different villages" and HE /l'ılqvlafı/ KW /lılqvlafε³/ "tribe, tribespeople."

⁵²⁷ In HA /l'i:lysk³ana/ "coat without sleeves, vest, waistcoat" and HA /l'iq³ksi³a/ "toothless."

⁵²⁸ The HE/OO examples refer to red cedar but the HA ones to barkless red cedar. The only KW example is /Liχsm/* "November."

⁵²⁹ {lxv-} only in HE /l'al'axvmas/ "person who always does things the wrong way." The root likely refers to fluttering in HA /lalagvd'ai/ "butterfly."

⁵³⁰ In terms referring to the sky, the milky way, northern lights and water with a milky colour.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
						flapping, flickering, whirling, twirling, spiralling ⁵³¹
11320	1231	lw-	lw-	lw-	lw-	(?) ⁵³²
11330	1226	lwp-	lwp-	lwp-	lwp-	empty, hollow inside; to wither
11340	1226	lwm ³ -	lwm ³ -	lwm ³ -		(?) ⁵³³
11350	1227				lwt-	to uncover, bare, reveal
11360	1228				lws-	to uncover, bare, reveal
11370	1229	lwł-	lwł-		lwł-	haunted, possessed
11380	1230	lwqv-	lwqv-		lwqv-	longlining (for halibut, black cod)
11390	1231	lwqv-	lwqv-	lwqv-	lwqv-*	to go after hemlock bark
11400	1232	lwχv-	lwχv-	lwχv-	lwχv-	round, rolling; (HA and HE (KI) also:) rolling like thunder, rumbling, trouble; (HE/KW also:) patch, batch, aggregation, grouping

⁵³¹ In KW /lumutla/ "to make a hollow rumbling noise, to cause turmoil" HE /hl'ulu/ "butterfly (cf. OO /hmumu/) KW hlulu/* (a reddish bird) HA /lul'u/ "sole." Could be the same root as no. 11300. In the case of HA /lul'u/ the root is perhaps associated with flatfish having a pale side that faces the sea bottom and a pigmented side that faces upward and sometimes serves as camouflage.

⁵³² Possibly in HE /lu'aq/ OO /luaq/ HA /lu³aq/ KW /lɔq/ "hemlock sap." Reference is probably not to juice but western hemlock cambium which is edible and scraped off the harvested bark. It is believed to ward off evil. It is believed to ward off evil. It is also possible that the four items are augmented forms of a root *{lwqv-}, older form of {lwqv-} (root no. 11390).

⁵³³ In {lwm³hs-} "to scorch (clothing); (HA also:) brown, orangy (like leaves in fall)."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
11410	1233	lw ³ χv-	lw ³ χv-	lχv- nχv-	lw ³ χv-	(?) ⁵³⁴
11420	1234 1235	lqv-	lqv-	lqv-	lqv-	tended fire, campfire, camp; village ⁵³⁵
11421					lrw-	strawberries ⁵³⁶
11430	1237				lχ-	open-work basket
11440	1238	lχ-		lχ-	lχ-	to pound with stone (or other round thing)
11450	533 1239 1244	lh- nh-	lh- nh- hh-	lh- nh-	lh- nh- hh-	to go (away from origin, towards target, about business); ongoing, applicable; to reach, attain ⁵³⁷

⁵³⁴ {lw³χv-} occurs only in {lw³χv-∞kv-} "rocks, boulders." HA {lχv-} occurs in {lχv-∞kv-} "rocks, boulders" and {lχv-∞ot-} "personal belongings." {nχv-} is attested only in the alternant /nχvəd'ac³i/ of HA /lχvəd'ac³i/ and /lχud'ac³i/ "place where one puts one's valuables."

⁵³⁵ {lqv-h} has the idiomatic meaning "firewood."

⁵³⁶ Wild strawberries (*Fragaria vesca*) can survive mild fires or regrow after fire (cf. https://en.wikipedia.org/wiki/Wild_strawberries). Possibly therefore this stem derives from {lqv-} (root no. 11420).

⁵³⁷ {lh-} is the most frequently occurring alternant by far. {nh-} and {hh-} occur mostly in exclamations, e.g. HA /n³ha/ OO /hah³a/ "yes"; HE /hi'a/ OO /hia/ (mock encouragement and anxious encouragement); HE /h³han'a/ OO /h³anana/ KW /h³hana/ "ouch!" The form {ly-} occurs only as a proclitic signalling resumption of a thread of discourse, cf. English "well!"; in HE it alternates with {lh-}. KW {hlh-}, like HA/KW {hh-}, occurs in a number of expressions broadly meaning "go!" and "farewell." In one example {hlh-} is replaced by {hlhk-}, cf. KW {hlhk-Δxs•-hlh} > /hlagxsala/ "go and take your chance!" The presence of |k| in {hlhk-} may be influenced by KW {hhl³h-} "to rush" having an extended form {hhl³hk-}. This stem {hhl³h-} and its alternants are listed as root no. 23142 but could be augmented forms of {hh-} or {lh-, nh-}. The form {hh-} of the root occurs possibly also in HA /haχg/ "poor, destitute" in which case this

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Root #	Old #	HE	OO	HA	KW	Gloss
	2469	hh-		hh-	hlh-	
	2498	ly-		ly-	hlhk-	
	2510					
11460	1240	lhxv-	lhxv-	lhxv-	lhxv-	to wrap sth. around
11461					lhq ³ vt-	bundle, bundling ⁵³⁸
11470	1241		lhχv-		lhχv-	(?) cover, concealment ⁵³⁹
	1242					
11490	1243	lhχ-		lhχ-	lhχ-	clear, unclouded (water, sky), watery (liquid), runny (sore) ⁵⁴⁰
11500	1246				l ³ yχ-	wide open, broad
11510	1247	l ³ χvw-	l ³ χvw-	l ³ χvw-	l ³ χw-	to cough ⁵⁴¹
11520	1248	l ³ q-	l ³ q-	l ³ q-	l ³ q-	shapeless soft moist mass (e.g. putty)
	1249					
	1236					
11530	1252				l ³ h-	(?) ⁵⁴²

stem contains a semantically opaque suffix {-χg} whose only other occurrence is in HA /saχg/ "to want to."

⁵³⁸ Only two examples, KW /laq³vta/ "to bundle up, bale, make bundle (of skins, blankets)" and KW /laq³vdkv/ "bundle." Stem {lhq³vt-} may contain a root {lhqv-} and a suffix {-+t} but no clues to their meaning. Stem could also be a foreign loan.

⁵³⁹ In OO /laχysiwa/ "cape" which word may refer to one's head sticking through an opening in the body cover. Possibly also in KW /laχvɲis/ "man from interior" and /law³aχsm/ "woman from interior."

⁵⁴⁰ Only HE example is possibly the place name /L'αλχsk³vs/.

⁵⁴¹ Proto-Salishan correlate: *-7əχvu7 "to cough" (Kuipers 2002:22).

⁵⁴² In KW {l³h-=ys} > /l³a³is/ "small mussel" and KW {l³h-%ydy} > /L³edi/ (a place name: "where you go for small mussels").

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Root #	Old #	HE	OO	HA	KW	Gloss
11540	1250	l ³ hp-	l ³ hp-	l ³ hp-	l ³ hp-	to spread apart (lips, legs, edges of slit); (OO/KW also:) to dig a pit, to excavate; (HA also:) to expose what's under the cover
11550	1251		l ³ hc-			(?) ⁵⁴³
11560	1253				l ³ hqv- l ³ hχv-*	to shout, holler ⁵⁴⁴
11570	1255	g-	g-	g-	g-*	and further, and then; (in subordinate clauses:) when, whenever ⁵⁴⁵
11580	1256	kp-	kp-	gp-	gp-	to plug (hole), button up, tuck in, jam in, insert (lever); (HA also:) to tuck away, to store for later use, to stock up
11590	1257	gm-	gm-		gm-	(?) ⁵⁴⁶
11600	1258	(ghmwɪ ³ -)	(ghmwɪ ³ -)	(ghmwɪ ³ -)	gmɫ-	fish hook
11610	1259				gmɫ-	(?) ⁵⁴⁷

⁵⁴³ In OO /l³acaχɪa/ "coming off (said of a pocket)."

⁵⁴⁴ {l³hχv-}* only in KW /l³aχv:l³aχv/* "yellow-beaked cormorant" (so called because of its cry, says Boas).

⁵⁴⁵ The only available KW example is possibly /gm³h/* which Boas (1947:358) uses in /gm³h h³a³ɔlak³ɛ³/ "this is my witness."

⁵⁴⁶ In HE /gm³'in'uχv/ OO/KW /gm³inuχv/ HE/OO "clan" KW "fellow clansmen." Root could mean "offshoot, barb, branch in network" and be related to {ghmh-} (no. 12100) and {gmɫ-} (no. 11600).

⁵⁴⁷ In KW /gmɫa/ [2] "to get tired of eating sth."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
11620	1260				gm χ v-	lumpy object (like one's head) hangs down, to hang heads
11630	1262				gd χ v-	(?) ⁵⁴⁸
11640	1261				gt-	to make, create, construct sth.
11650	1263				gt-	(?) ⁵⁴⁹
11660	1264 1269	gn-	gn- gnlh-	gn-	gn-	extension, supplement, addition, topping up ⁵⁵⁰
11670	1268				gn- gnł-	child, person of tender age ⁵⁵¹
11680	1266	gnc-	gnc- gn ³ c-	gnc-		to own, ownership, possession, responsibility for sth.
11690	1265 1267	gnc•- gnch-	gnc•- gnch-	gnc•-	gn- gns-	how many
11710	1270				gnw ³ - gnw ³ h- gwn∞-	to add, give more; to lend a helping hand ⁵⁵²
11720	1271				gn χ v-	(?) ⁵⁵³

⁵⁴⁸ In KW /gd χ va/ "to tickle."

⁵⁴⁹ In KW /gt³ala/ [2] "to tell sb. not to do sth., to forbid" and possibly KW /gt³ałud/ "to fit in."□

⁵⁵⁰ OO {gnlh-} only in /gñlut/ "to add money to an account" which has a structure {gnlh-wd} (with suffix no. 830) that parallels that of the synonym {q³nłh-wd} > HE /q³ñł'aut/ OO /q³ñłut/.

⁵⁵¹ The form {gn-} occurs only before {-%hnm} (suffix no. 1290) and is probably the result of this process, {gnł-%hnm} > {gnł∞-hnm} > {gnł-hnm} > {gnØ-hnm} > /ghanm/ "child."

⁵⁵² Direct evidence of the alternant {gnw³h-} is KW {[g]gnw³h-rw-d} > /ggñw³arud/ "to add in between."

⁵⁵³ In KW /gñ χ va/ [1] "to fart (especially after eating fresh ooligan oil)"

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
11730	1272		glχv-	glχ-	gnχv-	to rub, rub in ⁵⁵⁴
	1280			gl ³ χ-	glχ-*	
	1281					
11740	1273	gl-	gl-	gl-	gl-	to raise the head in fear of danger ⁵⁵⁵
11750	1274	gl-	gl-	gl-	gl-	to go on all fours, to crawl, to creep, to move stealthily, to stay low to the ground
11760	1275				gl-*	(?) ⁵⁵⁶
11780	1277	glt-	glt-	glt-	glt-	long, tall
11790	1278	klx-	klx-	klx-	glx-	to leak (said of a canoe, kettle, hollow container), leak, leaky
11800	1279	glw ³ -	glw ³ -	glw ³ -	glw ³ - glxv-*	canoe ⁵⁵⁷
11820	1276				glh-	grizzly bear
11830	1282	gy-	gy- gy ³ -	gy- gh-	gy-	located, situated somewhere

⁵⁵⁴ OO only in /gλχva/ "to knuckle with a rubbing motion." KW {glχ-}* only in /gλχα/* "to rub with a wet finger" and KW /gλχas/* "clitoris."

⁵⁵⁵ In words referring to the weasel and KW /gλ³ala/* "birds raise heads in expectation of danger." Weasels have long necks and raise their heads when disturbed. Evidence that the root is {gl-} rather than {gl-} is the insertion of [h] in the root in HA {[gh]g[h]t-+m-h} > /gagal³m'a/ "to go after weasels." This root may be related to {gwl³-} and {ghl³-} "apprehensive, uneasy, alarmed" (root no. 11991).

⁵⁵⁶ In KW /gλa/* [2] "salmon when dried put lengthwise" and KW /gλi³stnd/* "to turn over lengthwise (salmon, small animal)."

⁵⁵⁷ {glxv-}* only in KW /gλxvila/* "to make a canoe."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
11850	1284	gy-	gy-	gy-	gy-	beloved, respected, revered ⁵⁵⁸
	1294	gys-	gys-	gyx-	gys-	
		gy ³ -	gy ³ -	gy ³ s-	gyx-	
					gyy ³ -	
					gy ³ -	
					gy ³ s-	
					ghy ³ -	
11860	1285				gys-	to shake head in dissent
11870	1283	gyc-	kyc-		gys-	material with pale shiny surface (like enamel of teeth or the pearly material used for buttons and decorating) ⁵⁵⁹
	1286	kyc-			kys-	
11880	1287	gyɬ-	gyɬ-			dear, beloved
11890	1288	gyg-	gyg-	gyg-	gyg-	tooth, teeth
		gyk-	gyk-		gyk-	
11891	1298	gyw ³ hlh-	gwy ³ hlh-			be careful, take care ⁵⁶⁰
11900	1289	gyw ³ hlh-				(?) ⁵⁶¹

⁵⁵⁸ Derivates refer to kinship and marital relations.

⁵⁵⁹ KW {gys-} only in /gisəɣstala/ "ceremonial box cover with sea otter teeth at the opening."

The examples of KW {kys-} probably include KW /kizilɬai³/* "nose ornament" and KW /kizilbala/* "to wear nose ornament" (which latter according to Boas (1948:22) is a synonym of KW /h³izilbala/* "abalone nose ornament."

⁵⁶⁰ In HE /g'iw³al'a/ [1] "to take care" OO /guy³ala/ "to be careful." The HE item is listed in Boas (1928:240).

⁵⁶¹ In HE /g'iw³al'a/ [2] "to make love to one's sister-in-law."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
11910	1290				gyχv-*	(?) foolish ⁵⁶²
11911	1291 1305				gyχv- gχv-	steelhead salmon
11920	1292				gyq-	chief, lord, authority ⁵⁶³
11930	1293	gyχ-	gyχ-	gyχ-	gyχ-	to grind, rub, file (as for sharpening)
11931				gvy-	gw- gvy-	(onomatopoeic) ⁵⁶⁴
11940	1296	gvwmh-	gvwmh-	gwmh-	gwmh-	(?) large eyes ⁵⁶⁵
11950	1297				gwt-	head is underwater
11980	1299	gvws-	gvws-	gws-	gwys-	frost, to freeze ⁵⁶⁶
11990	1301	gvwl-	gvwl-	gwł-	gwł-	(HE/OO/HA) to gather and preserve food staples (meat, berries, salmon), make travel provisions, to will sth. to sb. (KW) travelling provisions, snack, lunch

⁵⁶² In KW /giχva/* "foolish" KW /giw³ala/* "to speak foolishly" (both from the /N³ak³vaxda³χv/ dialect)

⁵⁶³ This very productive root could be a backformation from KW {gy-rm-αy³} > /girme³/ "chief" (literally "the one in front").

⁵⁶⁴ In KW /gugugu/ "screech owl" HA /gvigvigv'i/ KW /gvigvigvi/ "oystercatcher (bird)."

⁵⁶⁵ In words referring to ratfish and the grey or snowy owl. Ratfish like owls have large eyes.

⁵⁶⁶ KW {gwys-} could have the structure {gw[y]s-} < {gw[∞]s-}.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
11991					gwɫ ³ - ghɫ ³ -*	(?) to agitate, be agitated ⁵⁶⁷
12000	1295	gvwgvvy ³ -	gvwgvvy ³ -	gwgvy ³ -	gwgvy ³ w-	foot, leg ⁵⁶⁸
12010	1302 1303	gvwk ^v -	gvwk ^v -	gwk ^v -	gwk ^v - gwx ^v -	residence, home, settlement ⁵⁶⁹
12030	1295	gvw ³ -	gvw ³ -	gw ³ -	gw ³ -	(?) ⁵⁷⁰
12040	1300			gw ³ ɬ-		to borrow
12050	1304			rvx ^v -	gɣ ^v -	to drift (like canoe, log)
12070	1306				gɣ-	seat in canoe
12080	1307	gh-	gh-	gh-	gh-	this (near speaker) ⁵⁷¹
12090	1310	gh-	gh-	gh-	gh- zh-*	(?) reference point, starting point ⁵⁷²

⁵⁶⁷ In KW /gʊɫ³gɫ³qa/ "to stir about among things." Another example may be KW /gʊɫ³ala/ and /gaɫ³ala/* "to expect unseen danger, uneasy for fear, on the alert against danger."

⁵⁶⁸ This free stem could derive from root no. 12010 if the latter means "foundation."

⁵⁶⁹ KW {gwx^v-}* only in /guxva/* "to dwell" (from the Gwasla dialect).

⁵⁷⁰ Perhaps in HE /gʊv³aɬa/ OO /gʊv³aɬa/ HA /gʊ³aɬa/ KW /gʊ³ala/ "to help, to assist."

⁵⁷¹ Demonstrative root occurring as free form and proclitic. Only a small number of suffixes can be attached; which ones is different in HE/OO, HA and KW.

⁵⁷² 1. {gh-} is assumed to be a subcomponent of the stem {ghɣ•-, ghɣ-} "hither, towards the speaker, etc." listed as entry no. 12093 in this root list because in HA the pluralizing suffix {-m-, -m∞-, etc.} (suffix no. 430) can separate |gh| and |ɣ•, ɣ|, cf. HA {ghɣ-m=yɬ} > /g'aɣm³iɬ/ and {gh-m∞-ɣ=yɬ} > /g'aməɣiɬ/, plural forms of HA {ghɣ=yɬ} > /g'aɣiɬ/ and /gaɣ'iɬ/ "to come into sth." 2. The following stems are also listed as separate entries (nos. 12091 and 12092) but are probably augmented forms of {gh-}, sc. (a) {ghhlh-, ghl∞-, ghlh-} "before, first, etc."; (b) {ghy-, ghyh-} "starting from, etc." 3. {zh-}* occurs in a non-reelicited word Boas (1948:335) mentions

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
12091	1311	ghlh- ghl∞- ghhlh-	ghlh- ghl∞- ghhlh-	ghlh- ghl∞- ghhlh-	ghlh- ghl∞-	before, first, ahead, earlier on, ancient; (in certain syntactic constructions:) when, as soon as ⁵⁷³
12092	1313	ghy- ghyh-	ghy- ghyh-	ghy- ghyh-	ghy- ghyh-	starting point, origin, reason, cause
12093	1315	ghχ- ghχ•-	ghχ- ghχ•-	ghχ- ghχ•-	ghχ- ghχ•-	hither, to come towards the speaker(s), to move this way, to come back home
12100	1308				ghmh-	branching off, off the beaten track, strange, different ⁵⁷⁴
12101	1258	ghmwł³-	ghmwł³-	ghmwł³-	ghmwł³-*	fish hook ⁵⁷⁵
12110	1309				ghd-	far, to a great extent ⁵⁷⁶
12130	1312			ghl³-	ghl³-	(?) to hold a suspicion, verify an assumption
12140	1314	ghwyq-	ghwyq-	ghwyq-	ghwyq- ghwhq-	(HE/OO/HA) seafood; (KW) clams ⁵⁷⁷
12150	1316				kp-	to embrace, to carry in one's arms

as an example of the /Dh³axda³χv/ (Knight Inlet people) using a dental-alveolar plosive where KW has a palatal-velar one.

⁵⁷³ Possibly {gh-} (no. 12090) expanded into {g[h]h[h]-} and {g[h]h[h∞]-}, with the middle [h] dissimilating into [l].

⁵⁷⁴ Could be an augmented form of {gm-} (no. 11590).

⁵⁷⁵ Only in HE /g'am'ul³a/ OO /gamul³a/ "black cod hook made out of yew wood" HA /g'amulay³u/ "black cod hook" KW (Newetee dialect) /gamul³a/* "halibut hook."

⁵⁷⁶ In KW /gadala/ "far ahead, far away" and KW /gagada³isla/* "to take sth. seriously."

⁵⁷⁷ Could contain a root {ghxv-}, {ghχv-} or {ghwh-}. If the root is {ghwh-} it might be related to {gw³-, gvw³-} and mean "sustenance, support."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
12151	1319				km-*/ kmk-*/ kmx-*	(?) ⁵⁷⁸
12160	1317		kmt-	kmt-	kmt-	(OO) to gnaw with the upper teeth, (HA/KW) to remove protrusions (e.g. stems from berries or berries from plant) ⁵⁷⁹
12170	1318				kms-*/ kmy ³ -	captured, immobilized by surroundings (like saw that "binds" when moved too fast or forcefully), corralled, surrounded (like fish or the novices who had disappeared during the initiation ceremony) ⁵⁸⁰
12190	1320				kmq-	(?) ⁵⁸¹
12200	1321	kmq-	kmq-	kmq-	kmq-	gap between objects closing forcefully; to collide with sth., to bump or collapse into sth., to jam together, to get shut in

⁵⁷⁸ In KW /kmx.h³id/* "to give a pull, to start to pull." No telling if root is {km-}, {kmk-} or {kmx-}.

⁵⁷⁹ Only one OO example of this root but relatively many HA/KW ones. The HA/KW ones suggest that {kmt-} refers to gripping or pinching the object to be removed. Blocking escape seems to be a recurring theme among roots beginning in |k| plus |p| or |m|.

⁵⁸⁰ {kms-}* only in KW /kmsa/* and /kms.h³id/* "to close up, to bind (saw)."

⁵⁸¹ In KW /kmqa/ "to use adze." Not listed in Boas's dictionary but mentioned in the 1980 root list (p. 230).

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
12220	1322		kdh-			(?) ⁵⁸²
12230	1323			kt-		to shoot with a gun
12240	1324 1325 1367	khnh-		khn ³ -	kn- kn ³ - khnh-	circle, circular, back and forth; to encircle, embrace; to surround (isolate) a portion of a mass (e.g. small fish) with a scoop or net ⁵⁸³
12250	1326	knc-	knc-	knc-	kns-*	(HE/OO/HA) to loathe, be disgusted with sth.; (KW) to fear, to be ashamed
12260	1327 1329 1330 1333	knk-	knk-	knk-	knk-	in a circle, wrapping around, back and forth (as when shaking the head), in a loop ⁵⁸⁴
12290	1328 1331				knx-	to roll (like ring or hoop), to wrap, to surround, to capture, to scoop
12310	1332	knq-	knq-	knq-	knq-	to bend one's head, to put one's head close to sth.

⁵⁸² In OO /kdau/ (a vocative to address one's daughter) and OO /Kdaka³u/ (a woman's name).

⁵⁸³ {khnh-} and {khn³-} only in HE /k'an'an³a/ HA /kak'an³i/ KW /kanε³/ "1. hoop game; 2. punk (a white pancake-like growth on old trees that was used to preserve fire)."

⁵⁸⁴ 1. Also in terms referring to a fungus, most likely because it is a hemicircular shelf fungus that sort of wraps itself around a stem or branch. 2. Also in HA {knk-m} > /k'нкм/ "marten." The root refers here to the throat and chest "bib" hanging from the animal's neck. The suffix is no. 490 of the suffix catalogue and means "in front." 3. The 1980 root list has a KW root {knχ-} "to wrap around." One of its three examples is in error and the other two are really examples of {knk-} but with the root allomorph's /x/ misspelled /χ/.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
12330	1335 1342		kys-	ks-	ks- kys-	sweeping motion with hand, arm, tail or tool; to rake, to motion sideways, to move to one side
12340	1334				ksp ³ -	(?) musky ⁵⁸⁵
12350	1336				kɬ-	to use arm (to beckon, carry under arm, hold sb.'s arm)
12360	1337				kɬ-*	to notch
12370	1338	kɬ-		kɬ-	kɬ- kykhɬ-	(HE) amazed, impressed, in awe; (HA) apprehensive, unhappy with what's going on; (KW) afraid, fearful
12380	1339		klx-		klx-	circular, round; (KW also:) to go around, to operate a vehicle, run an engine
12390	1340				klxv-	to buy, purchase ⁵⁸⁶
12400	1341				klɣ-*	(?) ⁵⁸⁷
12410					klhkv-	muskrat ⁵⁸⁸
12420	1343				kyɬ-	to fish with a net; to fish sth. out of water (by any means)

⁵⁸⁵ In KW /ksp³uli/ "trailing black currant" KW /kakasp³a³a/ "to gather trailing black currants." Boas (1948:263) wonders if /ksp³uli/ could mean "musky smell berry" and it probably does because according to <http://nativeplantspnw.com/trailing-black-currant-ribes-laxiflorum/> the plant's leaves give off a strong odor when bruised.

⁵⁸⁶ All examples are about buying goods but the root could more generally refer to the circulation of goods through trading and thus be related to {klx-} (root no. 12380).

⁵⁸⁷ In KW /klɣa/* "to strike the face."

⁵⁸⁸ Cross-family stem, cf. proto-Salish *-kəlxav- "muskrat" (Kuipers 2002:36).

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
12430	1344	kyxv-	kyxv-	kyxv-	kyxv-	(HE/OO/KW) fair or light in colour (e.g. hair); (HA) grey, whitish
12440	1345	kyχ-	kyχ-	k ³ yχ-	kyχ-	to scrape, to scrub, to rub together; (HE/OO also:) to use a saw
12450	1347	kvxv-	kvxv-	kvxv-	kxv-	to rise or blow out forcefully (hot air, steam, breath, dust, smoke); (KW also:) to give off a smell
12460	1348	kvwp-	kvwp-	kwp-	kwqv-	to snap, to break (said of a stick or long stick-like thing)
12470	1349	xvwt-	kvwt-	kwt-	kwt-	to suspect, guess
12480	1350	kws-	kws-	kws-	kws-	to shave, to scrape off with a knife (fur, fish scales)
12490	1351				kws-*	(?) ⁵⁸⁹
12500	1352	kwł-			kwł-	dried up, dried out ⁵⁹⁰
12510	1353	kvwkv-	kvwkv-		kwkv-	pearly, mother-of-pearl
12520	1354	kvwxv-	kvwxv-	kwxv- kw ³ kv-	kwxv-	(HE/OO/HA) warm, hot; (KW) at or towards the right temperature, weather is improving ⁵⁹¹
12530	1355				kwχv-	to scrape (for inner hemlock bark, for cockles)

⁵⁸⁹ In KW (Koskimo dialect) /kus.h³id/* "breath stops."

⁵⁹⁰ HE only in {kw[k]ł=hlly} > /k'ukvɪ'ali/ "dried clams."

⁵⁹¹ {kw³kv-} only in HA /kukvɪ'a/ "warm clothes"; the glottalization of |w³| accounts for the accent on the suffix, {-lh}.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
12540	1356				kwχv-	(?) to give off stench ⁵⁹²
12550	1357	kvχv-	kvχv-		kχv-	to fart, give off stench ⁵⁹³
12560	1358 1375 1376	kq- khq- khq-	kq- khq- khq-	khq- k ³ hq- k ³ hq-	kq- khq- khq-	one's head or the end of a moving object (e.g. log, canoe) strikes or touches sth., to collide with, to bump into sth; to head towards sth., to aim; (HA also:) to nod, to bend the head forward ⁵⁹⁴
12570	1359 1377 1952 1961 2190	rvχv- rvhχv- rhχ- rhχ- rhχ-	rvχv- rvhχv- rvhqv- rhχ- rhχ-	k ³ hχ- rvhkv- rvhχv- rhq- rhχ-	kχ- khχ- rvhχv- rhχ- rhχ-	(onomatopoeic:) to croak (crow or raven), cry of crow or raven ⁵⁹⁵
12580	1360	kh-	kh-	kh-	kh-	dish-shaped object is being held up (e.g. waiter-style on the palms of one's hands) or put somewhere; to use plate, pot or pan
12590	1361	kh-		kh-	kh-	(?) ⁵⁹⁶

⁵⁹² In KW /kuχvac³i/ "musk bag of an animal."

⁵⁹³ All HE/OO examples refer to farting with the specification "noiselessly."

⁵⁹⁴ HE/OO {kq-} only in {k[hh]q-w} > HE /k'aqu/ OO /kaaqu/ "to collide." Possibly HA {khq-} once referred to bending the head and bumping the head while {k³hq-} referred to steering and collision but both forms can now have either meaning.

⁵⁹⁵ In HA reference is to a frog's croaking but in HE/OO/KW to that of a raven. {rvχv-} only in HE /rvu³i/ OO /rvu³i/ "raven" and derivatives.

⁵⁹⁶ Possibly in HE /kay³i/ (expression of scorn) HA /ka/ (proclitic said to be used in Kitamaat for "I don't know") HA /ka³a/ (form of phatic communion when sb. is talking: "yes, yes"; "sure,

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
12591	1373	(χ£-)	(χ£-)		kh-	(?) ⁵⁹⁷
12600	1362 1363	khp-	khp-	khp-		(HE/OO) to apply, change or remove a covering layer; to separate layers; (HA) frozen over, frost-covered ⁵⁹⁸
12610	1364	kht-	kht-	kht-	kht-	long object (e.g. log) is or moves somewhere
12620	1365 1371	kht-	kht-	kht-	kht-* khs-	head or heavy hammer-like object (like deadfall) coming down, to nod the head, to bob up and down (like head, canoe)
12630	1366	kht-	kht-			(?) ⁵⁹⁹
12640	1372				khc ³ s-	cone of coniferous tree ⁶⁰⁰
12650	1368	khs-	khs-	khs-	khs-	crooked, bent
12660	1369				khs-	to shred cedar bark

sure"). Also perhaps in KW /kat³u/ and /kat³ɔ/ "not enough, insufficient, mediocre" which could however also be singular developments of KW /k³uta/ [2] "to judge insufficient, etc." (from {k³wt-}, root no. 13440).

⁵⁹⁷ In KW {[kh]kh-+χw-hlh} > /kaka³χɔla/ "to wear a necktie" and {kh-hlh-+χhwɔy³} > /kala³χawɛ³/ "necktie." Root may be a borrowing from Nuuchahnulth ("Nootka") which has a root {ka-} "stick-like object protruding" (Sapir & Swadesh 1939:283). The HE/OO equivalents of the KW terms derive from {χ£-} "long object points or pokes out, etc."

⁵⁹⁸ Probably also in OO /kapi³ala/ "living together to give a child a recognized father."

⁵⁹⁹ Only in HE/OO {kht-w} "to meet sb." Form and gloss of this term are reminiscent of a HA/KW derivate of root no. 12610, sc. {kh[k]t-w} > HA /kakt'u/ KW /kaktu/ "to meet, to fall to the same spot (logs), to lie together (logs)."

⁶⁰⁰ Free stem. Could be loanword.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
12690	1374	khx-	khx-	khx-		to lift, hold up or carry on the hands and/or forearms (e.g. canoe); (for HE/OO figurative use is also attested:) to uphold law and traditions
12700	1370				khy ³ -	to chase off, to drive away ⁶⁰¹
12710					khwt-/ khwht-	(?) non-serious, for fun (e.g. cat's cradle) ⁶⁰²
12740	1378 1379	k ³ p-	k ³ p-	k ³ p-	k ³ p-	to hold by squeezing (with tongs, a clip, under the arm); (HA/KW also:) to clip, to cut with scissors ⁶⁰³
12750	1380 1433 1472			k ³ m- k ³ ymh-	k ³ m-* k ³ hmf-	(?) ⁶⁰⁴
12760	1381 1384	k ³ mt-	k ³ mt-	k ³ mt-	k ³ my ³ -	to shut out, seal up, lock in
12770	1382				k ³ mt-	to make a notch; to cut off or cut up with knife or adze

⁶⁰¹ Could be a cross-family stem; there is partial semantic and formal similarity to Proto-Salish *-kal- "go after, follow, chase" considering that Proto-Salish *l > y in e.g. Comox and Sliammon spoken in areas adjacent to KW territory (Kuipers 2002:3, 36).

⁶⁰² Stem could contain a root {khxv-} or {khxv} reminiscent of Proto-Salish *-caxv- "glad, happy, enjoy" (Kuipers 2002:26). The suffix would be {-=t} or {-=ht} (suffix no. 1060).

⁶⁰³ Probably also in HE /k³mst'u/ OO /k³m³stu/ "to show discontent by closing both eyes and turning the face away." HE/OO uses {qlx-} (root no. 20590) for cutting with scissors.

⁶⁰⁴ Possibly in the names of a young herring, salmon fry and a young land otter.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
12780	1383				k ³ ms-	(?) ⁶⁰⁵
12790	1385 1472	k ³ hmhs-	k ³ hmhs-		k ³ ms-* k ³ hmhs-*	cascade, rapids ⁶⁰⁶
12800	1386				k ³ m£- c ³ m£-*	to adze ⁶⁰⁷
12810	1387				k ³ mxv-	hemlock needles ⁶⁰⁸
12820	1388	k ³ mq-	k ³ mq-		k ³ mq-* k ³ mhq-* k ³ mhχ-	calm (weather, sea)
12830		k ³ mχ-	k ³ mχ-	k ³ mχ-		canyon ⁶⁰⁹
12840	1389 1390 1392	k ³ t-	k ³ t-	k ³ t- k ³ ht-	k ³ t- k ³ ht-	unstable, dizzy; tippy, cranky (like boat), in and out (as when weaving), up and down, back and forth (as when sweeping, brushing or shaking off) ⁶¹⁰
12860	1391				k ³ t-	to extend, protrude, stick out

⁶⁰⁵ In KW /k³msa/ "to rough out canoe" and /k³msmε³/* "tough butt of log."

⁶⁰⁶ HE/OO only in HE /k³am'azh/ OO /k³amazh/ "small waterfall."

⁶⁰⁷ {c³m£-*} occurs in one never reelicited word Boas (1948:335) mentions as an example of the /Dh³axda³χv/ (Knight Inlet people) using /c³/ where KW has /k³/.

⁶⁰⁸ Could be a backformation from KW /k³amuma/ "needles of coniferous trees" which is a cross-family stem, cf. PS *-k³amu/a(ma7)- in Kuipers (2002:41). See also the comment on {k³h-} (root no. 13590).

⁶⁰⁹ Only HE/OO example is a place name.

⁶¹⁰ Insufficiently clear glosses make it hard to tell if it is this root or no. 12860 that is present in KW /k³d'л³sla/ (name of a bird) KW /k³длу³ala/ "sound made by bird or raccoon."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
12880	1393			k ³ n-	k ³ n-	hanging loose (like hair, snot); (KW also:) unstable, unsteady; detached, separated, disconnected (from origin) ⁶¹¹
12890	1394	k ³ n-	k ³ n-	k ³ nh-	k ³ n-	feeling cold
	1395				k ³ nh-	
12900	1396				k ³ nt-*	(?) chiton ⁶¹²
	1397				k ³ nt-*	
	1398				k ³ nyt-*	
	1402				k ³ nxv-*	
					k ³ nwt-	
12930	1399	k ³ nk-	k ³ nk-	k ³ nk-	(χq-)	to comb, to rake
12940	1400	k ³ nxv-	k ³ nxv-	k ³ nk-	k ³ nxv-	tangled, matted together, a
	1401			k ³ nxv-		twisted mass, curled up; grappling and grabbing movement (as of crabs)
12960	1403	k ³ nq-	k ³ nq-			grappling and grabbing movement (of crabs or as in wrestling)
12970	1404	k ³ s-	k ³ s-	k ³ s-	k ³ s-	(negative and privative
	1405	k ³ s•-	k ³ s•-		sk ³ s•-	meanings:) 1. not the case, not as before (or could or should be), not any
			sk ³ s•-			

⁶¹¹ Also in HA (Kitamaat dialect) /k³ak³h³a/ "hummingbird" (said to mean "trying to get hair").

⁶¹² In altogether ten words reported by Boas (1948) but eight of which could not be reelicited.

According to Boas they are about *Cryptochiton stelleri* which, according to

https://en.wikipedia.org/wiki/Gumboot_chiton, is commonly known as gumboot chiton or Giant Western Firey chiton. Which property of this large kind of chiton the roots may refer to is unclear.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
						more, deprived of; to undo, back out of; (HE/OO also:) one-sided; 2. lacking control or vigour, lax, slack, loose, lazy ⁶¹³
12990	1406		k ³ ʕ-			(?) ⁶¹⁴
12991	1407			k ³ ʕ-		(?) ⁶¹⁵
13000	1408	k ³ ɬ-	k ³ ɬ-	k ³ ɬ-	k ³ ɬ-	particles (e.g. dust, berries) are moving; to brush, sweep or shake off particles; (KW also:) to shake huckleberries off the bush
13010	1410	k ³ ɬ-	k ³ ɬ-	k ³ ɬ-	k ³ ɬ- k ³ ɬ-	movement of bodily organ (tongue, clitoris, heart), to lick with tongue ⁶¹⁶
13020	1409	k ³ ɬ-	k ³ ɬ-	k ³ ɬ-	k ³ ɬ-*	(?) ⁶¹⁷
13021				k ³ ɬm-		(?) ⁶¹⁸
13030	1411	k ³ ɬp-	k ³ ɬp-	k ³ ɬp-	k ³ ɬp-	to twist, wring

⁶¹³ {sk³s•-} is attested only in OO /sk³sirvi/ "(single) side of the longhouse (seen from the entrance)" and perhaps the non-reelicitable KW /sk³sala/* "to be seen but not to see" [sic]. It can be undiagnosable if HE/OO is using {k³s-} or {k³s•} in which case {k³s-} is assumed.

⁶¹⁴ In OO /k³ʕ³a³ɬ/ "long flat chief's dish with flat carved ends."

⁶¹⁵ In HA words referring to a bullhead.

⁶¹⁶ The only example of {kɬ-} is KW /k³ɬamas/ "to cause the heart to beat fast (as when running)."

⁶¹⁷ Perhaps in HA /k³ɬm/ [2] "red hot stone or iron for heating grease" OO /kɬ³aq/ HE /k³'ik³ɬ³aq/ HA /k³'ɬk³ɬ³aq/ "natural crystal" KW /k³ɬp³ala/* "copper smell."

⁶¹⁸ In HA /k³ɬ'amp³a/ "sour, fermented" and derivatives.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
13040	1412	k ³ lt-	k ³ lt-	k ³ lt-	k ³ lt-	reluctant to act, put off by sth.
13050	1413				k ³ ls-	easily kinked or twisted
13060	1414				k ³ ls-	(?) ⁶¹⁹
13070	1415	k ³ lk-	k ³ lk-	k ³ lk-	k ³ lk-	to bind, bandage, tie with a string or ribbon, wrap, wind around, strangle (in trap), interweave
13080	1416	k ³ lx-	k ³ lx-	k ³ lx-	k ³ l ³ x-	raw, untreated (e.g. food, metal) ⁶²⁰
	1423	k ³ l ³ x-	k ³ l ³ x-	k ³ l ³ x-		
13090	1417	k ³ lkv-	k ³ lkv-	k ³ lkv-	k ³ lkv-	to prick ⁶²¹
13100	1418	k ³ lqv-	k ³ lqv-	k ³ lqv-	k ³ lqv-	to urinate (said of a male), to spout, to gush out
13110	1419	k ³ lq-	k ³ lq-	k ³ lq-	k ³ lq-	to lick
13120	1420	k ³ lχ-	k ³ lχ-			to wrap
13130	1421	k ³ lχ-	k ³ lχ-	k ³ lχ-	k ³ lχ-	to extinguish, go out, put out (light, fire)
13140	1422				k ³ lχ-*	(?) ⁶²²
13150	1424	(y ³ yt-)	(y ³ yt-)	(h ³ yt-)	k ³ k-	going backwards, to row a boat, to back up, to defecate
13160	1425	k ³ k-	k ³ k-	k ³ k-	k ³ k-	to stretch skins

⁶¹⁹ In KW /k³l³su/ "to beg for sth." KW /k³l³sonm/ "obtained by begging."

⁶²⁰ HE/OO/HA {k³lx-} occurs possibly in HE /k³l³xk³axa/ OO /k³l³xk³axa/ HA /k³l³xk³axa/ and /k³l³xk³ax'a/ "to eat sth. raw."

⁶²¹ In three words referring to a digging stick and the thorn-like core of a corn or callus.

⁶²² In words referring to a thistle-like plant with milky juice.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
13170	1426	k ³ k-	k ³ k-	k ³ k-	k ³ vk- k ³ vhk-	to squeak, to creak (like sth. bursting, new shoes)
13180	1427		k ³ x-		k ³ x-	to bifurcate, to split in two
13190	1428				k ³ x-	mouldy
13200	1429 1430 1442	k ³ y k ³ yy ³ -	k ³ y k ³ yy ³ -	k ³ y- k ³ hyh- k ³ hy ³ -	k ³ y- k ³ hyh-	1. (privative meanings:) removed, gone, missing, deceased, in memory only; not as it could, used to or should be; lacking sth., deprived of, poor; 2. (when combined with {-s.h ³ w} (suffix no. 2610) as in the free stem {k ³ y-s.h ³ w} and derivatives:) memorabilia (e.g. rights, privileges, songs, masks); 3. (HE/OO also:) to carve (wood, meat), to dress or fillet fish; (KW also:) to carve (wood, pole, blubber); (HA also:) to cut anything with a knife; 4. (HA {k ³ hy ³ -}:) out of sight, disappeared. ⁶²³
13210	1431	k ³ y-	k ³ y-	k ³ y-	k ³ hyh-	(?) ⁶²⁴
13230	1434 1437				k ³ yt-	upright, prominent, notable ⁶²⁵

⁶²³ HA {k³hy³-} corresponds to HE/OO/KW {t³hy³-}, augmented form of {t³y-} (root no. 3780).

To facilitate cross-dialect comparison the derivatives of {k³hy³-} are listed under root no. 3780.

⁶²⁴ Possibly in HE /k³'id'a/ OO /k³ida/ HA /k³id'a/ "little finger" KW /k³ɛda/ "ring finger."

⁶²⁵ Several derivatives refer to a princess (chief's eldest daughter).

