

A PHONOLOGY OF OKANOGAN

by

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B.A., University of Kansas, 1968

Submitted to the Department of
Anthropology and the Faculty of
the Graduate School of the
University of Kansas in partial
fulfillment of the requirements
for the degree of Master of Arts.

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For the department

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ACKNOWLEDGEMENTS

Support for this research was provided by the National Science Foundation and administered by Professor M. Dale Kinkade and the University of Kansas. I gratefully acknowledge this support, and I thank Professor Kinkade for his assistance in this research. His knowledge of Salish languages, his background in linguistic research, and his patient and thorough approach as principal advisor to this study have been invaluable. Without his help, this paper would not have been possible.

I also thank Professors Robert E. Hinshaw and T. Dale Nicklas for their assistance in this research and in the graduate study preliminary to this research.

Professor Hinshaw introduced me to anthropology late in my undergraduate career and facilitated my entrance into this graduate program. I sincerely appreciate the instruction and counsel which he has afforded me throughout my study.

Professor Nicklas has given me countless hours of instruction in linguistic theory and methodology, both in class and in conference. For this tireless effort, and for continuing to stimulate my interest in linguistic anthropology, I am very, very grateful.

I thank the native speakers of Okanogan--Louise and William Charley, Julian Timentwa and, especially, Edna Jack for their assistance in this research.

The kind services of Ingrid Kring have been especially valuable in putting this paper into its final form, and I thank her for this help.

I am deeply indebted to the faculty and graduate students of the Anthropology Department who have worked together to maintain an open and honest environment in which all might pursue their interests within anthropology. If these efforts have not been without some contention, they have neither been without reward. I think the frustrations of such cooperation are largely those inherent in research and teaching. And I believe that the graduates of this department are uniquely equipped to handle these difficulties as a result of their experience here.

Finally, I thank my wife, Priscilla, and my children, Christopher and Kimberly, for their patience and sacrifice, and for their many kinds of support through three years of graduate study in anthropology.

INTRODUCTION

This paper presents a tentative phonology of the Okanogan dialect of Interior Salish. This phonology is based on materials elicited and recorded in Washington and British Columbia during the summer of 1970.

The name "Okanogan" also appears in historical, ethnographic and linguistic materials regarding this geographic area, culture and language as "Okanagon", "Okanagan", "Okinagon" and "Okinagan". This name is now that of a lake and a tributary of the Columbia basin as well as that of two towns located on this tributary, Okanogan, Washington, and Okanagan Falls, British Columbia. "Okanogan" appears to be a derivative of an Indian place-name for the point on this river now known as Okanagan Falls, which was considered the head of the river--the furthest point of ascent for salmon in this river (Teit, 1930:198).

In one of the earliest documented studies of North American Indian culture of this particular area, Teit (1930:198-200) identifies Okanogan as one dialect of a group of similar and mutually intelligible dialects designated as Okanogan or Okanogan group. Teit identifies as members of this group the dialects of Okanogan, Sanpoil, Colville and Lakes. More recently, Spier (1938:3-5) includes Nespelem dialect in this group as well. Ray (1932:10)

identifies Lower Spokane as an Okanogan group dialect, and suggests a distinction between dialects spoken by northern and southern speakers of the Okanogan dialect. These two dialects are identified by Ray as Okanogan and Southern Okanogan, respectively. More recently, Kinkade (1967) proposes inclusion of the Methow dialect--earlier considered to be a dialect of Columbian (Wenatchi)--in the Okanogan group on the basis of vocabulary and place-name similarities shared with other dialects of the Okanogan group.