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
13240	1435	k ³ yt-	k ³ yt-	k ³ yt-		to rake in (herrings)
13250	1436	k ³ yt-	k ³ yt-		k ³ yt-	grass, grassy, to get grass
13260	1438	k ³ ys-	k ³ ys-	k ³ ys-	k ³ ys-	1. absent, gone, etc. (see the
	1439	k ³ wws-	k ³ yws-	k ³ wws-	h ³ ys-	privative meanings of no.
	1440				h ³ y ³ s-	13200);
	2594				k ³ y ³ s-	2. immaterial, spiritual;
					k ³ y ³ s•-	3. not the case, to the contrary,
					c ³ y ³ s-*	non-existent;
					k ³ yws-	4. (HE/OO/HA {k ³ ys-} also:)
					k ³ yhws-	water is drained off, stream goes
					k ³ hyws-	dry ⁶²⁶
13290	1441			k ³ ys-	k ³ ys-*	(?) layer of clothing
13300	1443				k ³ yɬ-	to clip off, to cut down (e.g.
						grass), to cut open (a can)
13310	1444				k ³ yɬ-	(?) ⁶²⁷
13320	1445				k ³ yɬ-	slime
					k ³ yɬ ³ -	
					k ³ yɬ ³ h-	
13330				k ³ yɬ-		(?) ⁶²⁸
13340	1446	k ³ ygh-	k ³ ygh-	k ³ ygh-	(myg-	to caulk a boat
		k ³ yk-	k ³ yk-	k ³ yk-	mygh-)	

⁶²⁶ The |s| component in the alternants could be the extender listed as suffix no. 2140. There is only one example of {k³y³s•-}, cf. KW {k³y³s•-hlh} > /k³i³sala/ "not being." The form {c³y³s-}* is mentioned by Boas (1948:335) as an example of KW using a palatal-velar obstruent but the /Dh³axda³χv/ (Knight Inlet people) a dental-alveolar one.

⁶²⁷ Possibly in the KW stem {k³yɬ=hkv-} "to kill, to beat up, to club"

⁶²⁸ Possibly in HA (Kitamaat dialect) /k³il³i/ "rat." The word could however be a borrowing.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
13341	1447	k ³ ww- k ³ hwh-	k ³ yw-	k ³ ww- k ³ hwh-	k ³ yw- k ³ yhw k ³ hyw-	not the case, to the contrary, non-existent ⁶²⁹
13350	1448	k ³ yχv-	k ³ yχv-	k ³ yχv-	k ³ yχv-	(HE/OO/HA) to run on foot; (KW) to run away, escape, flee from
13360	1449	k ³ yq-	k ³ yq-	k ³ yq-	k ³ yq-*	to poke one's head forward
13370	1450				k ³ yχ-*	(?) bloodied skin, scraped skin ⁶³⁰
13371					k ³ y ³ -	virgin
13380	1451	k ³ vzv-	k ³ vzv-	k ³ vzv-	k ³ xv-	to suck
13390	1452 1748		k ³ vw-	k ³ w-		(?) to forge social ties, to link up with others
13400	1453 1749	k ³ vw-	k ³ vw-	k ³ w-	k ³ w-	to split open, spread apart (like clam shells, wood, jaw's legs); to dry clams
13410	1454	k ³ vwp-	k ³ vwp-	k ³ wp-	k ³ wp-	flake or strip peeling off or being torn off; to handle a flat object; (HA/KW also:) to break or tear flat brittle object
13420	1455				k ³ wt-	flat narrow object stands or lies on edge, to put sth. on edge
13430	1456				k ³ wt-	salmon

⁶²⁹ HE/HA {k³hwh-} only in HE /k³aw'aq³a/ (name of a monster) HA /k³awaq³a/ "wild caveman." It may mean "to be avoided."

⁶³⁰ In KW /k³iχk³χis/* "red-throated loon" KW /k³iχa/* "to scrape skin (drawing towards body)" KW /k³iχayu/* "skin scraper." These words' /k³/ may be in error because there is a KW root {kyχ-} "to scrape, to scrub, to rub together" (root no. 12440).

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
13440	1457				k ³ wt-	to judge insufficient, to criticize what is given, to look down upon
13450	1458	k ³ vwt-	k ³ vwt-	k ³ wt-		long slender pointed object (like quill, nail) sticking in or driven into sth.
13460	1459			k ³ ws-	k ³ ws-	(?) to handle clams
13470	1460	k ³ ws- k ³ vws-	k ³ wc-/ k ³ w ³ s- k ³ ws- k ³ vws-	k ³ ws-	k ³ ws-	1. surface is bent or folded at a sharp angle (as at a ridge, edge, backbone, keel); 2. (OO/HA/KW also:) bent or curled up (like finger, one's body, box made by bending single cedar board) ⁶³¹
13480	1461				k ³ wɬ-	rough (to sight or touch)
13490	1462 1464	k ³ vwɬ-	k ³ vwɬ-	k ³ wɬ-	k ³ wɬ-	to form a sharp angle (as at a ridge, edge, backbone, keel), V-shaped, triangular, square, to square off
13500	1463				k ³ wɬ-	(?) ⁶³²
13510	1465	k ³ vwkv-	k ³ vwkv-	k ³ wkv-	k ³ wkv-	to stand on edge, to stand sideways or on the side (said of thin, flat object), to use an

⁶³¹ OO {k³wc-} or {k³w³s-} (not diagnosable which) occurs only in /k³u³ssmala/ "curled up, having a hoop-like shape (as a person curled up)."

⁶³² In KW /k³ulisa/* "noise made by whale when making long dive" and two reelicited KW words referring to a porpoise and seemingly deriving from a stem {k³wɬwt-} < {k³wɬ=-wt-}. This stem {k³wɬwt-} could however be a backformation from /k³ulut³/* "porpoise" which is a cross-family stem, "porpoise" being k³v'unut³ in Squamish, cf. Kuipers (1967:346).

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
						object's edge (as in chopping), layer splits off a stem and falls down flat (like banana peel, skunk cabbage leaves) ⁶³³
13520	1750	k ³ vwxv-	k ³ vwxv-	k ³ wxv-		(?) ⁶³⁴
13530	1466 2175	q ³ vwqv-	q ³ vwqv-	k ³ wqv-	k ³ wqv- rwqv-	to carry by handle or loop; to pull, tug, hoist ⁶³⁵
13540	1467		k ³ wχv-		k ³ wχv-	to bend, to fold
13550	1468 1476 1488 2060	q ³ vqv-	q ³ vqv-	q ³ vqv-	k ³ qv- k ³ h ³ qv- k ³ vh ³ qv-	to disengage things that fit together, to pull sth. out of what it fits in; (KW also:) long thing pokes out of sth., to poke into sth. ⁶³⁶
13560	1469 1470	k ³ q-	k ³ q-	k ³ q-	k ³ q-	to move, deliver or put down a pile, load or cargo of things (said of humans handling food staples, mats or blankets, but in HA also said of beaver) ⁶³⁷

⁶³³ Uncertain if this root occurs in OO /k³vuuk³v/ HE /k³vk³v'uk³v/ HA /k³k³uk³v/ KW /k³k³a³ukv/ "skunk cabbage." Term could be a cross-linguistic stem, cf. *-k³vuk³v- in proto-Salish (Kuipers 2002:141).

⁶³⁴ Only in HE /k³v'uxv'an'i/ OO /k³vuxvani/ HA /k³'uxvani/ "butter clams" which however is a cross-family stem, cf. Proto-Salish *k³vuxvani7 "clam" (Kuipers 2002:142).

⁶³⁵ KW {rwqv-} only in /raruχvst³ap³i³/ "suspenders."

⁶³⁶ KW {k³qv-} likely also in three slightly different names of fireweed, /k³ak³aqvama/, /k³ak³qva³m/ and /k³ak³aqv³ah³ms/. Fireweed stalks were thrown at each other in a game. KW {k³h³qv-} only in /k³a³q³vs/ "young tree, pole or stick in the ground."

⁶³⁷ Probably also in HA /k³q'ita/ "to undress."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
13570	1471	k ³ χ-	k ³ χ-	k ³ χ-	k ³ χ-*	to close one's eyes, shut-eye, sleep ⁶³⁸
13580	1472 1487	k ³ h-	k ³ h-	k ³ h-	k ³ h-	small loose things (e.g. ooligans; particled solids like sand, ashes, gravel) are located somewhere or being handled (spread, poured, scattered)
13590	1472 1474 1475	k ³ h-	k ³ h-	k ³ h-	k ³ h-*	(?) ⁶³⁹
13600	1473				k ³ h-	(?) to handle a flat thing ⁶⁴⁰
13610	1477	k ³ hp-	k ³ hp-	k ³ hp-	k ³ hp-	to gnaw
13620	1478	k ³ hp-	k ³ hp-	k ³ hp-	(hnxv-)	humpback salmon
13630	1479	k ³ ht-	k ³ ht-	k ³ ht-	k ³ ht-	to write, to paint, to draw pictures
13640	1758	k ³ vht-	k ³ vht-	k ³ ht- k ³ vht-		to rake in, to pull towards oneself with a stick, to strike a match, to reclaim goods

⁶³⁸ The KW examples are all from the Koskimo dialect.

⁶³⁹ |k³h| is the shared initial component of the following hard to analyze terms and their derivates. It is a root in example no. 3 but may or may not be that in the other ones. 1. HE /k³am'amu/ and /k³al'ulu/ OO /k³amumu/ (a small kind of clams) KW /k³amuma/ "needles of coniferous trees"; 2. HE /k³an³a/ OO /k³an³a/ "saltwater bullhead"; 3. HE /k³au/ HA /k³a.u/ (exclamation, meaning unknown); 4. HA /k³anqas/ OO /k³aaqa/ "crow" HE /k³aqā/ "crow" and "black rock cod" OO /K³aanawira/ (name of Raven's sister); 5. KW /k³ada/ "starry flounder."

⁶⁴⁰ In KW {k³h-hł-h} > /k³ałā/* [2] "to throw flat thing overhand" and perhaps also in the stem {k³h³ht-} "hold salmon flat in tongs."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
13650	1480				k ³ hs-	to send away sb. unwelcome, to separate, divorce (like couple), to come apart (like bundle) ⁶⁴¹
13660	1481	k ³ hs- k ³ h ³ s-	k ³ h ³ s-	k ³ hs-	k ³ hs-	to grip, pinch, claw ⁶⁴²
13670	1482				k ³ h£-*	flat thing sails through the air
13680	1483				k ³ h£-*	(?) ⁶⁴³
13690	1484	k ³ h£-	k ³ h£-	k ³ h£-	(myχ-)	to sleep, to dream
13700	1485	k ³ h£-	k ³ h£-	k ³ h£-		(?) ⁶⁴⁴
13710	1486	k ³ hk-	k ³ hk-	k ³ hk-	k ³ hk-	to raise the eyebrows
13720	1489	(χyx-)	(χyx-)	(χyx-)	k ³ hχv- k ³ hwhχv-	to whittle, shave, slice thinly, peel
13730					k ³ hy ³ hχv-*	half dry
13750	1490				k ³ hq-	positioned crosswise (logs, boards)

⁶⁴¹ Root could be a backformation from KW /k³asu/ < {k³[h]s-w} (with {k³s-} "slack, etc." (root no. 12970) and suffix no. 4290) which Boas (1948:275) glosses as "to come loose from each other, bundle comes apart, married couple separates." Alternately, {k³hs-} may refer first of all to "throwing lower arm horizontally sideways [with] palm inward" which gesture serves to chase sb. away, cf. Boas (1948:282).

⁶⁴² Could be a backformation from HE /k³'ask³'as/ "talons, claws" HE /k³'az'al'ac³i/ and /k³'az'al'ic³i/ HA /k³azan'ic³/ KW /k³azalac³i/ "ant." Note the occurrence in South Wakashan (Nuuchahnulth) of k³ac- "to pinch."

⁶⁴³ In KW (Koskimo dialect) /k³a£a/* "to menstruate."

⁶⁴⁴ Possibly in HE /k³'al'ax/ OO /k³alax/ "a species of fern" HA /k³'alak/ "long green fern species."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
13760	1491				k ³ h ³ l-	to emit steam, to menstruate
13770	1492	k ³ h ³ x-				to slip, slide, scoot
13780	1493				k ³ h ³ x-	to go backward
13790					k ³ h ³ qw-	engine idles ⁶⁴⁵
13810	1494			xmt-		strong wind
13820	1495				xms-	to skim off oil ⁶⁴⁶
13830	1496		xms-		xms-*	(?) silly, foolish ⁶⁴⁷
13840	1497	(£xs- lxs-)		xms-		to eat too much ⁶⁴⁸
13841	1498	xm ³ -			xm ³ -	to lasso, snare, set a snare
13850	1499				xt-	to suck, siphon, pump, inhale, breathe ⁶⁴⁹
13860	1500 1501		xnt-		xnt-	to spin around while held in a sling or at the end of a rope, to swing overhead, to use a bullroarer ⁶⁵⁰

⁶⁴⁵ Stem could be the form {k³h³qv-} of root no. 13550 followed by {-w} (suffix no. 4290).

⁶⁴⁶ In KW /xmsa/ [1] "to skim off oil" KW /xmzac³i/ "oil vat."

⁶⁴⁷ In OO /xmsa/ "to act in a silly or foolish way" KW /xmsa/* [2] "to feel happy" KW /xmyashukv/* "having laughed with happiness."

⁶⁴⁸ In HA /x'msla/ "to eat too much."

⁶⁴⁹ Perhaps also in KW /xi:xtba/* "puffin." Its unreduplicated root could be {xt-} or {xyt-} as far as form is concerned. Boas (1948:374) lists the name as a derivate of {xt-}.

⁶⁵⁰ Possibly also in words to do with giant fawn lily (*Erythronium giganteum*) because the plant has tall thin naked stalks capped with usually only one pendant flower (cf.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
13880	1502	xnt-	(hnχ-)	xnt-	(hnχ-)	(HE) to look at one's reflection (in water, in mirror); (HA) to look, to peek
13890	1503	xnc-	xnc-		xns-	to sniff
13900	1504				xnk ³ -*	(?) ⁶⁵¹
13910	1505				xnqv-	to snort ⁶⁵²
13920	1506 1507			xnq-	xnq-	(?) to stick out (like fingers, toes, nose), to stick up (like plant stalk) ⁶⁵³
13940	1509				xzx-	mould, mouldy
13950	1508 1543	xs- xhs-	xs-	xs-	xs- xhc ³ -	({xs-, xhs-}:) to disappear, vanish; lost from view, hidden; to dissolve (e.g. in water); ({xhc ³ -}:) liquid drains off, tide goes down ⁶⁵⁴
13970	1510			xs-	xs-	(?) to spray, to sprinkle (from mouth or like rain)
13980	1511	xɬ-	xɬ-	xɬ-		to move to another place ⁶⁵⁵

<http://science.halleyhosting.com/nature/gorge/3petal/lily/erythronium/fawn.htm>). The shape of stalk pus flower could be associated with holding up an object to be swung around.

⁶⁵¹ In KW /xHk³a/* "to repent" KW /xixHk³u/* "to repent and do better next time."

⁶⁵² The 1980 root list incorrectly indicates this root is also attested for OO.

⁶⁵³ In KW /xHqa/ "to sniffle" KW /xHaq³a³as/* "nostrils" HA /x'ixHaχsk³ani/ "one's ten fingers" HA /x'ixHaχsiza/ "one's ten toes."

⁶⁵⁴ {xhs-} occurs only in HE {xhs-=hp-} "twilight" (= "disappear to bottom," with reference to setting sun). {xhc³-} may have developed from *{xh³s-}.

⁶⁵⁵ HA only in /xɬuy'a/ "to leave one's spouse behind."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
13990	1512				xł-	to hang up (to dry in wind, sun or smoke)
14000	1513				xl-*	to fish for dentalia
14020	1515				xl-*	(?) ⁶⁵⁶
14030	1516	xlp-				to lay bare ⁶⁵⁷
14040	1517			xlp-	xlp-	(HA) to twist strands of fibre into rope; (KW) to revolve, to spin around (like flywheel or rotors of helicopter)
14050	1518				xlt-	to saw
14060	1519				xls-*	(?) ⁶⁵⁸
14070	1520				xlkv-	(?) ⁶⁵⁹
14080	1521	xlq-	xlq-		xlq-	limp object (e.g. rope, clothing, bedding), to fling a limp object
14090	1522				xk ³ -	(?) ⁶⁶⁰
14100	1523	xyt-	xyt-	xyt-	xyt-	to raise the end of sth. long (e.g. pole, paddle, head of a person lying down); (HE/OO/HA also:)

⁶⁵⁶ In KW (Newettee dilaect) /xła/* "ribs of halibut."

⁶⁵⁷ In HE /x'łpa/ and /x'łm³it/ "to lift one's dress."

⁶⁵⁸ In KW /xłsa/* and /xłsla/* "top of waves blown by wind."

⁶⁵⁹ Possibly in the stem {xk³vt-} which refers to twisting a line and making a single coil in basket-making. Only two examples.

⁶⁶⁰ In KW /xk³a/* and /xk³x.h³id/* "to take sth. out of the tongs" KW /xk³ala/ "Coleman stove."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
						to use a long thing to lever up sth. to a vertical position ⁶⁶¹
14110	1524	xyç-	xy ³ s-	xyq-	xys-	to show the teeth; to grin
14111					xyç ³ hx-	to witness, observe, be a spectator
14120	1526	xył-	xył-			to squirt, to spray
14130	1525 1544	xhl-	xhl-	xhl-	xyl ³ -	to respect, admire, hold dear
14140	1527				xyk-*	to strip off (berries), to squeeze out (from a tube)
14150	1528	xyq-	xyq-	xyq-	xyq-	(HE/OO/HA) red hot, sparkling, fiery (colour); (KW) to burn, on fire, red hot ⁶⁶²
14160	1529				xkv-*	in parallel, side by side (as clams for cooking)
14170	1530	xvwp-	xvwp-		xwp-	(?) ⁶⁶³
14180	1531	(£ ³ ykv-)	xvwp-	xwp-	xwp-	burning end of a stick; (hence:) (OO) to tattoo, to cauterize; (HA) to cauterize, to transfer fire; (KW) to light a fire

⁶⁶¹ Uncertain if raising to a vertical position is a KW meaning too. Boas (1948:376) glosses KW /xita/ and /xit³id/ as "to lift up head" and comments that "to raise a pole" is an OO meaning.

⁶⁶² For HA attested only in words referring to stars. For "to burn, be on fire" HE/OO/HA use {xvlt-}.

⁶⁶³ In the names of butterball duck, goldeneye duck and the Western screech owl (which happens to have yellow eyes, like the goldeneye). The root occurs across families, cf. Proto-Salish *-xvup- "a night bird" (Kuipers 2002:121).

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
14190	1532				xwm ³ s-	head of land animal ⁶⁶⁴
14200	1533				xwt-*	severed head of seal or porpoise
14220	1535				xws-	(?) head of person or animal ⁶⁶⁵
14230	1534	xvws-	xvws-	xws-		ball, airbag, lungs
14240	1534		xvws-		xws-	(OO) tired, weary; (KW) rest, breather; to take a rest, go on holiday
14250				xws-		(?) ⁶⁶⁶
14260	1536				xwƒ-*	(?) ⁶⁶⁷
14270	1537	xvwł-	xvwł-	xwł-	xwł-*	fresh boiled salmon eggs
14280	1538 1539	xvwkv-	xvwkv-	xwkv-	xwkv-	swollen, bulbous ⁶⁶⁸
14281					xwkv-	(probably onomatopoeic) ⁶⁶⁹
14290					xwqv-*/ xwq-*	(?) ⁶⁷⁰

⁶⁶⁴ Only in KW /xum³s/ "head of land animal."

⁶⁶⁵ In KW /xusut/ < {xws-wt} "to cut off head of person or animal" and perhaps two non-reelicitable terms whose transcription and meaning are problematic.

⁶⁶⁶ In HA /x'usalał/ "twilight; northern lights."

⁶⁶⁷ In KW /xuƒa/* "to beat fast time, make a noise."

⁶⁶⁸ One HA example refers to thick fat on goat legs. All other ones refer to Indian rice which is a kind of lily with edible bulbs known as chocolate lily.

⁶⁶⁹ In KW /xukv xukv/ "cry of raven signifying bad news."

⁶⁷⁰ In KW /xurkv/* "mock suns."

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Root #	Old #	HE	OO	HA	KW	Gloss
14300	1540			xqv-	xqv-	to stretch head out, to peek, to crane neck ⁶⁷¹
14310	1541				xhm ³ -*	scarcity of food, famine
14320	1542	xht-	xht-	xht-	(xqv-)	to peek, to peer, make effort to look (like stretching head out, standing on tip of one's toes)
14340	1545	xhlh-				(?) ⁶⁷²
14350	1546	xhk-	xhk-	xhk-		rib, rafter, supporting beam
14360	1547				xh xv-*	to hear insufficiently well to be able to understand
14370	1548				xhw ³ -	to take sth. out of sth.
14380	1549	y-	yy-	y-	y-	1. the one in point, the one under
	1551	yy-	yh-	h-	yh-	discussion;
	1559	yh-	hy-	yy-	hy-	2. instance of, satisfying a
	2587	hy-	h ³ y-	yh-	y ³ h-	description; real, actual, true;
		h ³ y-	h ³ hyh-	hy-	h ³ y-	straight away, undelayed, direct, abrupt ⁶⁷³
		h ³ hyh-		y ³ h-		

⁶⁷¹ Only HA example is /xaxaquy'a/ < {[xh]x[h]qv-wyh-+-h} "to stretch out the head in order to look at a person as he goes by."

⁶⁷² In HE /x'al'a/ "come here!"

⁶⁷³ 1. The sense of "the one in point" occurs in e.g. HE {yy#wqv} > /yi'uɣv/; OO {yy#wqv} > /yi'uɣv/; HA {hy#dh#qw} > /hid'aqu/ "it's the one near you (and not sth. else)"; KW {hy#&m} > /hih³m/ "that's it!" 2. The examples of the "instance of, etc." sense have varying degrees of semantic transparency. In some the root is merely an attachment point to turn suffixes into words, just like {w³w-, h³w-, etc.} (root no. 17720). Alternation with forms of root no. 17720 occurs, cf. HE /y'im³as/ OO /yim³as/ HA /h'im³as/ "chief" and HA /h³um³as/ "big" which latter contains the same suffix as the word for "chief." Whereas {yy-} is used in the HE/OO word for

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
14390	1550	yp-	yp-	yp-	yp-	to weave (e.g. net, mat, cedar strip fence), to intertwine, to arrange and secure long things in parallel, to be abreast ⁶⁷⁴
14400	1552				yn-	(?) to drag along ⁶⁷⁵
14410	1553				ynt-*	to gnaw (said of human or large animal)
14420	1555 1556	ys-	ys-	ys-		to soften inner cedar bark by pounding; (HA also:) to hit (any object) with a stick
14421	1554				ys-*	(?) ⁶⁷⁶
14430	1557		yɬ-		yɬ-	to wrap or tie around (rope, bandage, strap), to bandage
14440	1558				yls-	to twirl a fire drill, to rub with palm of hand ⁶⁷⁷

"chief," {w³w-} is used in HE /w³um³aq/ OO /w³uum³aq/ "chieftainness." 3. This root is likely also the base of various hard to analyze exclamations including e.g. HA /y'aiyiyiyi/ used to encourage a speaker or to accompany the raising of a pole. The HE equivalent of this expression (recorded in Klemtu from William Freeman) is /yilil'ai/. Another exclamation, HE /yɬal'a/ OO/KW /yɬala/ "serving sb. right, etc." is assumed to contain a root {lh-}.

4. The alternant {h³y-} occurs in HE /h³i³us/ OO /h³i³u³s/ KW /h³t³u³s/ "to understand (language, meaning)."

⁶⁷⁴ One HE speaker of the /W³uyalityv/ dialect consistently pronounced /yp/ as /yip/. Kitamaat informant George Paul Wilson for HA pronounced /yp/ as /yup/.

⁶⁷⁵ Only in KW /yngt³ala/ "dragging along on water."

⁶⁷⁶ Only in KW /ysaɬa/* "open (said of a cut, crack, boil)."

⁶⁷⁷ Many derivatives found in the Boas-Hunt materials could not be re-elicited.

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Root #	Old #	HE	OO	HA	KW	Gloss
14460	1560				ylχv-*	to hang heads or skulls of enemies on poles
14480	1561 1562	ylχ-	ylχ-		ylq-*	to rub, to smear
14490	1563				yk-	to limp
14500	1564		yk-	yk-	yk-	to catch halibut
14510	1565	yx- yx•-	yx- yx•-	yx- yx•-	yx- yxh- yhx-	swift, fast, speedy; to ride the current, shoot the rapids
14520		yx-				to heap up ⁶⁷⁸
14530	1566				ykv-	(?) ⁶⁷⁹
14550	1567 1568	yxv-	yxv-	yxv-	yxv- ykv-*	covering layer, flat object (e.g. a card)
14560	1569		yxv-		yxv-	to fan the fire
14570		yxv-/ yhxv-				(?) ⁶⁸⁰
14580	1571	yw-	yw-	yw-	yw-	wind, draft; catching wind (like sail, billowing curtain or canvas), to sail
14581	1572				yw-	this one (near addressee) ⁶⁸¹

⁶⁷⁸ In HE {yx-yw-t} "ocean swell" and its derivate {yx-yw-t=ył} "sth. heaped up or piled up on the floor of the house."

⁶⁷⁹ In the stem KW {ykvyl-} "twins, having twins"

⁶⁸⁰ In HE /y'ay'axvani/ <{[yh]yhxv-hny} or {[yh]y[h]xv-hny} (a kind of clams).

⁶⁸¹ Free form but syntactic status uncertain. Could contain {y-} (root no. 14380) and {#w} (suffix no. 4690).

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Root #	Old #	HE	OO	HA	KW	Gloss
14590	1573	ywd-	ywd-	ywd-	ywd-	four ⁶⁸²
14600	1549	ywt-	ywt- ywł-	ywt-	ywt- ywł-	settled in a routine or framework, trained, accustomed to sth., tamed
14610	1574	yws-	yws-	yws-	yws-	(HE/OO/KW) to spoon out, eat with a spoon; (HE/OO/HA) to sip; (HA) to drink
14620	1575				ywł-*	(?) ⁶⁸³
14630	1576				ywlh- ywł∞-*	to drift downriver
14640	1577			ywkv-	ywkv-*	(?) ⁶⁸⁴
14660	1578			yqv-		cedar bark for baskets
14661	2193 2366 2495	q- χ-	q- χ-	yqv- yq- r- q-	q- χ- h-	in regard to, for the benefit of, for the purpose of ⁶⁸⁵

⁶⁸² In most derivatives followed by {-w}, {-xv} or, in KW, {-kv}.

⁶⁸³ In KW /Yuł³ε³/* (a place name, probably that of Triangle Island) KW /Yuł³inuχv/* "Triangle Island people." Perhaps the root means "three."

⁶⁸⁴ HA in /y'ukva/ "soft, brittle (said of rock)"; KW in /yuk³va/* "slate, throw flat thing overhand."

⁶⁸⁵ In a number of full words, proclitics and enclitic-like elements referring to the 1st, 2nd and 3rd person and having various syntactic functions. The forms {yqv-} and {yq-} are attested only in HA (Kitamaat) {yqv#sw} > /yχvsu/ HA (Kitlope) {yq#sw} > /yχsu/ "It is you" (and note that in HA before /s/ there is no opposition between /qv/ and /χv/, /q/ and /χ/). The HE/OO counterparts have {q-}, cf. HE {q#sw} > /qs'u/; OO {q#sw} > /qsu/ "It is you."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
				χ- h ³ -		
14670	1579 1570	yχv-	yχv-	yχv-	yχv-	to shake, tremble, swirl, spin, Indiandance
14680	1580	yq-	yq-	yq-	yq-	to knit, to make net or web
14690	1581	yq- yhq-	yq- yhq-		yhq-/ yhχ-	(?) ⁶⁸⁶
14700	1582				yh-	to hang down, trail
14701	1549				yh-	to quit, give up trying, discontinue; to deviate from a course
14702				yhmh-		(?) ⁶⁸⁷
14710	1583	yhp-	yhp-	yhp-		to send on an errand, to order sth. done
14720	1584	yht-	yht-	yht-	yht-	to rattle (with a rattle, gambling bones)
14730	1585	yht-	yht-	yht-		backwards, in reverse ⁶⁸⁸
14740	1586	yht-		yht-		(?) ⁶⁸⁹

⁶⁸⁶ In HE /yχf'h/ OO /yχf'h/ "property to be given away at potlatch" and possibly in a number of proper names among which OO/KW /Yaxf'h/ (person's name, meaning unknown).

⁶⁸⁷ In HA /y'ama/ "small (compared to what one expected)" and possibly the place name /Yam'acisa/ said to mean "fine beach (all gravel and little stones)."

⁶⁸⁸ In HE /y'ay'at³ala/ OO /yayat³ala/ "remorseful" HA /y'aita/ "to regret doing sth."

⁶⁸⁹ In HE /y'ay'atuɬi/ (an unidentified bird) HE /y'adhsrM/ HA(Kitlope) /y'adhsrM/ HA (Kitamaat) /y'aidhsrM/ "harlequin duck." Boas (1928:184) adds "(= rattle face)" to the gloss "harlequin duck" and must believe this root {yht-} is identical to that for "rattle."

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Root #	Old #	HE	OO	HA	KW	Gloss
14750	1587	yhzh-				to complain, whimper ⁶⁹⁰
14760	1588				yhs∞kv-	suet, tallow ⁶⁹¹
14780	1625	y ³ h£-	y ³ h£-	yh£- y ³ h£-	yh£- y ³ h£-	bad ⁶⁹²
14790	1589				yhl-	to rock the cradle
14800	1590			yhl-		floppy object (e.g. towel, blanket) is somewhere
14810	1591				yhl-	to dig clams
14820	1592 1594				yhlk ³ -* yhxk ³ -	to hop on one foot ⁶⁹³
14830	1593	yhx-	yhx-	yhx-	yhx-	(HE/OO/HA) to potlatch; (KW) to give dowry
14840	1595		yhwhs-		yhwhs-	to stay a little while
14850	1595				yhw ³ yx-	1. in motion, moving about, moving things about, to rummage; 2. to give a winter ceremonial

⁶⁹⁰ Possibly in HE /y'aizak³ala/ "to ask for a favour" HE /y'ay'azasila/ "to take care of a cry-baby or any spoiled person."

⁶⁹¹ Possibly a polymorphemic stem but form and meaning of root and suffix(es) problematic. See also the similar case of HE/OO/HA/KW {hys∞kv-} "married."

⁶⁹² HA {yh£-} only in {yh£³wp-} "gassy feeling' in throat or stomach (sign of arrival of visitors)." KW {yh£-} only in {hhy³h£³w-} "to warn." KW {y³h£-} only in {y³h£³wp-} (same meaning as HA {yh£³wp-}) and {y³h£³w-} "wary, treating with caution."

⁶⁹³ {yhlk³-}* is Koskimo dialect according to Boas-Hunt.

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Root #	Old #	HE	OO	HA	KW	Gloss
14860	1596	yhqv-	yhqv-	yhqv-	yhqv-	to distribute gifts ⁶⁹⁴
14870	1597	yhqv-	yhqv-		yhqv-	(HE) long thing (e.g. log) lies somewhere; (OO) flat thing (e.g. board) lies somewhere; (KW) to lie still, lie dead
14880	1598	yhqv-	yhqv-		yhqv-	(?) ⁶⁹⁵
14890	1599	yhqv-	yhqv-	yhqv-		to wager, bet, put at stake
14900	1600				yhχv-*	(?) ⁶⁹⁶
14910	1601	yhrhł-	yhrhł-	yhrhł-		(?) ⁶⁹⁷
14920	1602	yhq-	yhq-	yhq-	yhq-	(?) to talk, engage in conversation ⁶⁹⁸
14930	1603	yhχ-	yhχ-	yhχ-	yhχ-	thin (said of liquid), molten, of low viscosity, liquefied (as lead, butter, ice)
14940	1604 1619				y ³ mł- y ³ wł-*	to burst, split open (berries, frozen pipe, clams), to split sth. open (e.g. game) ⁶⁹⁹

⁶⁹⁴ Some KW examples link the giving to a potlatch.

⁶⁹⁵ In words referring to woodworms and dentalia (i.e. tooth- or tusk-like shells as used in Indian jewellery).

⁶⁹⁶ In KW /yaχva/* "to starve."

⁶⁹⁷ In HE /y'arał'a/ OO /yarał/ HA /y'arał/ "a man's brother-in-law."

⁶⁹⁸ Only in the stems HE/OO/HA/KW {yhq-+gh³ł} "to utter sth." and KW {yhq-+nt-} "to talk."

⁶⁹⁹ {y³wł-}* only in KW /y³uł/* "to burst (e.g. clams and potatoes when being boiled)."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
14941	1623				y ³ mk-/ y ³ mx- y ³ hp-	(?) ⁷⁰⁰
14950	1605				y ³ mqv-*	to sit flat
14960	1606				y ³ mq-*	to spread apart, to burst apart
14970	1607	y ³ ł-	y ³ ł-	y ³ ł-	y ³ ł-	to spread out (e.g. things for drying), to spread apart (canoe, jaws of spring trap, one's legs)
14980	1608	y ³ łx-	y ³ łx-			to spread or pour out over an area
14990	1609				y ³ łkv-*	to carry a long, stiff object on the shoulder
15000				y ³ x-		to pour liquid into a container
15010	1610	y ³ y-	y ³ y-	h ³ y-		to keep sth. raised (like a net-buoy), to put the hand under sth. to raise it, to raise the hand, to wave
15020	1611	y ³ y-	y ³ y-	h ³ y-	h ³ y-	(exclamation expressing a negative experience)
15030	1613 2590	y ³ yt-	y ³ yt-	h ³ yt-	h ³ yt-	back, backwards, back again, in reverse; (HE/OO/HA also:) to row (facing backwards); (HA also:) to defecate; (KW also:) re-occurring ⁷⁰¹

⁷⁰⁰ Only example of {y³mk-/y³mx-} (not diagnosable if |k| or |x|) is KW /h³t³mxq³s/ "enjoying oneself." Only examples of {y³hp-} are KW /h³t³apq³s/ (synonym of /h³t³mxq³s/) and KW /h³ay³apq³sola/ "noise of people enjoying something."

⁷⁰¹ Possibly also in a word from the Koskimo dialect, /h³idayu/* "gaff hook."

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Root #	Old #	HE	OO	HA	KW	Gloss
15040	1614	y ³ ys-	y ³ ys-	h ³ ys-	h ³ ys-	(HE/OO/KW) to stay, to remain; (KW also:) to wait; (HA) to restore, renew
15050	1615	y ³ yx•- y ³ yxh-	y ³ yx•- y ³ yxh-	h ³ yx•- h ³ yxh-	h ³ yx•- h ³ yxh-	target or expected event getting closer, about to happen, almost
15060	1616	y ³ yq-	y ³ yq-	h ³ yq-	h ³ yq-	witchcraft; (HE/OO/HA also:) modern medicine
15070	1617	y ³ yχ-	y ³ yχ-	h ³ yχ-	h ³ yχ-	(?) ⁷⁰²
15080	1618	y ³ wmh-	y ³ wmh-			to visit for the purpose of getting a free drink or meal
15100	1620 1621	y ³ wgv- y ³ wgvh-	y ³ wgv- y ³ wgvh-	y ³ wgv- y ³ wgvh-	y ³ wgv- y ³ wgvh-	rain ⁷⁰³
15110	1622	y ³ χv-	y ³ χv-	y ³ χv-	y ³ χv-	to rise (tide), to flood
15130	1624				y ³ hs-*	to spread sth. open, to crack open (like cut, boil)
15150	1626				y ³ hlhq-	to send sb. ⁷⁰⁴
15160	1627 1628	y ³ hk- y ³ h xv-	y ³ hk- y ³ h xv-	y ³ hk- y ³ h xv-	y ³ hk- y ³ h xv-	bad ⁷⁰⁵

⁷⁰² Possibly in HE/OO {y³yχnt-} HA/KW {h³yχnt-} "to menstruate."

⁷⁰³ In many examples it is not diagnosable which of the two forms the root has. In these cases {y³wgvh-} is assumed because there is one example in which a locative suffix does diagnosably follow {y³wgvh-}, cf. HA {y³wgvh-yst•-=kv} > /y³ugv'aisdakv/ "caught in the rain (without a coat)."

⁷⁰⁴ May contain a root {y³hlh-} or {y³hl-}.

⁷⁰⁵ In all examples of {y³h xv-} except one it is followed by a suffix beginning in [p³] so that it is not diagnosable if the root ends in [kv] or [xv]. The exception pointing to [xv] is KW /y³ɔl³ɔl/ "ugly old (thing or person)." In HA and KW {y³hk-} can be substituted for {y³h xv-} (not vice versa). Perhaps this is a normalization because {y³hk-} occurs in very many more words than

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
15170	1629 2647		h ³ hr-		y ³ hr- h ³ hr-	(?) ⁷⁰⁶
15200	1630			gvd-	gvd-*	to become separated, disconnected, untied (like rope), to become disentangled
15201	1632				gvd-	(?) ⁷⁰⁷
15210	1631	kvt-	kvt-	gvt-	gvt- kvt-*	(?) goldeneye duck ⁷⁰⁸
15230	1633				gvt-*	to scream (from fear, love, excitement)
15240	1634 1652				gvn- gvhn ³ -	({gvn-}*) to fall down (said of e.g. trees, people), to keel over, to drop dead; ({gvhn ³ -}) to fold over, bend over, double up

{y³hxv-}. For HA the examples of {y³hxv-} are either from the Kitamaat informant or provided by the Kitlope one with the warning they are from Kitamaat.

⁷⁰⁶ In all examples combined with {-hs} which is suffix no. 2150 and occurs in kinship terms.

The combination means "a woman's female friend."

⁷⁰⁷ In KW /Gvagvada³χια/ "always potlatching" (proper name).

⁷⁰⁸ KW {kvt-}* is from the Koskimo dialect. Root may really refer to some physical characteristic of goldeneyes and possibly other ducks. The HA consultant referred to some kind of black ducks in the root's examples. Goldeneyes could be confused with black ducks because the back, wings, and tail of the male common goldeneye are black (cf.

http://www.allaboutbirds.org/guide/Common_Goldeneye/id). Male scoters are also black, see http://www.allaboutbirds.org/guide/Black_Scoter/id. HE/OO informants however positively identified goldeneyes, as does Boas (1928:248).

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Root #	Old #	HE	OO	HA	KW	Gloss
15250	1643				gvn-/ gvx-	(?) ⁷⁰⁹
15260	1643		gvnyp-	gvyn ³ p-	gvnp- gvnyp-	(?) to disintegrate, perish ⁷¹⁰
15270	1635				gvnχ-*	dentalia ⁷¹¹
15280	1636 1654		gvhs-		gvs- gvhs-	{gvs-}:) to rub, to scrub; to wring out (washing); {gvhs-}:) to fray, chafe, rub ⁷¹²
15290	1637			gvǣ-	gvǣ-	(HA) to appropriate, arrogate, take more than one's share; (KW) to keep in reserve, to leave standing for future use

⁷⁰⁹ Possibly in KW /gvniqv/ "embers of a fire" and a proper name with unknown meaning, KW /GvH³alalis/. A HA consultant the name was read to associated it with a Tsimshian term he pronounced as /gvH³a/ and which he said means "here!, take it!"

⁷¹⁰ Only examples are KW /gvnpa/ "to go after dry wood" and KW /gvnip/ OO /gvniH³m/ HA /gvni³p/ "dry, powdery alder wood." The OO term is a rare example of morphophonemically unpredictable OO accent. It shows change from |p| to |m³| (as is usual in HE/OO word-finally and before an obstruent, cf. {w³hp-} > {w³hm³} > /w³a³m/ "water") while the subsequent split of |m³| into |h³m| is preceded in OO {mhyt-+χd-hlh} > /maiH³χdala/ "lean body sideways (so that one can take away what one is sitting on)." Possibly OO /gvniH³m/ is an adaptation of borrowed KW /gvnip/. There is however some uncertainty about the KW term. It is listed in Boas (1948) and could be re-elicited except that one consultant pronounced it /gvni³ip/ rather than /gvnip/.

⁷¹¹ In two terms from the Koskimo dialect, sc. /gvHχ/* "dentalia" and /gvHχac³i/* "Koskimo basket for dentalia."

⁷¹² Boas (1948) gives examples of {gvs-} also meaning "to put a patch on" but they could not be reelicited.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
15300	1638				gvł-	(?) ⁷¹³
15301	1640				gvł- gvls-	(?) ⁷¹⁴
15310	1639 1769	xvlt-	xvlt-	xvlt-	gvlt- xvmt-	fire, on fire
15330	1641	gvłkv-	gvłkv-	gvłkv-	gvłkv-	(?) ⁷¹⁵
15340	1642				gvłkv-	(?) ⁷¹⁶
15350	1644	gvvy-	gvvy-	gvvy-	gvvy-	to awaken, wake up
15360	1645	gvyt-	gvyt-	gvyt-	gvyt-	(HA/HE) Tsimshian; (OO) belonging to more than one clan; (KW) belonging to other Indian tribes (esp. Salishan) ⁷¹⁷
15370					gvyc-*/ gvys*-	(?) ⁷¹⁸

⁷¹³ In KW /gvła/ "to lower the price of sth" KW /gvłisbnd/ "to put harpoon point on its shaft."

⁷¹⁴ {gvł-} possibly in KW /gval³ac³i/ and /gval³ic³a/ "abalone." {gvls-} in KW /gvłyadi/ "having abalone."

⁷¹⁵ In HA {[gvh]gvłkv-bhlh} > /gvagvłxvbal'a/ "hard of hearing" and the HE/OO/HA/KW free stem {gvłkv-m-} "deaf, hard of hearing." If stem's root {gvłkv-} means "deaf" it's unclear what the suffix {-m} means. If the suffix is the one referring to one's head, the root could mean "unyielding, hard to get through."

⁷¹⁶ In words referring to rubbing with sth. rough (e.g. with hemlock branches) or against sth. hard (e.g. with a flint to make fire, on a stone to sharpen sth.). It could be the same root as no. 15330.

⁷¹⁷ One KW consultant indicated the derivate /gvitla/ does not just refer to foreign Indians tribes but can be derogatory: "slow to understand, stupid."

⁷¹⁸ In KW /gvissmut/* and /gviss.w³t/* both meaning "head sparrow fellow."

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Root #	Old #	HE	OO	HA	KW	Gloss
15380	1646	gvyl-	gvyl-		gvyl-	to dismantle, tear down, pull apart; (KW also:) to scatter ⁷¹⁹
15390	1647	gvwt-	gvwt-			to stack, pile things up
15400	1648				gvq-	to pour out, to throw out a liquid
15410	1649	gvh-	gvh-	gvh-	gvh-	low, down; (KW also:) downriver, north
15420	1650	gvh-/ gvhk-/ gvhx-				(?) ⁷²⁰
15430	1651	gvhn ³ -	gvhn ³ -	gvhn ³ -	gvnhn- gvhn ³ -	to relate to a standard of quantity or quality: to assess, test, judge, weigh etc.; (HA also:) to restrict, to control, to ration
15460	1649	gvhs-	gvhs-	gvhs-	gvhs-	tears, to weep
15470	1653	gvh- gvhs•-	gvhs•-	gvhs•- gvhsh- gvhs-	rvhs•- rvhsh- rvhs-	(on) this side ⁷²¹
15490	1655				gvhkv-	discoloured by smoke (like a pulp mill's cellulose sheets that look like off-white paper)
15500	1656				gvh xv-	sea parsley

⁷¹⁹ Most KW examples point to the "scatter" sense only.

⁷²⁰ In HE /gv'ax.h³it/ "to move back suddenly (as a fish when startled)."

⁷²¹ {gvh-} only in HE /gv'aki³a/ "on this side of the top of sth. bulky (e.g. a cabin)" and derivatives. The KW root may have |rv| instead of |gv| due to contamination with the uvular of its antonym KW {qvys•-} (HE/OO/HA {χvys•-}) "over there, on that side."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
15510	1657				gvhq ³ l-	to prevent sth. undesirable (e.g. fire from going out) ⁷²²
15520	1658				kvm-	to stoop (whole body), to bend the body down
15530	1659			kvmt-	kvmt-	to stoop, to have or move one's head down
15540	1660	kvmc-			kvmc-	to stoop, to lean forward
15550	1661				kvmł- kvmx-	(?) ⁷²³
15560	1662				kvdkv- kvhdkv-	continuously, always ⁷²⁴
15570	1663		kvt-		kvt-	(KW:) rising low (like hill, island, floating log), sinking a small distance, shallow (like depression, low-sided basket); (OO possibly:) concave or convex object ⁷²⁵

⁷²² Only two examples. Stem may be analyzable as {gvhq-+l-} but meaning of root and suffix are unknown.

⁷²³ Root may mean "to stoop, move head downward" because grouse spend most of their time on the ground and bob when foraging.

⁷²⁴ In KW /kvdkva/ "continuously" and two synonymous proper names, KW /Kvdgvisila³urva/ and /Kvadgvisila³urva/ "always (potlatching) woman."

⁷²⁵ OO only in /kvti³a/ and /kvtqi³a/ "cover, lid," words that are synonymous with OO /h³mki³a/ and like it contain suffix no. 4070.

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Root #	Old #	HE	OO	HA	KW	Gloss
15580	1664	kvn-	kvn-	kvn-	kvn-*	pungent ⁷²⁶
	1669	kvl-		kvhn ³ -		
	1676					
15590	1665	kvnc-	kvnc-	kvnc-	kvns-	to use steam (e.g. to poultice,
	1666	kvns-	kvns-	kvns-		bend wood, take a steam bath,
	1684			kvyx-		bake); (KW also:) to steam up,
						fog up, cloud over; (HA {kvyx-}
						also:) to get steamed up about
						sth. ⁷²⁷

⁷²⁶ Only in (1) the names for mink, (2) OO /kvH³χdi/ KW /kvH³χsde³/* "musk bag of animals (e.g. mink)," (3) the HA name for a frog (more likely toad), (4) HA terms deriving from {kvhn³-} and having to do with yellow cedar. According to <http://www.for.gov.bc.ca/hfd/library/documents/treebook/yellowcedar.htm> "the inside of yellow cedar bark smells like potatoe skins." A commentator at <http://forum.norwoodindustries.com/board/viewtopic.php?f=2&t=1084> wrote that "the smell of yellow cedar is strong and unique. Pungent. When we would get in the crummy at the end of the shift, you could smell who had cut yellow cedar that day. Very strong odour." The frog connection is problematic because there is a frog that smells like mink and is therefore called mink frog, however, it lives no further west than Manitoba. The mountain yellow-legged frog emits a pungent odor when disturbed but belongs to the Sierra Nevada and southern California (cf. <http://earthjustice.org/irreplaceable/mountain-yellow-legged-frog#>). Perhaps the frog the HA term refers to is really a toad. At <http://www.kidzone.ws/lw/frogs/facts8.htm> one reads "Toad's skin lets out a bitter taste and smell that burns the eyes and nostrils of its predators, much like a skunk does." The form {kvl-} instead of {kvn-} occurs in HE /kvлχd'i/ which is the counterpart to OO /kvH³χdi/ "musk bag of animals."

⁷²⁷ HE/OO {kvns-} only in the word for a steam box and old-fashioned box stove. HA {kvyx-} may originate by backformation from examples where {kvns-} is followed by a suffix beginning in |=| and metathesis occurs between |n| and |y| (from |s-=|), as in {kvns-=hc³y} > {kvny∞-hc³y} > {kvny-hc³y} > {kvyn-hc³y} > /kvin'ac³i/ "steam box" and {kvns-=kv} > {kvny∞-kv} >

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Root #	Old #	HE	OO	HA	KW	Gloss
15600	1667	kvnxv-	kvnxv-	kvnxv-	kvnxv-	loud noise, rumbling, thunder
15610	1668 1680	kvnq-	kvnq-	kvnq-	kvn ³ q- kvn ³ χ-	pungent, musky; repugnant, repulsive; (in most KW examples:) spoiled, rotten (said of clams) ⁷²⁸
15630	1670 1672	kvs-	kvs-	kvs-	kvs- kvsx•- kvsx- kvsxh-	to splash, spray, wash, bathe (with water or urine)
15650	1671	kvs-	kvs-	kvs-	kvs- k ³ vs- q ³ vs-	dark colour (grey, blue, black) ⁷²⁹

{kvyn∞-kv} > /kvinəkʷ/ "meat steamed in an underground oven." Both these examples are from the Kitamaat consultant; the Kitlope one used /kviniy'ac³i/ < {kvyx-=ys=hc³y} and /kviniy'ukv/ < {kvyx-=ys=-kv}, respectively.

⁷²⁸ Some examples refer to what informants call frogs but are probably toads. On toads and bad smell see the comment on root no. 15580. Toads "are associated with sickness and disease," cf. p. 145 of Kwakiutl String Figures by Julia P. Averkieva, UBC Press, 1992. Boas's listing of {kvn³χ-} derivates (1948:299) suggests the root is primarily about a kind of colour but this is likely a misinterpretation.

⁷²⁹ 1. {kvs-} occurs in KW /kvskv/ "Stellar's jay" KW /kvskvssm/ "blue blanket" HE /kvi'uqʷ/ HA /kvi³auqʷ/ (an unidentified small grey diving sea bird). The Stellar's jay is often mislabelled "bluejay" in the Pacific Northwest; its lower body is blue like a bluejay but its upper body and head are black. The base form {kvs-} and various augmented forms occur across families, see first of all Proto-Salish *-kvas- represented by Sechelt kvəsim "blue" Comox kv'əsim "colour of evening or morning sky" Shushwap kvəses "getting dark" etc., see Kuipers (2002:47). In augmented form and with |s| replaced by |š| the root also occurs in South Wakashan, cf. Makah kviškviši Ditidaht xviišxviiš "bluejay" (= Stellar's jay) cited in Fortescue (2007). 2. It is uncertain

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
15660	1673 1970 1971	kvɬm-	kvɬ•-	kvɬm- qvɬm-	kvɬ-* qvɬ-	sticking out or hanging down from a point of attachment (like roots still attached to a stump or log, or strips in a tassel); (HA possibly also:) to stick together (like group of people or animals) ⁷³⁰
15670	1674	kvɭ-	kvɭ-			pile of things collapses or disintegrates
15680	1675	kvɭ-	kvɭ-	kvɭ-	kvɭ-	to lie somewhere, to lie down (said of animate beings)
15690	1677				kvɭxv-	greyish, blond, faded
15700	1678				kvk-	to burst (like boil), to pop (like berries in mouth)
15710	1679				kvk-	to trip, stumble, fall down (persons/animals)
15720	1681 1682	kvyt-	kvyt-	kvyt-		(HE/OO) to break (said of waves); (HA) to rip, to tear
15730	1683	kvys-	kvys-	kvys-	kvys-	to spit
15750	1685 1844	kvykv-, wykv-	kvykv-, wykv-	kvykv-	kvykv-	(kvykv-):) to whistle (with fingers or like eagle or marmot); {vykv-}:) eagle
15760	1686	kvyq-	kvyq-	kvyq-	kvyq-*	to sting (like wound, pepper), to scold, to act angrily

if {kvs-} occurs also in HE /kv'ay³alaqs/ HA /kvay³al'aɣs/ OO /kvaira/ "Steller's jay." The name could be a foreign borrowing with native suffixes added.

⁷³⁰ If |m| in the forms {kvɬm-} and {qvɬm-} is suffix no. 490 and means "protruding," it would in all examples but one be followed by the form {-rm} of this same suffix no. 490.

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Root #	Old #	HE	OO	HA	KW	Gloss
15770	1687	kvyɣ-	kvyɣ-		kvyɣ-	(KW) to strike with stick (as in an attack or to crack open nuts or clamshells), to murder, to bang on floor with stick, to beat time; (HE/OO) to crack open (nuts, clam shells) ⁷³¹
15771	1688	xvwmyt-	kvwmyt-			to move up and down, to move to and fro, to seesaw, to teeter
15780	1689	kvwɬ-	kvwɬ-			(HE) to break a branch; (OO) to bend sth. long (e.g. a piece of wire)
15781		kvwɫ-				(?) ⁷³²
15800	1690 1699	kvhq-		kvhq-	kvq-	to split (wood), to part (bushes), to open up (crack)
15810	1691	kvhs-	kvhs-		kvhs-	to trample, stamp the feet, push with the feet; (KW also:) to scorn sb., to kick sb. out
15820	1693				kvhɬ-	to decrease (in size or volume, like berries settling), to become indistinct (to sight)
15830	1694				kvhx-	smoke (from fire or chimney)
15840	1695	kvhkv-	kvhkv-	kvhkv-	kvhkv-	(?) ⁷³³

⁷³¹ HE/OO/HA use {h³ɣ-} to refer to murdering and beating up.

⁷³² Only in HE {[kvh]kvwɫ-+ɣɣ-ay³} > /kv'akvu³ɣɣ'ai/ "one's rear end."

⁷³³ In names of tribal divisions on northern Vancouver Island and the adjacent mainland, and in words referring to the tongue of one subdivision, the Kwakiutl. Boas tried but failed to get to this root's meaning and complains for example on p.112 of The Social Organization of the Kwakiutl

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Root #	Old #	HE	OO	HA	KW	Gloss
15850	1696	kvh _{xv} -	kvh _{xv} -	kvh _{xv} -	kvh _{xv} -	hole, hollow, pit; wind-filled, lungs, airbag, swelling, pustule ⁷³⁴
	1697	k ³ vh _{xv} -	k ³ vh _{xv} -	k ³ vh _{xv} -		
	1698	qvhq _v -	qvhq _v -	qvhq _v -		
	2001					
	2003					
	2006					
15860	1692	kvh ³ c-/ kvh ³ s-	kvh ³ c-/ kvh ³ s-			(?) ⁷³⁵
15870	1700	k ³ vp-	k ³ vp-		k ³ vp-	to make a slit in a layer and rip one side off, to tear off along a line (e.g. sheet off a writing tablet) ⁷³⁶
	1701	k ³ vhp-	k ³ vhp-		k ³ vhp-*	
	1755				qvh _p -	
	1756					
	1997					
15890	1702	k ³ vp-	k ³ vp-			(?)muddy ⁷³⁷

(in American Anthropologist - New Series, Vol. 22 No 2 of April - June 1920) that informants derive /Kvagu³l/ "Kwakiutl" folk-etymologically from {kvh_x-} "smoke" (root no. 15830).

However, a connection with smoke is possible if {kvh_kv-} is related historically to HE/OO/HA {kv_xv-} KW {k_xv-} "to rise or blow out forcefully (hot air, steam, breath, dust, smoke); (KW also:) to give off a smell" (root no. 12450).

⁷³⁴ HE/OO {kvh_{xv}-} only in HE/OO {kvhw³t-} "musical instrument."

⁷³⁵ In HE /kv'ikv'aziłba/ OO /kvikvaziłba/ "ocean bird with a parrot-like beak - probably a puffin."

⁷³⁶ OO {k³vhp-} only in /k³vapa/ "to part because of arguments (as husband and wife)." KW {k³vhp-}* in /k³vabirχstɛ³/* "lips."

⁷³⁷ In HE/OO {k³vp³s-} "mud."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
15900	1703			k ³ vhm ³ -	k ³ vm-* k ³ vm ³ - k ³ wm ³ -	(?) ⁷³⁸
15920	1705	q ³ vm-		k ³ vm-	k ³ vm-	to become detached, break away (like in landslide) ⁷³⁹
15930	1706	k ³ vmt-	k ³ vmt-	k ³ vmt-	k ³ vmt-	to suck; (HA/KW also:) to inhale tobacco smoke
15940	1704 1707			k ³ vms-	k ³ vms- k ³ vmws-	to tighten the opening of a bag or conduit, to gather material (as in sewing), to pucker the lips ⁷⁴⁰
15950	1708 1711	k ³ vms-	k ³ vms-	k ³ vms-	k ³ vml- k ³ vml ³ -	to char, burn, scorch, go dry
15960	1709				k ³ vm£-*	to shrink back, to draw back
15970	1710			k ³ vm£-		to grow up (child, plant)
15980	1712				k ³ vml-	battledore and shuttlecock game
15990	1713	k ³ vt-	k ³ vt-	k ³ vt-	k ³ vt- k ³ vht-	to stick on, sticky, to stick together; (KW also:) to infect ⁷⁴¹

⁷³⁸ In KW /k³vm³a/, /k³um³a/ and /k³vms£³a/* "bullhead" and in HA /k³vam³χs/ "baby bullhead." Uncertain which fish is meant by "bullhead" but it is likely a sculpin. The root could refer to the wide, heavy head of sculpins (cf. <http://www.britannica.com/animal/sculpin>). The root's various forms could derive from a cross-family stem *{k³vwm∞-}, cf. Proto-Salish *-q³vum- [1] "skull, head, hair on head" and *-q³vum- [2] "lump, pile, top, high" in Kuipers (2002:97).

⁷³⁹ HA only in /k³vm'aχa/ "to come off, become detached (e.g. boards from a wall)." KW only in /k³vmx.h³id/ "to rush away, to slide (mountain)."

⁷⁴⁰ KW {k³vmws-} may have developed via {k³vm[m]s-} from {k³vm[∞]s-}.

⁷⁴¹ {k³vht-} only in KW /k³vatɲa/ "burrs."

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Root #	Old #	HE	OO	HA	KW	Gloss
16000	1714	k ³ vt-	k ³ vt-	k ³ vt-	k ³ vt-	(?) ⁷⁴²
16010	1715			k ³ vt-	k ³ vt-	(?) ⁷⁴³
16020	1716	k ³ vn-	k ³ vn-	k ³ vn-	k ³ vn-*	(?) ⁷⁴⁴
16030	1717	k ³ vnc-	k ³ vnc-	k ³ vnc-		wrinkled
16040	1718	k ³ vnł-	k ³ vnł-	k ³ vnł-		intestines ⁷⁴⁵
16050	1719				k ³ vnxv-	sunburnt
16060	1720 1765	k ³ vnq-	k ³ vnq-	k ³ vnq-	k ³ vnq-	wet, damp
16070	1721	k ³ vc-/ k ³ vs-	k ³ vc-/ k ³ vs-	k ³ vc-/ k ³ vs-	k ³ vc-/ k ³ vs-	leather, hide
16080	1722 1723	k ³ vs-	k ³ vs-	k ³ vs-	k ³ vs-	light (in weight) ⁷⁴⁶
16090	1724	k ³ vy-	k ³ vy-		k ³ vs-	to sit (optionally used instead of {k ³ vh-} when talking about a plurality)
16091					k ³ vs-	(?) ⁷⁴⁷
16100	1760	k ³ vhs- k ³ vhxs-	k ³ vhs- k ³ vhxs-	k ³ vhs-	k ³ vs- k ³ vhs-*	dish-shaped things piled up, mussels

⁷⁴² In the name of an unidentified plant called Indian tobacco.

⁷⁴³ In words referring to a blanket. Boas (1948:304) interprets them as derivates of {k³vt-} "to stick on etc." (root no. 15990) but its semantic basis is unclear.

⁷⁴⁴ Possibly in {k³vnhxv-} "to split off boards."

⁷⁴⁵ The HA informant specified reference is to the guts of deer or mountain goat, not fish.

⁷⁴⁶ Also in HE /k³vsłs/ OO /k³vsłs/ "wolf." Wolves are said to move across snow as if having little weight. This must be thanks to their large feet with slight webbing between the toes.

⁷⁴⁷ Perhaps in KW /k³vıuqv/ [2] "mischievous, proud"

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
16110	1725				k ³ vl-	to pluck out (hair, beard, eyebrows, roots, seaweed)
16120	1726 1727 1728	k ³ vl-	k ³ vl-	k ³ vl-		to stir, squirm, move slightly; stop-and-go when swimming ⁷⁴⁸
16150	1730			k ³ vlp-		(?) to squirm ⁷⁴⁹
16160	1731				k ³ vlp-	to pluck off (berries), to tear apart (meat)
16170	1732			k ³ vlt-		(?) ⁷⁵⁰
16180	1733				k ³ vls-	to take fish off the hook or out of the net; to take game out of the trap
16190	1729	k ³ vl ³ xv-/ k ³ vl ³ χv-	k ³ vl ³ xv-/ k ³ vl ³ χv-	k ³ vlxv-/ k ³ vlχv-		(?) ⁷⁵¹
16200				k ³ vlq-		(?) fur-bearing aquatic animal ⁷⁵²

⁷⁴⁸ In words referring to the movements of fish, seal and also probably in the word for land otter because according to the HA (Kitlope) informant a land otter owes its name to being fast when swimming in any direction.

⁷⁴⁹ In HA (Kitamaat dialect) /k³vɫb'm/ "worm."

⁷⁵⁰ Only in HA /k³v'ɫk³vɫ/ "wild raspberry."

⁷⁵¹ In HE /k³vɫ³uH/ OO /k³vɫ³uH/ HA /k³vɫɫuH/ "black bud of cottonwood" and derivatives; HE /k³vɫw³as/ (with two low tones) OO /k³vɫw³as/ (with accent on /ɫ/) "northern black cottonwood, balsam poplar." According to http://www.fs.fed.us/wildflowers/plant-of-the-week/populus_balsamifera.shtml "The bark is rough and dark-colored, thus 'black cottonwood.'" The root could be a cross-family one, cf. Proto-Salish *-q³val/-q³vay- "to scorch, black, (burn to) ashes; roast, ripen; berry" in Kuipers (2002:95).

⁷⁵² In HA /k³v'ɫq³χɫa/ "fur seal" and HA /k³v'ak³vɫq³a/ "to hunt for land otter."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
16210	1735				k ³ vlχ-	to sight sth.
16211	1734				k ³ vl ³ k-	(?) to sight, to recognize ⁷⁵³
16220	1736 1761	k ³ vhx-	k ³ vhł- k ³ vhx-	k ³ vhx-	k ³ vx-	scum, slime, saliva, mucous
16230	1738	k ³ vyt-	k ³ vyt-	k ³ vyt-	k ³ vyt-	to pry loose, to pry apart, to use leverage; (KW also:) barnacles (by back-formation)
16240	1739	k ³ vys-	k ³ vys-	k ³ vys-	k ³ vys-	snow
16250	1740				k ³ vył-	to feast
16260	1741	k ³ vykv-	k ³ vykv-	k ³ vykv-	k ³ vykv-	to squirm, wriggle, twist, distort, warp, skew; misaligned (in HA also:) to sidestep, miss out on sth.
16270	1742	k ³ vyxv-			k ³ vyxv-*	(?) ⁷⁵⁴
16280	1743			k ³ vyχv-		to smile
16290	1744 1752	k ³ vχ-	k ³ vχ-	k ³ vyq-	k ³ vχ-	to wink, blink, flash, keep one eye closed
16300	1745	k ³ vyq-	k ³ vyq-	k ³ vyq-		to choose, select (as from a list), elect, set a target, determine which is best
16310	1746 1747	k ³ vyχ-	k ³ vyχ-	k ³ vyχ-	k ³ vyχ-	to make arrangements, to negotiate (deal, marriage), to agree to sth., to plan; (KW also:)

⁷⁵³ Possibly in the unanalyzable KW proper name /K³vɭ³k³ɛs/ said to mean "always recognized, prominent."

⁷⁵⁴ In KW (Koskimo dialect) /k³vixva/* "to twist" HE /k³v'ixv'an'i/ KW /k³vixvanɛ³/* "geoduck clam." Root could be an alternant of {k³vykv-} (root no. 16260).

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
						to advise, to council; (HE/OO also:) to request sth., to ask a favour, to persuade sb. to do sth. ⁷⁵⁵
16320	1751	k ³ vq-	k ³ vq-	k ³ vq-	k ³ vq-	light, bright, daylight; to flash (with a light or like a bird with colours)
16330	1753				k ³ vχ-	square
16340	1754	k ³ vh-	k ³ vh-	k ³ vh-	k ³ vh-	to sit, to be in a fixed position (said mainly of a single animate being)
16350				k ³ vh-		(?) ⁷⁵⁶
16380	1757				k ³ vht-*	to bet ⁷⁵⁷
16400	1759	k ³ vhs-				(?) ⁷⁵⁸
16410					k ³ vhywkv-	(?) ⁷⁵⁹
16420	1762				k ³ vhy ³ -	rather, quite
16430	1763				k ³ vhxv-	tallow ⁷⁶⁰

⁷⁵⁵ Boas lists HE and/or OO derivates of {k³vyχ-} on p. 252 of Bella Bella Texts that could not be reelicited but point to the root also having the sense "to advise, to counsel" as in KW.

⁷⁵⁶ In HA /k³vaa/ "to pay ransom for an enslaved relative."

⁷⁵⁷ In KW /k³vata/* "to stake in a bet" and /k³vatɔl³a/* "to bet against each other" (both from the Newettee dialect).

⁷⁵⁸ In HE /k³v'ask³vasa/ "to limp."

⁷⁵⁹ In KW /k³vayukvɫa/ "to shake one's body up and down (dancing)."

⁷⁶⁰ In the place name KW /K³vaxvm/ "tallow on face" and two non-reelicitable KW words, /k³vaxva/* "to rub tallow on" and the place name /K³vaxvɫawad/* (meaning unknown).

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
16431					k ³ vhwh-*	(?) to sever, split off ⁷⁶¹
16440	1764			k ³ vhq-	k ³ vhq- k ³ vh ³ q-	wood (especially cedar)
16450	1766	k ³ vh ³ qv-				(?) ⁷⁶²
16460	1767 2085				xvp-	hole, cave, hollow
16461	1768 1793	xvm- xvhm ³ -	xvm- xvhm ³ -			long pointed thing shoots out (like bee's stinger, a flame)
16470	1770	xvmt-	xvmt-	xvmt-		to suck in, siphon, pump, draw in breath
16480	1771			xvmc-/ xvms-	xvms-	to sniffle
16490	1772 1773	xvmq-	xvmqv- xvmq-	xvmq-		sharp point penetrating a surface (as a bee stinging), pointed thing touching a surface (as in sniff- kissing); nose; to smell sth.
16500	1774				xvt-	to decrease in size or volume (like water level in well or berries settling in basket)
16501				xvt ³ q-		(?) ⁷⁶³
16502					xvn-*	(?) ⁷⁶⁴
16503	1776				xvn£-*	to get faint

⁷⁶¹ In five words listed in Boas (1948:307) but never yet reelicited.

⁷⁶² Possibly in HE /k³v'ik³v'aqv£awa/ "lichen."

⁷⁶³ Only in HA /xvt³qa/ "tidal wave."

⁷⁶⁴ Only in KW /xvna/* "mud with air in it."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
16510	1775	xvnys-	xvnys-	xvnys-		cold spring ⁷⁶⁵
16520	1777	xvs-	xvs-	xvs-	xvs-	long thing spans a distance, long
	1779	xvhs-	xvhs-	xvhs-		thing sweeps or sways across
	1784	xvh ³ s-	xvh ³ s-			(e.g. thread, tree branch), to lean over; (KW also:) to whip, to beat with stick; (HA also:) to bob (like end of sth. that leans over at intervals, e.g. a seesaw) ⁷⁶⁶
16540	1778				xvs-	fort ⁷⁶⁷
16560	1780	xvlp-	xvlp-	xvlp-	xvlp-	open, gaping, hollow inside, to
	1781					cave in
16570	1782				xvls-	to wither, shrivel up; lonely, longing for sth.
16580	1783	xvyqv-	xvyqv-	xvykv-	xvyp-	to whistle (with the lips) ⁷⁶⁸
16590	1785	xvyt-	xvyt-	xvyt-	xvyt-	(HE/OO/KW) to stick out, exceed; to handle sth. sticking out (e.g. by tipping it up), to lever up; (HA) long thing (e.g. tree) leans over, to sway, to swing
16600	1787	xvy ³ s-	xvy ³ s-	xvys-		to whip, whipping movement

⁷⁶⁵ May contain a root {xvn-} or {xvns-}.

⁷⁶⁶ Related to this root is HE/OO {xvy³s-} HA {xvys-} (root no. 16600) which refers specifically to whipping.

⁷⁶⁷ Boas (1948:379) considers this root a semantic extension of root no. 16520, perhaps because a fort dominates (holds sway over) an area.

⁷⁶⁸ A cross-family stem, cf. Proto-Salish *-xviw- "to whistle" and the alternation of labial, velar and uvular among its descendants in Kuipers (2002:121).

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
16610	1786				xvys-*	(?) ⁷⁶⁹
16620	1788	xvył-	xvył-	xvył-	xvył-	movement in alternating directions, to pitch (hence: at an angle; to turn a corner sharply, to zigzag, to stagger, to lurch, to wrestle, to reverse directions, to return, to back out; (HE/OO/HA also:) to throw to a target, to drop, to fall) ⁷⁷⁰
16630	1789				xvyq-	potlatch gift that is to be returned ⁷⁷¹
16640	1790				xvyq-*	streak, marking (with coal or paint)
16650	1791	xvyq-	xvyq-	xvyq-	xvyq-*	to string a line, to swing a line or long thing, to throw a rope
16651					xvw-*	(onomatopoeic) ⁷⁷²
16660	1792		xvh-		xvh-*	(?) ⁷⁷³

⁷⁶⁹ Only in KW /xvisa/* "marriage present (to bride's father)."

⁷⁷⁰ On the relationship between movement in alternating directions and just falling see the description of the polysemy of "to pitch" in Webster's Collegiate Dictionary.

⁷⁷¹ In KW /xviqa/* "potlatch gift that is to be returned" KW /xvaxvirala/ "to return gift due in the potlatch."

⁷⁷² In KW /xvuxvuxvu/* "Raven's cry (presaging poor salmon year)."

⁷⁷³ In OO /xvaan³ia/ "a game in which people run around sb." OO /xvaan³iazuis/ (an unidentified stellar configuration) KW /xvan³iala/* "tree sways in wind."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
16670	1794	xvht-	xvht-	xvht-	xvht-	(HE/OO/HA) to rake, to pull sth. towards oneself with a stick; (KW) to scratch ⁷⁷⁴
16680	1795 1796 1797	xvhs-	xvhs-	xvhs-	xvhs-	poised for moving or acting, on edge, aroused, excited, agitated, coming into sight
16690	1798			xvhl-	xvhl-	crosswise, in crossed directions
16700	1799		xvhkv-		xvhkv-	canoe ⁷⁷⁵
16710	1800				xvhkv-	croaking sound
16720	1801	xvhkv-	xvhkv-	xvhkv-	xvhkv-	to disintegrate, to separate
16730	1802	xvhq-	xvhq-	xvhq-	xvhq-	to scratch, to mark by scratching
16740				wp-		water rising and rippling over objects, water washes over sth.
16760	1806	wn-	wn-	wn-	wn- wnk-/ wnx-	to enter, penetrate, go inside; (hence:) (HE/OO/HA) to insert a plug, fill an opening; (KW) to drill (with auger) ⁷⁷⁶
16780	1808	wny- wly-	wn- wny-	wny-	wly-*	to go on, to proceed, to go ahead ⁷⁷⁷

⁷⁷⁴ The only KW example is /xvata/ "to scratch swelling to relieve pressure."

⁷⁷⁵ OO only in /xvak³vha/ "a type of canoe fit for one or two persons." Could be a dialect borrowing from KW.

⁷⁷⁶ {wnk/x-} only in KW {wn[wh]k/x-.m³wt} > /wḥwax.m³ut/ "leftovers from drilling" (alternant of KW /wḥwam³ut/).

⁷⁷⁷ HE {wly-} in /wḥ'ixsiḥa/, variant of /wḥ'ixsiḥa/ "goodbye." KW {wly-} in /wḥiḥa/* "to utter war-cry."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
16790	1806				wnmt- whnm-	immobile, dead
16800	1805 1867	wn- whn ³ -	wn- whn ³ -	wn- whn ³ -	wn- whn ³ -	white, milky (like the sea when the herring release their milt), herring
16810	1809	wnc-	wnc-	wnc-	wns-	sunken, submerged, floating deep, soaked; (HA also:) at low level (as one's mood)
16820	1810 1812				wnł- wnx-	(?) impressive, incredible, excessive ⁷⁷⁸
16830	1811				wnł-*	(?) ⁷⁷⁹
16860	1814				wnχv-	(?) ⁷⁸⁰
16870	1815 1832	wnq-	wnq-	wnq-	wnq- wlq-*	(KW) deep (eyes, water etc.), deep inside sth.; (HE/OO/HA) deep in the water, low in the water (like boat) ⁷⁸¹
16871	1816	wnq ³ -	wnq ³ -	wnq ³ -	(bn ³ -)	down, under, below, lower, at bottom, deep down
16872	1807	w ³ n ³ hł-	w ³ n ³ hł-	w ³ nhł- w ³ n ³ hł-	wn ³ hł-	physical or mental disturbance (as when feeling one is being

⁷⁷⁸ In KW /wHwHłxəs/ "wonderful, incredible" (also name of Cannibal society) KW /wHwHxəs/ "grand, great, huge, big, wonderful (superlative)" KW /wHwHxəsa/ "to overdo, do sth. to extremes." The root forms {wnł-} and {wnx-} are both uncertain.

⁷⁷⁹ In KW /wHła/* "damp ground."

⁷⁸⁰ In KW /wHχva/ which refers to oil passing through one's body. Unclear if root is related to that referring to scorching and burning (no. 4940).

⁷⁸¹ Few HE/OO/HA examples. Some KW derivatives of {wnq-} correspond to HE/OO/HA derivatives of {wnq³-}.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
						touched, having a presentiment or being drunk, dazed) ⁷⁸²
16880	1893	wc-/ ws-		wc-/ ws-		(?) ⁷⁸³
16881	1820				wc-*/ ws-*	(?) ⁷⁸⁴
16890	1817				ws-*	(?) ⁷⁸⁵
16900	1819			ws-	ws-	to roll, to twist (for spinning or removing debris)
16920	1803				wsdys-	up landwards from the beach ⁷⁸⁶
16930	1821				wɬ- whɬ-	to question, to ask; to hear (speech or any sound)
16940	1822	wɬ-	wɬ-	wɬ-	wɬ-	to have antlers or horns
16941					wɬ-*/ wɬ-*	(?) ⁷⁸⁷
16950	1823	wɬ-	wɬ-		wɬ-	without help, unsupported, without or as if without cause,

⁷⁸² Stem may contain a root HE/OO/HA {w³n-} KW {wn-} or HE/OO/HA {w³nɬ-} KW {wnɬ-}.

HA derivatives with both initial /w³n/ and /w³nɬ/ have been recorded.

⁷⁸³ Possibly in HE (Klemtu dialect) /wz'ik/ HA /wzik/ "moose." The HA informant said the term is onomatopoeic. The 1980 root list mistakenly writes the term with /w³/ instead of /w/.

⁷⁸⁴ In KW /wzhris/* "mud."

⁷⁸⁵ In KW /wsali/* "small barnacle."

⁷⁸⁶ In KW (N³ak³vaxda³χv dialect) /wsdisɬax.h³id/ "to carry up from beach." This is suffix no. 4430 used as a root.

⁷⁸⁷ In KW /wɬra/* glossed by Boas or his editor as "a diving sea bird, loon" and "kind of spoon of Haida."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
						effortlessly; to try one's luck, to venture; in vain
16960	1826 1875	wl-	wl-	wl-	wl- whl ³ - w ³ hl ³ -	stopped, stalling, arrested, confined, imprisoned ⁷⁸⁸
16970	1827				wlt-*	bear grease
16980	1828 1829		wlk-		wlk- wlx-	to encircle, constrain, contain, bind, tie up
16990	1824	wlyqv-	wlyqv-	wlyqv-	wly ³ χv-*	baby seal ⁷⁸⁹
17000	1830	wlxv-	wlxv-	wlxv-	wlxv-*	before other things, with priority, at short notice
17010	1831	wlχv-	wlχv-		wlχv-	to use a love charm
17020	1833	wlq-	wlq-	wlq-		afraid, scared
17030	1834	wlq-	wlq-		wlχ-*	to encircle, constrain, contain, bind, tie up
17040	1835			wk-	wk-	to break off (said of crumbly or friable things)
17041	1862 1907 2502 2619	wh- why- hhy- h ³ wh- w ³ w-	ww- wh- why- hhy-	wy- wh- h ³ ww-	wy- wh- why-	1. proceed!, go ahead!, to affirm, to say Yes; 2. (interjection marking the beginning or termination of an act or a train of thought, and to capture or

⁷⁸⁸ The alternant {w³hl³-} may be the result of confusing the augmented form {whl³-} of {wl-} with the stem {w³h-l³-} "distance (e.g. length, height, depth, radius, scope), limit of a course." Boas (1948) only lists examples of {w³hl³-}, not {whl³-}.

⁷⁸⁹ In HE /wɫ'iqv/ OO/HA /wɫiqv/ KW /wɫi³χv/* "baby seal." It could contain a root {wɫ-}, {wl-} or {wls-}, and it could be monomorphemic {wlqv/χv-} with a |y| or |y³| augment.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
			hhw- h ³ wh-			maintain the listener's attention:) well!, well now!, behold! ⁷⁹⁰
17050	1836	wy-	wy-	wy-	wy-	to reach for the limit, to fail to reach the limit, to come up short, to lack
17060	1836	wy-	wy-	wy-	wy-	to lift off, to rise
17070	1837				wyp-*	(?) ⁷⁹¹
17080	1838	wynh- wyn∞-	wynh- wyn∞-	wynh- wyn∞-	wynh- wyn∞-	to raid, attack, make war; to challenge; in turmoil
17090	1839	wys-	wys-	wys-	wys-	male, forceful
17100	1840	wy£-	wy£-	wy£-	wy£-	weak, feeble; to get the better of sb., to overpower; to overcome difficulty
17110	1841				wy£-	(?) ⁷⁹²
17120	1842				wył-	cedar
17121					whylyq-	to zigzag (around the village to announce termination of the KW /c ³ εqa/) ⁷⁹³

⁷⁹⁰ HE {w³w-} only in {w³w-χ-h} > /w³uχva/ "to set free etc." and HA {h³ww-} only in {h³ww-χ-h} > /h³uuχva/ "free (of debt, obligations)." HA may have {h³ww-} in this latter instead of just {h³w-} to distinguish /h³uuχva/ from HA /h³uχva/ "also, likewise, too" which presumably contains the root {h³w-} (no. 17720) followed by {#χh} (suffix no. 5450).

⁷⁹¹ Only in KW /wipa/* "to redden (skin, by heat of fire)"

⁷⁹² Only in KW /wi£a/ "to pack on the back."

⁷⁹³ Stem may have structure {w[h]ył-%yq-} or {[wh]wył-%yq-} but unclear what the root {wył-} could mean. The suffix would be no. 4020 of the suffix catalogue. Boas (1948:68) lists the stem without attempting to analyze.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
17130	1843	wyl ³ -		wyl ³ -		beach
17131					wyk-	weak, moribund
17140	1836 1905	w ³ yx-	wyx-		wyx-*	(?) ⁷⁹⁴
17160	1845		wyqv-		wyqv-	(OO) to slip, slide, skate; (KW) to shove a long thing; to praise, ennoble (i.e. push forward), to talk about one's deeds
17180	1847	wyχ-	wyχ-			to lie on one's back, to lean back
17181	1885				wy ³ χ- wh ³ χ-	to lift
17190	1818 1848	wws-	wws-		ws- wws-	(HE/OO) scared, frightened; (KW) pity, sympathy ⁷⁹⁵
17200	1849	ww£-				(?) ⁷⁹⁶
17210	1850	wwł-	wwł-	(h ³ wp-)		to heap up, rise, uprising, riot
17220	1851 2496	www-	www-	ww- hw-	ww- hw- hww-*	Ooh! (onomatopoeia expressing fear, discomfort or awe) ⁷⁹⁷

⁷⁹⁴ {w³yx-} in HE /w³ay'ax/ "skirt, woman's garment in general." {wyx-} may occur in unanalyzable OO /wawixiaqs/ "woman with power" and {wyk-} in non-reelicitable KW /wawɛkila/* "skirt."

⁷⁹⁵ KW {ws-} only in {[wy]ws-ylh} > /wi:wsila/ "to desire sympathy."

⁷⁹⁶ Possibly in HE /w'u£³M/ "club."

⁷⁹⁷ KW {hww-} would be diagnosable only in KW (Newettee dialect) /huḥagila/* "warn against danger, notify" (from {hww-h-gylh}, with telescoping of |ww|).

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
17230	1852 1853	wwqv-	wwqv-	hwqv-	hwqv-	to spill out of a place (hence 1. to vomit; 2. to move in a group (like people))
17250	1854		wq-	wq-	wq-	frog, toad; to croak
17260	1855				wq-*	(?) ⁷⁹⁸
17270	1857			wq-	wq-*	to move in one direction, to go in a school
17290	1858 2501	wχ-	wχ-	wχ-	wχ- hwχv-	to split, crack, shatter, break off
17300	1859		wχ-			(?) ⁷⁹⁹
17310	1860	wχ-				(?) ⁸⁰⁰
17330	1861 1863	wh-	wh-	wh-	wh-	river, stream, flowing water
17340	1864	wht-	wht-	wht-	wht-	to pull or drag using hands; (KW also:) to lead by the hand
17350	1865	wht-	wht-	wht-	wht-	kelp (probably Nereocystis luetkeana, known by many everyday names including e.g. giant kelp and bladder wrack kelp) ⁸⁰¹

⁷⁹⁸ In KW /wa:wq³a³ayu/* "to eat what is left over after feast, to beg for remains of feast, to eat with wife."

⁷⁹⁹ In OO /wχ.h³la/ "to make a stop at a camping place."

⁸⁰⁰ Only in HE /wχ.l'a/ "to encourage" which informant said is synonymous with HE /w'axs'iχa/ (< {wh#xs'y-χ-h}).

⁸⁰¹ Uncertain if this is the root referring to pulling (no. 17340). Kelp was used for making fishing nets and harvested by pulling it into the canoe.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
17360	1868 1869	whs-		whs-	whs-*	(?) muscular tension, force, agitation; forceful, unbending ⁸⁰²
17370	1871	whs-	whs-	whs-	whs-	fish eggs, to spawn ⁸⁰³
17380	1870				whz- whs- whłqy- whłqys-*	(?) ⁸⁰⁴
17390	1872	whł-	whł-	whł-	whł-	thought, deliberation, discourse, content of one's words
17400	1804 1866 1872 1873		wł- whł-	whł-	whł-	directionless, uncoordinated, undecided, misdirected; unserious, unreal, imagined only, deceitful, wishful, wished for ⁸⁰⁵
17410	1874			whł-	whł-*	(?) smelly ⁸⁰⁶
17420	1876	whk-	whk-	whk-	whk-	to bend sth., to be bent or ring-shaped, to be around sth. ⁸⁰⁷
17430	1877	whk-	whk-	whk-	wwkv- ww ³ kv-	to bark (dog, wolf), to woof ⁸⁰⁸

⁸⁰² Probably also in KW {whyhd-} "ruthlessness, disregard to danger or consorts."

⁸⁰³ Most examples are about herring spawn in particular, especially in HE/OO/KW.

⁸⁰⁴ In a small number of words referring to hunger, food and marriage presents that are mentioned by Boas but can be neither analyzed nor re-elicited, with the partial exception of KW {[wh]whłqy-hlh} > /wawałqəla/ "to give presents (man to son-in-law in marriage feast)."

⁸⁰⁵ OO only in /włkin³i/, /włcin³i/, /wałkin³i/ "child" (endearing term) which matches KW /wawałkinε³/ "child" (endearing term meaning "one wished for").

⁸⁰⁶ In KW words referring to the land otter or its musk bag; HA possibly in /wałp³as/ "flavour."

⁸⁰⁷ Possibly also in KW /wagiga/ "fisher (mammal)."

⁸⁰⁸ Also in HE/OO {whk³p-} "to hiccup."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
17440	1878	whx-	whx-	whx-	whx-	to attempt (without knowing the outcome), to try one's luck, in vain, for nothing
17450	1879	whkv-				to try; nevertheless, although
17460	1880			whxv-	whxv-*	water hemlock
17470	1881	whxv-	whxv-		whxv-*	to fart noisily
17480	1856 1882 1883	whqv-	whqv-	whqv- wq-	whqv- whq-	ringed in, encircled (as when wrapped in a blanket, wearing a cape); to go in circle from one point to another (like rainbow); to bridge a gap ⁸⁰⁹
17490	1883				whqv-	to run (said of a colour); washing is soiled or discoloured
17500					whχv-	(?) (perhaps onomatopoeic) ⁸¹⁰
17510		whχ-	whχ-	whχ-	whχ-	gully, trough, trench, grave
17520	1884				wh ³ χ-	to help, to do a favour, to be so good as to, please
17540	1887				w ³ p-	to fall into a hole ⁸¹¹
17550	1888				w ³ d-	cold, cool

⁸⁰⁹ HA {wq-} possibly in /wr'ari/ "ring tied to an ooligan net and put on a stick so as to keep the net in place." Perhaps the ring is the wooden hoop around the bag net. The hoop is anchored to poles driven into the river bed and thus helps keep the net stable in the river mouth.

⁸¹⁰ In KW /waχ:waχvɹi/ "robin, thrush."