Okanogan and Southern Okanogan language populations are located by Ray (1936:103) in north-central Washington and south-central British Columbia. This area is bounded on the north by the Shuswap, north of Lake Okanogan; its eastern boundary is its contact with the Lakes and Nespelém areas, roughly paralleling the Okanogan river and twenty to forty miles to the east of this river. The southern border of this area is less well defined, but seems to be south of the present course of the Columbia river from Bridgeport to Pateros, Washington. Although Ray proposes this river as the boundary, texts describing root gathering south of the river by the Southern Okanogan and those describing gathering sweat-house rocks south of the river by both Okanogan and Southern Okanogan elicited by me confirm the extension of this boundary south of the Columbia river. Inclusion of the Methow dialect would extend this southern boundary to the mountain ridge between the Methow valley and Lake Chelan. Ray proposes the Cascade Divide as the western boundary of the Okanogan-Southern Okanogan area. The language population located on this western edge of Okanogan

group dialects are identified by Ray as Wenatchi. The division between the Okanogan dialect and the Southern Okanogan dialect appears to be immediately south of the United States-Canadian border. The Methow dialect is described by Ray as being located in the Methow valley, southwest of the Southern Okanogan area. Cline, et. al. (Spier, 1938) advocate extending this border to the Okanogan river. Texts elicited from informants for this paper concerning their family histories seem to indicate that the area between this river and the Methow valley had a mixed population of Methow and Okanogan speakers.

What little documented history of Okanogan-Southern Okanogan populations exists does not extend back beyond about 1800, according to Teit (1930). These populations appear to have resided in this general area for at least two centuries. Julian Timentwa, an informant assisting in this study, believes on the basis of stories and family history that she heard as a child that Okanogan-Southern Okanogan population of this area goes back to well before the appearance of white men into the area.

Teit (1930:198-213) estimates the combined population of these two groups at 2,500 to 3,000 around 1800. The populations at the time of his field research, in 1905, were 824 Okanogan and 692 Southern Okanogan. More recently, Chafe (1962:167) estimates the number of Okanogan group speakers--including Okanogan, Southern Okanogan, Sanpoil, Colville and Lakes--at one to two thousand.

Settlement within the Okanogan-Southern Okanogan area appears to have been in numerous small groups in villages throughout the area, rather than in large, concentrated living groups. On the basis of texts describing place-names, family histories and village locations, Walters (1938:84-87) lists fifty-four permanent villages of the Okanogan, Southern Okanogan and Methow in about 1900. These villages were located near the Okanogan river from the south end of Lake Osoyoos to the Columbia river, and along the Columbia river from this point to Brewster, Washington. Teit (1930:204-213) generally agrees with this pattern of settlement and number of villages, but indicates more Okanogan villages in the area north of Lake Osoyoos to Lake Okanogan. Ray (1936:137-141) describes similar settlement size and pattern phenomena among the other groups of the Columbia basin, including the Nespelém, Sanpoil and Colville.

The diffuse and isolated nature of these villages makes sharp delineation of cultural boundaries difficult, as in the case of the Methow-Southern Okanogan boundary discussed above. The notion that cultural phenomena among the various populations of the Okanogan group are similar is confirmed by Teit (1917) in his documentation of recurring themes in tales of the Okanogan, Southern Okanogan and other groups of the Columbia basin. Texts elicited and recorded from informants assisting in this paper also illustrate the close similarity of folk-tales and many cultural activities among Okanogan and Southern Okanogan, and possibly Methow, populations. These observations suggest that delineation of cultural or even sub-cultural

boundaries among segments of Okanogan group population may not be justified on the basis of recorded historical and ethnographic data; a concept of a general culture, varying slightly from village to village, may be more accurate or, at least, useful heuristically.

A valid question, and a question relevant to this paper, is whether dialect is a correlate of culture in this area. Kinkade (1967) suggests that vocabulary difference and similarity within a particular semantic domain--i.e. place-names--of a population is sufficient for assignment in one language group rather than another, given certain phonological differences within the whole area. If it may be assumed that such variation in vocabulary can be the result of cultural variation, and that Kinkade's suggestion is valid, then it is possible that dialectal variation can be determined by or, at least, be a correlate of, cultural variation.