⁸¹¹ In KW /w³pa/ "to fall into a hole" and KW /w³aw³ap³ay³u/ "hole dug and covered so that game falls in."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
17560	1889	w ³ n-	w ³ n-	w ³ n- w ³ ynh- w ³ yn∞- w ³ hnh- w ³ hn∞-	w ³ n- w ³ hn ³ -	to act inconspicuously or stealthily, to hide oneself, to sneak about, to stalk
17570	1890 1926	w ³ nk-	w ³ nk-	w ³ nk-	w ³ h£-	lover, sweetheart
17580	1891				w ³ nxv-*	(?) ⁸¹²
17590	1892	w ³ nxv- w ³ wnw- w ³ wnw ³ -				(?) ⁸¹³
17600	1894	w ³ s-	w ³ s-	w ³ s-	w ³ s- w ³ xs-	fur, hair; hide; belt
17610	1895				w ³ s-*	to store away for future use
17620	1896	w ³ l-	w ³ l-	w ³ l-		to use branches (e.g. for camouflaging or to gather herring eggs)
17630	1897				w ³ l-*	to bend wood into a one-piece box
17631					w ³ lwp-*	to eat fresh roasted ooligan
17640	1898				w ³ x-	to beg for food

⁸¹² In KW /w³nxva/* "to hide."

⁸¹³ {w³nxv-} occurs only in HE /w³'hxv'il'akv/ "cured mountain goat meat." This term has a synonym /w³'un'u/ which is difficult to analyze; the available diagnostic derivatives point to its stem being {w³wnw-} and {w³wnw³-}. The relationship between {w³nxv-} and {w³wnw-, w³wnw³-} is reminiscent of that between {£mxv-*} and {£hmv-} "perch (fish)."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
17650	1899	w ³ y- w ³ ys-	w ³ y-	w ³ y- w ³ ys•-	w ³ y-	where, when, how, to what degree, which one ⁸¹⁴
17660					w ³ yp-	(?) ⁸¹⁵
17670	1901	w ³ ył-	w ³ ył-	w ³ ył-	w ³ ył-	thin (said of sth. tall such as tree or person)
17680	1902 2641	(h ³ hg-)	(h ³ hg-)	(h ³ hg-)	w ³ yl ³ - wyl ³ h-	all, everything, everybody ⁸¹⁶
17690	1903	w ³ yk-	w ³ yk-	w ³ yk-	w ³ yk-	to lift a load onto the shoulder and carry it ⁸¹⁷
17700	1904	w ³ yx•-	w ³ yx•-	w ³ yx- w ³ yx•-		slow, delayed, delaying
17710	1846	w ³ yq-	w ³ yq-	h ³ wyq-	h ³ y ³ qv-/ h ³ y ³ χv-	devil's club (<i>Oplopanax horridus</i> , a.k.a. <i>Fatsia horrida</i>) ⁸¹⁸
17711	1900	w ³ yw£-	w ³ yw£-			early morning
17720	1886 1906 1914 1929	w ³ w- w ³ hwh- rvw- rvw-	w ³ w- w ³ hwh- rvw- rvw-	h ³ w- h ³ hwh- w ³ hwh-	h ³ w- h ³ hwh- h ³ hw ³ -	instance of, satisfying a description; real, actual, true; straight away, undelayed, direct, abrupt ⁸¹⁹

⁸¹⁴ HE {w³ys-} only in /w³'istu'ala/ "to concern, be the business of."

⁸¹⁵ Only in KW /w³ip/ "cry of the KW /hms:hmc³s/* (= a member of one of the lower-ranked Cannibal societies)."

⁸¹⁶ If it is not diagnosable if a suffix is attached to the bound root {wyl³-} or the free stem {w³yl³h-}, attachment to {w³yl³-} is assumed.

⁸¹⁷ In some of Boas's KW examples the load is more particularly a long stiff thing.

⁸¹⁸ HE/OO root misrecorded as {wyq-} in 1980 root list.

⁸¹⁹ 1. In many examples this root is followed by a locative or somatic suffix and serves as a prop to make a word with the meaning of the suffix. This is also the case in the only example of {rvw-, rw-}, sc. HE /rv'urvm'i/ OO /rvurvmi/ HA /r'urvmi/ KW /rurvm̄i³/ "face" and in the only

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
	1947	q ³ vw-	q ³ vw-	rw-	rw-	
	2052	h ³ w-	h ³ w-	q ³ w-	q ³ w-	
	2606					
	2645					
17730	1908	w ³ wt-	w ³ wt-	h ³ wt-	h ³ wt-	to prick, pierce, pin, perforate; (KW also:) to vaccinate
17740	1909	w ³ wz- w ³ wzh-, w ³ w ³ zh- h ³ wc•-	w ³ wz- w ³ wzh- h ³ wzh- h ³ wzw-	h ³ wz- h ³ wzh- h ³ wzw- h ³ w ³ z-	h ³ wzh-	to go wrong, suffer misfortune, have trouble, give trouble ⁸²⁰
17750	1910	w ³ wlh-	w ³ wlh-	w ³ wlh-	h ³ wlh-	(?) ⁸²¹

certain example of {q³vw-, q³w-}, sc. HE/q³v'uq³v'un³i/ OO /q³vuq³vH³i/ HA /q³uq³vH³i/ KW /q³uq³un³i/ "neck, throat." 2. The senses of this root overlap with those of the set {y-, h-, yy- yh-, hy-, etc.} (root no. 14380). 3. HE/OO {h³w-} occurs in HE /h³um/ OO /h³um/ "father" and related words, and in {h³w-±χf•-} "to carry on the back." 4. HE/OO {w³w-} is used instead of {h³m-} "one, unit" (root no. 23230) before {-p³n-} "times" or one of the many derivatives of {-p³n-}, see suffix no. 220 ff. 5. Root no. 17820 ({w³h-, etc.}) is probably just an alternant of this one.

⁸²⁰ HE {h³wc•-} OO {h³wzh-} occur in a proper name that is likely a KW borrowing. Note that in all HE/OO examples where |z| of {w³wz-} becomes /c/ due to being followed by an obstruent, the root could also have the form of {w³wc•-} and that the only actual evidence for {w³wz-} as opposed to {w³wzh-} are the two high tones of /'al'a/ in {w³wz-hlh} > HE /w³uz'al'a/ "to have bad luck, etc." HA {h³wzw-} is assumed to occur in {h³wzw-Δł-k³hnh} and {h³wzw-Δł-k³hny³} "(to have a) hand or arm that hurts/is sprained" and {h³wzw-Δł-sys=h} "foot or leg that hurts."

⁸²¹ HE/OO in HE /w³ul'a/ OO /w³ula/ "to visit a sick person." KW in words referring to expecting and waiting for sth. Root may also occur in HE /w³ul'ala/ OO /w³ulala/ (name of a dance) HA /w³ul'ala/ "hemlock branch dance (second dance in the HA /h'ilikla/ series)" KW (Newetee dialect) /h³ulala/* (a ceremonial).

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
17760	1911	w ³ wgv-	w ³ wgv-	h ³ wgv-	h ³ wgv-	different, other, separate, private
17761		w ³ wkv-	w ³ wkv-	(h ³ ygh-)		to store away, to save ⁸²²
17770		w ³ ww-	w ³ ww-		h ³ w-	(onomatopoeic)
17780	1912		w ³ wqv-			(?) ⁸²³
17790	2618	w ³ wqv-	w ³ wqv-	h ³ wqv-	h ³ wqv-*	(?) ⁸²⁴
	2646	h ³ wqv-	h ³ wqv-		h ³ hχv-	
17810	1915	w ³ h ³ q ³ vh-	w ³ h ³ q ³ vh-	w ³ h ³ q ³ v-	wq ³ v- w ³ qv- w ³ qv-	sibling of opposite sex ⁸²⁵

⁸²² HE/OO only in {w³wkv-} > HE /w³ugvīl/ OO /w³ugvīl/ "to put sth. away indoors."

⁸²³ In OO /w³uqvīl/ "to throw away property at one's daughter's wedding."

⁸²⁴ In the names of flying squirrel (a kind of bat), hellebore and jellyfish. It is not diagnosable if HE/OO has {h³wqv-} or {h³wχv-}; the former is assumed because the HA root diagnosably has [qv]. The hellebore terms probably refer to white hellebore (*Veratrum viride*), also known as false or Indian hellebore. It is toxic and was used for medicinal and ritual purposes, cf. Compton (1993: 80, 123, 184, 201-203 and passim). What links a flying squirrel to jellyfish and hellebore is unclear. It could be a parachute-like appearance in the case of flying squirrel and jellyfish but judging from pictures the bowl- or saucer-shape of hellebore flowers is not reminiscent of a parachute. The connection may concern the supernatural.

⁸²⁵ {wq³v-} only in KW /hvaq³vasōl/ (with /va/ = [Λwa]) "brothers and sisters in own family." {w³qv-}* only in /w³rvad/* "having a sibling of opposite sex" which term Boas says is from the dialect of the /Zawada³inuχv/. {w³qv-} only in KW /w³qvad/ "having a sibling of opposite sex." The KW example /w³q³vu³l/ "former sibling of opposite sex"/ is the only available evidence for KW {w³q³v-} beside {w³q³vh-}. Contamination with {w³h³χv-} "group of people" (as e.g. in HE /w³aχv'uy'a/ OO /w³a³χvuya/ "male's brothers") may have changed an original HE/OO/HA root {w³q³vh-} into {w³h³q³v-}.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
					w ³ q ³ v- w ³ q ³ vh-	
17820	1917	w ³ h- w ³ hw ³ -	w ³ h- w ³ whw ³ -	w ³ h- h ³ ywh- h ³ hwh- w-	w ³ h-, wh ³ - w ³ - h ³ w- h ³ hwh-	1. (all forms except HE {w ³ h[w ³]-} HA {h ³ ywh-} OO {w ³ whw ³ -}:) quantity, size, measure, dimension; 2. (HE {w ³ hw ³ -} HA {h ³ ywh-} OO {w ³ whw ³ -}:) equal in size, measure, dimensions, direction ⁸²⁶
17840	1916 1928	w ³ h- w ³ h ³ xs•- w ³ hxs•-	w ³ h- w ³ h ³ xs•- w ³ hxs•-	h ³ y ³ s•-	w ³ hxs- w ³ hxs•-	duality ⁸²⁷

⁸²⁶ 1. HE {w³hw³-} is {w³h-} with reduplication of the initial element: {w³h[w³]-}. 2. In some examples HE {w³hw³-} alternates with {w³h-hw³-} in which {-hw³} is suffix no. 4230. For "equal in size etc." OO only uses {w³w-} plus this suffix no. 4230; to prevent a useless proliferation of records the combination is conveniently written {w³whw³-} when HE has {w³hw³-} but {w³w-hw³-} when HE has {w³h-hw³-}. It is unclear how HA {h³ywh-} and {h³hwh-} derive from {w³h-}. No KW {w³h-}-related equivalent has been recorded meaning "equal in ..."; however, KW {w³h-hw³-} does occur but with the meaning "big, large, great." 3. KW {w³-} occurs only in the stem {w³-wkv-}, alternant of {w³h-wkv} "thick layer." KW {h³w-} occurs in the stem {h³w-hw³-} "big, large." 4. This root occurs only with a suffix signifying quantity, number, size or dimension (e.g. length, width) and is just like root no. 17720 only a device to turn a suffix into a word. It could be identical historically to no. 17720.

⁸²⁷ 1. {w³h-} by itself refers to duality only in the HE/OO stem {w³h-%lhqv-} "talking together." Compare this stem with HE/OO {w³w-%lhqv-} "to admit to sth." and its HA/KW cognate {h³w-%lhqv-} HA "to deny an accusation" KW "to fall silent." This root {w³h-} is likely related historically to suffix no. 4220 with the sense of "across." The stems {w³hxs•-} and {w³h³xs•-} consist of {w³h-} plus suffix no. 2140. 2. In HE the stem {w³hxs•-} is rare and in OO it is not

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
17850	1918	w ³ hp- w ³ hm ³ - w ³ hm ³ p-	w ³ hp- w ³ hm ³ - w ³ hm ³ p-	w ³ hp-	w ³ hp-	water ⁸²⁸
17870	1922	w ³ hnh-	w ³ hnh-	w ³ hnh- w ³ hn∞-	w ³ n-* w ³ hnh-*	to exchange, take turns ⁸²⁹
17880	1921				w ³ n-* w ³ hnh-	poor ⁸³⁰
17881					w ³ hnw£- w ³ hnwł-*	(?) ⁸³¹
17890	1923 1924 1925	w ³ hs-	w ³ hs-	w ³ hs-	w ³ hs-	dog, dog-like; (KW also:) dear, loved
17891	1926	(w ³ nk-)	(w ³ nk-)	(w ³ nk-)	w ³ h£-	lover, sweetheart
17900	1927			w ³ hl-		(?) in a tight spot ⁸³²

even diagnosable directly but assumed when the HE cognate has it. 3. HA {h³y³s•-} may stem from {[h³y]h³s•-} or {[h³]h³s•-}.

⁸²⁸ HE/OO {w³hm³-, w³hm³p-} are the free form versions of {w³hp-}, with {w³hm³-} occurring before category B and C suffixes beginning in an obstruent and if no suffix follows, and {w³hm³p-} before vocalic elements. A HE free form {w³hp-} is rumoured to have existed. Note that in HE /w³a³mx.h³it/ "to turn into fresh water" the suffix form {-x.h³yd} has been joined to {w³hm³-} instead of the suffix's alternant {-&yd} to {w³hp-} (resulting in */w³am³it/).

⁸²⁹ HA {w³hn∞-} is diagnosable in {w³hn∞-w-d} > /w³an'ud/ "to trade in, exchange."

⁸³⁰ Only reelicitable example is KW /w³anałə/ "poor."

⁸³¹ {w³hnw£-} is a free KW stem meaning "not up to a task, not really capable" according to Lincoln (n.d.). It doesn't seem to occur in Boas's 1948 dictionary. What Boas does list (1948:75) is {w³hnwł-*}, a bound stem referring to helpful medicine. Boas's examples could however not be reelicited.

⁸³² In HA (Kitamaat dialect) /w³alə/ "to narrowly escape an accident."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
17920	1930	w ³ hχv- w ³ h ³ χv- w ³ h ³ χ-	w ³ hχv- w ³ h ³ χv- w ³ y ³ χv-	w ³ hχv- w ³ h ³ χv-	w ³ h ³ χv-	group of people ⁸³³
17930	1931	w ³ hq-	w ³ hq-	w ³ hq-		to feed a visitor, to welcome, to host sb. ⁸³⁴
17940	1932	w ³ hχ-	w ³ hχ-	w ³ hχ-	w ³ hχ-	plume (of smoke in HE/OO/KW, of feathers in HA)
17960	1953	rvms- rvh-	rvms- rvh-	rvms- rvnc-	rvms-	ochre ⁸³⁵
17970	1933	rvn-	rvn-	rvn-	rvn-	to pay a debt, to repay
17980	1934 1956	rvn-		rvn-	rvhn ³ -	(?) bending, curved ⁸³⁶
17990	1935 1936	rvn-	rvn-	rvn-	rvn-	to burn ⁸³⁷
18000	1937				rvnt- rvnt ³ -	heavy
18010	1938		rvnc-	rvnc-	rvns-	excrescence, to bud out ⁸³⁸

⁸³³ KW only in /w³a³ukv/ "some, others, the rest (of the group)" and derivates. {w³y³χv-} occurs only in OO /w³i³χvuyaqs/, plural form of /w³a³χvuyaqs/ "sisters (term used by females)."

⁸³⁴ In most examples {w³hq-} is followed by {-+-} the significance of which is unclear.

⁸³⁵ {rvh-} only in the HE/OO stem {[rvh]rvh-rm-} "paint face with red ochre."

⁸³⁶ Possibly in KW /rvan³a/* "elbow" KW /rvan³aq/ "to bend" HE stem {rvh³h-} "in labour" and HE/HA {rv[h]n[y]-} > HE /rv'an'i/ "ladle made of mountain goat horn" HA /rvan'i/ "horseclam shells (used as dishes at potlatches)."

⁸³⁷ In HE/OO only in the word for ashes of a fire. Cf. English "ash" which is akin to Latin "aridus" ("dry"), "ardor" and "ardēre" ("to burn").

⁸³⁸ In terms for a bud of cottonwood, a horseclam and a carbuncle.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
18020	1939 2136	rvn- rvl-, rl-	rvn- rvl-	rvl-	rvl-	pitch, resin, gum, sap from plant ⁸³⁹
18030	1940	rvlx-	rvlx-	rvlx-	rvlx-	pitch, resin, gum; sticky
18050	1941	rvy-	rvy-	rvy-	rvy-	thus, in such a way, of such a kind
18060	1942	rvy-	rvy-	rvy-	rvy- rvhy ³ -	heavy in weight, whale
18070	1943	rvyc-/ rvys-	rvyc-/ rvys-	rvyc-/ rvys-	rvys-*	sparrow ⁸⁴⁰
18080	1944	rvys-	rvys-			unsoaked dried salmon
18090	1945	rvyk-	rvyk-	rvyk-	rvyk-	whale
18100	1946	rvyχ-	rvyχ-	rvyχ-		flour, bread
18110	1948	rvwy ³ -	rvw ³ - rvy ³ -	rw ³ h-		(?) sameness of shape, action or timing; occurrence at regular intervals ⁸⁴¹
18120	1949	rvwl-/ rvwlh-	rvwl-/ rvwlh-	rwł-/ rwłh-/ rwł∞-	rwłh-	trout

⁸³⁹ {rvn-} only in HE/OO {[rvh]rvn-+-h} "to go after pitch."

⁸⁴⁰ In several non-reelicitable KW words referring to a sparrow and the Sparrow Society. Perhaps also in HA /rv'isrv'i/ and /rv'isrv'i/ "sparrow" and HE /rv'isqv/ OO /rv'istχv/ which informants said refers to a dark brownish kind of robin but which Boas-Hunt gloss as "sparrow" (see Bella Bella Texts, p. 258).

⁸⁴¹ The HE/OO forms are attested only in HE /rv'uy³'al'a/ OO /rvu³ʎa/ and OO /rv'ʎa/ "regular(ly)."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
18130	1950	rvwl-	rvwl-	rwł-	rvł-*	fat, tallow, marrow; (KW possibly also:) core (e.g. of fruit), innards ⁸⁴²
18140	1951	rvwχv-	rvwχv-	rwχv-		skinny, lean, slender
18150	1994 2004 2061 2245 2246	qvqv- qq- qhq- 	qvqv- qq- qhq- 	rqv- rwqv- qq- qhq-	rvqv- rqv- qvhqv- rwqv-, rq-	(possibly onomatopoeic) ⁸⁴³
18160	1954				rvh- rvhlh-	to stop doing sth., to refrain from doing sth.
18170	1955			rvh-		(?) ⁸⁴⁴
18180	1957	rvht-	rvht-	rvht-	rvht-	red huckleberry
18190	1958				rvh£-	to moan, groan, holler (when startled)
18200	1959	rvhl-	rvhl-	rvhl-	rvhl-	ready, finished, completed; to make ready, arrange, appoint, order
18210	1960	rvhlhs-	rvhlhs-	rvhlhs-	rvhlhs-	lizard

⁸⁴² None of the KW examples in the Boas-Hunt materials could be reelicited.

⁸⁴³ {qq-} occurs in words referring to dogs giving the hunting cry when chasing animals, and in HE /qr'ig'a/ OO /qriga/ "a species of white diving bird that says HE /q³q³q³q³'a/." The other forms occur in the names of water birds including long-necked ones such as heron, crane, swan and the long-billed sawbill duck, but also KW /qvarvilbe³/* "lance" (possibly literally "heron-nosed"). The heron's call is a harsh croak resembling /qa qaa qa qa/.

⁸⁴⁴ In HA /rvar'auy³uala/ "bumble bee" (according to the Kitlope informant), "horsefly" (according to the Kitamaat one).

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
18220					rvhk-	(?) ⁸⁴⁵
18230	1962 1963	rvhχ-	rvhχ-	rvhχ-	rvhχ-	striped, streak-marked (like dog salmon near spawning time); dyed (with alder bark) ⁸⁴⁶
18240	1964	qvp-	qvp-	qvp-	qvp-	powder, powdery (like dry snow, rotten wood) ⁸⁴⁷
18250	1965 2063	qvmc- qvms-	qvmc- q ³ vms-		qvms-	(?) brown, decaying ⁸⁴⁸
18260	1966				qvn-/ qvnp-	(?) ⁸⁴⁹
18270	1967			qvn-	qvn-* qvh ³ -*	to crush, smash, crack
18280		(tq-+l-)	qvns-	(dq-+l-)		itch(y) ⁸⁵⁰
18290	1968				qvnqv-	to twitch, to move with a jerk, to shake
18300	1969				qvs-	layer-like thing becomes detached (e.g. page from book,

⁸⁴⁵ Possibly in KW /Γvarvkmilas/ (place name said to mean "face out of sight") and KW /Γvarvk³utl³as/* (name of house of one called KW /Q³aniqil³akv/).

⁸⁴⁶ Dog salmon is also known as chum salmon and "chum" is Chinook jargon for "spotted" or "marked." Root is a cross-family stem, cf. South Wakashan (Nuuchahnulth) {qvaḥ-} "daubed with red clay" and its derivate /qvaḥmis/ "red clay of a certain kind used as paint" in Sapir & Swadesh (1939:294).

⁸⁴⁷ See also the footnote to {q³vp-, q³p-} (root no. 18660).

⁸⁴⁸ The two KW examples are about dog excrement. The HE/OO examples are HE (Bella Bella) /qvmst'u/ HE (Klemtu) /qv'mstu/ OO /qvm³stu/ "brown" and OO /q³vams/ "brown, moss-like."

⁸⁴⁹ Possibly in KW /qvhap/ "young sawbill ducks."

⁸⁵⁰ Only in OO /qvhsa/ "to itch, itchy."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
						leaf from stem, skin from flesh), to peel off
18320	1972				qvl-	to hit, to strike (said of waves); waves, breakers, ocean swell
18330	1973		qvlp-, q ³ vlp-	qvlp-		dust, powder
18340	1974	qvlx-	qvlx-	qvlx-		rust-coloured, brownish
18350	1975				qvlx-	to handle long, loose, pliable things
18360	1976	qvlqv-	qvlqv-		qvlqv-	to sprain, wrench
18380	1979 1980	qvyc- qvys-	qvyc- qvys-	qvys-		to squeeze, to tweeze, to hit against each other (like split ends of rattle stick); squeaky (voice) ⁸⁵¹
18390	1977 1978	χvy- χvys•-	χvys•-	χvys•-	qvy- qvys•- qvys-	that direction, far, on the far side, far away ⁸⁵²
18410	1981 1082 1983	qvyl-	qvyl-	qvyl- qvyl-	qvyl-	to lose coherence, come apart, get dismantled; to separate into components (like juice when sediment settles); to unravel, to become detached (like rope) ⁸⁵³
18430	1984	qvylx-	qvylx-			to unlock (as with a key)
18440	1985 2233	qvylqv- qvylq- qvylχ-	qvylqv- qvylq-	qvylq-		to wiggle the end of a long thing (as to free a pole or when

⁸⁵¹ The form {qvyc-} occurs possibly also in HE /qvist'h/ OO /qvi³sth/ (an unidentified bird).

⁸⁵² {χvy-} only in HE /χv'iki³a/ "on the far side of the top of sth. bulky (e.g. a cabin)."

⁸⁵³ {qvylχ-} only in HA /qv'iɬa/ "to smash sth. up (e.g. fruit)."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
						nodding the head or bending it sideways)
18450	1988	qvwnh-	qvwnh-	qwnh-	qwmh-	thumb, big toe
18460	1986	qvw- ⁸⁵⁴	qvw- ⁸⁵⁴		qwt-	(?) ⁸⁵⁴
18470	1987	qvw ³ h-	qvw ³ -	qwt ³ h-	qwt ³ - qwt-	full, filled up ⁸⁵⁵
18480	1989 1998	qvws-	qvws-	qws-	qws- qvhs-	({qvws-, qws-}:) to become covered with downy material (like seedhead of dandelion); (HE/OO/HA also:) to burst into bloom, to blossom, to flower; (KW {qvhs-}:) to bud, flower, bloom
18500	1990	qvwyq-	qvwyq-			to worry ⁸⁵⁶
18510	1991	qvwł-	qvwł-	qwl-	qwl-*	fur, pelt ⁸⁵⁷
18520	1992 2240 2241	qvwł- qwl- qws-	qvwł- qwl- qws-	qwl- qw ³ ł- qw ³ s-	qwl- χwl-*	bent, crooked, warped ⁸⁵⁸

⁸⁵⁴ In HE/OO {qvwt³x-} KW {qwt³x-} "ceremonial blanket symbolizing a bride price consisting of material and spiritual property."

⁸⁵⁵ KW {qwt-} only in /qut³χu/ < {qwt-+χw} "mouthful."

⁸⁵⁶ Stem could be polymorphemic but structure unclear.

⁸⁵⁷ In words referring to beaver and muskrat.

⁸⁵⁸ HE/OO {qvwł-} only in HE /qv'ul'ush/ OO /qvulush/ (name of a supernatural bird). The KW counterpart is /qulus/ (in the Fort Rupert subdialect) and /χulus/* (in the Gwasala subdialect) and means "mythical bird with slanting beak, brother of Thunderbird." The root forms ending in |s|

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
18530	1993	qvwqv-	qvwqv-	qwqv-	qwqv-	lump, bulge, hump; (KW also:) bone
18550	1995 1996 2346 2348		qvχv-	qvχv-	qvχ- q ³ χv- q ³ χ-	particulate solid matter (e.g. powder, flour, lime, dust, ashes, seeds), droplets (of e.g. water); grey, dusty
18560				qvh-		to tear off a flat thing
18570				qvht-		(?) ⁸⁵⁹
18580	1999		qvhs-			(?) ⁸⁶⁰
18590	2000	qvhq-	qvhk- qvhq-	qvhk- qvhq-	qvhq-	to split apart, to split open ⁸⁶¹
18600	2002				qvhk ³ v-*	to peel off
18620	2005	qvhqv-	qvhqv-	qvhqv-		to swing, to sweep
18630	2007	qvhχv-	qvhχv-	qvhχv-	qvhχv-	to display, show, exhibit, bring out in the open
18640	2009				qvh ³ x-*	(?) ⁸⁶²
18650	2010				qvh ³ x-*	(?) ⁸⁶³

are attested only in OO /qusla/ "crooked, winding in different directions (as a rope, a boat)" HA (Kitamaat dialect) /qusla/ "crooked."

⁸⁵⁹ In HA /qvad'aułsm/ "bulky in shape and with black spots."

⁸⁶⁰ In OO /qvasa/ "to be startled."

⁸⁶¹ OO {qvhk-} only in /qvaka/ the meaning of which is uncertain; consultant believes it is a synonym of OO /qvaqa/ "to split open (e.g. the abdomen of fish or animals)."

⁸⁶² In KW /qva³xa/* [1] "to hurry" (an old word, says Boas).

⁸⁶³ In KW /qva³xa/* [2] "to straighten up one's body."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
18660	2011 2266	q ³ vp-	q ³ vp-	q ³ vp- q ³ p-	q ³ vp- q ³ p-	({q ³ vp-}:) disintegration of a mass of sth. into particles; crumbling, granular (like sand), fragmentized, scattered; to spread, sprinkle, scatter (dust, powder, powdery things, leaves in fall); ({q ³ p-}:) broken shells and sand on beach ⁸⁶⁴
18670	2012 2119 2329	q ³ vwm∞- q ³ vwmh-	q ³ vm- q ³ vwm∞- q ³ wm∞- q ³ vwmh-	q ³ vm- q ³ wm∞-	q ³ wmh- q ³ wm∞-	to stick out, protrude; notable, rich, wealthy ⁸⁶⁵
18680	2014	q ³ vmt-	q ³ vmt-		q ³ vmt-	to poke into sth., to pierce, to perforate; (HE/OO also:) to vaccinate; (KW also:) crabapples (ripe when pierceable)
18690	2013	q ³ vms-	q ³ vms-			fat, rich ⁸⁶⁶
18700					q ³ vmł-*	(?) thundering

⁸⁶⁴ Semantically this root seems to be similar to {qvp-} (root no. 18240) but with the added notion of scattering. {qvp-} and {q³vp-} alternate freely in HA /qvqvpma/ and /q³vq³vpma/ "to put powder on the face (red ochre etc.)."

⁸⁶⁵ 1. Wealth can refer to cultural property such as privileges, stories, dances, names. 2. {q³vm-} is probably the root's base form from which the other forms derive by augmentation. 3. The forms {q³wm∞-} and {q³wmh-} are also forms of root no. 21601 which refers to howling and wailing.

⁸⁶⁶ Probably in {q³vm[∞]s-} > HE /q³v'ms/ OO /q³vmms/ "liver."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
18710	2015	q ³ vmx-	q ³ vmx-		q ³ vmx-	land- or rockslide; (KW also:) to rush down (said of group of people)
18740	2018	q ³ vt-	q ³ vt-	q ³ vt-	q ³ vt-	scar, healed wound
18750	2019	q ³ vn-	q ³ vn-	q ³ vn-	q ³ vn-	often
18760	2020	q ³ vn-	q ³ vn-	q ³ vn-	q ³ vn-	(?) to split off, branch off'; node in network (e.g. in lupine roots) ⁸⁶⁷
18770	2021 2022		q ³ vnc-	q ³ vnc- q ³ vns-	q ³ vns-	(?) intertwinement ⁸⁶⁸
18771					q ³ vny ³ qv -	cottonwood
18780	2023	q ³ vnk-	q ³ vnk-	q ³ vnk-		fat, stout
18790	2024	q ³ vnqv-	q ³ vnqv-	q ³ vnqv-		to swallow
18800	2025				q ³ vs-*	to tie with a knot
18810	2026	q ³ vs-	q ³ vs-		q ³ vs-	to drizzle
18820	2027				q ³ vs- q ³ vhs-*	to heal (wound, sore)

⁸⁶⁷ Possibly in HE /q³vH'm/ OO /q³vHM/ "instrument with a sharpened edge used to make shakes or take bark off a tree" HA /q³vah/ (a kind of root) KW /q³vH³i/ "lupine roots."

⁸⁶⁸ The KW examples refer to lupine roots and, in one case, getting drunk on lupine (but unknown if on lupine roots or lupine seeds). The HA examples refer to getting or eating an unidentified kind of root and communicating with the HA /h'ilikJa/ dancer. The one OO example of the root form means "friends together." Lupine roots are a network of nodules and perhaps interwovenness is what the various examples have in common semantically.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
18830				q ³ vs-		(?) ⁸⁶⁹
18840	2028			q ³ v£-		to ask for volunteer help
18850	2029	q ³ vł-	q ³ vł-	q ³ vł-	q ³ vł-	to scratch an itch
18860	2030	χvł-	χvł-	χvł-	q ³ vł-	maternal or paternal uncle; (KW also:) husband's or wife's brother-in-law ⁸⁷⁰
18880	2035		q ³ vlp-	q ³ vlp-	q ³ vlp-	(?) decay, destruction ⁸⁷¹
18890	2033	q ³ vłm ³ s-	q ³ vłm ³ c- q ³ vłm ³ s-	q ³ vłm ³ s-		rotten, decaying ⁸⁷²
18900	2036	q ³ vłc-	q ³ vłc-	q ³ vłc-	q ³ vłs-	aging, decaying, rotting
18910	2037	q ³ vylh-, q ³ vyly-	q ³ vylh-, q ³ vyly-	q ³ vly- q ³ vylh- q ³ vyly-	q ³ vly- q ³ vlyh-	acting autonomously, on one's own accord, by oneself, unassisted; affecting oneself or one's own group, to do sth. in person ⁸⁷³
18920	2038	q ³ vłqv-	q ³ vłqv-	q ³ vłqv-	q ³ vłqv-	ticklish, afraid to touch, tending to avoid contact; lacking manliness, tending to chicken out

⁸⁶⁹ Possibly in HA {q³vxq³vywkv-} "vegetation."

⁸⁷⁰ KW in /q³vłi³/ "uncle (maternal or paternal)" and /q³vłis/ "brother-in-law (of husband or wife)."

⁸⁷¹ Only in OO /q³vł³mstu/ "rusty colour, colour as of rotten wood; water with moss in it" HA /q³vłb'h/ (a small species of maggot) KW /q³vłpa/ "to tear apart."

⁸⁷² In HE /q³vł³ms/ OO /q³vł³ms/ and /q³vł³mc/ HA /q³vłm³s/ "having dry rot."

⁸⁷³ HE/OO/HA {q³vyly-} is attested only before the suffix {-rw} "together, etc." (suffix no. 4290).

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
18930	2031 2039	q ³ vlh-	q ³ vlh-	q ³ vlh-	q ³ vlh- q ³ vyllhx- q ³ vynhl-	giving signs of life, stirring, twitching; (hence:) alive, to survive ⁸⁷⁴
18940	2032 2041 2017	q ³ vl ³ - q ³ l ³ h-	q ³ vl ³ - q ³ l ³ h-	q ³ vl ³ -	q ³ vl ³ - q ³ vm ³ -*	covered all over, blanketed, cloaked, concealed, covert (operation) ⁸⁷⁵
18950	2034 2040	q ³ vl ³ -	q ³ vl ³ -	q ³ vl ³ -	q ³ vl ³ - q ³ vm ³ -*	1a. limit, end point, to reach the end; 1b. to bring to an end, to finish, to complete; 2. delimited, defined, distinct, clear, lucid, recognizable ⁸⁷⁶
18970	2042 2053				q ³ vk- q ³ vk ^v -*	to notch
18980	2043				q ³ vk-*	(?) ⁸⁷⁷
18990	2044				q ³ vy-	(?) (perhaps onomatopoeic) ⁸⁷⁸
19000	2045	q ³ vyt-	q ³ vyt-	q ³ vyt-		to hug, to embrace
19001					q ³ vyt-*	to pry, to split off

⁸⁷⁴ KW has preserved the original meaning of stirring etc. in {q³vyllhx-} and {q³vynhl-}.

⁸⁷⁵ {q³vl³-} and {q³vl³h-} occur in e.g. HE /q³vlk³h/ and /q³vl³ak³h/ OO /q³vl³k³h/ and /q³vl³ak³h/ HA /q³vlk³h/ "anything covering the body, etc." and in the HE/OO/HA/KW stem {q³vl³h£-} "to hide sth., to do sth. secretly." For KW this stem is the only example of {q³vl³-}. Some and perhaps all derivatives of the form {q³vm³-}* are from the Koskimo dialect and could not be reelicited anyway.

⁸⁷⁶ KW {q³vm³-}* only in /q³vm³ba/* "at an end" which is from the Koskimo dialect.

⁸⁷⁷ In KW /q³vka/* "to get less."

⁸⁷⁸ In KW /q³iq³viq³vi/ "crossbill" ("petrel" according to Koskimo source).

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
19010	2046	q ³ vys-	q ³ vys-	q ³ vys-	q ³ vys-	to grip, strangle, squeeze,
	2047	q ³ vy ³ s-	q ³ vy ³ s-			wring ⁸⁷⁹
19020	2048				q ³ vy£-	to be silent, stop speaking, quieten down
19040	2049	q ³ vył-	q ³ vył-	q ³ vył-	q ³ vył-	(HE/OO/KW) to break, crumble;
	2050					to grind up, crush, shatter, mince; (HA) disintegrating, rotting (meat, fruit fish)
19070	2051	q ³ vyqv-	q ³ vyqv-		q ³ vyqv-*	to twist, warp, loose shape or structure
19080	2016	q ³ vwmhq-	q ³ vwmhq-			stump ⁸⁸⁰
19090	2054	q ³ vwt-	q ³ vwt-	q ³ wt-	(t ³ q-)	mushy, jam-like
19100	2055	q ³ vwł-				salmon stew, fish mulligan
19110	2056	q ³ vwł-	q ³ vwł-			to bend or fall forwards (as in diving, somersaulting)
19120	2057	q ³ vwqv-	q ³ vwqv-	q ³ wqv-	q ³ wqv-	stationary, stable, free of flow,
	2345	q ³ wqv-	q ³ wqv-			calm (water, weather)
19130	2058	q ³ vwχv-	q ³ vwχv-		q ³ wχv-	to dress
19140	2059	q ³ vwqv-	q ³ vqv-		q ³ vq-	bright light shining, to flash
		q ³ vwχv-	q ³ vχv-			
19150				q ³ vq-		to wish for sth. ⁸⁸¹
				q ³ vhq-		
19160	2062				q ³ vh-*	(?) ⁸⁸²

⁸⁷⁹ Possibly also in OO /q³vais/ "my friend!"

⁸⁸⁰ Could contain a root {q³vmq-} or {q³vwmh-}.

⁸⁸¹ In HA /q³vqɭa/ "to wish for sth., etc." and HA /q³varł/ "what one wishes."

⁸⁸² In KW (Koskimo dialect) /q³va/* "to live."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
19170	2064 2065	q ³ vh-	q ³ vh-	q ³ vh-	q ³ vh-	standing together, grouped or bundled together; standing out, rising
19180	2066				q ³ vht-	(?) ⁸⁸³
19190	2068	q ³ vht-	q ³ vht-	q ³ vht-	q ³ vht- q ³ vhc- q ³ vh ³ hc-	(?) ⁸⁸⁴
19200	2067	q ³ vht ³ - q ³ vht ³ h-	q ³ vht ³ - q ³ vht ³ h-	q ³ vht ³ h-		crowded ⁸⁸⁵
19210	2069	q ³ vhs-	q ³ vhs-	q ³ vhs-	q ³ vhs-	to well up (tears), to weep, to wail
19211					q ³ vhs-	(?) ⁸⁸⁶
19220	2070 2072	q ³ vhl-	q ³ vhl-	q ³ vhl-	q ³ vhl- q ³ vhl ³ -	to burn to cinders, to destroy by war ⁸⁸⁷
19230	2071		q ³ vhlhx-		q ³ vhlhx-	dress up for special occasion ⁸⁸⁸

⁸⁸³ In KW /q³vadiqa/ "unhappy, downcast, sad."

⁸⁸⁴ Examples refer to slugs and snails and seem to confuse snails, which have a coiled shell, and slugs, which lack it. Boas's glosses mention snails only (1928:268; 1948:364).

⁸⁸⁵ A cross-family stem, cf. Proto-Salish *-q³vac³- "full" in Kuipers (2202:95).

⁸⁸⁶ In KW /q³vaq³vshχε³/ "edges of halibut" KW /q³vaq³vsawε³/* "middle piece of salmon" KW /q³vayus/ (probably:) "lower jaw" KW /q³vay³uc³a/* "soft end of fern root" KW /q³vayal³ac³i/* "castoreum." Boas's dictionary lists the first two as derivatives of {q³vhq-} "to split etc." They could also be misrecordings. Note the semantic similarity between KW /q³vaq³vshχε³/ and the {q³vh-}-derivate {q³vh[q³vh]-nχ-αy³} > /q³vaq³vshχε³/ "ribs of halibut (standing on edge)."

⁸⁸⁷ Is a cross-family stem, cf. Proto-Salish *-q³vhl-, *-q³vay- "to scorch, (burn to) ashes, black, etc." in Kuipers (2002:95).

⁸⁸⁸ OO only in names of likely KW origin.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
19240	2074	q ³ vhk-	q ³ vhk-	q ³ vhk-		to stand up, to rise
19250	2075		q ³ vhk-			(?) ⁸⁸⁹
19260	2076 2077 2078	q ³ vhqv-	q ³ vhqv-	q ³ vhqv-	q ³ vhqv-	grey, smoke colour, dogfish colour; (hence:) (HE/OO/HA) dogfish; to stick out, rise up, pierce (like dorsal spines of dogfish); (KW) 1. to darken (by smoke, heat), grey (like seagull); 2. to stretch oneself out with the arms up ⁸⁹⁰
19280	2079	q ³ vhq-	q ³ vhq- q ³ vhχ-	q ³ vhq-		to scream, to shout ⁸⁹¹
19281	2080		q ³ vhq-		q ³ vhq-*	to split along an axis (like salmon halves along the backbone prior to smoking)

⁸⁸⁹ In OO /q³vaka/ "to take salmon out of the trap."

⁸⁹⁰ 1. According to https://en.wikipedia.org/wiki/Spiny_dogfish, dogfish are greyish brown at the back but according to <http://www.enchantedlearning.com/subjects/sharks/species/Dogfish.shtml> the colour is deep grey with some white spots. 2. Also according to https://en.wikipedia.org/wiki/Spiny_dogfish, the dogfish can pierce its captor with its two dorsal spines by arching its back. 3. The association with dogfish survives in KW only in the "stretch out" meaning. 4. Possibly the root occurs with the "pierce" and "stick up" meaning in OO {q³vhqv-+w³l}> /q³vaq³vul/ "fence" (which probably refers to a palisade) and in KW /q³vaq³vu³lsm/ "barrel." 5. The root is a cross-family stem, cf. Proto-Salish *-q³vax/χv- "to smoke (said of fire), smoke colour" in Kuipers (2002:97).

⁸⁹¹ {q³vhχ-} only in OO /q³vaq³vaxa/ [1] "to summon people to a potlatch planning." Possibly this root really refers more generally to a channel's mouth opening wide ("splitting") to let something through, in which case it is related to roots nos. 19281 and 19290.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
19290	2081 2082 2083	q ³ vhχ-	q ³ vhχ-	q ³ vhχ-	q ³ vhχ-	to sprout or fold off a stem (like growing plant's buds, leaves, branches); to slope down from a ridge or stem (like roof's sides, the down-sweeping branches of a western hemlock tree); to grow (like plant), to rise, to expand (like dough)
19300	2073	q ³ vh ³ l-	q ³ vhl- q ³ vh ³ l-	q ³ vh ³ l-	q ³ vh ³ l-	to pick sprouts
19310	2084				q ³ vh ³ x-*	to sit up straight, stretch the body
19320	2086 2087				χvmt-	squirming, writhing, undulatory motion ⁸⁹²
19340	2088	χvms-	χvms-	χvms-	χvms-	venereal disease
19350	2089	χvt-	χvt-		χvt- χvht-	(HE/OO) to cut with a knife; (KW) to cut grooves with a knife on a swelling to make it go down ⁸⁹³
19360	2090	χvn-	χvn-	χvn-	χvn-	to shake, shiver, tremble; tense
19370	2091	χvn-	χvn-			burnt up (said of fire)
19380	2092				χvnt-	excited, agitated, jumpy, nervous

⁸⁹² In KW {[χvmt]χvmt-h} > /χvmt:χvmta/ "epileptic fits" and words referring to the land otter (= river otter). The link between the two is probably that a land otter can swim by dorsoventral undulation of body and tail (cf. https://en.wikipedia.org/wiki/North_American_river_otter and <http://animals.nationalgeographic.com/animals/mammals/american-river-otter/>).