Evidence, though tentative and inconclusive, does exist which suggests some cultural variation between Okanogan and Southern Okanogan populations. Ray (1939) describes dissimilar cultural activity between these two groups in the domain of belief, especially in notions of illness and spirit acquisition. My own fieldwork indicates some variation between Okanogan and Southern Okanogan in names of months. I also found some variation in use and selection of various plants for food, and in methods of hide preparation. Further, my preliminary investigation indicates a slight variation in conceptual categorizing of colors.

The cultural variation cited between Okanogan and Southern Okanogan confirms the conventional, since Ray (1932), distinction between these two groups. And, after the fashion of Kinkade (1967) discussed above, this difference permits distinction of Okanogan and Southern Okanogan dialects, given the validity of the concept of distinct dialects within the Okanogan group. What remains, relating specifically to this study, would be to determine whether variation among Okanogan-Southern Okanogan speakers is best considered major dialectal variation, variation evidenced among individual village populations or ideolectical variation. However important and useful this consideration may be, it is not within the scope of this paper. I suspect that, because of the dissolution of the villages in this area by the early 1900's, the second of these manners of variation may no longer be confirmed.

Since material from which this paper was written and the included phonology hypothesized was elicited and recorded from informants representing both Okanogan and Southern Okanogan, and possibly Methow, populations, considerations of whether dialectal variation is present and, if so, what populations these dialects actually represent are both relevant. However, because of the small sample of informants utilized, the second consideration is not possible. Because documented and collected data mentioned above confirm conventional notions of dialectal variation between Okanogan and Southern Okanogan, it is assumed throughout this paper that

such a distinction does exist. It should be noted however that this variation is based upon considerations of variations of cultural activities, vocabulary and semantic domain differences suggested above, and not upon any acknowledged phonetic distinctions. Therefore, it is further assumed, given the similarities noted among Okanogan group dialects by many sources cited above (Teit, 1930; Spier, 1938; Ray, 1932; Kinkade, 1967), that accuracy of a phonology hypothesized from material from two or more of these dialects will not necessarily be impaired.

The two principle language informants assisting in collecting material for this paper were Julian Timentwa of Monse, Washington, and Edna "Dolly" Jack of Penticton, British Columbia. Mrs. Timentwa speaks an Indian language which she identifies as Okanogan; she is over fifty years old and has lived all of her life on the Colville Indian Reservation, spending most of her time between Monse and Malott. She was reared by her parents, both of whom spoke only Okanogan and both of whom came from the Methow valley. Mrs. Timentwa spoke no English until she entered public school at Malott at about twelve years of age. Mrs. Jack was reared by her parents on the Penticton Indian Reserve in Penticton, British Columbia, where she now lives. She is about fifty years old and she speaks an Indian language which she also identifies as Okanogan. Both of her parents spoke Okanogan, and she uses Okanogan at home with her children and grandchildren as much or more than she speaks English. Mrs. Jack lived in Brewster, Washington, for several years, and

knows Mrs. Timentwa and the other informants assisting in this study. According to both Mrs. Timentwa and Mrs. Jack, the two can understand one another, but speak in a slightly different manner.

Other language informants assisting in this study were Louise Charley and William Charley, both of Malott, Washington. Louise Charley is William Charley's aunt (FaBrW), as I understand their relationship. Louise Charley was reared by her grandmother, who spoke no English. She is over fifty years old and has lived all of her life between Okanogan and Malott on the Colville Indian Reservation. She too identifies her Indian language as Okanogan. William Charley was born in 1926 in Malott and has lived there all of his life. He was reared by his parents; his father spoke Methow and his mother spoke Wenatchi. William Charley identifies his Indian language as Methow. Both William Charley and Louise Charley agree that they speak the same language. They also agree that their language is a little bit different from that of Julian Timentwa or of Edna Jack. Primarily textual material was elicited from both William Charley and Louise Charley; little material elicited from either of them is included in the materials considered in hypothesizing this phonology.

In eliciting materials for this phonology, primary consideration was given to items on the Thompson Word List (Thompson, 1969) in order to facilitate comparative work with other Interior Salishan dialects. Examples used in this paper do not comprise

a complete list of items from the Thompson list, and some items are presented which do not appear on the Thompson list.

This paper may be considered preliminary to semantic analysis of Okanogan language materials. Amoss (1969) documents the significance of lexical suffixes in identification of semantic domains in Coast Salishan languages and suggests the possibility of similar phenomena within Interior Salishan languages. The purpose of this initial research and this paper is to develop an orthography that will allow comparative work with previously documented material from this area. And it is an aim of this work to have at my disposal a reliable ability to recognize important sound features which will allow careful analysis of the role of the lexical suffixes in this language.

CHART OF THE PHONEMES IN OKANOAN

	Bilabial	Alveolar	Palatal	Velar	Back Velar	Pharyngeal	Glottal
Stops	p	t		k k ^w	q q ^w		
	p'	t'		k' k' ^w	q' q' ^w		ʔ
Affricates			c ç'				
Fricatives		s	ʃ	x x ^w	x̣ x̣ ^w		h
Resonants	m	n l r	y	w		ʕ ʕ ^w	
Vowels		i		u			
		a					
Stress		'					

PHONEMES

The Stops

Bilabial stops, /p/ and /p'/, occur in all positions in word roots and affixes. Glottalized bilabial stop occurs finally in roots and affixes less frequently than does the unglottalized bilabial stop. Both phonemes occur both singly and in consonant clusters; the unglottalized bilabial stop appears to occur in clusters more frequently than does the glottalized bilabial stop. /p/ is aspirated in initial position only; /p'/ is not aspirated.

The phoneme /p/ contrasts with /p' k k^w/ as follows:

- p/p' - /púx^wam/ blow: /p'úm/ orange; brown
/q'apqín/ hair: /kap'sáp'iʔ/ a long time ago
- p/k - /piqaliʔqín/ bald eagle: /kiláʔwnaʔ/ grizzly bear
- p/k^w - /paʔtaʔwínax^w/ old lady: /k^waʔk^wfʔaʔ/ bay horse
/sk^waʔʔíp/ moss: /ʔarasík^w/ turtle

The phoneme /p'/ contrasts with /p k' k'^w/ as follows:

- p'/p - see above
- p'/k' - /p'fnaʔ/ birch-bark basket: /k'fx^walux^w/ old
/k'ík'ap'/ near: /k'flak'/ lie down
- p'/k'^w - /p'úm/ orange; brown: /sk'^wuk'^wúʔsn/ star
/kalíp'c'aʔ/ green deer hide: /t'ík'^wt/ lake

Alveolar stops, /t/ and /t'/, occur in all positions in word roots and affixes. Both phonemes occur singly and in consonant

clusters. The unglottalized alveolar stop occurs in final clusters in roots and suffixes more frequently than does the glottalized alveolar stop, as in /táq't/ wide and /sx^wíntk/ ice. /t/ occurs aspirated; /t'/ is unaspirated.

The phoneme /t/ contrasts with /t' ʔ c/ as follows:

- t/t' - /tac'ánt/ tie: /t'áx/ sweet
 /st'pincút/ cover up: /ʔamút'/ sit
- t/ʔ - /spaʔpáʔtn/ sleet: /spuʔʔ'án/ fog
- t/c - /tuk^wtúps/ white-tail deer: /ʔúk't/ crawl
 /k'ak'áʔx^wát/ narrow: /yámx^waʔ/ Thompson-style basket
- t/c - /tak'amaʔʔaʔúpanikst/ sixty: /cak^want'íx^w/ drag

The phoneme /t'/ contrasts with /t ʔ c'/ as follows:

- t'/t - see above
- t'/ʔ - /t'áxt/ sugar: /ʔux^wʔ'ax^w/ chokecherries
- t'/c - /t'ant'ínaʔ/ ears: /ʔánan/ magpie
- t'/c' - /t'fʔ/ dirty: /c'íxam/ roast on a spit

Velar stops, /k/ /k'/ /k^w/ and /k'^w/, occur in all positions in word roots and affixes. All of these phonemes occur both singly and in consonant clusters. The unlabialized unglottalized phoneme frequently occurs singly as a prefix. /k/ and /k^w/ are aspirated in the environments -V and -#; /k'/ and /k'^w/ are unaspirated.