⁸⁹³ HA uses {tws-} and {k³y-} and KW uses {t³ws-} for cutting with a knife in general.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
19390	2093	χvnkv-	χvnkv-	χvnkv-	χvnkv-	child, offspring (of people, animals) ⁸⁹⁴
19400	2094	χvs-	χvs-	χvs-		losing shape, cohesion or vigour; to lose parts (as when plants lose berries, leaves); to dissolve (like soap flakes), melt, disintegrate; (HA also:) to become covered (e.g. with mud, water), to become overpowered; to get cleared (of clutter)
19420	2094 2101	χvl-	χvl-	χvl- χvlc-/ χvls-	χvs- χvz-	seal blubber; (HA also:) animal fat ⁸⁹⁵
19430	2096				χvlt-	to mark a line (as for sawing), to scratch a mark on sth. (e.g. when drawing pictures on the sand)
19440	2097 2098	χvlc-	χvlc-	χvlc-	χvls-	(?) to turn the head aside; head-turning, eye-catching, conspicuous ⁸⁹⁶

⁸⁹⁴ In all dialects the root occurs also as the free form {χvnwkv-} in which the augment |w| stems from |∞|. Additionally, in KW it occurs in a variety of augmented forms whose interpretation is problematic, cf. {χvnynkv-}, {χvny∞kv-}, {χvhynkv-}, {χvhn³wkv-}.

⁸⁹⁵ {χvlc-} or {χvls-} only in HA {χvlc/s-£ms} > /χv'ɬsɬms/ "fat on the belly."

⁸⁹⁶ Occurs possibly also in HE /χv'ɬzus/ OO/KW /χvɬzus/ HA /χv'ɬcus/ KW also /χvɬzis/ which is a fish name consultants say refers to a tommy cod, ratfish or "big-eye." Boas (1947:332) says it is a Hexagrammos superciliaris. On p. 276 of Bella Bella Texts Boas says it means a Hexagrammos octogrammus, which is the masked greenling and a member of a family of brilliantly colourful fishes that also include the non-cod called ling cod (<http://greenling.steveclarkhall.com/fish.htm>). Bella Bella elder Willie Gladstone said the fish in

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
19450	2099		χvlk-		χvlk-	to mark with a groove
19451	2095				χvlyqv-	to shake the hands (in dancing), to crumple in the hands ⁸⁹⁷
19460	2100	χvlqv-	χvlqv-	χvlqv-	χvlqv-	shark, rough like shark skin, to use sth. rough (like sandpaper, a file or dogfish skin) in order to smooth a surface or sharpen an edge
19480	2102				χvk-	crack (as in a rock), groove, ditch
19490	2103	χvyt-	χvyt-	χvyt-	χvyt-	to stir, to mix by stirring, to mash with a spoon
19500	2104				χvyɬ-	to fart
19510	2105				χvyłh-/ χvył∞- χvył ³ h- χvył ³ -*	(?) ⁸⁹⁸

question is smaller than a ling cod, which is consistent with it being a greenling. The nickname "big-eye" however points to the ratfish, which is a small shark with a duckbill-shaped snout, a long pointed rat-like tail and large emerald green eyes which are able to reflect light, similar to the eyes of a cat. The North Pacific tommy cod or tomcod (*Microgadus proximus*) is cod-like and doesn't have conspicuous features like the ratfish or the greenling family.

⁸⁹⁷ Could contain a root {χvł-} or {χvl-}, or be an expanded form of {χvlqv-}. Tension could be the shared element of the stem's two senses.

⁸⁹⁸ {χvyłh-} or {χvył∞-} occurs with suffix no. 4220 in the stems {χvyłh/∞-w-} and {χvyłh/∞-hw³-} "to spawn." {χvył³h-} is a free form meaning "quartz crystals." Boas's dictionary lists it as /χvył³/* < {χvył³-} (1948:391). The semantic connection between spawning and quartz awaits clarification.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
19520	2106		χvył-		χvyx-	(?) losing shape, cohesion or vigour ⁸⁹⁹
19530				χvkv-		(?) pebbles, loose small hard things (e.g. potatoes)
19540	2107	χvws-	χvws-		(zs-)	to boil (as water), to give off bubbles
19580	2109				χvht-	lascivious, fond of mating ⁹⁰⁰
19590	2110				χvnh- χvnhł-	poised for moving or acting ⁹⁰¹
19600	2111 2112			χvhs-	χvhs-	(HA) to scrape off inner cottonwood bark; (KW) to tear (skin, fabric, a sheet of sth.)
19610	2113	χvhs-	χvhs-	χvhs-	χvhs-*	(HE/OO/HA) maggoty; (KW) flyblow ⁹⁰²
19620	2114			χvhł-	χvhł-	to fillet, to gut, to carve
19630	2115				χvhk ³ n-*	old female salmon
19640	2116				χvhkv-*	furrows

⁸⁹⁹ In the stem KW {χvynht-} "upset, restless, mushy, mashed, to make a mess of sth." and in OO {χvyłhkv} "(sth.) having lost its form again (as e.g. whipped-up berries)."

⁹⁰⁰ In words for testicles and the wren. Wrens are associated with sexual activity, cf. p. 137 of *Hunting the Wren: Transformation of Bird to Symbol: a Study in Human-Animal Relationships* by Elizabeth Atwood Lawrence, 1997, The University of Tennessee Press/Knoxville.

⁹⁰¹ {χvnh-} could be an augmented form of {χvn-} (root no. 19360) with the meaning "tense." It also occurs in the stem {χvnhł-} but is here followed by a suffix whose form could be {-ł} or {-hł} while its meaning is unclear.

⁹⁰² Could be a cross-family stem, cf. proto-Salish *-xv/χvay-a7 "fly, maggot, worm, ant" in Kuipers (2002:122).

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
19660	2117				χvhq-	to scratch ⁹⁰³
19670	2118			rp-	rp-	(?) ⁹⁰⁴
19680				rp-		bearing the name of ... ⁹⁰⁵
19690	2120	rm-	rm-	rm-	rm-*	to lie somewhere ⁹⁰⁶
19700	2121				rmt- rms-*	to gather up or hold loose things (e.g. wood, moss, down, fern fronds)
19730	2122				rmχ-	to use one's arms to carry or keep in place loose things (e.g. blankets)
19740	2123	rm ³ χ-	rm ³ χ-		rm ³ χ-	left side
19750	2124			rt-	rt-	bent, curved, rounded
19760	2125	rn-	rn-	rn-	rn- rhn-	female
19770	2126	rn-	rn-	rn-	rn-	to carry a load in one's arms
19780	2127	rn-	rn-		rl-	wave

⁹⁰³ Could be an alternant of {xvhq-} (root no. 16730). Is a cross-family stem, cf. *-χvu/aqv- "to grind, rasp; snore" in Kuipers {2002:128}.

⁹⁰⁴ Possibly in KW /rβluxvstvi³/ "eyeball" and HA /rarabl'ai/ "1. to tickle somebody; 2. the star-shaped receptacle which remains after a raspberry or strawberry is picked." What may link these meanings is uncertain. As suggested in Lincoln (n.d.), perhaps the root {rp-} means "inserted, tucked in" and is an alternant of {gp-, kp-} "to tuck in etc." (root no. 11580).

⁹⁰⁵ Used proclitically and with left-hand adjunct terminating {#s}, as in HA /rps Γ'auləq/ "one called /Γ'auləq/."

⁹⁰⁶ In HA said of people.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
19790	2128	rnys-	rnys-	rnys- rn ³ ys-	rlys- rl ³ ys-	to screech (like bird), to squeak, to scream (like siren) ⁹⁰⁷
19800	2129				rnɬ-	(?) ⁹⁰⁸
19810	2130				rnɬ-*	to beware, to take care ⁹⁰⁹
19820	2131				rnk-	thick, viscous (said of a liquid, fog, mud, oil, paste), pasty, mushy, to get thick
19821				rs-		(?) ⁹¹⁰
19830	2132 2133 2134	qs-	rs- qs-	rs-	rs- qs-	round, oval, curving, coiled, winding; one's eye
19840	2138	rl- rlh-	rl- rlh-	rlh-		to wait for
19850	2137 2139	rl-	rl-	rl-	rl-	curved shape (like bird's beak), curving motion, to subtend, to connect two sides of an angle

⁹⁰⁷ 1. The Kitlope consultant for HA used {rn³ys-} but from the Kitamaat one {rnys-} was recorded. KW {rl³ys-} is attested only in {rl³ys- %twəy³} > /ɾɿ³iztʉɛ³/ "screaming while going along." 2. Stem could contain a root HE/OO/HA {rx-, rn-} KW {rɬ-, rl-}. Boas reports a term KW /rɬ.h³id/* "to reproach" that perhaps shares a root {rɬ-} "shrill (piercing) sound or talk" with KW {rlys-}, however, the term could not be re-elicited.

⁹⁰⁸ Only in KW /ɾɿɬa/ "to thicken (as oil in cold weather)."

⁹⁰⁹ In KW (Koskimo and Newetee dialects) /ɾɿɬa/* "beware!" and KW /ɾɿɬagɿɿɬ/* "to take care of oneself in the house."

⁹¹⁰ Proclitic attested in imperatives such as HA /ɿs_g'aɿɿɿ/ and /ɿs_g'aɿɿɿ/ "Come in!" in which the structural centre is {ghɿ=ɿɿ} "to come into sth." to which have been joined {#ɿɿ} (suffix no. 5440) and {#s} (suffix no. 2200). Unknown what the proclitic contributes semantically.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
						(like muscle), to lie or put across ⁹¹¹
19860	2140	rlp-	rlp-	rlp-	rlp-	to use hooked fingers or hand for pulling towards oneself or hanging on (as when pulling trigger or holding on to rail or leash); (in some KW non-reelicitable examples also:) to count using finger to bend other hand's fingers
19870	2141				rls-	to paint, to smear on ⁹¹²
19880				rlk-		peg or pole placed across sth. (e.g. a slope) to support or stabilize it
19890	2142	rlxv-	rlxv-	rlxv-	rlxv-	hook-shaped, to use the hooked fingers for pulling, lifting or counting.
19891	2143	rlwhd-	rlwhd-			water lily ⁹¹³
19900	2144 2145	rlq-	rlq- rlχ-	rlq-	rlq-	to curve fingers or hand into a hook or scoop (as for lifting a container by the handle or pushing water away with the

⁹¹¹ Root occurs perhaps also in KW /rɫla/* "redbreasted robin." {rhlh-} (root no. 20280) and {rhl³-} (no. 20290) could be augmented forms of {rl-}.

⁹¹² This root and {q³lc-, q³ls-} may really both refer to rubbing on any mushy or greasy substance with the finger.

⁹¹³ Only in HE /r'ɫw'at/ OO /rɫwat/ "water lily."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
						hand), to swim by curving a fin ⁹¹⁴
19910					rlq- rlyq-	wild rose
19930	2146	rlχ-	rlχ-		rlχ-	to twist ⁹¹⁵
19940	2148	rk- qk-	rk- qk-	rk-	rk- rhk-	woman, wife
19950	2187	rhx-	rhx-	rx-		(?) ⁹¹⁶
19970	2150	ry-	ry-	ry- rhyh-	ry-	long in duration, happening long ago, late
19971	2151	ry- ryh-	ry-	rh-	ry-	come!; to come across, reciprocate, thank
19980	2152 2177	ry- ry ³ - ry ³ h-	ry ³ - ry ³ h-	ry- ry ³ - ry ³ h- rhy ³ -	ry ³ - ry ³ h- rhy ³ -	across, crosswise, sideways ⁹¹⁷
19990	2153	ryp-	ryp-	ryp-	ryp-	birthmark, freckle, mole
20000	2154				ryt-	(?) ⁹¹⁸
20010	2155				rynh-	to threaten

⁹¹⁴ OO {rlχ-} only in /rlχa/, synonym of /rlqa/ "to push water away with the hands, etc."

⁹¹⁵ In KW /rlχ.h³id/ "to spin threads of bark together" and two HE/OO words referring to handling a bolt or screw.

⁹¹⁶ Possibly in HE /ra³rh³i³q³/ OO /ra³rh³i³q³/ HA /rlrh³ai³q³/ "abalone" and related words.

⁹¹⁷ In derivatives it may not be diagnosable if {ry³-} or {ry³h-} is present in which case {ry³-} is assumed.

⁹¹⁸ In KW /rita/ "fresh (said of fish or meat)."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
20020	2149	ryn ³ y-	ryn ³ y-		ryn ³ - ryn ³ y-	(?) ⁹¹⁹
20030	2156	rys-	rys-	rys-	rys-	cow parsnip (<i>Heracleum lanatum</i>)
20040	2157 2158 2227	qy ³ s- qys-	qy ³ s- qys-	qys-	rys- qys-	(HE/OO/HA and KW {rys-}:) mushy, jelly-like, creamy; to scrape up anything mushy (food, paint) with a finger; (KW {qys-}:) smooth, shiny, slippery; to smooth ⁹²⁰
20050	2159	rys-	rys-	rys-	rys-	to trip up, to trip sb.
20060	2160	ryx-	ryx-	ryx-	ryx-	to stick on (like a burr, like hair lice)
20070	2161				ryxv-	to hang
20080	2161	(qhm ³ -)	(qhm ³ -)	(qhm ³ -)	ryxv-	deer
20090	2162	q xv-	(q ³ wp-)	rxv-	rxv- q xv-*	to copulate, to cohabit ⁹²¹
20100	2163	rw-	rw-	rw- rhwh-	rhwh-	(?) to transpire, to become noted; to reveal ⁹²²
20110	2164 2165	rwp- rwm ³ h-	rwp- rwm ³ h-	rwp- rwm ³ h-	rwp-	becoming thin, flat and wide at one end (like paddle, fish scales);

⁹¹⁹ In HE /r'in³i/ OO/KW /rin³i/ "salmon roe" and HE /rɪr'in³i/ OO /ra³ɪrin³i/ KW /raɪrin³i/ "kidneys."

⁹²⁰ HE/OO {qys-} takes the place of {qy³s-} when the root undergoes plural and other augmentation.

⁹²¹ KW {rxv-} is attested only in the Koskimo and Newettee dialects.

⁹²² {rw-} only in the HE/OO stem {rw-hk-} "to bestow a name upon sb." and the HA stem {rw-mh-} "aware sth. is near one." KW {rhwh-}* perhaps in /rawa/* "head of devilfish."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
						to flare out at the end, tile-shaped, plate-like
20120	2166				rwt-	(?) ⁹²³
20130	2167				rwt-	(?) loon ⁹²⁴
20140	2168 2170	rws-	rws-	rws-	rws-	protected by a framework of boards or crossed poles, sheltered
20150	2169				rws-	sweaty, steamed up, dewy
20160	2171			rwɬ- rwɬ-	rwɬ-	to claim sth.
20170	2172				rwɬ- rwɬ ³ -	to rake in with fingers, to scrape up or scoop out with fingers
20180	2174	rwɬ-	rwɬ-	rwɬ-	rwɬ-	berry
20190	2173				rwɬ-*	(?) ⁹²⁵
20200	2176	rwɣv-	rwɣv-	rwɣv-	rwɣv-	to scoop up particled solids (e.g. berries) in the hollow of the hand
20210					rh-	(onomatopoeic) ⁹²⁶
20220	2179	rh ³ -	rh ³ -	rh- rh ³ - rhh ³ -	rh- rh ³ -	early, early in the morning
20230	2180	rht-	rht-	rht-	rht-	fly, biting of fly
20240	2181	rhnh-	rhnh-	rhnh-	rhnh-	evening, night

⁹²³ In KW /ruta/ "to punch, strike with fist."

⁹²⁴ In KW /gut³ga³ɬ/ "cry of loon" KW /rut³ala/* "cry of loon."

⁹²⁵ In two words referring to quartzite rock.

⁹²⁶ In raven's cry and a word for chicken.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
20250	2182	rhzhχ-	rhzhχ-	rhzhq- rhzh-	rhzhq-	starfish; crosswise, at an angle to another line, lines forming a hook-shape ⁹²⁷
20260	2183	rh ³ xs•-	rh ³ xs•-		rhxs•-, rhxs•-	to hook a finger for carrying sth. (e.g. fish by the gills) or holding it in position (e.g. blanket thrown over shoulder) ⁹²⁸
20270	2184	rh£-	rh£-	rh£-	rh£-	to gaff, to hook, to crochet
20280	2186				rhlh-	(?) ⁹²⁹
20290	2185 2135	rhl ³ -	rhl ³ -	rhl ³ -	rhl ³ -	to oppose, criticize negatively ⁹³⁰
20291		rhgv-	rhgv-			(?) ⁹³¹
20300	2188	rhxv-	rhxv-		rhxv-	to hang down (said of a long thing), to be hanging on or over sth., to hang sth. up (e.g. clothes)
20310	2189	rhqv-				(?) worm ⁹³²

⁹²⁷ {rhzh-} only in HA {rhzh-∞χthm³w-•-y} > /raz'aχdam³ui/ "to cross one's feet."

⁹²⁸ Boas (1948:316) mentions the KW root is sometimes {rhxs•-} instead of {rhxs•-} but gives no examples. Lincoln (n.d.) provides one example, KW {rhxs•-h} > /rasxa/ and {rhxs•-h} > /raxsa/ "to carry (fish) hooked on fingers."

⁹²⁹ Possibly in {rhlh-wp-} "across, crosswise, to cross over" and {rhlh-%wqv-m} > KW /raluqvm/ "crooked beak mask (used in Hamatsa dance representing a mythological bird)." Could be an augmented form of {rl-} (root no. 19850)

⁹³⁰ Could be an augmented form of {rl-} (root no. 19850).

⁹³¹ In HE /r'akv/ (endearing term; uncertain for whom) and the vocatives HE /ragv'ai/ OO /ragvi/ (with accent on /a/).

⁹³² In HE /r'arvit/ "clam poisoning worm."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
20330	2191	rhχ-	rhχ-	rhχ-	rhχ-	to stride, straddle, stand with legs apart; astride
20340	2192				rhχ-*	(?) ⁹³³
20360	2194	qp-	qp-	qp-	qp-	hollow vessel (e.g. canoe, container) is upside down or being turned upside down, to pour out from a vessel
20380	2197				qmt-	to notch with knife
20390	2198			qm£-	qm£-	to draw in the stomach
20400	2199	qml-	qml-	qml-		deer
20410	2200	qmk-	qmk-		qmkv-	constricting, constricted (like in trap)
20420	2201 2374	qmxv-	qmxv-	qmxv-	χmxv-	crispy, brittle, crunchy (as seaweed after curing)
20430	2202 2268		q ³ m xv-		qmxv-	fluffy substance (like down, cotton) ⁹³⁴
20440	2203				qmχ-	encircling object slides along the encircled (as when stripping berries off a branch by moving the fingers along the branch while squeezing it, or when oarlock slides along oar)

⁹³³ In KW /raχayu/* "long-handled adze." Boas's KW dictionary lists this word as a derivate of {rhχ-} "to stride, etc." without indicating why.

⁹³⁴ OO only in /q³mukv/ < {q³m xv=-kv} the meaning of which is not remembered by the consultant except that it had to do with making bits and pieces out of sth. The word could be a KW loan (cf. KW /qmukv/ "covered with eagle down") but with /q/ changed to /q³/.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
20441		qdw ³ χv-				(?) ⁹³⁵
20450	2204 2205	qt-	qt-	qt-	qt-	hinge joint, to jackknife, to spread or move together legs of V-shape against resistance; (KW also:) to make taut or tense (as when cocking gun or stringing a bow), to brace, to keep in position, to counteract, to contradict ⁹³⁶
20460	2206	qnc- qnch-	qnc- qnch-	qnc-	qns-	lever with sharp edge coming down (e.g. arm holding a chopping tool), to adze, to use mattock; (HA also:) to make taut or tense (as when stringing a bow) ⁹³⁷
20470					qnkv-	to frown
20480	2207				qnq-*	to snap (like beak) ⁹³⁸
20490	2208	qnχ-	qnχ-	qnχ- qnq-	(q ³ y ³ hk-)	to straighten the legs of a V-shape; to kick, to put on shoes; one's footwear

⁹³⁵ In HE /qduχv/ "a small kind of seal."

⁹³⁶ Possibly also in KW {qt=ws-} "whirlpool" because whirlpools are caused by conflicting currents. {-ws} would be suffix no. 4400.

⁹³⁷ {qnch-} occurs only in {qnch-b-hlh} > HE /q'hcab'al'a/ OO /qh cabala/ "adze" which may have developed under the influence of its synonym {£³hqvh-b-hlh} > HE /£³'aqvab'al'a/ OO /£³aqvabala/.

⁹³⁸ In two words from the /DH³axda³χv/ dialect.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
20500	2209	qc ³ llc-	qc ³ yt-	qc ³ yt-		(?) ⁹³⁹
	2210	qc ³ yt- qc ³ ws-	qc ³ ws-			
20510	2212			qɬ-	qɬ-	to pull in one's stomach ⁹⁴⁰
20520		qɬ-				(?) ⁹⁴¹
20530	2213				qɬt-	to shore up with a post
20550	2215				qɬk-	tired
20551	2214				qɬy ³ h-*	plover (bird) ⁹⁴²
20560	2216	qɬkv-	qɬkv-	qɬkv-	qɬkv-	to lie, to recline (said of animate beings) ⁹⁴³
20580	2217	qɬxv-	qɬxv-	qɬxv-	qɬxv-*	to preserve food (especially berries) by thickening it into a cake through boiling and/or by pouring grease over it
20590	2218 2219	qɬχ-	qɬχ-	qɬχ-	qɬχ-	(?) to leave a trail (e.g. a wake in the water, offspring, eggs, the

⁹³⁹ {qc³ws-} only in HE /qc³'us/ OO /qc³us/ "rack for drying things (e.g. seaweed, fish slices)."
 {qc³llc-} only in HE /qc³'ɫc/ "a sole-like fish." {qc³yt-} in HE /qc³'it/ HA /qc³it/ (probably:) "sole" and HA /q'aaqac³ita/ "to fish for /qc³it/." The latter word has a synonym HA /q'aaqac³a/ which could be a backformation.

⁹⁴⁰ The few derivates include HA/KW {qɬ-&yd} > /qɬ.h³id/ which the HA consultant said means "to draw in one's stomach" but the KW one "to stop feeling full from eating."

⁹⁴¹ In HE /qɬ'a/ "to go and pick abalone" (synonyms: /h³p'a/, /raɫɪh³'iqa/).

⁹⁴² In KW /qɫy³a/* "Aegialitis semipalmata," i.e. semipalmated plover which according to <http://findwords.info/term/aegialitis%20semipalmata> is characterized by a ring around the neck that is black in summer but brown or gray in winter.

⁹⁴³ Possibly also in HA /q'aqlk³va/ "snake."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
	2220 2221					strips left as the scissors move forward through the sheet), streaming behind sth.
20620	2222 2223	qk-	qk-	qk-	qk-	tight, jammed in, trapped, fitting tightly, obstructed, plugged up, causing an obstruction ⁹⁴⁴
20630	2224	qx-	qx-	qx-	qx-	to bind, fasten, secure with or as if with a hoop, noose, or ring; to wear a band
20650	2226 2248	qyt-	qyt-	qyt-	qyt-	to surround, to encircle (like ring a finger, hat a skull) ⁹⁴⁵
20660	2232	qynh-/ qyx-	qynh-/ qyx-	qynh-/ qyx-	qynh-/ qyx-	(?) ⁹⁴⁶
20670	2228	qyl-	qyl-	qyl-	qyl-	to branch off, to head sideways, to lean to one side; one's head is turned to one side (as on a pillow) or moving sideways (as

⁹⁴⁴ KW only in words referring to bunchberries. The connection with being jammed in and fitting tightly is probably in the springy filaments that are cocked underneath the highly elastic petals of bunchberry flowers. When flipping backward the petals release the springy filaments which snap upward and fling pollen out of containers attached to them (see https://en.wikipedia.org/wiki/Cornus_canadensis).

⁹⁴⁵ Only in HE/OO/HA/KW {q[h]yt-} > HE /q'it/ OO/HA /qait/ /KW /qet/ "hat, cap" and derivates, and in KW {qy[q]t-+χλ-hlh} > /qit³χλala/ "wearing a ring" and KW {qy[q]t-+χλ-ay³} > /qit³χλε³/ "ring."

⁹⁴⁶ In HE/OO/KW {qynwł-} HA {qynhwł-} "pillow." Stem could contain root no. 20670 if |n| developed from |l|. Note that such a development did not happen in e.g. HE {h³hlł-°wł} > {h³hlwł} > /h³'al'uł/ "new."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
						in beckoning); (KW also:) to stop on the way
20680	2229				qyɬ-	bog cranberries (probably <i>Vaccinium oxycoccos</i>) ⁹⁴⁷
20690	2230				qyk-	to chew gum ⁹⁴⁸
20700	2231	qyk-	qyk-			(?) ⁹⁴⁹
20720	2234	qyɣ-	qyɣ-	qyɣ-	qyɣ-	to waste away, to wear out, to fade (like colour), to become destroyed; debris left after destruction
20730	2235 2236	qkv-	qkv-	qkv-	qkv-	1. (KW) top of structure buckles and creates overhang; (HA) to spill over (as when container too full or boat rocks so that water washes over its edge); 2. (KW) house collapses; 3. (KW and probably HE/OO) to trap, confine, fit things together so they cannot loosen themselves

⁹⁴⁷ There is visual similarity between a cranberry blossom sitting on top of a long down-pointing bird beak-like structure and the head of a crane. The similarity has led to cranberries being called "crane berries," see <http://cranberry.ca/Farm/facts.html>. This root {qyɬ-} could therefore really be no. 20670

⁹⁴⁸ In KW /qika/ "to chew gum noisily" KW /qik³ala/ "noise made when chewing gum."

⁹⁴⁹ In HE /q'ikm'a/ OO /qikma/ "a species of shellfish with a thick shell and attached to the rocks on one side."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
20750	2237	qkv-/ qxv-				(?) ⁹⁵⁰
20760	2238			qwp-		to melt animal fat at the end of a stick
20770	2239				qwt-	astringency, dry feeling in the mouth (as caused by tannins in e.g. chokecherries)
20790	2242				qwl ³ -*	(?) to wish ⁹⁵¹
20791					qwl ³ wqv-	to use bird arrow (with kelp knob as head) ⁹⁵²
20800	2243	qwqv-	qwqv-	qwqv-	qwqv-	(HE/OO/HA) to drift; (KW) to roll, to list (ship), to tilt (hollow vessel); to move in one's sleep, to worry
20810	2244	qwχv-	qwχv-	qwχv-	qwχv-	to scrape (e.g. a hide)
20830	2247	qχ-	qχ-	qχ-	qχ-	forked, two-pronged
20840	2249	qhp-	qhp-	qhp-		spring salmon
20850	2195 2250	qhp-	qhp-	qhp-	qhb- qbx-	(HE/OO) to rise and come towards one (heat, steam, haze, smell), to waft, a whiff of sth.; (HA) to employ smoke; (KW) heat, heat haze, stuffy air

⁹⁵⁰ In HE /qxvsmkv'il'a/ or /qxvmkv'il'a/ "to win a game by sheer luck."

⁹⁵¹ In KW (Koskimo dialect) /qul³a/* "to wish" and /qul³a³akv/* "(sth.) wished."

⁹⁵² Boas (1948:340) thought the stem means "knob." It is however possible that the stem's structure is {qwl³-%wqv-}, with the root being no. 20790 and meaning "to target, aim or intend" rather than "to wish." The suffix could be no. 4680.

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Root #	Old #	HE	OO	HA	KW	Gloss
20860		qhmmh-			qhmmh-	(?) ⁹⁵³
20870	2196	qhm ³ -	qhm ³ -	qhm ³ -	(ryxv-)	deer ⁹⁵⁴
20880	2225 2251			qht-	qht-	to cut crosswise, to slice, to sever, to cut steaks
20890					qhs-	(?) ⁹⁵⁵
20900	2252 2253	qhs-		qhl-	qhs-	to walk, go on foot; (KW also:) to walk as messenger to invite people ⁹⁵⁶
20901	2254	qhl-	qhl-			(?) ⁹⁵⁷
20910	2255 2256	qhl-	qhl-		qhl-	bent, encircling ⁹⁵⁸
20920	2257	qhk-	qhk-	qhk-	qhk-	to behead, to chop off head
20930	2258	qhk ³ v-	qhk ³ v-	qhk ³ v-		to suffer a loss (as in a game or business)
20940	2259	qhwht-	qhwht-	qhwht-	qhwht-	to hear, to listen, to communicate ⁹⁵⁹

⁹⁵³ In HE /q'am'a/ "toy" and possibly KW /qamina/* and /qaminay³u/* "implement thrown by a KW /m³am³aq³a/."

⁹⁵⁴ In HE /q'am³il'a/ OO /qam³ila/ HA /q'am³ila/ "deer." This root and no. 20860 could be augmented forms of a root {qm-} with diminutive and/or hypocoristic meaning.

⁹⁵⁵ Possibly in KW /qast/ (address used for male friend of male).

⁹⁵⁶ HE {qhs-} only in {qhs=hyw} > /q'ay'ayu/ "stilts" (cf. KW {qhs=hyw} > /qazayu/ "crutch"). The KW free stem {qhs=yɛ} and derivatives refer specifically to marriage.

⁹⁵⁷ Possibly in the stem {qhlht-} "wake of fish streaking by under water, streak in water."

⁹⁵⁸ Possibly in HE/OO {qhlhkv-} "laid beside fire to cook" and KW {qhlwqv-} "bent (like horseshoe)."

⁹⁵⁹ Could contain a root {qh³xv-}, {qh³ɣv-} or {qhwh-}.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
20950	2260	qh _q -		qh _q -	qh _q -*	to hang to dry ⁹⁶⁰
20960	2262			qh _q -		to saw
20970	2263		qh _χ -			rabbit ⁹⁶¹
20980	2264	qh _χ -	qh _χ -	qh _χ -	qh ³ χ-	(onomatopoeic:) to clear the throat with a rasping sound
20990	2265	q ³ p ³ y-	q ³ p ³ y-	q ³ p- q ³ p ³ y-	q ³ p- q ³ p ³ y- q ³ p ³ h-	holding together, un-scattered, organized; (hence in HA/KW:) objects or people are gathered together; (in HE/OO/HA:) to know things already, good at learning and not forgetting; (HA also:) to conform to the standard or tradition ⁹⁶²

⁹⁶⁰ HE only in /q'aq³u/ "drying frame." HA only in /q'aq³u/ "sliced and smoke-dried meat or fish."

⁹⁶¹ Possibly in OO /qaax/ "rabbit."

⁹⁶² A HA derivate of {q³p³y-}, /q³p³i'ala/, has probably become contaminated with derivatives of {q³h³p-} (root no. 21750) to the effect that instead of /q³p³/ one may also hear (unaccented) /q³ap³/. The phenomenon has been observed with both the Kitamaat and Kitlope consultant. Two transcriptions (e.g. HA /q³p³i'ala/ and /q³ap³i'ala/) are given for these cases. The Kitlope consultant is himself aware of the variation and suggests that HA /q³p³i'ala/ or /q³ap³i'ala/ is a borrowing from HE. Furthermore, some words that as far as meaning is concerned would seem to be derivatives of {q³h³p-} "on target, on the right track, etc." (root no. 21750), nevertheless have a root allomorph /q³p-/. The few cases concerned involve a stem with the form of {q³p-stw-}, e.g. HA /q³psdua/ "to put on the right track." These cases are analyzed as containing a variant {q³p-} of {q³hp-, q³h³p-}.

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Root #	Old #	HE	OO	HA	KW	Gloss
21010	2267 2268 2352	q ³ h ³ mh-		q ³ m- q ³ h ³ mh-	q ³ m-, q ³ h ³ mh-*, q ³ h ³ m ³ -*	patch for repairing or covering up; (hence:) 1. patch (= stain) on one's reputation, disgrace; 2. to mend by sewing, to splice (e.g. netting twine) ⁹⁶³
21020	2269	q ³ mt-				(?) ⁹⁶⁴
21030	2271			q ³ mt-	q ³ mt-	song, singing (for the dancers)
21040	2272	q ³ ms-	q ³ ms-	q ³ ms-	q ³ ms-	lazy, reluctant
21050	2273	q ³ m ³ s-	q ³ m ³ s-	q ³ m ³ s-	q ³ ms-	(KW) salmonberry (<i>Rubus spectabilis</i>); (HE/OO/HA possibly:) unripe berry or fruit ⁹⁶⁵
21060	2274			q ³ mł-	q ³ mł-	fleshy, meaty (as opposed to thin and dried out)
21070	2275				q ³ mk-	barb, barbed (like harpoon), harpoon point
21080	2276	q ³ mkv-	q ³ mkv-	q ³ mkv-	q ³ mkv-	to bite sth. hard or brittle, to crunch, crunchy

⁹⁶³ {q³m-} refers to excusing or covering up error or embarrassment in the elicited or re-elicited KW examples in Lincoln (n.d.). Boas however lists many non-reelicitable derivatives referring to physical patching and splicing. The only clear HA example of the root is /q³am'agh/ "goldeneye duck" (and note that adult males have a dark head and a circular white patch below the eye).

Possible examples are HA /q³m'ugvɬla/ "to take care of sth., to keep sth. out of trouble" and HA /Q³m³as/ (chief's name, meaning unknown). That the root occurs in HE as {q³h³mh-} is speculative because its only example is /Q³'am'akas/, a man's name belonging to the late Edwin Hunt but whose meaning is unknown. Also speculative is the root's occurrence in KW (Koskimo and Newetee dialects) /q³amaɬla/* "uncle" KW (Koskimo) /q³am³a³al³a/* (possibly:) "to warn."

⁹⁶⁴ In HE /q³'md'ms/ "small dead hemlock without bark and causing sparks in the fire."

⁹⁶⁵ HE/OO/HA only in HE /q³msɬ'i/ OO /q³m³sɬ'i/ HA /q³msɬ'i/ "unripe fruit or berry."

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Root #	Old #	HE	OO	HA	KW	Gloss
21100	2277				q ³ mχ-	herring
21110	2278 2279	q ³ t-	q ³ t-	q ³ t-	q ³ t-	patch, to patch; individual or subgroup differing from main group ⁹⁶⁶
21130	2280	q ³ ht-	q ³ ht-	q ³ t-	q ³ ht-*	(?) ⁹⁶⁷
21140	2281 2282 2289 2351	q ³ n- q ³ hnh-	q ³ n-	q ³ n- q ³ hnh-	q ³ n- q ³ hny- q ³ hn ³ -	not coming apart, joined together (like panels of a patchwork quilt or cardboard box), fixated, not running any more (like tree sap), sticky (like resin) ⁹⁶⁸
21160	2283	q ³ nt-	q ³ nt-	(kt-)		blast, explosion
21170	2284	q ³ nc-	q ³ nc-			to scald (face, hands, etc.)
21180	2285 2286 2287	q ³ nc- q ³ ns-	q ³ nc- q ³ ns-	q ³ nc- q ³ ns-	q ³ ns-	not coming apart, joined together (like the overlapping plates of a chiton's shell that resemble the sewn-together panels of a quilt),

⁹⁶⁶ Occurs also in KW terms referring to sand fleas, a beach-dwelling species of the Talitridae family of Amphipoda. Their body divides into patch-like segments.

⁹⁶⁷ In HE /q³'at³a/ OO /q³at³a/ HA /q³t³a/ KW /q³at³a/* "a species of edible sea anemone." Could be root no. 21110.

⁹⁶⁸ The forms {q³hnh-, q³hnh-, q³hn³-} only in HE /q³'an'iq³as/ "balsam tree" HA /q³'amiq³as/ "cottonwood" KW /q³aq³an³i³/ "black-fruited hawthorn (Crataegus rivularis)." Black cottonwood is a subspecies of balsam poplar. Its buds are sticky with resin that used to be used as an adhesive. The connection between hawthorn and stickiness is that the berries contain a lot of pectin, which is thick and sticky. Possibly {q³hnh-} occurs also in HE /q³'an'isxa/ "to regurgitate (as after eating rancid ooligan oil)" although its suffix(es) are unclear and the only connection with stickiness may be that the oil refuses to go down the digestive tract.

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Root #	Old #	HE	OO	HA	KW	Gloss
						intertwined (like mending twine and the net or sock being mended); to patch, mend, darn, sew ⁹⁶⁹
21190	2288				q ³ ns-	meat ⁹⁷⁰
21200	2290			q ³ n£-	q ³ n£-	(?) to respond to physical impact (as when drawing in belly and bending over when hit in stomach), to renege (on a decision), to react angrily
21210	2291	q ³ nłh-	q ³ nłh-			to add sth. to sth. else, to refill
21220	2292			q ³ nk-		(?) sharp (object, movement) ⁹⁷¹
21230	2293	q ³ nq-	q ³ nq-		q ³ nq-	tacky, sticky
21250	2294 2295 2296	q ³ s-	q ³ s-	q ³ c- q ³ s-	q ³ s- q ³ hs-	1. elastic, resilient, rubbery, not breaking under pressure, chewy (like meat, fat, tree pitch); (KW also:) expandable (like one's chest), taking revenge, do in return; 2. pressed together (like spring, sides of boat, the legs of a hinge joint such as knee or elbow), to

⁹⁶⁹ Possibly also with the sense "not falling off (in autumn)" in HA /q³'hc³ialas/ "needles of an evergreen tree."

⁹⁷⁰ Only in KW /q³hsq³as/ "to eat meat."

⁹⁷¹ In words whose available glosses are hard to connect, e.g. HA /q³'hka/ "to use an arrow with a sharp bone at the end" and HA /q³'hxc³ud/ "to snap the eyes at sb."

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Root #	Old #	HE	OO	HA	KW	Gloss
						fit tightly or accurately (like a shirt a person), close up against, snug ⁹⁷²
21300	2297	q ³ ɛ ³ h- q ³ ɛ ³ -	q ³ ɛ ³ h-	q ³ ɛ ³ h-	q ³ ɛ ³ h-	six
21310	2298	q ³ l-	q ³ l-	q ³ l-	q ³ l-	to reach around sth. (e.g. with one's arms) for lifting or supporting
21320	2299	q ³ l- q ³ lyp- q ³ lhχ-	q ³ lyp- q ³ lhχ-	q ³ lyp- q ³ lhχ-	q ³ nyp- q ³ lhχ-	({q ³ l-, q ³ lyp-, q ³ nyp-}:) to reach or wrap around sth.; (in HE/OO/HA developed into:) to loop around a peg or other point of support (as suspenders around one's shoulders or as a padlock's U-shaped shackle around the ring it will dangle from), to reach around (as one's arms around a pole when climbing); dangling, suspended; ({q ³ lhχ-}:) fence ⁹⁷³

⁹⁷² {q³c-} is diagnosable only in HA {q³[hh]c-} > /q³aac/ "to marry within one's own tribe."

Either {q³c-} or {q³s-} may occur in HA /q³st³ad'i/ "beaver cast, castoreum." A beaver's castor sacs are tightly embedded in surrounding tissue and difficult to cut out, see

http://www.youtube.com/watch?feature=player_detailpage&v=aXFgkwiD_zA.

⁹⁷³ HE {q³l-} is likely the result of backformation from {q³lyp-} because it occurs in just two examples without OO counterpart, e.g. {q³l-xsk³hnh-hlh} > /q³'ɪxsk³'an'ala/ "hand and/or forearm in a sling." The stem {q³lhχ-} "fence" is probably an unanalyzable cross-family stem, cf. Proto-Salish *q³lχ, *q³laχ "round; fence, stockade, corral" mentioned in Kuipers (2002:88). A less likely interpretation is that it contains a root {q³l-} referring to the slings used to suspend

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Root #	Old #	HE	OO	HA	KW	Gloss
21350	2300	q ³ l ³ -	q ³ l ³ -	q ³ l- q ³ hlh- q ³ l ³ - q ³ hl ³ -		going a long distance, reaching far, going deep
21360	2301 2353	q ³ ht-	q ³ ht-	q ³ ht- q ³ h ³ t-	q ³ ht-	to chisel, to break a copper ⁹⁷⁴
21370	2302	q ³ lc-	q ³ lc-	q ³ lc-	q ³ ls-	oil, grease, lubrication
21380	2303 2304	q ³ lc- q ³ ls-	q ³ lc- q ³ ls-	q ³ lc-	q ³ ls-	weighted, held down or immobilized by weight, anchored
21390	2305				q ³ lk-*	to move slowly
21400				q ³ lk-		(?) to braid hair
21410	2306	q ³ lxv-	q ³ lxv-	q ³ lxv-	q ³ lxv- q ³ lkv-*	to coil, curl, wriggle; worms ⁹⁷⁵
21420	2307				q ³ lχ-	wrinkled, creased
21430	2309 2310	q ³ k-	q ³ k-	q ³ k-	q ³ k-	to pinch (like crab); to bite with the teeth, to trap, to clasp, to close (shell of shellfish)
21440	2308 2311	q ³ k-	q ³ k-	q ³ k-		piling layer upon layer, to dry and pound salmon eggs (to make "Indian cheese")

one horizontal fence pole from another and that {-hχ-} is suffix no. 6200 and refers to the suspension.

⁹⁷⁴ {q³ht-} occurs possibly also in HA /Q³at³idχv/ "Hartley Bay, people from Hartley Bay."

⁹⁷⁵ {q³lkv-} only in KW /q³лgvac³χsde³/* "rope coiled at bottom of box or basket."

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Root #	Old #	HE	OO	HA	KW	Gloss
21450	2311 2147	q ³ k-		q ³ k-	rg-*	(?) ⁹⁷⁶
21460	2312	q ³ x-	q ³ x-	q ³ x-	q ³ x-*	to eat (crunch) raw fish eggs ⁹⁷⁷
21470	2313	q ³ y-	q ³ y-	q ³ y-	q ³ y-	high in number, quantity or degree; much, many
21480	2324	q ³ y-	q ³ y-	q ³ y-		poor, destitute
21490		q ³ y-	q ³ y-	q ³ y- q ³ hy ³ -	q ³ hy ³ -	(?) spirit, spiritual ⁹⁷⁸
21500	2314	q ³ ym ³ -		q ³ ym ³ -		to troll, to fish with hook and line ⁹⁷⁹
21510	2315				q ³ yt-	to fish with rod and baited hook; (in /Lirviłda ³ χv/ dialect also:) to troll
21520	2316				q ³ yz-*	cutthroat trout
21530	2317 2318	q ³ ys-	q ³ ys-		q ³ ys-	pungent, musky, skunky smell (of e.g. crushed hemlock needles, underarm, crushed stink currant leaves)

⁹⁷⁶ In HE /q³g'is/ HA /q³gis/ "transparent to the bottom (water)" and HE /q³k³a/ "stone on which the stone-throwing game (HE /lk'a/ OO/KW /lka/) is played." The KW root occurs only in /rga/* "stone against which players throw in the /lka/ game." This /rga/ could be a misrecording of KW */q³k³a/.

⁹⁷⁷ Boas (1948:352) gives two examples of this root but they refer to eating raw salmon spawn whereas the HE/OO/HA examples are about eating raw herring eggs. Boas also lists as examples of this root what are really examples of {q³nq-} "tacky, sticky."

⁹⁷⁸ In HE/OO/HA {q³y-%lhqv-} "to drone at ceremony" (with suffix no. 3010) and {q³hy³-%wqv-} (in HA:) "tame the /t'anis/ dancer," (in KW:) "become excited in ceremony."

⁹⁷⁹ HE root is used in Klemtu instead of Bella Bella's {dwkv-}. Possibly a Tsimshian borrowing.

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Root #	Old #	HE	OO	HA	KW	Gloss
21540	2320	q ³ ykv-	q ³ ykv-	q ³ ykv-		to lie, to deceive, to lure
21541					q ³ ywd-	to talk
21550	2321				q ³ yq-	(?) ⁹⁸⁰
21560	2322	q ³ yχ-	q ³ yχ-		q ³ yχ-	driftwood
21570	2319 2323	q ³ yχh-	q ³ yχh-	q ³ yχ.ħ ³ h-	q ³ ył-*	mosquito ⁹⁸¹
21571		(qnχ-)	(qnχ-)	(qnq-) (qnχ-)	q ³ y ³ hk-	to kick
21580	2325	q ³ kv-	q ³ kv-	q ³ kv-	q ³ kv-	severed, amputated, cut off
21590	2326	q ³ w- q ³ hw ³ -	q ³ w-	q ³ w-	q ³ w-	isolated body of water (e.g. pond, pool, puddle, lake), standing water
21600	2327 2328	q ³ wp-	q ³ wp-	q ³ wp-	q ³ wp-	to copulate, insert extended object (penis, stick) into receptacle; to wiggle, vibrate, move up and down and back and forth
21601	2330	q ³ mw- q ³ wmw-	q ³ wm∞- q ³ wmw-	q ³ wm∞- q ³ wmh-	q ³ wmh-* rmwt-	to howl (like wolf, coyote, dog), to wail (as at funeral) ⁹⁸²

⁹⁸⁰ In words referring to (probably ritual) purification and one word glossed as "charm."

⁹⁸¹ In HE /q³iχa/ OO /q³iχa/ HA /q³iχ.ħ³a/ KW (Koskimo dialect) /q³iła/* "mosquito." Unanalyzable. Could be a borrowing.

⁹⁸² KW {q³wmh-*} is attested only in /q³umala/* "to wail, to sing mourning song for chief in chorus while beating time with stones." Boas (1947:332) mentions KW {rmwt-h} > /rmuta/ "wolf howls" as an example of a suffix {-wt-} possibly referring to sound. This analysis leaves a problematic root {rm-}.

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Root #	Old #	HE	OO	HA	KW	Gloss
21602					q ³ wmh-	(?) ⁹⁸³
21610	2331	q ³ wdh-	q ³ wdh-	q ³ wdhq-	q ³ wdhq-	(?) ⁹⁸⁴
21620	2332	q ³ wt-	q ³ wt-	q ³ wt-	q ³ wt-	pole or pillar holding sth. up, open or in place; to use a pole to brace, shore up, support, poke or push ⁹⁸⁵
21630	2333 2334 2335 2336 2338	q ³ ws-	q ³ ws-	q ³ ws-	q ³ ws-	(HA/KW) arch (of fish gill), circle, circular (as a bracelet), to encircle (as crabs with their pincers), to circulate, to trade; (HE/OO) traffic circulation, to paddle, travel on water, go by boat
21670	2339 2340 2341	q ³ wł-	q ³ wł-	q ³ wł-	q ³ wł-	1. (HA/KW and possibly in two OO examples:) ends of long thing curving towards each other, crooked, curved, winding, whirling, to turn around, to revert, to go back and forth (like meandering river);

⁹⁸³ Possibly in KW /q³um³is/ < {q³wmh-=ys} "crab."

⁹⁸⁴ Only in the name of the horned grebe (a bird). Boas (1948:362) says the KW name means "poked in crotch" which means he analyzes it as {q³wt-=hq} with root no. 21620 and suffix no. 6100. Considering the absence of the critical /q/ from the HE/OO term the name more likely has to do with the bird's "distinctive golden-yellow patches of feathers behind its eyes, which resemble short horns. These 'horns' can be erected or lowered, and are only present during the breeding season." (<http://www.arkive.org/horned-grebe/podiceps-auritus/>)

⁹⁸⁵ Possibly also in KW {q³wt-+χwly} > /q³ut³χuli/ "little red berry bush growing on rocks."

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Root #	Old #	HE	OO	HA	KW	Gloss
						2. (HE/OO/HA/KW) fermentation, agitation in liquid; (hence:) to well up, to bubble up, to fizz, to boil; (HE/OO/HA also:) to burp, belch, repeat ⁹⁸⁶
21680	2337				q ³ wy ³ -	to rub in the hands (leather in order to soften it, clothes when laundering)
21690	2343 2344	q ³ wkv-	q ³ wkv- q ³ wxv-	q ³ wkv-	q ³ wkv-	bent, crooked, curved ⁹⁸⁷
21700	2342	q ³ wkv-	q ³ wkv-			bubbling, welling up ⁹⁸⁸
21710			q ³ ww-			(onomatopoeic: imitation of a raven cry with the special significance that someone is coming by boat)
21720	2347	q ³ q-			q ³ q-	(?) ⁹⁸⁹
21740	524 527 2349 2361	q ³ h- q ³ hy ³ -	q ³ h- q ³ hy ³ -	q ³ h- q ³ hy ³ -	nq- nhq- q ³ h- q ³ hy ³ - q ³ hl ³ -	(HE/OO/HA {q ³ h-} and KW {nq-}:) free from diversion, interruption or distraction (hence: 1. in a straight line, not going sideways; in the middle, central, halfway; 2. properly ordered,

⁹⁸⁶ The OO examples of sense 1 are /q³u³la/ "crooked" (synonym: /q³u³la/, /q³u³la/) and possibly /q³u³la/ "fish weir."

⁹⁸⁷ KW possibly also in /q³uxvsaw³ani/ "Western dock."

⁹⁸⁸ Only in HE /q³'ukv'i/ OO /q³ukvi/ "the bubbling of herrings."

⁹⁸⁹ In HE /q³q³'a/ "to come loose (said of cedar bark in May-July)" and KW /q³q³h³i/ (probably:) "black hawthorn berries."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
						correct, complete, to the full extent, exactly; on course, on target; 3. upright, vertical); (HE/OO/HA/KW {q ³ h-} and the augmented forms {q ³ hy ³ -} and {q ³ hl ³ -} also:) to stretch out, reach out, reach for (hence: focused on sth. affectively or cognitively, to love, to worry, to mind sth., to think, to remember, to know, to learn, to hit the target, find what you're looking for, discover) ⁹⁹⁰
21750	2350	q ³ hp-	q ³ hp-	q ³ p- q ³ hp- q ³ h ³ p-	q ³ hp-	to hit a target, be to the point (words), follow a route; (HA also:) straight, correct, right, exact, upright etc. (the senses of HE/OO/HA {q ³ h-}) ⁹⁹¹

⁹⁹⁰ 1. The polysemy of this root resembles that of English "straight," see Webster's Collegiate Dictionary. 2. The augmented forms {q³hy³-} and {q³hl³-} are modifications of *{q³hh³-}. 3. KW {nhq-} occurs in few words and is probably a backformation from the many examples in which a suffix causes augmentation of {nq-} into {n[h]q-}. 4. KW {nq-h} means "ten" and likely developed from applying the "full, complete" and "target" sense of {nq-} to the fingers of both hands. The HA stem for "ten" is {q³hp-w-} with a root that likely also refers to hitting a target. OO uses {hyl-w-} for "ten" and HE {h³yk³-hs-} and {hyl-w-}.

⁹⁹¹ HA {q³hp-} occurs mostly in {q³hp-w-} "ten." HA {q³p-} occurs only in the stem {q³p-stw-h}, e.g. /q³psdu'aiła/ "to put back in the same spot" and /q³psduaud/ "to put on the right track." See also the comment on HA {q³p-, q³p³y-} (root no. 20990)

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
21780	2354		q ³ hs-	q ³ hs-	q ³ hs-*	(?) ⁹⁹²
21790	2355	q ³ h ³ s-	q ³ h ³ s-		q ³ hs-	sea otter
21810	2356 2357	q ³ hlh-/ q ³ hł-	q ³ hlh-/ q ³ hł-	q ³ l-/ q ³ hlh-/ q ³ hł-	q ³ hł-	decay, rot, putrefaction, soil, dirt, bodily waste ⁹⁹³
21820	2358	q ³ hł-	q ³ hł-	q ³ hł-	q ³ hł-	to braid, to plait, interwoven, winding, writhing (like a worm), to go zig-zag, unstable (as quicksand) ⁹⁹⁴
21830	2360			q ³ hx-	q ³ hx-	(?) to stink ⁹⁹⁵
21831					q ³ hyhχ-	(?) surprised, puzzled ⁹⁹⁶
21840	2362	q ³ hkv-	q ³ hkv-	q ³ hkv-	q ³ hkv-	extension of the family, servant, slave

⁹⁹² In OO /q³aikv/ "overripe berry" and OO /q³ayuqva/ HA /q³ayuqva/ KW /q³ayuqva/*

"(over)ripe berries."

⁹⁹³ HE/OO/HA only in HE /q³al'ac³i/ OO /q³alac³i/ HA (Kitlope) /q³al³ac³i/ (Kitamaat) /q³alac³i/ "chamber pot." What stands in the way of assuming the root form {q³hł-} for HE/OO/HA is the glottalization of /l³/ in HA (Kitlope) /q³al³ac³i/.

⁹⁹⁴ Probably also in HE /q³al'łks/ OO /q³alłks/ HA /q³alłgs/ "marine pilot."

⁹⁹⁵ Possibly in HA /q³an³a/ "badger" KW /Q³aniqil³akv/ (name of the Transformer in legends) KW /q³aniχp³ala/* "smell of /Q³aniqil³akv/." That the root could mean "to stink" is inferable from the Transformer apparently being known for its smell (why else have a term for it) and the fact that a badger has a musk gland on the underside that produces a pungent odor used for defense.

⁹⁹⁶ Boas (1948:357) wonders if this stem might derive from a root with the form of {q³y-}. If it does it is not clear what would be the suffix. The stem might also contain a root with the form of {q³yχ-}.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
21850	2364	q ³ h _{xv} -	q ³ h _{xv} -	q ³ h _{xv} -	q ³ h _{xv} -	to emerge from the water (as a rock or reef when tide goes out), left high and dry (like beached boat), shallow water in or on top of sth. ⁹⁹⁷
21860	2363 2365	q ³ h _{wh} -	q ³ h _{wh} -		q ³ h _{wh} - q ³ h _{w∞} -	(?) stinky (like sea otter or rotten shellfish) ⁹⁹⁸
21880	2367				χ _{bls} - χ _{hb_{xv}} -* χ _{hsb_{xv}} -*	to bang around, make a racket ⁹⁹⁹
21890	2368	χ _m - χ _{h_mh} -	χ _m - χ _{h_mh} -	χ _m - χ _{h_mh} -	χ _m - χ _{h_mh} -	unconnected, alone (hence: 1. without influence, lacking in social power, of low class, orphan; 2. without protecting or separating layer, without intermediary, exposed, right next to sth., to do sth. in person)
21900	2369 2371	χ _{ms} -	χ _{ms} -	χ _{ms} -	χ _{ms} -	hollow object (e.g. pot, box) is moved violently or carelessly, rattling noise from inside a

⁹⁹⁷ Boas (1948:359) gives several non-reelicitable examples referring specifically to fish caught in a stone dam trap.

⁹⁹⁸ According to http://en.wikipedia.org/wiki/Sea_otter predation of sea otters is not common because "Many predators find the [sea] otter, with their pungent scent glands, distasteful."

⁹⁹⁹ Boas (1948:385) lists the stem as "xā'bE_x-" in which "x" is likely a typing error for "x_w" because he mentions a derivate "xā'bE_x³wid". None of Boas's stem's derivates could be reelicted. Boas (1947:328) mentions "xā'sbe_xwi³lāla" - "to make noise here and there" which contains an expanded form of the stem but could not be reelicted either.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
						hollow object, clattering; (HA also:) to wreck or break into sth.
21910	2370	χms-	χms-		χms-	smoke-dried salmon
21920	2372	χm£-	χm£-	χm£-		to dismantle, break down (objects, relationships)
21930	2373				χmlkv-	to bang around (as when packing things up, rummaging, scaring game) ¹⁰⁰⁰
21940					χmwmw-	backbone
21950	2375	χm³-	χm³-	χm³-	χm³-	to stay overnight, to keep overnight, to age food
21960	2376 401	χt-	χt-	χt-	tχ- χt-	carrot (wild or domestic) ¹⁰⁰¹
21970	2377 2427	χn- χnh- χhn³-	χn- χhnh- χnh- χhn³-	χn- χnh- χhn³-	χhn³-	1. ({χn-} and {χhnh-}:) without protecting or separating layer, without intermediary, exposed, right next to sth., to do sth. in person (i.e. same as the 2nd series of senses for {χm-, χhnh-}); 2. ({χnh-}:) little (in amount), few (senses probably developed via "not constituting an obstacle or separation, negligible"; KW

¹⁰⁰⁰ In KW /χmłk³vala/ "noise of moving around" KW /χmłk³vga³l/ "sounds of moving (e.g. packing up), making noise to scare game." Stem may contain a root {χm-} related to root no. 21900 but form and meaning of suffix unclear.

¹⁰⁰¹ KW /tχm/ "carrot" was elicited from a consultant who uses both /tχm/ and /χtm/ for "carrot."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
						uses {χhɬ ³ -} for this meaning); 3. ({χhn ³ -}:) naked; (in KW also:) without titles or privileges (see 1st series of senses for {χm-, χhmf-})
21980	2379	χnt-	χnt-	χnt-	χnt-	to snore
21990	2381				χnɬ-	too much, very
22000	2380				χnyhs-	to marvel, be astonished
22010	2382	χs-	χs-	χs-	χs-	cedar material (for canoe, box, dish, spoon, rope)
22020	2383			χs-	χs-	loose things (e.g. grass, roots, branches, hair) covering sth. (e.g. for camouflaging) or being placed somewhere
22030	2385 2386	χɬ-	χɬ-	χɬ-	χɬ-	long object points or pokes out, to stick up, to poke into, long thing is set upright; (HA also:) upstanding, exemplary
22040	2384				χɬ-	to crack by pressure (canoe, paddle, box), to break a box or a paddle
22050	2387	χl-	χl-	χl-	χl-	to bail out water; (KW also:) to scoop up (with strainer, bailer, dipnet)
22060	2388	χlp-	χlp-	χlp-	χlp-	to rake, to scrape with the fingers; (HA also:) to dig (trench, grave, clams), to shovel

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
22070				χlt-		(?) ¹⁰⁰²
22080	2389 1514		χlc-		χls-	to claw, to scratch (as in a fight)
22090	2390 2431	χlk-	χlk-	χlk-	χlk- χhk-	hollow-shaped surface (e.g. bailer), concave, warped, structure with ribs extending from a central point or ridge (e.g. one's rib cage, a four-sided cottage roof) ¹⁰⁰³
22100	2391				χlxv-	to cut or scrape with hollow knife
22110	2392				χlqv-	bare, bald
22120	2393				χlq ³ vh-	(?) hollow ¹⁰⁰⁴
22130	2394				χlq-*	(?) ¹⁰⁰⁵
22140	2395				χk ³ -	to remain in a place or condition one doesn't belong, to fail to return, to be stranded
22150	2378			χx-		(?) to hang the net on a line
22160	2396 2397	χy-	χy-		χy-	disconnected, unprotected, bare, exposed, next to ¹⁰⁰⁶

¹⁰⁰² In HA /X'ltamił/ (chief's name belonging to the Beaver clan).

¹⁰⁰³ {χhk-} only in KW /χak³zə/ "backbone of fish."

¹⁰⁰⁴ In KW /χlq³va/ "basin, dish, crockery, glassware" (but according to Boas in the Koskimo dialect also "halibut cutting knife").

¹⁰⁰⁵ In KW /χlqanaħ³isla/* "to throw blankets to each in turn."

¹⁰⁰⁶ These are also senses of {χm-, χhnh-} and {χn-, χhnh-}.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
22170	2398	χy-		χy ³ -	χy-*	(probably onomatopoeic) ¹⁰⁰⁷
22180	2399				χym ³ -	(?) to wiggle, to drag oneself forward keeping the body close to the ground and moving it from side to side (as when crawling on hands and knees), to creep sitting (like child)
22190	2400	χyt-	χyt-	χyt-	χyt-	to brush off or shove away (with back of hand or stick) ¹⁰⁰⁸
22200	2401				χy£-*	(?) ¹⁰⁰⁹
22210	2402				χy£-*	(?) ¹⁰¹⁰
22220	2403	χyx-	χyx-	χyx-	(k ³ hχv-) (k ³ hwhχv-)	to whittle wood, to plane sth., to shave (wood)
22230	2404	χykv-	χykv-	χykv-	χykv-	to sweep, brush, rake or scrape away loose things (e.g. dirt, snow, hair)
22240	2405	χhyhq-	χhyhq-	χhyhq-	χyq-	to sit, be in a fixed position ¹⁰¹¹

¹⁰⁰⁷ In HA /χ'iχiχi/ KW /χiχiχi/* "snow goose" HE /χ'iχiχi/ (a species of northern goose with black-tipped wings, probably the snow goose (*Chen caerulescens*) which exists in two colour plumage morphs, white (snow) or gray/blue (blue), and the white-morph birds are white except for black wing tips).

¹⁰⁰⁸ In the HE/OO/HA examples associated only with wiping one's bottom.

¹⁰⁰⁹ In KW /χi£a/* "to nibble, gnaw."

¹⁰¹⁰ In KW /χi£ла/* "many voices shout (squeal)" KW /χi£i£a/* "to shout again and again."

¹⁰¹¹ HE/OO/HA only in the word for barnacles. Barnacles attach themselves permanently to a hard substrate such as rock or a boat's hull and keel. The expanded stem {χ[h]y[h]q-} occurs in

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
22250	2406				$\chi yq-/$ $\chi y\chi-/$ $\chi q-/$ $\chi\chi-$	(?) sore ¹⁰¹²
22260	2407 2432	$\chi kv-$	$\chi kv-$	$\chi kv-$	$\chi kv-$	rough to the touch, crusty outgrowth (e.g. bark of tree, scab)
22270	2408	$\chi w-$	$\chi w-$	$\chi w-$	$\chi w-$	splitting of wood
22290	2409	$\chi wp-$	$\chi wp-$			to scoop together debris or pieces of wood for the fire ¹⁰¹³
22300	2410	$\chi wp-$	$\chi wp-$			rough to the touch (as opposed to slippery)
22310	2411				$\chi wmh-$	disorder, unruliness, disagreement, quarrelling ¹⁰¹⁴
22311	2412				$\chi wm\infty-*$	rotten ¹⁰¹⁵
22320	2413	$\chi wt-$	$\chi wt-$	$\chi wt-$	$\chi wt-$	to scoop up, ladle out, dip up, shovel
22330	2415	χwc^3-	χwc^3-	χwc^3-		sledgehammer ¹⁰¹⁶

KW too but with the narrowed-down meaning of "sitting directly on" (as opposed to e.g. on a cushion).

¹⁰¹² In KW $/\chi i:\chi\chi stu/$ "sore eyes." Its root allomorph $/\chi i:\chi\chi-/$ could derive from four possible unaugmented roots.

¹⁰¹³ The 1980 root list mistakenly reports a KW derivate $*/\chi upa/$ of this root.

¹⁰¹⁴ In the KW stems $\{\chi wmh\chi-\}$ "quarrel, fight, battle" and $\{\chi wmhk-\}$ "unruly (hair)." The former may contain a suffix with the form of $\{-\chi\}$ or $\{-h\chi\}$ and the latter one with the form of $\{-k\}$ or $\{-hk\}$.

¹⁰¹⁵ Possibly in KW $/\chi ums/*$ "rotten."

¹⁰¹⁶ Free stem. May contain a root $\{\chi wc-\}$ or $\{\chi ws-\}$.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
22331				χws-	χws-*	(?) ¹⁰¹⁷
22340	2414	χws-	χws-	χws-	χws-	to sprinkle, to splash
22350	2416	χwł-	χwł-		χwł-	a large variety of mussel
22360	2417		χwł-			(?) to sprinkle ¹⁰¹⁸
22370	2418			χwł-	χwł-	squirming (like maggots), writhing, tangled (like strings), confused (discussion, people), to shuffle (cards)
22380	2419		χwqv-	χwqv-	χwqv- χqv-*	skull ¹⁰¹⁹
22381					χwqv-*	(?) wearable ornament
22390	2420 2421				χqv- χχv-	to gather stones (for cooking)
22400	2422	(k ³ nk-)	(k ³ nk-)	(k ³ nk-)	χq-	to comb
22410	2423 2424 2425	χh- χh ³ -	χh-	χh- χh ³ -	χh-	outlying; (hence:) outside a main area, outside or unprotected by societal rules, escaping containment, exceeding a limit ¹⁰²⁰

¹⁰¹⁷ Perhaps in HA /X'usalał/ < {χws-hlhl} (name of the sun personified) and KW /Xuyalas/* (name of a tribe).

¹⁰¹⁸ Perhaps in OO /χulalas/ "firemen on top of the building where the potlatch is held."

¹⁰¹⁹ In KW the root also has an augmented form {χw[y]qv-}. KW {χqv-}* occurs in /Xqvalul/* (name of probably a person and said to mean "head without body").

¹⁰²⁰ This root is a cross-family stem, cf. Proto-Salishan *-χαʔ- "sacred, taboo, forbidden, impressive, smart, violent, etc." listed in Kuipers (2002:122). It occurs in the following stems. 1.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
22420	2426				χhp-	to grasp in hands or talons
22430	2428	χhs-	χhs-	χhs-	χhs-	(HE/OO/KW) to rot, go bad, decompose, deteriorate; to boil sth. to pieces; (HA) brittle, brittle things breaking
22440	2429	(χnh-)	χh£³- (χnh-)	(χnh-)	χh£³-	a little ¹⁰²¹
22450	2430				χhł-	to raise the voice to mock, humiliate or frighten away (as in flushing game), to boo, to jeer at sb.
22470				χhxv-		(?) ¹⁰²²

In {χh=hp-} > HE/OO/KW {χh³p-} HA {χh³p-} which can refer to cradling on a board but in HE/OO/HA also more generally to being juvenile and not yet having reached the age when one is fully responsible for one's acts although one has stopped being half-wild because still partly belonging to the spirit world. 2. In the stem {χh=ys} which occurs in tribal division names associated with the areas of Klemtu and Kitamaat. The root may here refer to being separated from a related larger mainstream population. As far as Kitamaat is concerned, legend has it that it was founded by a chief and his followers fleeing northward from the Rivers Inlet area out of fear of vendetta. 3. Possibly in the stem {χh=ys} occurring in terms meaning "downstream" in HE/OO/HA as well as "north" in HE/OO but "south" in HA, and in names referring to westerly or northwesterly wind. KW uses {gvh-} for this. 4. In HE /χ'ak'a/ OO /χaka/ "too much." 5. In HA/KW terms referring explicitly to being or going outside containment or bonds. 6. In KW /χa³χsd/ "blueback salmon (i.e. sockeye when living in the ocean)."

¹⁰²¹ OO {χh£³-} could be a KW borrowing.

¹⁰²² Only in HA /χ'axva/ "to flush game or people out (of the bush) by making a noise."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
22480	2434	χhwy-	χhwh- χhwy-	χhwy ³ -	χhwh- χhwy-	(?) (at) neck or throat, necklace (like that of a loon) ¹⁰²³
22481	2433	χhwys-	χhwys-			(?) ¹⁰²⁴
22490	2435				χhw∞- χhw ³ -	fur seal
22500	2436 2437	χhχ-	χhq- χhχ-	χhχ-	χhχ-	bone
22510	2438	hp-	p-	hhp-	hhp-*	(?) plant excrescence that is hard and prickly, thorny or bristly (like swamp gooseberry berries, tree cones) ¹⁰²⁵
22520	2439	hp-	hp-	hp- hhp-	hp- hhp-	facial and body hair
22530	2440 2511	hp-	hp-	hp-	hp-	to dip, immerse, dye, hold under water

¹⁰²³ 1. In words referring to the common loon a.k.a. great northern loon (*Gavia immer*). The bird has a unique cry and seems to be wearing a necklace (cf.

<http://www.hww.ca/en/wildlife/birds/loon.html?referrer=https://www.google.ca/>). Perhaps therefore this root and the suffix {-+χhwh} "(at) neck, throat or narrow passage" (suffix no. 5400) have a common origin. 2. For HA the form {χhwy³-} is assumed because of /h³/ rather than /h/ in the diagnostic derivate /χaw'ih³u/ "3-2 is a loon."

¹⁰²⁴ In HE /χ'aw'isrm/ OO /χawisrm/ "tin" and the OO synonym /χawissm/. Informants say they are unaware of any connection with loons (see root no. 22480).

¹⁰²⁵ In HE /hbл'iq³vs/ OO /bлiq³vs/ HA /habл'iq³vχlawā/ "cone (of tree)" HE /h'ab'axsuli/ KW /habaxsuli/* "fruit of swamp gooseberry." The plant is also known as prickly currant and black gooseberry; scientific names *Ribes echinatum* (Dougl.) and *Ribes lacustre* (pers.), see p. 72 of *The Trees and Shrubs of Western Oregon* by Gilbert Benson. Difficult to tell if this root might be identical to that meaning "hair" (root no. 22520).

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
22540	2442	hm-	hp- hm-	hm-	hm- hmy-* hm ³ - hhp-	cry of the dancer known as HE /h'am'ac ³ a/ OO/KW /hamac ³ a/ HA /t'anis/ ¹⁰²⁶
22541		hhbh-	hhbh-			(babytalk for "I want a drink of water!")
22550	2443	hm-	hm-	hm-	hm-	to put or hold sth. in the mouth
22560	2445	hmt-	hmt-	hmt-	hmt-	to carry sb. on one's back
22580	2446	hmc-/ hms-	hmc-/ hms-	hmc-/ hms-	hms- hm ³ -	to pick berries ¹⁰²⁷
22590	2444 2447	hms- hm ³ -	hms- hm ³ -	hms- hm ³ -	hm- hms- hm ³ - hm ³ h- h ³ hm ³ - h ³ hm ³ h- hym ³ - hym ³ h-	to eat, food ¹⁰²⁸

¹⁰²⁶ HA only in /hmc³/ < {hm#c³} in which {#c³} is suffix no. 900 and attested also in e.g. the greeting HA /ya.uc³/ < {yh-w#c³} "hello!, hi!."

¹⁰²⁷ HE/OO/HA only in HE /h'am'azax³vsu/ HA /hamaz'ax³vsu/ (both with /χv/) OO /hamazax³su/ "to feed on berries, to eat berries straight from the plant." That root refers to picking rather than eating berries is inferable only from the many KW examples.

¹⁰²⁸ HE/OO/HA {hm³-} occurs only in the stem {hm³-gylh-} "to cook" (which stem means "to feed" in KW). In contrast {hms-} meaning "to eat, food" is rare in KW. It can be undecidable if the root form is {h³hm³-} or {h³hm³h-}, {hym³-} or {hym³h-} in which case the shorter form is assumed. In some examples {hym³-, hym³h-} is the plural form of {hm³-, hm³h-}.

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Root #	Old #	HE	OO	HA	KW	Gloss
22600		hms-	hms-	hms-	hms- hmz- hm ³ xs-	(?) ¹⁰²⁹
22610	2448				hmkv-	to stoop, hunch the back
22620	2449				hmχv-	to rush or jump forward
22640	2450		ht-	ht-		(OO) steeply downwards; (HA) steeply down into a liquid, to swallow down a liquid
22650	2451	hn-	hn-	hn-	hn-	hollow object (e.g. container, gun, boat, vehicle) is located or moves somewhere, container's content is being manipulated
22670	2453	hn£-	hn£-	hn£-	hn£-	(HE/OO/HA) to shoot with bow and arrow; (KW) to shoot (with anything)
22671	2452	hny-	hny-	hly-	hny-	(?) ¹⁰³⁰
22680	2455		hnkv-	hnkv-		to fold on itself, double up, pile up
22690	2456	hnkv-	hnkv-		hnkv-	to curse, wish ill luck
22700	2457	(k ³ hp-)	(k ³ hp-)	(k ³ hp-)	hnxv-	humpback salmon

¹⁰²⁹ In words relating to the dancer known as HE /h'am'ac³a/ OO/KW /hamac³a/ HA /t'anis/. Also in a few words referring to bees or wasps, and a grebe (bird). The connection between the two types of reference is unclear.

¹⁰³⁰ In HE /hɦina/ OO hɦina/ "go on, go ahead" and HE /hɦ'inuχv/ OO /haninuχv/ KW /hɦinaχv/ HA hɦin³akv/ "to ask for a ride, to ask to go along, to ask for mother or father (said of a child)."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
22710	2454			hnqv-		(?) ¹⁰³¹
22720	2458				hnqv-	bent (as a tree by the wind)
22730	2459	hnq-		hnq-	hnq-	to fold onto itself (like blanket or apron so one can carry sth. in it)
22740	2461		hnχ-		hnχ-	to look at one's reflection (in water or mirror)
22750	2462 2463	hs-	hs-	hs-	hs-	(?) ¹⁰³²
22760	2466	hl-	hl-	hl-	hl-	(?) ¹⁰³³
22770	2467	hl-	hl-	hl-	hl-	to pause, rest, put to rest
22780	2470 2477	hl- hl ³ - hyl ³ - hyn ³ -	hl- hl ³ - hyl ³ -	hl- hlh- hl ³ - hyl ³ -	hl- hl ³ - hyl ³ -	unstable, unpredictable (hence e.g. hesitant, wavering, apprehensive about what's going to happen next, obtained through luck, ephemeral, immaterial, ghostly) ¹⁰³⁴
22790	2471	hls-	hls-	hls-	hls-	at or close to the critical point, perilously close to, barely, hardly

¹⁰³¹ In HA /h'hrvíst³a/ "fur seal, sea otter."

¹⁰³² In HE /hc³χd'i/ OO /hc³χdi/ KW /hc³χsde³/ "tail of an animal" HA (Kitlope dialect) /hc³ikv/ "timberwolf" HA /hsла/ "to charge with the intention of killing (said of any animal)."

¹⁰³³ Possibly in (1) {hl-hq-} "to dispatch, ship, mail, send goods; to pay what is due (e.g. salary)" and in KW also "to send word"; (2) KW /hləqa/* "to spread over (e.g. towel over stomach)" KW /hləχsmd/* "to spread over"; (3) KW /hlk³ε³/* "protector."

¹⁰³⁴ This root's antonym is {h³l-} (root no. 23600). The form {hyl³-} derives from {hl-} via *{hhl³-}.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
22800	2472				hlxv-*	(?) hesitant, wavering etc. (i.e. the senses of no. 22780) ¹⁰³⁵
22801	2473	hlχ-	hlχ-	hlχ-	(mhχ-)	killer whale
22810	2474 2485	hk ³ v-			hk ³ - hk ³ v- hhk ³ v-	stuck in a place or condition, forced to stay, lodged immovably (e.g. sliver in finger)
22820	2475 2487	hx- hhx- hxv-	hx- hhx- hxv-	hx- hhx-	hx- hhx-	to move the legs of a V-shape further apart (hence: 1. to yawn, to open the mouth, to open sth. jaw-like, to play an accordion, to growl (like dog, wolf); 2. to lever sth. up) ¹⁰³⁶
22821	2476	hy- hhyh- hhy ³ -	hy-	hhyh-	hy- hhyh- hył-	to hide, conceal ¹⁰³⁷

¹⁰³⁵ In KW /hlxva/* "to back out (of deal), withdraw (an offer)."

¹⁰³⁶ In the KW examples {hhx-} usually refers more specifically to levering up, the exceptions being KW /haxɬa/ "yawning" and the proper name KW {hhx-⁰yws} > {hhn∞-yws} > /Hanəyus/ and /Han³ius/ "sky keeps on showing openings in clouds on horizon." In the HA examples {hhx-} refers to levering up with the forearms. {hxv-} occurs diagnosably only in HE/OO {hxv-w-} "to howl (like dog, wolf, coyote)." In its HA/KW counterpart it is not diagnosable if the stem is {hx-w-} or {hxv-w-}.

¹⁰³⁷ HE {hhy³-} is in most examples augmented to {[hh]hhy³-}. This contracts to {hhhy³-} whose [hh] will contract further into just [h] but leave a trace by blocking high tones in suffixes, cf. HE {[hh]hhy³-h-c³w-h} > {hhhy³-h-c³w-h} > /h'ay³ac³ua/ "person who always hides himself." OO attested only in {[hh]hy-m³h} > {hhyh-m³h} > /hayam³a/ "to deny an accusation, hide the truth, keep sth. secret." KW {hył-} only in {[hh]hył-sm-+-h} > {hhyhł-sm-+-h} > /hayałsm³a/ "to conceal sth."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
22822					hymwt-	(?) discontentment ¹⁰³⁸
22823	2477			hynh-	hynh-*	(?) on the alert, prepared for things to come ¹⁰³⁹
22824	2477				hynhk-	to do as a last resort ¹⁰⁴⁰
22830	2478	hys-		hys-		sockeye salmon
22840	2479	hys∅kv-	hys∅kv-	hys∅kv-	hys∅kv-	married ¹⁰⁴¹
22850	2480 2483	hył- hyx- hy ³ x-	hył-	hył-	hył- hyx-*	right, proper, on target; lucky, happy ¹⁰⁴²
22851				hyłzhqv-	hyłzhqv-	from the Bella Bella area, Heiltsuk ¹⁰⁴³
22852	2481	hyly-	hyly-	hyly-	hyly- hyl∅-	to hire

¹⁰³⁸ In several derivatives whose glosses refer to grumbling and to abuse in speaking. Boas (1947:332) believes it contains a suffix {-wt} referring to sound.

¹⁰³⁹ In HA /hin'ala/ "to hear a ghost" KW /has:hina/* "to prepare" and KW /has:hinaqa/* "to overhaul things, to prepare, get oneself ready."

¹⁰⁴⁰ Could be root no. 22823 with the same extender [k] found in {hlhk-} (see under no. 11450) and {hhl³hk-} (no. 23142).

¹⁰⁴¹ |∅| between a fricative and another obstruent is phonetic zero in HE/OO but actualized as /ə/ in HA/KW. Stem may be polymorphemic and contain a root {hy-} or {hys-} but no clues to its meaning or that of the suffix(es). The KW stem {yhs∅kv-} "suet, tallow" presents a similar problem.

¹⁰⁴² KW {hyx-}* only in /HixalisJla/* "to set right in the world (name of /Q³aniqil³akv/)."

¹⁰⁴³ Dialect borrowing from HE/OO. The HE original means "native, indigenous" and has a structure {hyyl-zhqv} in which {hyyl-} could stem from {hy[h]ł-}, {[h]hył-} or {hy=yl-}.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
22853				hylw-		(?) ¹⁰⁴⁴
22854					hyl ³ -	(?) ¹⁰⁴⁵
22860	2482	hyx-	hyx-	hyx-	hyx-	(HE/OO/HA) head (of any animate being); (KW) fish head
22880	2484	hyxv-		hyxv-	hyxv-	(?) to deny, oppose, contest ¹⁰⁴⁶
22890				hkv-		(?) ¹⁰⁴⁷
22900	2486	hxv-	hxv-			(?) ¹⁰⁴⁸
22920				hxv-/ hχv-/ hw-		(?) ¹⁰⁴⁹
22930	2488	hw- hhwh- hhw ³ h-	hw- hhwh-	hhwh-	hw- hhwh-	arranged crosswise, matted, interwoven ¹⁰⁵⁰

¹⁰⁴⁴ In HA /h'ailuxvλH/ < {[hh]hylw-xfn} "weasel head dance headdress" and derivatives.

¹⁰⁴⁵ In the bound stems {hyl³-w³s-}, {hyl³-w³kv-} and {hyl³-w-} which refer to one thing being right behind, inside or supportive of another. The particular example of KW /hil³ɔχstala/ < {hyl³-w-hχst•-hlh} "to hire sb. to speak for one" indicates {hyl³-} before {-w, -w³s, -w³kv} could be another variant of {hylh-, hyl∞-} (root no. 22852).

¹⁰⁴⁶ HE only in the woman's name /H'ixvaqs/ which is said to mean "denying woman." HA only in /h'ixva/ "to oppose sb.'s right to do sth."

¹⁰⁴⁷ Possibly in HA /hgvusaw'ai/ "game in which one makes people laugh."

¹⁰⁴⁸ In HE /hxvM³ait/ OO /hxvM³it/ "walrus" OO /hxvM³aiɛ/ "sea lion."

¹⁰⁴⁹ In HA /hu³ala/ "the kind of sound made by the wings of a certain bird (said to sound like scratching the trees)."

¹⁰⁵⁰ {hhw³h-} occurs possibly in HE /h'aw³'ani/ "brother-in-law"; its root form derives from {hw-} observable directly in the kinship term's vocative form, /huan'ai/.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
22940	2489				hwp ³ q-	(?) tangled, matted ¹⁰⁵¹
22950	2490	hwmh- hwm∞-	hwmh- hwm∞-	hwmh- hwm∞-	hwmw-	(HE/OO/HA) to check out, to obtain information (by watching, listening and questioning); to ask permission, to try to make an arrangement; (KW) to watch, to observe
22960	2491	hwmhχh-	hwmhχh-			spider ¹⁰⁵²
22980	2492	hwt-	hwt-	hwt-	hwt-*	to leave, to abandon; to depart
22990	2493 2497	hws-	hws-	hws-	hws-*	lumber, shakes or boards split off a tree ¹⁰⁵³
23000	2494	hws-	hws-	hws-	hws-	to count, to tally, to calculate; (HE/OO/HA also:) to keep the books; (HA also:) to read books ¹⁰⁵⁴

¹⁰⁵¹ Stem's root could be {hw-} or {hwp-}. Occurs in KW /hup³rmala/ "tree stump" and KW /hup³rtuała/ "having one's hair all messed up."

¹⁰⁵² There is no evidence that the name contains suffix no. 6200, {-hχ-} "down from higher level, off." The meaning of the root would also be unclear.

¹⁰⁵³ KW possibly in /huzac³i/* [1] "isolation shed for widows, menstruating women or sick people." One informant has KW /xuzac³i/ "rest shed" which seems to derive from KW {xws-} "rest, breather; to take a rest" (root no. 14240) but is possibly a restructuring of /huzac³i/* based on folk etymology.

¹⁰⁵⁴ Could be root no. 22990 if recording a tally was done by putting a stick or chip in a receptacle for every object tallied. KW has a word suggesting this practice, {hws=-hc³y} > /huzac³i/ [2] "receptacle to count into."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
23020	2499	hwł-			hwł-	(?) ¹⁰⁵⁵
23030				hwy ³ -		(?) ¹⁰⁵⁶
23031		hwkv-	hwkv-	hwkv- hwxv-	hw ³ xv-	arranged crosswise, matted, interwoven ¹⁰⁵⁷
23040	2500				hwkv-	(?) ¹⁰⁵⁸
23050	2503 2504	hqv-	hqv-	hqv-	hqv- hhqv- hχv- hkv-*	1. to press down on, to sit on eggs, to lie flat, to lie face down; 2. to bend down (hence: to stoop, to bend or fall forward; to hunch one's back, a hump, a mountain); 3. (HA also:) baby faces back or chest of carrying adult ¹⁰⁵⁹
23070	2505				hqv-	(?) ¹⁰⁶⁰

¹⁰⁵⁵ In {hwłhł} HE "small (in size)" KW "few, little (in amount), a bit." Uncertain if analyzable as {hwł=hl}, with a suffix carrying diminutive meaning.

¹⁰⁵⁶ Possibly in HA /h'uy³ala/ "to respect sb."

¹⁰⁵⁷ KW only in /hu³xvɪ³a/ "log jam."

¹⁰⁵⁸ In KW {[hwkv]hwkv-} > /huxv:hukv/ (name of a mythological man-eating bird) and derivatives.

¹⁰⁵⁹ Boas (1948:93) lists a root {hkv-}* and three derivatives referring to stooping and people or trees leaning over. They are however not mentioned in Lincoln (n.d.) and probably typing errors. KW /hχva/ [1] "to fall (bend) forward" is the only certain example of {hχv-} as variant of {hqv-}.

¹⁰⁶⁰ In {hrvm-} "to join or stay with others, to join the dead" and derivatives. Root could be no. 23050.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
23080	2506 2508	hχv-	hχv-	hχv-	hχv-	to climb (tree, pole, steep rock, rope) ¹⁰⁶¹
23090	2507 2620	hχv- h ³ χv-	h ³ χv-	h ³ χv-	hχv-	thrush (<i>Hylocichla ustulata</i> according to Boas (1928:179)) ¹⁰⁶²
23100	2509				hq-	to swell (said of body parts)
23110	2512	hht-	hht-		hht-	(?) cross, uncooperative ¹⁰⁶³
23120	2514	hht-	hht-	hht-	hht-	black cod
23130	2515				hhny-*/ hhwy-*	(?) ¹⁰⁶⁴
23131	2516				hhnhk-	to request permission
23140	2517 2518 2519 2520 2521 2522	hhs-	hhs-	hhs-	hhs-	breath, whiff, air, spirit, soul, ghost, vital force in animate beings, blood; to contain, emit or inhale air, vital force, etc.; air-filled, spongy, fluffy, airborne (like smell or sound); to cure (by blowing)

¹⁰⁶¹ Also in HE /hχv.h³ut/ (with low tone /u/) OO /hχv.h³ut/ "afterbirth" (used to be tied to a young tree to climb up as the tree grows).