The phoneme /k/ contrasts with /p k' k^w q ʔ c x/ as follows:

- k/p - see above
- k/k' - /ʔfckn/ play: /n'f'k'n/ cut
 /kak'ín/ where: /sk'aʔáy/ autumn

- k/k^W - /kiláʔwnaʔ/ grizzly bear: /k^Wíʔʔstn/ sweathouse
 /sx^Wíntk/ ice: /mit'mít'k^W/ dull
- k/q - /kaʔʔfs/ three: /qáqsis/ just before dark
 /lʔfk/ thin: /pʔq/ white
- k/? - /kaʔʔfs/ three: /ʔasf1/ two
 /lʔfk/ thin: /síp'iʔ/ a hide in preparation
- k/c - /káx^Wuʔ/ fish: /cáx/ red
 /wuʔfkst/ finish: /ʔfckn/ play
- k/x - /lʔík/ thin: /kʔiʔíx/ canoe

The phoneme /k'/ contrasts with /p' k k'^W q' ? c'/ as follows:

- k'/p', k'/k - see above
- k'/k'^W - /sk'aʔáy/ autumn: /sk'^Wuk'^Wúʔsn/ star
 /stík't/ flow: /t'ík'^Wt/ lake
- k'/q' - /stík't/ flow: /ʔáq't/ wide
- k'/? - /k'uk'íʔax^Ws/ cache: /ʔúpanikst/ ten
 /k'ílak'/ lie down: /síp'iʔ/ a hide in preparation
- k'/c' - /k'ást/ bad: /c'árr/ bitter
 /k'ílak'/ lie down: /síc'/ new

The phoneme /k^W/ contrasts with /p k k'^W q^W x^W/ as follows:

- k^W/p, k^W/k - see above
- k^W/k'^W - /cik^Wán/ pull: /cik'^Wák^W/ spilled
 /nak^Wanámm/ sing: /nak'^Waʔft'k'am/ wash
- k^W/q^W - /k^Wfn/ hold: /q^Wflam/ song
 /sk^Wamk^Wfmcxn/ rainbow: /q^Waq^Waʔám/ chew
- k^W/x^W - /k^Wfn/ hold: /x^Wíʔck/ forked spear-fishing point

The phoneme /k^W/ contrasts with /p^W k^W q^W q^W/ as follows:

k^W/p^W, k^W/k^W, k^W/k^W - see above

k^W/q^W - /cik^Wák^W/ spilled: /q^Waq^Wín/ where

k^W/q^W - /nak^Waʔft^Wk^Want^W/ wash: /sq^Waʔlfsalap/ ashes
/ʔarasík^W/ turtle: /t^Wq^Wáq^W/ fall forward

k^W/q^W - /k^Wnixut^Wíft^W/ deep: /q^Wlɪʔam/ pick berries

Back velar (uvular) stops, /q/ /q^W/ and /q^W/, occur in all positions in word roots and affixes. All of the back velar stops occur both singly and in consonant clusters. /q/ and /q^W/ occur aspirated; /q^W/ and /q^W/ are unaspirated.

The phoneme /q/ contrasts with /k q^W ʔ/ as follows:

q/k - see above

q/q^W - /qáqsis/ just before dark: /q^Wíʔc^Wt/ full
/ncíqam/ dig a hole: /knq^Waq^Wft^Waʔam/ fishing

q/q^W - /ncíqam/ dig a hole: /t^Wq^Wáq^W/ fall forward

q/ʔ - /qáqsis/ just before dark: /ʔánan/ maggie
/píq/ white: /sɪʔx^Waʔ/ big

The phoneme /q^W/ contrasts with /k^W q q^W ʔ/ as follows:

q^W/k^W, q^W/q - see above

q^W/q^W - /q^Waʔuʔ/ spotted horse: /q^Wúct/ fat person
/q^Wak^Wamfs/ October: /q^Wlɪʔám/ pick berries

q^W/ʔ - /q^Wíʔc^Wt/ full: /ʔik^Walɪʔ/ at

The phoneme /q^W/ contrasts with /k^W q q^W x^W/ as follows:

q^W/k^W, q^W/q - see above

q^W/q^W - /q^Wáy/ blue: /q^Wáy/ black

q^W/x^W - /q^Wáy/ blue: /x^Wátx^Wat/ duck

The phoneme /q^W/ contrasts with /k^W q' q^W/ as above.