¹⁰⁶² KW only in /hu³ala/ [2] "song of the thrush" and /Hχvam³is/ (name of the extinct Wakeman-Sound tribe; according to legend they were named after the thrush).

¹⁰⁶³ In {[h]hht-+lh} > HE /h'at³la/ OO /haat³la/ KW /hat³la/ "obnoxious, persistent, a pest to others" and a word listed by Boas (1928:95, 199) but not elicited, sc OO {hht-&yd} > /hał.h³it/* "to disobey."

¹⁰⁶⁴ Possibly in KW /h:hani/* and its Newetee synonym /h:hawi/* which are spelled "hahā'ne" and "hahā'we" in Boas (1948:84) and glossed as *Clarengula hyemalis*. This must be *Clangula hyemalis* or long-tailed duck, formerly known as the oldsquaw duck.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
23141		hhs-	hhs-	hhs-	h ³ hs-	(?) ¹⁰⁶⁵
23142	2510	hhl ³ hk-	hhl ³ hk-	hhl ³ h- hhl ³ hk-	hhl ³ - hhl ³ h- hhn ³ h- hhl ³ hk- hhn ³ hkv-	to proceed with haste
23160				hhxv-		to gang up on sb., to go after sth. as a group
23170	2523				hhqv-*	roasted salmon ¹⁰⁶⁶
23180		hhqv-			hhqv-	(?) ¹⁰⁶⁷
23190	2525 2604	h ³ b-	h ³ b- h ³ gv-	h ³ b-	h ³ b-	mother ¹⁰⁶⁸
23200	2526	h ³ p-	h ³ p-		h ³ p-	abalone ¹⁰⁶⁹
23210	2527 2628	h ³ hp-			h ³ p-*	(?) all, in full ¹⁰⁷⁰

¹⁰⁶⁵ Possibly in HE /h'ay³asu/ OO /hay³asu/ HA /h'ay³asu/ KW /h³t³a³su/ "one's hand."

¹⁰⁶⁶ In KW /hχ:haqv/* "to eat fresh roasted salmon" and KW /haχ:haqvamas/* "to eat whole."

¹⁰⁶⁷ Possibly in HE /h'arvuy³u/ (name of a monster) KW /harvala/ "to get revenge, to lie in wait (for game or people)."

¹⁰⁶⁸ {h³gv-} only in OO /h³gvani/ "grandmother."

¹⁰⁶⁹ In HE /h³p'a/ OO /h³pa/ KW /h³ah³ap³a/ "to go after abalone."

¹⁰⁷⁰ Perhaps in KW {h³p-%yqv-h} > /h³biqva/* "gale, storm" and HE {[h³h]h³hp-w-d} > {h³h³p-w-d} > /h³ap'ut/ "to walk or run as fast as one can, to use all one's strength in doing sth., to run an engine at full speed." For HE the form {h³hp-} rather than {h³p-} is assumed because /h³ap'ut/ has a synonym {[h³h]h³hg-w-d} > {h³h³g-w-d} > /h³ag'ut/.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
23230	2529	h ³ m- w ³ w-	h ³ m- h ³ hm ³ h- w ³ w-	h ³ m- h ³ hmh- h ³ hm ³ h-	h ³ m- h ³ w-	screened off, constricted, pinched off (hence: 1. sealed, blocked, watertight, solid; 2. tapered, beginning or ending in a point, centering around or spreading out from a point, first in series) ¹⁰⁷¹
23240	2530	h ³ mhk-	h ³ mhk-	h ³ mhk- h ³ hmhk-	h ³ mhk-	to defecate ¹⁰⁷²
23250	2531	h ³ hm̥ay ³ - h ³ hm ³ h-	h ³ hm̥ay ³ - h ³ hm ³ h-	h ³ m̥ay ³ - h ³ mhys- h ³ hm ³ h-	h ³ m̥ay ³ -	small ¹⁰⁷³
23260	2532				h ³ m-	yes ¹⁰⁷⁴
23270	2534	h ³ m ³ t-	h ³ m ³ t-	h ³ m ³ t-	h ³ mt- h ³ m ³ t-	(?) bulbous, spherical ¹⁰⁷⁵
23280	2535	h ³ ms-	h ³ ms-	h ³ ms-		thick (box, snow, layer), dense (fog, brush)
23290	2536				h ³ ms-	supernatural, dangerous, taboo, to be respected

¹⁰⁷¹ KW {h³w-} only in {h³w-%lhqv-} "silence falls"; HE/OO has {h³m-%lhqv-} instead.

HE/OO {w³w-} substitutes for {h³m-} before {-p³n-} "times" or its many derivatives, see suffix no. 220 ff. In HA the sense "first" is associated mostly (but not exclusively) with the augmented form {h³hm³h-}.

¹⁰⁷² Stem may contain a suffix {-hk-} with privative meaning attached to {h³m-} (root no. 23230).

¹⁰⁷³ HA {h³m̥ay³-} and {h³mhys-} have plural forms {h³ym̥ay³-} and {h³ymhys-} that can mean "equally small," cf. HA {h³ymhys-tw} > /h³im'aisdu/ "as small as." On the use of a plural form to signify equal degree of sth. see also the case of HA {h³ywh-} mentioned under root no. 17820.

¹⁰⁷⁴ Occurs also as {#&m, etc.} (suffix no. 470).

¹⁰⁷⁵ In terms for sea urchin or sea eggs; in KW also in terms referring to a boil or carbuncle.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
23310				h ³ mł-	h ³ mł-	concession, exception; strange, different, novel ¹⁰⁷⁶
23320	2537 2615	h ³ mł- h ³ m ³ ł- h ³ wł-	h ³ mł- h ³ wł-	h ³ mł- h ³ wł- h ³ hł-	h ³ mł- h ³ hł-	playful, for entertainment, to play games; (HA/KW also:) to dance ¹⁰⁷⁷
23321					h ³ mlyxv-	staying at home
23322	2538	h ³ my ³ hχ-	h ³ my ³ hχ-	h ³ my ³ hχ-	h ³ myhχ-	to pray, praise, honour, pay tribute
23330	2539 2540	h ³ mqv- h ³ mχ-	h ³ mqv- h ³ mχ-	h ³ mqv- h ³ mχ-	h ³ mχ-	blocked off, choked off, screened off, sealed, watertight, halting ¹⁰⁷⁸
23350	2533	h ³ hm ³ h ³ ł -	h ³ m ³ - h ³ m ³ hł- h ³ hm ³ hł-	h ³ hm ³ hł-	h ³ m ³ hł- h ³ hm ³ hł-	(HE/HA/KW and OO {h ³ m ³ -}:) to become aware of sth. strange, unusual, or supernatural; (OO {h ³ hm ³ hł-}:) to hear
23360					h ³ hm ³ £-	strange, unusual, different ¹⁰⁷⁹
23370	2541	h ³ dmkv-	h ³ dmkv-	h ³ hdmkv-	h ³ dmkv-	sandhill crane
23380	2543		h ³ t-		h ³ t-	(?) ¹⁰⁸⁰

¹⁰⁷⁶ HA only in /h³młm/ "even though, in spite of".

¹⁰⁷⁷ KW {h³hł-} occurs only in {h³hł-%hxv-} "bone game, (s)labeled game."

¹⁰⁷⁸ {h³mqv-} only in HE/OO/HA {h³mqv-h} "to stutter" and OO /h³mrvm/ "material for making watertight."

¹⁰⁷⁹ Lincoln (n.d.) indicates accent on /m³/ in derivatives, e.g. KW /h³m³£a/ "strange, different, etc." It means the stem must be {h³[h]m³£-} which may derive from *{h³m£-}, a possible alternant of {h³mł-} (root no. 23320).

¹⁰⁸⁰ In KW /h³t³hxva/ "to persist, to keep on doing sth." and OO /h³dis/ "still."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
23390	2544	h ³ n-		h ³ n- h ³ hnhł-		to pay salary, to pay what is due, to do sth. in return for sth. (e.g. thank for gift or feast) ¹⁰⁸¹
23400	2545		h ³ n-	h ³ n-		rockslide, landslide
23410	2546	h ³ n-	h ³ n-	h ³ n-	h ³ n-	fire, to look after the fire (starting it, fueling it) ¹⁰⁸²
23430	2549	h ³ n-	h ³ n-		h ³ l- h ³ n-	(?) spruce pitch, resin, glue ¹⁰⁸³
23431	2550	h ³ n-	h ³ n-	h ³ n-	h ³ n-	(?) ¹⁰⁸⁴
23440	2551	h ³ ynh-	h ³ ynh-	h ³ ynh-	h ³ n- hn-	(?) ¹⁰⁸⁵

¹⁰⁸¹ {h³hnhł-} only in HA /h³an'ałzaqv/ "to thank sb. for sth. (feast, gift)."

¹⁰⁸² Perhaps in HE/OO {h³n³yq-} HA {h³nyq-} KW {h³ny³q-} "firewood, fuel" KW {h³n³q-} "to light fire (by putting coals in)" HE {h³n-x'yt} OO {h³n-xyt} HA {h³n-xyt} "pitchwood used to transfer and start a fire." Boas (1948:08) lists several more words to do with making or moving fire and pointing to a root {h³n-} but they could not be reelicited, e.g. KW /h³h³a/* "to put fire on rock."

¹⁰⁸³ Possibly in HE /h³h'iw³as/ OO /h³hiw³as/ KW /h³liw³as/ (in the Koskimo dialect /h³hiw³as/) "spruce tree." It may contain a stem HE/OO {h³n-%yxv-} KW {h³l-%yxv-} in which {-%yxv-} is suffix no. 3980. Note there is also HE/OO/KW {h³l[y]xv-} "to hunt with a canoe, etc." discussed in the comment on {h³lxv-} (root no. 23642).

¹⁰⁸⁴ In {h³n-ys} "maternal or paternal aunt." Could also be an |y|-augmented root {h³ns-} but {h³n-} is more likely because {-ys} (suffix no. 2160) also occurs in another kinship term.

¹⁰⁸⁵ In KW /h³a³h/ and /ha³h/ HE /h³a³'in'ix/ OO /h³a³inix/ HA /h³ah³'ainik/ "eyebrow" and derivatives.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
23441	2591				h ³ n- h ³ ynh-	(?) to quarrel ¹⁰⁸⁶
23450	2552		h ³ np-			heartburn
23460	2553 2554	h ³ nt-	h ³ nt-	h ³ nt-	h ³ nt-	chewy, crunchy (like herring eggs); to use front teeth to strip off whatever covers a layer (e.g. herring eggs); (HE/HA also:) to gnaw (like beaver, rodents)
23470	2555 2556	h ³ nc-	h ³ nc- h ³ nc•-	h ³ nc-	h ³ ns-	(HE/OO/HA) to move little by little, to shove, to move sideways, to slide; (KW) to snuggle up, to relax amorously, to lie with lover or spouse
23490	2557 2558				h ³ ny ³ -	1. lacking specifics, pointless, without direction, misdirected, foolish; 2. to leave food uneaten, fail to finish meal
23500	2559 2560	h ³ hgvh-	h ³ hgvh-	h ³ ngvh-	h ³ ngvh-	identity, social rank, being somebody; "who?"
23510	2561	h ³ nxv-	h ³ nxv-		h ³ nxv- h ³ nk-	(HE/OO) bruise, bruised; (KW) dark or bushy eyebrows
23511	2547	h ³ n ³ wkv- h ³ hnhł- h ³ nhłxn-	h ³ nwkv- h ³ hnhł- h ³ nhłkn-	h ³ nhxkn-	h ³ n ³ wkv- h ³ hnhł-	(?) to keep trying, proceed little by little ¹⁰⁸⁷

¹⁰⁸⁶ {h³ynh-} possibly in KW /h³inuxva/ "to make threatening gestures." {h³n-} in KW

{[h³y]h³n} > /h³i^hh³H/ "verbal fight (quarrel) between husband and wife" and derivates.

¹⁰⁸⁷ Unanalyzable stems with initial [h³n|, |h³n³| or |h³hn| and vague semantic similarity. HE

{h³n³wkv-} OO {h³nwkv-} and KW {h³n³wkv-*} from the Smith Inlet dialect means "to keep

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
23520	2562	h ³ nqv-	h ³ nqv-	h ³ nqv-	h ³ nqv-	cloud, fog, overcast; sky
	2563	h ³ n ³ qv		h ³ nw-	h ³ nw∞-	obscured by a layer ¹⁰⁸⁸
		h ³ nw-			h ³ nwh-	
23530	2564	h ³ nq-	h ³ nq-	h ³ nq-	h ³ nq-	to strain, to squeeze through slit or pipe, to force through or let out a bit at a time (e.g. sound), to babble (like baby), to moan
23550	2465	s-	h ³ s-	h ³ s-	hs-*	(?) otherworldly, supernatural,
	2567	h ³ s-	h ³ s•-	h ³ s•-	h ³ s-	dangerous, to be respected; to be
	2569	h ³ s•-	h ³ hs-	h ³ hs-		kept away from, to ward off, to
	2634	h ³ hs-				shoo (vermin, evil, dog) ¹⁰⁸⁹
23560	2211	h ³ s•-	h ³ s•-	h ³ s•-	hs-	(HE/OO/HA {h ³ s•-} KW {hs-,
	2464				qs- h ³ ps•-	qs-}): to belong to the other one (i.e. neither the speaker nor the addressee); (HE/OO/HA {h ³ s•} KW {h ³ ps•}):) the other or opposite side, one side (as opposed to both)

trying, persevere." {h³nhh-} occurs in HE /h³an'ałla/ OO /h³anałla/ "to coax sb. into doing sth." and KW /h³analas/ "funnel." The stems HE {h³nhłxn-} OO {h³nhłkn-} HA {h³nhxkn-} mean "to gasp for breath."

¹⁰⁸⁸ HE/HA {h³nw-} KW {h³nw∞/h-} may have developed from {h³nɣv-} as suggested by Boas (1948:10; 1947:323).

¹⁰⁸⁹ In the names of natural and supernatural creatures among which HE /h³z'i/ "frog" OO /h³zi/ "child-snatching ogre with the basket" HA /h³ziq³/ "worm, caterpillar or any creature that moves by squirming; ghost" KW /h³su/ (a kind of rock cod) KW /h³sam³a/* (a long red crab of medium size). The feature |•| in {h³s•-} and {h³hs•-} is posited to explain why a following suffix no. 3210 takes the form of {-k-} rather than {-&-}.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
23570			h³£bw-		h³λbw-	seven ¹⁰⁹⁰
23580	2570 2572			h³£-	h³£-	to snap, break off (like rope, tree branch); (HA also:) severed, apart, separated (from company, structure), dispersed, lost (in space or time); (KW also:) dentalia ¹⁰⁹¹
23590	2571 2638				h³£³k- h³h£³k-*	filled up, swollen ¹⁰⁹²
23600	2573 2575 2576	h³l-	h³l-	h³l-	h³l-	secure, stable, lingering, lasting, fast, tight, settled (like agreement), motionless, rigid, dead ¹⁰⁹³
23620	2577			h³lz- h³lc-/ h³ls-	h³lz- h³ls-	flesh, meat, fleshy; (KW also:) body fat, fat (as opposed to lean), fleshy

¹⁰⁹⁰ Sapir reports a South Wakashan root {7a£-} "two" (1939:247) and a suffix {-p.-} "to go across" (1939:325). The HE and HA words for "seven" consist of {mh³l-} "two" plus HE {-hw³s} HA {-hws} "across" (in this case to the fingers of the other hand). The HE/HA suffix derives from suffix no. 4220 which has many forms including {-w} and shades of meaning including "across." It is therefore at least conceivable that root no. 23570 contains the two mentioned South Wakashan morphemes plus native {-w} "across."

¹⁰⁹¹ All examples but one of the dentalia meaning involve a stem {h³£-lh-} (with suffix no. 2960). Uncertain which scenario could link dentalia and breaking off or being dispersed. Perhaps it is that some types of dentalia were used as money, see <https://www.nativewomenscollective.org/regaliastoriesdentalia.html>.

¹⁰⁹² Two of Boas's examples (1948:20) were re-elicited but with a root {h³£³k-}, not {h³h£³k-}.

¹⁰⁹³ Antonym of {hl-, etc.} (root no. 22780).

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
23630	2578	h ³ lc- h ³ l ³ hs-	h ³ lc- h ³ l ³ hs-	h ³ lc- h ³ l:h ³ hs-	h ³ ls-	sea cucumber ¹⁰⁹⁴
23640	2579	h ³ lk-			h ³ lk-	to shuck clams, remove meat from shellfish ¹⁰⁹⁵
23641	2580	h ³ lkv-	h ³ lkv-	(blk-)	h ³ lkv- h ³ lxv-	blood, to lose blood, to bleed; (OO also:) precious ¹⁰⁹⁶
23642	2574	h ³ lxv-	h ³ lxv-	h ³ lxv-	h ³ lxv-	to hunt with a canoe, to hunt at sea ¹⁰⁹⁷
23643				h ³ lqhł-		soaked ¹⁰⁹⁸
23650	2583	h ³ lχ-	h ³ lχ-	h ³ lχ-	(k ³ yχ-)	to kill, murder, beat up
23660	2584	h ³ lχ-	h ³ lχ-	h ³ lχ-		to chew

¹⁰⁹⁴ Informants aren't sure if the examples are about sea cucumber or sea slugs. Boas says on p. 13 of his KW dictionary and on p. 180 of Bella Bella Texts that the root refers to the sea slug or Holothuria. What he means is probably the sea cucumber because Holothuria is a genus of soft-bodied armless invertebrates resembling a cucumber and some species of Holothuria are harvested and sold as sea cucumber. Sea slugs do not necessarily resemble a cucumber and may not be edible.

¹⁰⁹⁵ HE only in the place name /H³lχdm³i'as/ "site of shucking clams."

¹⁰⁹⁶ Root occurs also in a few OO endearing terms for infants.

¹⁰⁹⁷ In KW {h³lxv-=zw-αy³} > /h³luzvε³/ which according to Boas (1947:212) means "sea hunter on flat." To this gloss he adds "(i.e. in sky, Orion)." Root probably also occurs in the stem {h³l[y]xv-} of terms referring to (HE) hunting for sea mammals, (OO) hunting in general, HA (Kitlope dialect) hunting using a canoe but (KW) getting ready (e.g. to leave). Boas (n.d.:13) lists many examples of KW {h³lyxv-} referring to sea hunting but hardly any could be re-elicited.

¹⁰⁹⁸ Only two examples, HA /h³lqal.h³h/ "soaked (said of one's entire body)" HA /h³lqals'is/ "soaked (said of one's feet)," both with word-final accent.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
23661					h ³ lhq-	(?) ¹⁰⁹⁹
23670	2585			h ³ ky-	h ³ k-	to bend forward with the head pointing down and the rear end up, to jump on the surface of water (said of whales, dolphins, fish)
23680	2586				h ³ k-*	firm ¹¹⁰⁰
23690	2588 2602 2642 2643	h ³ y- h ³ hyh-	h ³ y- h ³ hyh-	h ³ y- h ³ hyh-	h ³ y- h ³ hyh-	1. to bend, fold, double (sth. or oneself, e.g. over an edge or log or when squatting), to go in a loop (as when rounding a point of land), to teeter (as a long thing with only its middle on top of a rock), to seesaw, to pitch (like a boat); 2. (in several non-reelicitable Boas-Hunt examples:) to send payment (for shamanic services rendered) ¹¹⁰¹

¹⁰⁹⁹ In KW /h³laq/ "almost" and /h³laqa/ "almost there (e.g. about to give birth), to have a narrow escape."

¹¹⁰⁰ In KW /h³k/* "firmly."

¹¹⁰¹ 1. Possibly also with the sense of "to come around" in the exclamation HA /h³ayuḥ'ali/ that invites people to enjoy themselves at the celebration. 2. Unaugmented {h³y-} occurs only in HE/OO/HA/KW {h³y-hs-} "to urinate (said of a female)" and the mostly KW stem {h³y-wh-} "to round a point (before reaching the village)" in which latter {-w, -wh-} is likely suffix no. 4220 with the sense of "completely." Instead of {h³y-wh-} HE/OO usually have {h³hyh-w-} and {h³hyh-hwh-}.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
23700	2589	h ³ yp-	h ³ yp-	h ³ yp-	h ³ yp-	to pinch, to seize with two fingers
23721	2593				h ³ ys- h ³ y ³ s-	abalone shells
23730	2592				h ³ yshy ³ w-	(?) sympathy, pity, mercy ¹¹⁰²
23731	2596	(w ³ wkv-)	(w ³ wkv-)	h ³ ygh-		to store away, to save ¹¹⁰³
23790	2597 2599	h ³ yk- h ³ y ³ x-	h ³ yk- h ³ y ³ x-	h ³ yk-	h ³ yk-	good, nice, fine, well; smooth, level, free of obstruction, uninterrupted ¹¹⁰⁴
23800	2598	h ³ yk ³ -	h ³ yk ³ -	h ³ yk ³ -	h ³ yk ³ - h ³ y£ ³ -*	up, high up, above, on the upper side; heaven, supreme (in space or rank) ¹¹⁰⁵
23810	2600				h ³ yk ³ v-	to clean up, clear up
23820	2601			h ³ yxv-	h ³ yxv-	(?) to anticipate (eagerly in HA, with hope or fear in KW)
23830	2603	h ³ yqv-	h ³ yqv-	h ³ yqv-	h ³ yqv-	to dodge, to get out of the way
23850	2605				h ³ xv-	red cedar bark

¹¹⁰² In KW /h³isay³u/ "to sympathize" and derivatives.

¹¹⁰³ HA in {h³ygh-} > /h³ig'a/ "to store away" and derivatives including e.g. {h³ygh-=yɫ-h} > /h³ig'aiɫa/ "to put sth. away indoors."

¹¹⁰⁴ Both {h³yk-} and {h³y³x-} occur as free forms. In both HE and OO {h³y³x-} must be used instead of {h³yk-} before some suffixes of the kind that can only follow a complete word stem. Whereas in OO the two stems alternate freely before deictics with grammatical function, in HE {h³yk-} is used before some of them but {h³y³x-} before others. {h³y³x-} may have the structure {h³yk-'}.

¹¹⁰⁵ KW {h³y£³-} only in KW /h³i£³χsdε³/* "precipice, high bluff" KW /h³i£³χsdɫ³a/* "rocky precipice."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
23860	2607 2645 2617	h ³ w-	h ³ w-	h ³ w- h ³ hwh-	h ³ hwh- h ³ wyh-	solidified, stopped, inert, resisting change or action (hence: not leaving a place, settled, reluctant to get going, operating slowly); (HA {h ³ w-} also:) to leave sth. somewhere for a while ¹¹⁰⁶
23861	2613			h ³ ws•- h ³ wsl-	h ³ w- h ³ wsh-	(HA) lying somewhere; (KW) by itself, apart ¹¹⁰⁷
23870	2608	h ³ w-		h ³ w-		(?) ¹¹⁰⁸
23890	2609	h ³ wp-	h ³ wp-	h ³ wp-		to use a wood chisel ¹¹⁰⁹
23900		(wwl-)	(wwl-)	h ³ wp-		mound, heap
23910	2610		h ³ wp-		h ³ wp-	to whisper
23920	2611	h ³ wmh-			h ³ wm∞-	(?) ¹¹¹⁰
23930	2612	h ³ wm ³ -	h ³ wm ³ -	h ³ wm ³ -	h ³ wmh- h ³ wm ³ -	pain eases or stops
23940					h ³ wdhx-	suddenly

¹¹⁰⁶ Probably also in HA /h³aw'am³ru/ and /h³aw'aum³ru/ "to amalgamate."

¹¹⁰⁷ HA {h³ws•-} only in /h³us'alafɬa/ "lying on a raised surface (said of any person, animal, object)"

¹¹⁰⁸ Perhaps in {h³w-%hkv-} (with assumed suffix no. 6060) "to keep sth. in one's mouth (e.g. candy, chewing tobacco)."

¹¹⁰⁹ The only HA example, /h³upa/ "to use a wood chisel," is from a Kitamaat informant but not recognized by the Kitlope one.

¹¹¹⁰ Possibly in the HE proper name /H³um'aɬa/ and in KW /h³a³ums/ < {[h³]h³wm∞-s} "mortal, not magic or supernatural, ordinary."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
23950				h ³ wł-	h ³ wł- h ³ wł-	evident, discernable, noticeable
23970	2616				h ³ w ³ s- h ³ w ³ l ³ -	wolf ¹¹¹¹
23980	2606	h ³ wkv-	h ³ wkv-	h ³ wkv-		pity, mercy, compassion
24000		h ³ wχv-				(?) ¹¹¹²
24010	2622	h ³ q-	h ³ q-	h ³ q-	h ³ q-	wide, wide open, to gape (said of hole or mouth)
24030	2625	h ³ h-	h ³ h-			to add grease to one's cooking
24050	2626	h ³ h-	h ³ h-	h ³ h-	h ³ h-	ah! (in exclamations and forms of phatic communion)
24060	2627	h ³ hp-	h ³ hp-	h ³ hp-	h ³ hp-	maggoty
24070	2629	h ³ hmws-	h ³ hmws-	h ³ hmwł-	h ³ hmws-	1. (HE/OO/KW) to decorate (e.g. Christmas tree); 2. (HE/HA/KW) to practise a craft, do skilled work ¹¹¹³
24071	2629	h ³ hmwy ³ - h ³ wmwy ³ -	h ³ hmwy ³ -	h ³ hmwy ³ -		(HE/HA) surplus, extra, excess (that one gives away for free); (OO) to decorate ¹¹¹⁴

¹¹¹¹ In the stems {h³w³s-yk-} and {h³wł³-yk-} both meaning "wolf."

¹¹¹² Perhaps in HE /h³uχva/ "empty clam shell; an unidentified small kind of clam" HE /h³uχvnis/ "empty clam shells on the beach." In both examples the root, if it is {h³wχv-}, must be augmented to {h³w[∞]χv-} > {h³wwχv-} because only low tones can occur in suffix allomorphs.

¹¹¹³ Only HA example is /h³amul³iniχv/ "carver" (term said to be obsolete and now replaced by HA /χv'aɬ³iniχv/).

¹¹¹⁴ HE {h³wmwy³-} occurs in examples from elder Eli Wallace; other HE informants used {h³hmwy³-}. The OO gloss may be wrong.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
24080	2631	h ³ ht-	h ³ ht-	h ³ ht-	h ³ t- h ³ ht-	sinew, tendon, muscle, tenseness; to strain (muscles, vocal cords, at stool, in child birth) ¹¹¹⁵
24090	2633	(nqv-)	(nqv-)	h ³ hs-	(nχv-)	soapberries (probably Canada buffaloberry - <i>Shepherdia canadensis</i>) ¹¹¹⁶
24100	2635	h ³ hs-	h ³ hs-			to use the longline to catch halibut
24110	2636	h ³ h£- h ³ h£•-	h ³ h£- h ³ h£•-	h ³ h£- h ³ h£•-	h ³ hλ- h ³ h£- h ³ h£y- h ³ h£h- h ³ h£•-	away from open space (hence away from the centre of the house and towards the wall, away from the beach and towards the land, away from the sea and towards the mainland, towards the interior, inland, shorewards, behind the house) ¹¹¹⁷
24111					h ³ h£-	wolf ¹¹¹⁸
24120	2637				h ³ h£-	else, or

¹¹¹⁵ KW {h³t-} only in /h³dabize³/ "tendon behind knee". Informant may have been in error as this is likely KW /h³adabize³/* glossed by Boas as "calf of leg" (1948:17) and "sinew at heel" (1947:313).

¹¹¹⁶ Likely a Tsimshian loan.

¹¹¹⁷ HA {h³h£-} is attested only before the suffix {-tw}.

¹¹¹⁸ A root form {h³h£-} is extractable from KW /h³af³ala/ < {h³h£-+hlh} "wolf sound" and perhaps KW /h³af³ul³inuχv/* < {h³h£-wł-+ynwχv} "wolf." This form could be a backformation from a large number of unanalyzable and possibly borrowed free stems meaning "wolf" and consisting of /h³λ/, /h³aλ/, /h³£/, /h³af/ followed by /h³m/, /an³m/, /ɲ³m/ or /al³m/.

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
24130	2638	h ³ hɛ ³ -	h ³ hɛ ³ -	h ³ hɛ ³ -	h ³ hɛ ³ -	up in the woods, inland, in the interior; to build a canoe
24140	2639	h ³ hɫ-	h ³ hɫ-	h ³ hɫ-	h ³ hɫ-	adjoining in space, time or ranking (hence 1. next, second, following after, recent, new, again, recently, lately; 2. in support of, subordinate to, assisting ¹¹¹⁹)
24150	2640				h ³ hly-	to search, go here and there
24160	2641	h ³ hg-	h ³ hg-	h ³ hg-	(w ³ yl ³ - w ³ yl ³ h-)	all, everything, everybody
24170		h ³ hxhdy-	h ³ hxhdy-			fortified island at the mouth of an inlet or river
24180	2644	h ³ hxv-	h ³ hxv-	h ³ hxv-	h ³ hxv-	to foam, to skim off foam
24181					h ³ hwhqv-	summer seat, sundeck ¹¹²⁰
24190				h ³ hqv-		(?) ¹¹²¹
24210	2648	h ³ hq-	h ³ hq-	h ³ hq-	h ³ hq-	to arrive, appear on the scene, show up, loom up, become

¹¹¹⁹ Likely also the root of HA {h³hlhqv-} "weasel dance." This dance is the Kitlope equivalent of the OO /Λu³лaχa/ dance. The latter name derives from the HE/OO/HA stem {λw³l-} "again" related to KW {λw³-} "and, and also, along with, together with, accompanied by."

¹¹²⁰ Stem's structure could be {h³hxv-%hqv-} with suffix no. 4020 but unknown meaning of the root. The root could also be {h³hwh-} (no. 23860) with the meaning "to linger, to lounge" and suffix no. 4020.

¹¹²¹ Possibly in HA {h³hq³vn} "sand dune."

North Wakashan Comparative Root List (Updated)

Root #	Old #	HE	OO	HA	KW	Gloss
						visible, open up, unfurl, reveal ¹¹²²

¹¹²² Only two certain KW examples. Boas's dictionary doesn't seem to be aware of this root at all.

North Wakashan Comparative Root List (Updated)

4. Index of Root Forms

Alphabetic Order:

b p p³ m m³ d t t³ n n³ z c c³ s λ £ £³ l l³ g k k³ x y y³ gv kv k³v xv w w³ rv qv q³v χv r q q³ χ h h³

b		bwł-	200, 210	pnqv-	410
		bwxv-	220	pnχv-	420
bns-	10	bwqv-	230	pnq-	410, 430
bn ³ -	20, 30	bqv-	240	pn ³ ł-	400
bs-	40	bχ-	250	ps-	440
bł-*	450	bh-	260	p£-	450
bl-	50	bhs-	270	pł-	450
blk-	60	bh£-	280	plc ³ -	3200
blxv-	70	bhl-*	280	pl-	460
blq-*	80	bhkv-	160, 290, 300,	plk-	470
blχ-*	90		310, 311	plq-	80, 480
bx-*	140	bhxv-	320, 330, 340	pk-	500
by-	100, 260	bhqv-	240, 350	px-	510
bys-	110	bhχv-	360	pys-	520, 521
był-	120			py£-	530
byk-	130	p		pyk-	540
byx-	140			pyqv-	550
bkv-	150	p-	22510	pyχv-	550
bkv-	160	pt-	370	pyq-*	540
bw-	170	pn-	380	py ³ s-	520, 521
bwt-	180	pnc-	390	py ³ ł-	740
bws-	190	pns-	390	pkv-	150
bw£-	200	pn£-	400		

North Wakashan Comparative Root List (Updated)

pkv-	580	p ³ l-	870	m	
pxv-	590	p ³ l-	880, 890		
pw-	600	p ³ lc-	900	mmm-	1190
pws-	610, 611	p ³ lxv-	890	mmk-	1200
pw£-	620	p ³ lqv-	910	mt-	1210, 1211
pwxv-	630, 640	p ³ lχv-	890	mn-	1212
pwqv-	650	p ³ lq-	910	mnz-	1220
pwqv-	660	p ³ lχ-	920	mnł-	1230
pwχv-	660, 670	p ³ k-	940	mnk-	1240
pqv-	240	p ³ x-	940	mnxv-	1250
pχv-	680	p ³ ys-	960	mnr-*	1260
pq-	690	p ³ yxv-	970	mnq-	1270
pχ-	700, 710	p ³ yq ³ v-*	980	mc-	1280
ph-	720	p ³ yq-	990	ms-	1280, 1290, 1300
phs-	440	p ³ kv-	580, 1000	mł-	1320, 1330
ph£-	740	p ³ xv-	590	mł•-	1320
phł-	740, 750, 760	p ³ w-	1010	młh-	1320
phxv-	590, 770	p ³ ws-	1020	ml-	1340, 1410
phqv-	780	p ³ wł-	1030, 1040	mlc-	1360
phq-	690	p ³ wkv-	1050	mls-	1360
phχ-	710, 790	p ³ wqv-	1060	mlk-	1370, 1380
ph ³ l-	740	p ³ qv-	1070	mlx-	1380
		p ³ q-	1080	mlxv-	1250
	p³	p ³ h-	1090, 1100	mlqv-	1400
		p ³ hs-	440, 830	mlχv-	1400
p ³ dk-	800	p ³ h£-	1130	mlq-	1400, 1401
p ³ t-	810	p ³ hł-	1140	ml ³ -	1410
p ³ tk-	800	p ³ hx-	1150	mk-	1200, 1420
p ³ nq-	820	p ³ hq ³ v-	1170	mx-	1440
p ³ s-	440, 830, 850	p ³ hq ³ -	1170	mxs-	1300
p ³ £-	860			my-	260, 1450

North Wakashan Comparative Root List (Updated)

myt-	1460, 1470	mχv-	1810	mhχv-	1810, 2100
mys-	1480, 1490	mq-	1830	mhq-	1890, 2120
myg-	1510	mχ-	1840, 1850	mhχ-	2130, 2140
mygh-	1510	mh-	260, 1860	mh ³ l-	2150
myk-	1520	mhp-*	1890	mh ³ yl-*	2021
myk ³ -	1520	mhdh-	1920		
myx-	140, 1530, 1531, 1540	mht-	1210		m³
mykv-	1550	mhnys-	1930		
myqv-	1560	mhnh-	2200	m ³ n-	2160
myχv-*	1570	mhn'hys-	1930	m ³ nc-	2170, 2180
myq-*	1580	mhn ³ ys-	1930	m ³ ns-	2170, 2180
myχ-	1590	mhz-	1940	m ³ ny-	2160
mkv-	1600, 1610	mhzh-	1940	m ³ nq-	2190
mxv-	1610, 1620, 1630	mhs-	1940, 1950, 1960	m ³ nh-	2200
mw-	1640, 1641, 1650	mhs∞-	1940	m ³ n ³ c-	2170
mwdh-*	1920	mhf-	1970	m ³ c-	2210
mwt-	1660	mh ^l -	1320, 1330, 1971, 1980, 2000, 2020	m ³ s-	1300, 2210
mwc-	1670	mhl ³ -	1410	m ³ stq-	2220
mws-	1670, 1680	mhk-	2010	m ³ sχ-*	2220
mw ^l -	1690, 1700, 1710	mhx-	1440, 2020	m ³ χstq-	2220
mw ^l ³ -	1710	mhy ^l -	2021	m ³ l-*	2410
mw ^l ³ w-	1710	mhyh-*	2030	m ³ l-	2230
mw ^l ³ h-	1710	mhyht-	2030	m ³ lqv-	2240
mwkv-	1720, 1730	mhyh ³ x-	2030	m ³ lq-	2250
mw xv-	1730, 1740	mhy ³ -	1450	m ³ y-	1450
mwqv-	1750, 1760, 1770, 1780	mhk v-	2040, 2050	m ³ ys-	1480
mwχv-	1790	mhxv-	1620, 2050	m ³ y£-	2270
mr v-*	1791	mhw-	2060	m ³ yl-	2270
mqv-	1800	mhw ³ y-	1640	m ³ yk-	2300
		mhqv-	2070, 2090	m ³ y ³ £-	2270
				m ³ kv-	2310

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m ³ xv-	1620	d	dy ³ -	2780
m ³ w-	2320		dkv-	160, 2790
m ³ wt-	2330		dm-	2450, 2460
m ³ wc-	2340		dmł-	2470
m ³ wf-	2350		dmkv-	2480
m ³ wł-	2350		dmxv- *	2490
m ³ wkv-*	2360		dmqv-	2500
m ³ wqv-	1760, 2370		dmχ-	2510, 2520
m ³ w ³ qv-	2380		dn-	2530
m ³ q-	2390		dnt-	2550
m ³ h-	2400		dns-	2560
m ³ hny-	2200		dnkv- *	2570
m ³ hnh-	2200		dnxv-	2580
m ³ hs-	1960, 2401		dnχ-	2590, 2600
m ³ hsk-	2401		dn ³ -*	2610
m ³ hł-	2410, 2420		dn ³ h-	2610
m ³ hy-	2401		dł-	2620
m ³ hysk-	2401		dls-	2630
m ³ hy ³ hf-	2401		dlk-	2640
m ³ hyh-	2160		dlx-	2650
m ³ hkv-	2310, 2430		dlhyd-	2981
m ³ hxv-	2440		dk-	2670
m ³ hwh-	2320		dx-	2680
m ³ hw ³ -	2320		dy-	2690
m ³ hqv-	2070		dył-	2700
m ³ hχv-	2100		dyk-	2710
m ³ hhs-	2401	dyx-	2720	
m ³ hhł-	2401	dykv-	2730	
		dyxv-	2740	
		dyqv-	2750, 2760	
		dyχ-	2770	
			t	
		tp-	3030	

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tm-	3040	tyq-	3330	t ³ mxv-	3090
tms-	3050	tyχ-	3350	t ³ mq-	3590
tmsx•-	3050	ty ³ sx-	3210	t ³ mhkv-	3570
tml-	3060	ty ³ sx•-	3210	t ³ m ³ s-	3540
tmx-	3070	ty ³ xs-	3210	t ³ n-	3140
tmkv-	3080	ty ³ xs•-	3210	t ³ nc-	3600
tmxv-	3090	tkv-	3360	t ³ ns-	3600, 3610
tmqv-	3100	txv-	2800	t ³ nx-	3620
tmχv-	3110	tw-	3400	t ³ nqv-*	3630
tmq-	3120, 3130	twp-	3410	t ³ nχ-	3650
tmχ-	3130	tws-	3420	t ³ s-	3660, 3670
tn-	3140, 3150	twl-*	3430	t ³ l-	3680
tns-	3150	twqv-	3440	t ³ lc-	3690
tnk-	3160	twχv-	3441	t ³ ls-	3690, 3700
tnx-	3170	tqv-	3450	t ³ lxv-	3710
tnχ-	3180	tq-	2920, 3450	t ³ lq ³ -	3720
ts-	3190	tχ-	700, 2920, 21960	t ³ k-	3280, 3730
tlt•-	3200	th-	3470	t ³ x-	3280, 3740, 3750,
tlc ³ -	3200	thm ³ hqv-	3100		3760
tlx•-	3210	thw ³ -	3400	t ³ y-	3770, 3780
tlp-	3220	thqv-	3270, 3500, 4120	t ³ yp-	3800
tlkv-	3230, 3240, 3250	thχv-	3110	t ³ ys-	3810
tlqv-	3260, 3270	thq-	3010	t ³ yl-	3820
tk-	3280, 3281			t ³ yk-	3830, 3840
tx-	510, 2680, 3281		t ³	t ³ yx-	3840, 3850, 3860
tys-	521, 3210			t ³ ykv-	3870
tyl-	3290	t ³ p-	3520	t ³ yxv-	3880
tylx•-	3210	t ³ m-	3540	t ³ yqv-	3890, 3900
tyk-	3280	t ³ ms-	3550	t ³ yq-	3910
tyx-	3310	t ³ ml-	3560	t ³ yχ-	3920
tykv-	3320	t ³ mkv-	3570, 3580	t ³ y ³ l-	3930

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t ³ y ³ k-	3940	n	nwgvh-	4421	
t ³ y ³ kv-	3940		nwkv-	4500, 4510	
t ³ kv-	2790, 3950	np-	4160	nwxv-	4520
t ³ w-	3960	nm-	2460	nqv-	4530
t ³ wp-	3410	nms-	4180	nχv-	4530, 11410
t ³ ws-	3420, 3970	nt-	4190	nq-	4540, 4550, 21740
t ³ wł-	2860	nn-	4210	nχ-	4550, 4560
t ³ wxv-	3980, 3990	nnxw-	4211	nh-	4580, 4590, 4600, 11450
t ³ wqv-	4000, 4010	nnkv-	4220, 4230	nhp-	4160, 4610
t ³ wχv-*	4010, 4020	ns-*	4240	nhn-	4611
t ³ qv-	4030	nł-	4250, 4260	nhs-	4240, 4640
t ³ q-	2920, 4040	nl-	4260	nhł-	4470
t ³ χ-	2920	nk-	4290	nhk-	4650
t ³ h-	4060, 4070	nx-	4300	nhx-	4660
t ³ hm ³ -	3540	ny-	4310	nhxv-	4670, 4680
t ³ hm ³ hkv-	3570	nynwyh-	4420	nhwh-	4420
t ³ hny ³ -	3140	nys-	4320, 4330, 4800	nhχv-	4670
t ³ hnh-	3140	nył-	4350	nhq-	4550, 4690, 4700, 21740
t ³ hs-	3660, 3670	nyk-	4360	n³	
t ³ hł-	4071	nykv-	4370		
t ³ hk-	4080	nyqv-	1560	n ³ m-	2160, 2460
t ³ hx-	4080	nyχ-	4380	n ³ mh-	2200
t ³ hy ³ -	3780	ngv-	4390	n ³ mhy ³ h-	2200
t ³ hkv-	4100	nkx-	4370, 4400	n ³ n-	4710
t ³ hqv-	4110, 4120	nw-	4420, 4421	n ³ nk-	4720, 4730
t ³ hq-	4130	nwt-	4430	n ³ nq-	820
t ³ hχ-	4130	nwn∞-	4440	n ³ £-	4740
t ³ h ³ s-	3670	nws-	4320, 4450	n ³ l-*	4741
t ³ h ³ χ-	4150	nwl•-	4460		
		nwyh-	4420		
		nwl-	4470		

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n ³ ls-* 4742	n ³ hkv- 5060	zyk- 5370, 5380
n ³ lχ- 4750	n ³ hxv- 4860, 5070	zyx- 5400
n ³ lh- 4760	n ³ hk ³ v-* 5070	zykv- 5410, 5420
n ³ k- 4720, 4770, 4810	n ³ hqv- 5090, 5100	zyqv- 5420
n ³ y- 4780, 4790	n ³ hχ- 5110	zyq- 5430
n ³ ys- 4800		zyq- 5440
n ³ yk- 4790	z	zxv- 5450
n ³ yl- 4810		zw- 5460
n ³ yk- 4810	zblx- 5120	zwp- 5480
n ³ ylv- 4370, 4810, 4840	zp- 5480	zwmyg- 5481
n ³ xv- 4860	zm- 5130, 5140	zwmyk- 5481
n ³ xv•- 4870	zmxv- 5150	zwt-* 5490
n ³ xvh- 4870	zt- 5170	zwnh- 5491
n ³ w- 4880, 4890	zn- 5180	zws- 5500
n ³ wł- 4900	znk- 5190	zwxv- 5510, 5520
n ³ wlh- 4910	znq- 5200, 5210	zwqv- 5540, 5550
n ³ wyqv- 4940	zn ³ - 5211	zqv- 5560, 5570, 5580
n ³ wxv- 4920, 4930	zc- 5212	zχ- 5590
n ³ wqv-* 4940	zs- 5212, 5220	zh-* 12090
n ³ w ³ s- 4890	zl- 5230	zhmy- 5130
n ³ qv- 4950	zlk- 5240	zhm ³ - 5140
n ³ χvh- 4970	zlx- 5250	zhc- 5600
n ³ h- 4590, 4980, 4990, 5000, 5040	zlxv- 5260	zhs- 5600, 5610
n ³ hs- 5010	zlχ- 5270	zhkv- 5620
n ³ h£ ³ - 5020	zk- 5280, 5300, 5370	zhxv- 5620, 5630, 5640
n ³ hl- 5030	zx- 5310	zhwhdly- 5641
n ³ hlh- 5040	zy- 5320	zhqv- 5650
n ³ hl∞- 5050	zyp- 5321	zhq ³ v- 5660
n ³ hk- 5050	zyt- 5330, 5340	zhq- 5670
n ³ hk ³ - 5050	zys-* 5350	zh ³ nχ- 5671
	zyl- 5360	zh ³ ł- 5680

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	cyn ³ -	5980	chk-	5900, 6350, 6360
c	cys-	5990, 6000, 6010	chxv-	6370
	cysd-	5730	chq-	6380, 6390
cp-	cyst-	5730	chχ-	6300, 6400
cm-	cył-	5990, 6020	ch ³ x-	6410
cmkv-	cyx-	6020, 6050, 6070		
cmxv-	cykv-	6080	c³	
cm ³ s-	cyqv-	6090		
cm ³ wt-*	cyχv-	5870	c ³ bdy ³ -	6411
ct-	cyq-	6100, 6110	c ³ p-	6420
cnt-	cyχ-	6110	c ³ m-	6440
cns-	ckv-	6130	c ³ mt-	6450
cnqv-	cxv-	6130, 6140, 6150,	c ³ ms-	7140
cnχv-		6160, 6170	c ³ m£-*	12800
cnq-	cwp-	6180	c ³ mk-	6470
cs-	cwm ³ ws-*	6181	c ³ mx-*	6480
csqv-	cwt-	6190	c ³ mqv-	6490
cl-	cws-	6200	c ³ mq-	6490
cl-	cwl-	6210	c ³ mχ-	6510
clc-	cwk v-	6220	c ³ m ³ -	6520
clt-	cwxv-	6150	c ³ m ³ k-	6470
clqv-	cwqv-	5540, 6240, 6250	c ³ dhq-	6521
clχv-	cwχv-*	6250	c ³ t-	6530, 6540
clq-	cw ³ kv-	6260	c ³ n-	6550
clχ-	cqv-	5580, 6270	c ³ nd-	6560
ck-	cχv-*	6150, 6280	c ³ nt-	6450, 6570
cx-	cq-	5580, 6290	c ³ nc-	6580
cy-	cχ-	5590, 6300	c ³ nłd-	6560
cyp-	ch-*	6310	c ³ nx-	6590
cymh-	chm ³ -*	6520	c ³ nkv-	6600, 6610
cyt-	chs-	6330, 6340	c ³ n ³ yχv-*	6620

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c ³ n ³ yχ-*	c ³ yk- 6920, 6930, 6940,	c ³ hp- 6420
c ³ s- 5820, 6540, 6630	6950	c ³ hm ³ - 6440, 6520
c ³ sk- 5820	c ³ yk ³ hł- 6960	c ³ ht- 6540
c ³ skv-* 5820	c ³ yχ- 6970, 6980, 6990,	c ³ hs- 7350, 7370, 7380
c ³ sqv- 5820, 6640	7000	c ³ hk- 4080, 6770, 7400,
c ³ ł- 6540, 6560, 6650	c ³ ykv- 6920, 7020	7430
c ³ łd- 6540	c ³ yχv- 7040	c ³ hx- 6790, 6810, 7440,
c ³ ł•- 6560	c ³ yqv- 7030	7450, 7460, 7470
c ³ ł- 6650, 6660	c ³ yχv- 7040	c ³ hyq- 7471
c ³ łd- 6560	c ³ yq- 6100, 7030	c ³ hy ³ - 7480
c ³ łt- 6670	c ³ yχ- 7070	c ³ hkv- 7490
c ³ łs- 6680	c ³ y ³ p- 6840	c ³ hxv- 6370
c ³ łk- 6690	c ³ y ³ s- 6890, 13260	c ³ hw∞- 7500
c ³ łx- 5250, 6690	c ³ k- 7080, 7090, 7100	c ³ hw ³ - 7130
c ³ łkv- 6600, 6610, 6710	c ³ xv- 7110	c ³ hqv- 7510, 7520, 7530
c ³ łqv- 6720	c ³ w- 7130, 7140	c ³ hχv- 7530
c ³ łχv- 6730	c ³ wp- 5480	c ³ hr- 7540
c ³ łq- 6740, 6750	c ³ wt- 7160	c ³ hq- 7260, 7550, 7551
c ³ łχ- 6760	c ³ wnh- 7170	c ³ hχ- 6510
c ³ k- 6770	c ³ ws- 7140, 7180	c ³ h ³ q- 7560
c ³ x- 6540, 6790, 6800,	c ³ wł- 7190	c ³ h ³ χ- 7560
6810	c ³ wkv- 7200	
c ³ y- 5920, 6830	c ³ wxv- 7210	s
c ³ yp- 6840	c ³ wws- 7140	
c ³ ymhws- 6850	c ³ wqv- 7220, 7230	s- 23550
c ³ yt- 6540	c ³ wχv- 7230	sbh- 7570
c ³ ynh- 6870	c ³ w ³ s- 7140	sp- 7570
c ³ ys- 6880, 6890	c ³ qv- 6270, 7240, 7250	sp ³ - 7580
c ³ ył-* 5990	c ³ q- 7260	smp- 7590
c ³ yłχv- 6910	c ³ χ- 7270, 7280, 7290	sms- 7600
c ³ ył.w ³ - 6910	c ³ h- 7300, 7310	smk- 7610

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st-	7620	syχv-	7970	shwh-	8050
sn-	7630, 7640, 7650	syq-	7980	shqv-	8120, 8430
snt-	7660	sy ³ x-	7990	shq ³ v-	8120
sny ³ -	7670	sy ³ kv-	8000	shχv-	8410, 8440
snkv-	7680	skv-	8010, 8020, 8391	shq-	8450, 8460
snq-	7690	sw-	8040, 8050, 8060	sh ³ x-	8370
ss-	7700	swp-	6180, 8070	sh ³ kv-	8390
sss-	5730	swł-	8080	sh ³ χv-	8470
sł-	7710, 7720	swkv-	8090		
słbxv-	7730	swqv-	8110		λ
sł-	7740	sqv-	8120		
sl-	7740, 7750	sq ³ v-	8120	λm-	8480
slp-	7760	sχv-*	8120	λms-	8490
slt-	7780, 7790	sq-	8130	λmxv-	8500
slt ³ h-	7791	sχ-	8150, 8160	λn-	8510, 8520
sls-	7800	sh-	8170	λns-	8530
sly ³ -	7670	shp-	8200	λn£-	8540
slqv-	7810	sht-	8210	λnk-*	8550
slχv-	7820	shc-	8240	λnqv- *	8560
slq-	7810	shs-	8240, 8250	λk-	8580
sk-	7840	shł-	8260, 8270	λx-	8590
sk ³ s•-	12970	shlh-	7750, 8290	λy-	8600, 8601
sk ³ h-	7850	shl ³ -	8300	λys-	8610
sx-*	7860	shk-	8310, 8320, 8340,	λykv-	8620
sy-	7880		8360	λyq-	8630
syt-	7890	shx-	8360, 8370	λy ³ kv-	8620
synh-	7900	shyhł-	8290	λkv-	8640
sys-	7910	shy ³ -	7880	λw-	8650, 8670
sył-	7920, 7930	shkv-	8380, 8390, 8391	λws-	8670
syx-	7940, 7950	shxv-	8400	λwgv-	8680
sykv-	7960	shxv-	8410	λwgv- m-	8690

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λwkv- 8680	£nk- 8960	£h- 9330, 9340
λqv- 8700, 8710	£nqv- 8970, 8980	£hp- 8830, 9040, 9350
λq-* 8710	£nq-* 8990	£hmw- 8500
λχ- 8730, 8740	£s- 9000	£ht- 9360
λh- 8750	£l- 9010	£hs- 9380, 9400
λhmv- 8500	£l- 9020	£hk- 9050, 9410
λhmv ³ - 8500	£lp-* 9040	£hx- 9420, 9430
λhp- 8760	£k- 8580, 8590, 9050,	£hqv- 9440, 9450,
λht- 8761	9060	10910
λhk- 8770	£x- 8590, 9080	£hq- 9300, 9470
λhyd- 2981	£xs- 9090	£hχ- 9480, 9490
λhkv- 8620, 8640	£x•- 8590	£h ³ s- 9000, 9400
λhχv- 8800, 8810	£ys- 9100	
λh ³ p- 8820	£yl- 9110, 9120, 9130	£ ³
	£yx- 9110, 9120	
£	£ykv- 9150	£ ³ p- 9510
	£yqv- 9160, 9170	£ ³ ms- 9530
£p- 8830	£yq- 9190, 9200	£ ³ mł- 9550
£m- 8840	£yχ- 9200	£ ³ mkv- 9560, 9570
£ms-* 8850	£y ³ s- 9100	£ ³ mχv- 9571
£mł- 8860	£kv- 8640	£ ³ mq- 9580, 9590
£mk- 8870	£wp- 9230	£ ³ mh- 9600
£mkv- 8880	£wmh- 9240	£ ³ mhkv-* 9601
£mxv- 8500	£wm∞- 9240	£ ³ mhχv- 9602
£mχv-* 9571	£wł-* 9250	£ ³ m ³ s- 9530, 9603
£mq- 8900, 8910	£wy ³ - 9260	£ ³ t- 9610
£t- 8920, 8930	£wχv- 9270	£ ³ ns- 9620
£n-* 8940	£qv- 8700, 9280, 10910	£ ³ nk- 9640, 9650
£ns-* 8950	£χv- 9290	£ ³ ny ³ -* 9660
£nk- 8550	£q- 9300, 9310, 9320	£ ³ nq- 9670, 9680
£ny ³ - 8950	£χ- 8730	£ ³ n ³ q- 9681

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£³s-	9690	£³ws-	10080	£³hyh-	9820
£³l-	9710, 9720	£³wsnhk-	10090	£³hyhqv-*	
£³l-	9730, 9740	£³wskv-	10100	£³hy³-	9820, 10390,
£³l³χ-	9750	£³wl-	10110, 10120		10400
£³k-	9760, 9780, 9790	£³wk³v-	10130	£³hkv-	
£³x-	9800	£³wk³vp-	10060	£³h xv-	10020, 10420
£³y-	9810, 9820	£³wk³vm-	10060	£³hwq³v-	10421
£³yp-	9830	£³wqv-	10140, 10150	£³hqv-	10430
£³yn³h-	9840, 9850	£³wχv-	10151, 10160	£³hχv-	10440
£³yc-	9860	£³wχv£³wχv-	10161	£³hq-	10450, 10460
£³ys-	9860, 9880, 9890	£³wχv£³χv-*	10161	£³hχ-	10210, 10230,
£³yst-	9891	£³w³xv•-	10170		10480
£³y£-	9900	£³qv-	10180, 10910	£³h³wxv-	10481
£³yx-	9910	£³χv-	10190	£³h³hnys-*	10301
£³yx•-	8590	£³q-	10200	£³h³h£³y-	10482
£³ykv-	9920, 9960	£³χ-	10210, 10220,		
£³yxv-	9960		10230		l
£³ywhx-*	9961	£³h-	10240, 10250		
£³yq-	9970, 9980	£³hbht-	10280	lp-	10490
£³yχ-	10000	£³hp-*	10290	lm-	10500, 10510
£³y³-	9820	£³ht-	9610, 10300	lmp-	10530
£³y³χ-	10000	£³hnys-*	10301	lms-	10540
£³kv-	10010	£³hs-	10310, 10320,	lmqv-	10550
£³xv-	10020		10350	lmq-	10560
£³wp-	10030	£³hsh-	10350	lmχ-	10570
£³wp•-	10040	£³hs•-	10350	lt-	10580
£³wp³k-	10060	£³hl-	10360	ln-	10590, 10600
£³wp³kv-	10060	£³hk-	9760, 10361	lnp-	10610
£³wm³-	10030	£³hx-	10370	lnt-	10620, 10630
£³wt-	10070	£³hykm-	10371	lns-	11011
£³wc-	10071	£³hyqv-	10372	lnxv-	10650

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lnq-	8980, 10660	lhp-	10980	lyk-*	11190
lnχ-	10670	lhm ³ -	10500	lyx-	11170, 11200,
ls-*	10680	lht-	10980, 11010		11210
ll-	10600, 10690	lht ³ -	11010	lyxv-	11220
ll ³ -	10690	lhnc-	11011	lyqv-	11230, 11231
lx-*	10700	lhs-	11012	lyq-	11240, 11250
lxs-	9090	lhl-	11013	lyχ-	11260
ly-	10710	lhl ³ -	10690	lkv-	11270
lym ³ -*	10720	lhk-	11020	lxv-	11270
lyt-	10730	lhx-	11030	lw-	11300, 11310,
lync-	11011	lhxv-	11050		11320
lyc-	10740	lhws-	11012	lwp-	11330
lys-	10740, 10760	lhwhs-	11012	lwm ³ -	11340
lyk-	11020	lhqv-	10910	lwt-	11350
lyx-	9110, 9120, 10770	lhq-	10920, 11060	lws-	11360
lyxv-	10780	lhχ-	11070, 11080	lwł-	11370
lyq-	10770			lwqv-	11380, 11390
lyχ-	10770		l	lwχv-	11400
lkv-	10800, 10810,			lw ³ χv-	11410
	10820	lh ³ hq-	11060	lqv-	11420
lxv-	10830, 10840	lp-*	4160	lχv-	11410
lwp-	10530	lmxv-	11090	lrw-	11421
lwm∞-*	10850	lmχv-	11100	lχ-	11430, 11440
lwt-	10870	lmχ-	11110	lh-	11450
lwxv-	10880	ls-	11120	lhxv-	11460
lwqv-	10890, 10900	lk-	11130, 11140	lhq ³ vt-	11461
lw ³ t-	10870	ly-	11450	lhχv-	11470
lqv-	10910	lyp-	11150	lhχ-	11490
lq-	10920, 10930	lyt-	11160		
lχ-	10940	lyn∞-	11170		
lh-	10970	lys-	11180		

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l³		gnw ³ h-	11710	gwn∞-	11710
		gnχv-	11720, 11730	gws-	11980
		gn ³ c-	11680	gwł-	11990
		gl-	11740	gwł ³ -	11991
		gl-	11750, 11760	gwys-	11980
		glt-	11780	gwy ³ hlh-	11891
		glx-	11790	gwgvy ³ -	12000
		glxv-*	11800	gwgvy ³ w-	12000
		glw ³ -	11800	gwkv-	12010
		glχv-	11730	gwxv-*	12010
g		glχ-	11730	gw ³ -	12030
		glh-	11820	gw ³ £-	12040
		gl ³ χ-	11730	gχv-	11911, 12050
		gy-	11830, 11850	gχ-	12070
		gyc-	11870	gh-	11830, 12080, 12090
		gys-	11850, 11860, 11870	ghmwł ³ -	12101
		gy£-	11880	ghmh-	12100
		gyg-	11890	ghd-	12110
		gyk-	11890	ghlh-	12091
		gyx-	11850	ghl∞-	12091
		gyw ³ hlh-	11891, 11900	ghl ³ -	11991, 12130
		gyy ³ -	11850	ghy-	12092
		gyχv-	11910, 11911	ghyh-	12092
		gyq-	11920	ghy ³ -	11850
		gyχ-	11930	ghwyq-	12140
		gy ³ -	11830, 11850	ghwhq-	12140
		gy ³ s-	11850	ghχ-	12093
		gw-	11931	ghχ•-	12093
		gwmh-	11940	ghhlh-	12091
		gwt-	11950		

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k		kyxv-	12430	khχ-	12570
		kyχ-	12440		
kp-	11580, 12150	kxv-	12450	k³	
km-*	12151	kwp-	12460		
kmt-	12160	kwt-	12470	k ³ p-	12740
kms-*	12170	kws-	12480, 12490	k ³ m-	12750
kmk-*	12151	kwł-	12500	k ³ mt-	12760, 12770
kmx-*	12151	kwkv-	12510	k ³ ms-	12780, 12790
kmy ³ -	12170	kwxv-	12520	k ³ mł-	12800
kmq-	12190, 12200	kwqv-	12460	k ³ my ³ -	12760
kdh-	12220	kwχv-	12530, 12540	k ³ mxv-	12810
kt-	12230	kw ³ kv-	12520	k ³ mq-	12820
kn-	12240	kχv-	12550	k ³ mχ-	12830
knc-	12250	kq-	12560	k ³ mhq-	12820
kns-*	12250	kχ-	12570	k ³ mhχ-*	12820
knk-	12260	kh-	12580, 12590, 12591	k ³ t-	12840, 12860
knx-	12290	khp-	12600	k ³ n-	12880, 12890
knq-	12310	kht-	12610, 12620, 12630	k ³ nt-*	12900
kn ³ -	12240	khn-	12240	k ³ nł-*	12900
ks-	12330	khn ³ -	12240	k ³ nk-	12930
ksp ³ -	12340	khc ³ s-	12640	k ³ nył-*	12900
kł-	12370	khs-	12620, 12650, 12660	k ³ nkxv-	12940
klx-	11790, 12380	khk-	6360	k ³ nxv-*	12900, 12940
klxv-	12390	khx-	12690	k ³ nwt-	12900
klχ-*	12400	khy ³ -	12700	k ³ nq-	12960
klhkv-	12410	khwt-	12710	k ³ nh-	12890
kyc-	11870	khwh-	12710	k ³ s-	12970
kys-	11870, 12330	khq-	12560	k ³ s•-	12970
kył-	12420			k ³ ł-	12990, 12991
kykhł-	12370			k ³ ł-	13000, 13010
				k ³ l-	13010, 13020

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k ³ lp-	13030	k ³ yχv-	13350	k ³ hmv-	12750
k ³ lt-	13040	k ³ yq-	13360	k ³ hmhs-	12790
k ³ ls-	13050, 13060	k ³ yχ-	12440, 13370	k ³ ht-	12840, 13630,
k ³ lk-	13070	k ³ yhw-	13341		13640
k ³ lx-	13080	k ³ yhws-	13260	k ³ hs-	13650, 13660
k ³ lkv-	13090	k ³ y ³ -	13371	k ³ hf-*	13670
k ³ lqv-	13100	k ³ y ³ s-	13260	k ³ hl-	13680, 13690,
k ³ lq-	13110	k ³ y ³ s•-	13260		13700
k ³ lχ-	13120, 13130,	k ³ xv-	13380	k ³ hk-	13710
	13140	k ³ w-	13390, 13400	k ³ hyw-	13341
k ³ lhm-	13021	k ³ wp-	13410	k ³ hyws	13260
k ³ l ³ x-	13080	k ³ wm ³ -	15900	k ³ hyh-	13200, 13210
k ³ k-	13150, 13160,	k ³ wt-	13420, 13430,	k ³ hy ³ -	3780, 13200
	13170		13440, 13450	k ³ hy ³ hχv-*	13730
k ³ x-	13180, 13190	k ³ wc-	13470	k ³ hwh-	13341
k ³ y-	13200, 13210	k ³ ws-	13460, 13470	k ³ hwhχv-	13720
k ³ yp-	6970	k ³ wf-	13480	k ³ hχv-	13720
k ³ ymh-	12750	k ³ wl-	13490, 13500	k ³ hq-	12560, 13750
k ³ yt-	13230, 13240,	k ³ ww-	13341	k ³ hχ-	12570
	13250	k ³ wkv-	13510	k ³ h ³ s-	13660
k ³ ys-	13260, 13290	k ³ wxv-	13520	k ³ h ³ l-	13760
k ³ y£-	13300	k ³ wws-	13260	k ³ h ³ x-	13770, 13780
k ³ ył-	13310, 13320,	k ³ wqv-	13530	k ³ h ³ qv-	13550
	13330	k ³ wχv-	13540	k ³ h ³ qw-	13790
k ³ yl ³ -	13320	k ³ w ³ s-	13470		
k ³ yl ³ h-	13320	k ³ qv-	13550		x
k ³ ygh-	13340	k ³ q-	13560		
k ³ yk-	13340	k ³ χ-	13570	xmt-	13810
k ³ yy ³ -	13200	k ³ h-	13580, 13590,	xms-	13820, 13830,
k ³ yw-	13341		13600		13840
k ³ yws-	13260	k ³ hp-	13610, 13620	xm ³ -	13841

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xt-	13850	xws-	14220, 14230,	ylɣ-	14480
xnt-	13860, 13880		14240, 14250	yk-	14490, 14500
xnc-	13890	xwɤ-	* 14260	yx-	14510, 14520
xns-	13890	xwɭ-	14270	yxh-	14510
xnk ³ -*	13900	xwkv-	14280, 14281	yx•-	14510
xnqv-	13910	xwqv-	* 14290	yy-	14380
xnq-	13920	xwq-	* 14290	ykᵛ-	14530, 14550
xzx-	13940, 13950	xqv-	14300	yxv-	14550, 14560,
xs-	13950, 13970	xhm ³ -*	14310		14570
xɤ-	13980	xht-	14320	yw-	14580, 14581
xɭ-	13990	xhc ³ -	13950	ywd-	14590
xɭ-	* 14000, 14020	xhs-	13950	ywt-	14600
xlp-	14030, 14040	xhɭ-	14130	ywnwqv-	4940
xlt-	14050	xhlh-	14340	yws-	14610
xls-	* 14060	xhk-	14350	ywɤ-	* 14620
xlkᵛ-	14070	xhxv-	* 14360	ywɭ-	14600
xlq-	14080	xhw ³ -	14370	ywlh-	14630
xk ³ -	14090			ywl∞-	* 14630
xyt-	14100		y	ywkv-	14640
xyz-	14110	y-	14380	yqv-	14660, 14661
xyz ³ hx-	14111	yp-	14390	yɣv-	14670
xys-	14110	yn-	14400	yq-	14661, 14680,
xyɭ-	14120	ynt-	* 14410		14690
xyl ³ -	14130	ynk-	4360, 4720	yh-	14380, 14700,
xyk-	* 14140	ynk ³ -	4720		14701
xyq-	14110, 14150	ys-	14420, 14421	yhp-	14710
xy ³ s-	14110	yɤ-	14430	yhmh-	14702
xkv-	* 14160	yls-	14440	yht-	14720, 14730,
xwp-	14170, 14180	ylɣv-	* 14460		14740
xwm ³ s-	14190	ylq-	* 14480	yhzh-	14750
xwt-	* 14200			yhs∞kv-	14760

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yh£- 14780	y³ys- 15040	gvlt- 15310
yh£- 14790, 14800, 14810	y³yxh- 15050	gvls- 15301
yh£³- 14820	y³yx•- 15050	gvlkv- 15330, 15340
yhx- 14510	y³yq- 15060	gvx- 15250
yhxk³- 14820	y³yχ- 15070	gvy- 11931, 15350
yhx- 14830	y³wmh- 15080	gvyt- 15360
yhxv- 14570	y³w£- 14940	gvyn³p- 15260
yhwsh- 14840	y³wgv- 15100	gvyc- 15370
yhw³yx- 14850	y³wgvh- 15100	gvys*- 15370
yhqv- 14860, 14870, 14880, 14890	y³χv- 15110	gvy£- 15380
yhχv- 14900	y³h- 14380	gvwmh- 11940
yhrh£- 14910	y³hp- 14941	gvwt- 15390
yhq- 14690, 14920	y³hs- 15130	gvws- 11980
yhχ- 14690, 14930	y³h£- 14780	gvw£- 11990
	y³hlhq- 15150	gvwgv³- 12000
	y³hk- 15160	gvwkv- 12010
	y³hxv- 15160	gvq- 15400
	y³hr- 15170	gvh- 15410, 15420, 15470
y³		gvnhh- 15430
y³m£- 14940	gv	gvhn³- 15240, 15430
y³mk- 14941		gvhs- 15280, 15460, 115470
y³mx- 14941	gvd- 15200, 15201	gvhsh- 15470
y³mqv- 14950	gvt- 15210, 15230	gvhs•- 15470
y³mq- 14960	gvn- 15240, 15250	gvhk- 15420
y³nk- 4720	gvnp- 15260	gvhx- 15420
y³£- 14970	gvnyp- 15260	gvhkv- 15490
y³lx- 14980	gvnχ- 15270	gvhxv- 15500
y³lkv- 14990	gvs- 15280	gvhq³£- 15510
y³x- 15000	gv£- 15290	
y³y- 4780, 15010, 15020	gv£- 15300	
y³yt- 15030	gv£- 15301	

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kv		kvyq-	15760	k ³ vmł-	15950, 15980
		kvyχ-	15770	k ³ vmł ³ -	15950
kvm-	15520	kvxv-	12450	k ³ vmws-	15940
kvmt-	15530	kvwp-	12460	k ³ vm ³ -	15900
kvmc-	15540	kvwmyt-	15771	k ³ vt-	15990, 16000,
kvmł-	15550	kvwt-	12470		16010
kvmx-	15550	kvwɬ-	15780	k ³ vn-	16020
kvdkv-	15560	kvwł-	15781	k ³ vnc-	16030
kvt-	15210, 15570	kvwkv-	12510	k ³ vnł-	16040
kvñ-	15580	kvwxv-	12520	k ³ vnxv-	16050
kvnc-	15590	kvχv-	12550	k ³ vnq-	16060
kvns-	15590	kvq-	15800	k ³ vc-	16070
kvnxv-	15600	kvχ-	12440	k ³ vs-	15650, 16070,
kvñq-	15610	kvhdkv-	15560		16080, 16090, 16091,
kvñ ³ q-	15610	kvhn ³ -	15580		16100
kvñ ³ χ-	15610	kvhs-	15810	k ³ vl-	16110, 16120
kvs-	15630, 15650	kvhɬ-	15820	k ³ vlp-	16150, 16160
kvsx-	15630	kvhx-	15830	k ³ vlt-	16170
kvsxh-	15630	kvhkv-	15840	k ³ vls-	16180
kvsx•-	15630	kvhxv-	15850	k ³ vlxv-	16190
kvɬ-*	15660	kvhq-	15800	k ³ vlχv-	16190
kvɬm-	15660	kvh ³ c-	15860	k ³ vlq-	16200
kvɬ•-	15660	kvh ³ s-	15860	k ³ vlχ-	16210
kvł-	15670			k ³ vl ³ k-	16211
kvł-	15580, 15680	k³v		k ³ vl ³ xv-	16190
kvłxv-	15690			k ³ vl ³ χv-	16190
kvk-	15700, 15710	k ³ vp-	15870, 15890	k ³ vk-	13170
kvyt-	15720	k ³ vm-	15900, 15920	k ³ vx-	16220
kvys-	15730	k ³ vmt-	15930	k ³ vy-	16090
kvyx-	15590	k ³ vms-	15940, 15950	k ³ vyt-	16230
kvykv-	15750	k ³ vmɬ-	15960, 15970	k ³ vys-	16240

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k ³ vył-	16250	k ³ vh ³ qv-	13550, 16450	xvwp-	14170, 14180
k ³ vykv-	16260	k ³ vh ³ q-	16440	xvwmyt-	15771
k ³ vyxv-	16270			xvwt-	12470
k ³ vyχv-	16280		xv	xvws-	14230, 14240
k ³ vyq-	16290, 16300			xvwł-	14270
k ³ vyχ-	16310	xvp-	16460	xvwkv-	14280
k ³ vxx-	13380	xvm-	16461	xvh-	16660
k ³ vw-	13390, 13400	xvmt-	15310, 16470	xvhm ³ -	16461
k ³ vwp-	13410	xvmc-	16480	xvht-	16670
k ³ vwt-	13450	xvms-	16480	xvhs-	16520, 16680
k ³ vws-	13470	xvmqv-	16490	xvhł-	16690
k ³ vwl-	13490	xvmq-	16490	xvhkv-	16700, 16710, 16720
k ³ vwk-	13510	xvt-	16500	xvhq-	16730
k ³ vwxv-	13520	xvt ³ q-	16501	xvh ³ s-	16520
k ³ vq-	16320	xvn-*	16502		
k ³ vχ-	16290, 16330	xvn£-*	16503		
k ³ vh-	16340, 16350	xvnys-	16510		w
k ³ vhp-	15870	xvs-	16520, 16540		
k ³ vhm ³ -	15900	xvlp-	16560	w-	17820
k ³ vht-	13640, 15990, 16380	xvlt-	15310	wp-	16740
k ³ vhs-	16100, 16400	xvls-	16570	wn-	16760, 16800
k ³ vhl-	16220	xvyp-	16580	wnmt-	16790
k ³ vhk-	13170	xvyt-	16590	wnc-	16810
k ³ vhx-	16220	xvys-	16600, 16610	wns-	16810
k ³ vhsx-	16100	xvył-	16620	wnł-	16820, 16830
k ³ vhywkv-	16410	xvykv-	16580	wnk-	16760
k ³ vhy ³ -	16420	xvyqv-	16580	wnx-	16760, 16820
k ³ vhxv-	15850, 16430	xvyq-	16630, 16640, 16650	wny-	16780
k ³ vhwh-*	16431	xvy ³ s-	16600	wnyqv-	4940
k ³ vhq-	16440	xvw-*	16651	wnqv-*	4940
				wnχv-	4940, 16860

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wnq-	16870	wy£-	17100, 17110	wh£-	17390, 17400,
wnq ³ -	16871	wy£-	17120		17410
wnhqv-	4940	wyl ³ -	17130	wh£qy-	17380
wn ³ h£-	16872	wyk-	17131, 17140	wh£qys-*	17380
wc-	16880, 16881	wyx-	17140	wh£ ³ -	16960
ws-	16880, 16881,	wykv-	15750	whk-	17420, 17430
	16890, 16900, 17190	wyqv-	17160	whx-	17440
wsdys-	16920	wy£-	17180	why-	17041
w£-	16930, 16940,	wy ³ £-	17181	whylyq-	17121
	16941	ww-	17041, 17220	whkv-	17450
w£-	16941, 16950,	wws-	17190	whxv-	17460, 17470
	17400	ww£-	17200	whqv-	17480, 17490
w£-	16960	ww£-	17210	wh£v-	17500
wlt-*	16970	wwkv-	17430	whq-	17480
wlk-	16980	www-	17220	wh£-	17510
wlx-	16980	wwqv-	17230	wh ³ -	17820
wly-	16780	ww ³ kv-	17430	wh ³ £-	17181, 17520
wlyqv-	16990	wq ³ v-	17810		
wly ³ £v-*	16990	wq-	17250, 17260,	w³-	
wlxv-	17000		17270, 17480		
wl£v-	17010	w£-	17290, 17300,	w ³ -	17820
wlq-	16870, 17020,		17310	w ³ p-	17540
	17030	wh-	17041, 17330	w ³ d-	17550
wl£-*	17030	wht-	17340, 17350	w ³ n-	17560, 17870,
wk-	17040	whnm-	16790		17880
wy-	17041, 17050,	whn ³ -	16800	w ³ nk-	17570
	17060	whz-*	17380	w ³ n£v-*	17580, 17590
wyp-*	17070	whs-	17360, 17370,	w ³ n££-	16872
wynh-	17080		17380	w ³ n ³ h£-	16872
wyn∞-	17080	wh£-	16930	w ³ s-	17600, 17610
wys-	17090			w ³ l-	17620, 17630

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w ³ lwp-* 17631	w ³ w ³ zh- 17740	
w ³ x- 17640	w ³ qv- 17810	rv
w ³ xs- 17600	w ³ qvh- 17810	
w ³ y- 17650	w ³ q ³ v- 17810	rvms- 17960
w ³ yp- 17660	w ³ q ³ vh- 17810	rvn- 17970, 17980,
w ³ ynh- 17560	w ³ h- 17820, 17840	17990, 18020
w ³ yn∞- 17560	w ³ hp- 17850	rvnt- 18000
w ³ ys- 17650	w ³ hmwt- 2330	rvnt ³ - 18000
w ³ ys•- 17650	w ³ hm ³ - 2320, 17850	rvnc- 17960, 18010
w ³ ył- 17670	w ³ hm ³ p- 17850	rvns- 18010
w ³ yl ³ - 17680	w ³ hnwł- 17881	rvl- 18020
w ³ yl ³ h- 17680	w ³ hnwł-* 17881	rvlx- 18030
w ³ yk- 17690	w ³ hnh- 17560, 17870,	rvy- 18050, 18060
w ³ yx- 17140, 17700	17880	rvyc- 18070
w ³ yx•- 17700	w ³ hn∞- 17560, 17870	rvys- 18070, 18080
w ³ ywł- 17711	w ³ hn ³ - 17560	rvyk- 18090
w ³ yq- 17710	w ³ hs- 17890	rvyχ- 18100
w ³ y ³ χv- 17920	w ³ hł- 17891	rvy ³ - 18110
w ³ w- 17041, 17720,	w ³ hł- 17900	rvw- 17720
23230	w ³ hl ³ - 16960	rvwł- 18120, 18130
w ³ wt- 17730	w ³ hxs- 17840	rvwlh- 18120
w ³ wnw- 17590	w ³ hxs•- 17840	rvwy ³ - 18110
w ³ wnw ³ - 17590	w ³ hwh- 17720	rvwχv- 18140
w ³ wz- 17740	w ³ hw ³ - 17820	rvw ³ - 18110
w ³ wzh- 17740	w ³ hχv- 17920	rvqv- 18150
w ³ wlh- 17750	w ³ hq- 17930, 17940	rvxv- 12050
w ³ wgv- 17760	w ³ h ³ xs•- 17840	rvχv- 12570
w ³ wkv- 17761	w ³ h ³ q ³ v- 17810	rvh- 17960, 18160,
w ³ ww- 17770	w ³ h ³ q ³ vh- 17810	18170
w ³ wqv- 17780, 17790	w ³ h ³ χv- 17920	rvht- 18180
w ³ whw ³ - 17820	w ³ h ³ χ- 17920	rvhn ³ - 17980

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rvhs-	15470	qvy-	18380	q ³ v	
rvhsh-	15470	qvys-	18380, 18390		
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		qvwyq-	18500	q ³ vny ³ qv-	18771
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		qvqv-	18150	q ³ vnqv-	18790
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q ³ vy-	18990		19211	χvk-	19480
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q ³ vynhl-	18930	q ³ vhlhx-	19230	χvyt-	19490
q ³ vys-	19010	q ³ vhl ³ -	19220	χvys•-	18390
q ³ vy£-	19020	q ³ vhk-	19240, 19250	χvy£-	19500
q ³ vył-	19040	q ³ vhqv-	19260	χvył-	19520
q ³ vyly-	18910	q ³ vhq-	19150, 19280,	χvylh-	19510
q ³ vylh-	18910		19281	χvyl∞-	19510
q ³ vylhx-	18930	q ³ vhχ-	19280, 19290	χvyl ³ -*	19510
q ³ vyqv-	19070	q ³ vh ³ ł-	19300	χvyl ³ h-	19510
q ³ vy ³ s-	19010	q ³ vh ³ x-*	19310	χvyx-	19520
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q ³ vw-	17720			χvws-	19540
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q ³ vq-	19140, 19150	χvł-	18860		
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		χvlyqv-	19451	rmwt-	21601

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rn£-	19800	ryx-	20060	rhzhχ-	20250
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rnk-	19820	ryh-	19971	rhsx•-	20260
rnys-	19790	ry ³ -	19980	rh£-	20270
rn ³ ys-	19790	ry ³ h-	19980	rhlh-	20280
rs-	19821, 19830	rxv-	20090	rhl ³ -	20290
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rlp-	19860	rwp-	20110	rhx-	19950
rls-	19870	rwm ³ h-	20110	rhxs•-	20260
rlk-	19880	rwt-	20120, 20130	rhyh-	19970
rlys-	19790	rws-	20140, 20150	rhy ³ -	19980
rllyq-	19910	rw£-	20160	rhgv-	20291
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qmt- 20380	qys- 20040	qhs- 20890, 20900
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q ³ ns-	21180, 21190	q ³ ys-	21530	q ³ hp-	21750
q ³ n£-	21200	q ³ yłh-*	21570	q ³ hnh-	21010, 21140
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q ³ nłh-	21210	q ³ ywd-	21541	q ³ ht-	21130, 21360
q ³ nk-	21220	q ³ yq-	21550	q ³ hny-	21140
q ³ nq-	21230	q ³ yχ-	21560	q ³ hnh-	21140
q ³ c-	21250	q ³ yχh-	21570	q ³ hn ³ -	21140
q ³ s-	21250	q ³ yχ.h ³ h-	21570	q ³ hc-	2780
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q ³ ł-	21310	q ³ w-	21590	q ³ ł-	21810, 21820
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q ³ lc-	21370, 21380	q ³ wm∞-	21601	q ³ hyhχ-	21831
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q ³ łhχ-	21320	q ³ wł•-	21670	q ³ hw ³ -	21590
q ³ l ³ -	21350	q ³ wy ³ -	21680	q ³ h ³ p-	21750
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χmxv-	20420	χyχ-	22250	χhwys-	22481
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χm ³ -	21950	χkv-	22260	χhwh-	22480
χt-	21960	χw-	22270	χhw∞-	22490
χn-	21970	χwp-	22290, 22300	χhw ³ -	22490
χnt-	21980	χwmh-	22310	χhq-	22500
χn£-	21990	χwm∞-*	22311	χhχ-	22500
χnyhs-	22000	χwt-	22320	χh ³ -	22410
χnh-	21970	χwc ³ -	22330		
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χlc-	22080	χχv-	22390	hm-	1190, 22540,
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χlxv-	22100	χh-	22410	hmt-	22560
χlqv-	22110	χhbxv-*	21880	hmz-	22600
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χym ³ -	22180	χhsbxv-*	21880	hmkv-	22610
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hhy ³ - 22821	h ³ m ³ hl- 23350	h ³ s- 6540, 23550
hhk ³ v- 22810	h ³ d- 2780	h ³ s•- 23550, 23560
hhxv- 23160	h ³ dmkv- 23370	h ³ lbw- 23570
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	h ³ nc- 23470	h ³ ls- 23620, 23630
h³	h ³ nc•- 23470	h ³ lk- 23640
	h ³ ns- 23470	h ³ lkv- 23641
h ³ - 14661	h ³ nk- 23510	h ³ lxv- 23641, 23642
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h ³ m- 23230, 23260,	h ³ nw- 23520	h ³ lhq- 23661
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h ³ mt- 23270	h ³ nwh- 23520	h ³ l ³ hs- 23630
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h ³ mqv- 23330	h ³ nqv- 23520	h ³ yt- 15030
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h ³ mhys- 23250	h ³ nhχv- 4970	h ³ ys- 13260, 15040,
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h ³ ygh-	23731	h ³ wzh-	17740	h ³ hmɔy ³ -	23250
h ³ yk-	23790	h ³ wc•-	17740	h ³ hm ³ ɸ-	23360
h ³ yk ³ -	23800	h ³ wsl-	23861	h ³ hm ³ h-	23230, 23250
h ³ yxh-	15050	h ³ wsh-	23861	h ³ hm ³ hɸ-	23350
h ³ yx•-	15050	h ³ ws•-	23861	h ³ hm ³ h ³ ɸ-	23350
h ³ ykv-	23810	h ³ wɸ-	4900, 23320,	h ³ hd-	2780
h ³ yxv-	23820		23950	h ³ hdhc-	2780
h ³ ywh-	17820	h ³ wl-	23950	h ³ ht-	24080
h ³ yqv-	23830	h ³ wlh-	17750	h ³ hnhɸ-	23511, 23390
h ³ yq-	15060	h ³ wyq-	17710	h ³ hc-	2780
h ³ yɸ-	15070	h ³ wyh-	23860	h ³ hs-	6540, 23550,
h ³ y ³ s-	13260, 23721	h ³ wgv-	17760		24090, 24100, 23141
h ³ y ³ s•-	17840	h ³ wkv-	23980	h ³ hs•-	23550
h ³ y ³ x-	23790	h ³ ww-	17041	h ³ hɸ-	24110
h ³ y ³ qv-	17710	h ³ wqv-	2370, 17790	h ³ hɸ-	24110, 24111,
h ³ y ³ ɸv-	17710	h ³ wɸv-	24000		24120
h ³ gv-	23190	h ³ wh-	17041	h ³ hɸy-	24110
h ³ xv-	23850	h ³ w ³ z-	17740	h ³ hɸh-	24110
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h ³ wp-	23890, 23900,	h ³ ɸvh-	4970	h ³ hɸ-	23320, 24140
	23910	h ³ q-	24010	h ³ hly-	24150
h ³ wmwy ³ -	24071	h ³ ɸ-	2920, 4970	h ³ hg-	24160
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h ³ wm∞-	23920	h ³ hp-	23210, 24060	h ³ hyh-	14380, 23690
h ³ wm ³ -	23930	h ³ hmws-	24070	h ³ hgvh-	23500
h ³ wdhx-	23940	h ³ hmwɸ-	24070	h ³ hxv-	24180
h ³ wt-	17730	h ³ hmwy ³ -	24071	h ³ hwh-	17720, 17820,
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h³hw³- 17720

h³hqv- 24190

h³hχv- 17790

h³hr- 15170

h³hq- 24210

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