The glottal stop, /ʔ/, does not occur as the final consonant in the word root structure CVCC in forms elicited for this paper. The glottal stop appears to occur in all other positions in word roots.

The phoneme /ʔ/ contrasts with /t t' k k' q q'/ as above.

The Affricates

The glottalized lateral affricate, /ɬ'/, occurs in all positions in word roots and affixes. This phoneme occurs singly in these positions and occurs infrequently in consonant clusters.

The phoneme /ɬ'/ contrasts with /t t' ʔ/ as follows:

ɬ'/t, ɬ'/t' - see above

ɬ'/ʔ - /ɬ'aɬ'axáp/ old man: /ɬx^W ʔx^W ancút/ breathe

Alveolar affricates, /c/ and /c'/, occur in all positions in word roots and affixes. Both phonemes occur both singly and in consonant clusters. Allophones of /c/ are [c] and [č]; allophones of /c'/ are [c'] and [č']. The palatalized allophones are the more common phones for the unglottalized alveolar affricate, and the unpalatalized allophones are more common for the glottalized phoneme. However, all four of these phones appear frequently in words elicited for this paper. Allophone occurrence appears to be in free variation.

The phoneme /c/ contrasts with /t k c' s/ as follows:

c/t, c/k - see above

c/c' - /cak^W antíx^W/ drag: /c'ikám/ count

/p'iqcancút/ cook: /xsk'c'aʔíp/ animal pelt

c/s - /cʃlɪkst/ five: /sʃxkan/ scrapped hide

The phoneme /c'/ contrasts with /t' c k'/ as above.

The Fricatives

The alveolar fricative, /s/, occurs in all positions in word roots and affixes. This phoneme occurs both singly and in consonant clusters. Allophones of /s/ are [s] and [s̺]; these phones appear to occur in free variation. /s/ occurs frequently as a prefix in unpalatalized form. The palatalized allophone occurs less frequently initially or as a prefix. In general, [s] is more common than [s̺] in words elicited for this paper, although both allophones occur frequently.

The phoneme /s/ contrasts with /c x x ʃ h/ as follows:

c/s - see above

s/x - /saʃ^wsaʃ^wás/ prairie chicken: /xaʃxaʃúlaʃx^w/ rattlesnake
/sk^wuk^wuʃsn/ star: /wɪsxn/ long

s/x - /saʃ^wsaʃ^wás/ prairie chicken: /xaʃxápaʃ/ corn-husk basket
/qáqsis/ just before dark: /skamxíst/ brown bear

s/ʃ - /síc'/ new: /ʃíx/ smooth
/nást/ heavy: /c'áʃt/ cold water

s/h - /saʃwarísilip/ fire: /haʃwaʃhíʃwas/ yawn

The lateral alveolar fricative, /ʃ/, occurs in all positions in word roots and affixes. This phoneme occurs both singly and in consonant clusters.

The phoneme /ʃ/ contrasts with /ʃ' s x/ as follows:

ʃ/ʃ',ʃ/s - see above

ɬ/x - /k'ɬɬ/ drip: /ɬɪx/ smooth
 /t'ɬ/ dirty: /t'áx/ sweet

Velar fricatives, /x/ and /x^W/, occur in all positions in word roots and affixes. Both the labialized and the unlabialized velar fricatives occur both singly and in consonant clusters in these positions.

The phoneme /x/ contrasts with /k s ɬ x^W x̣ x^W h/ as follows:

x/k, x/s, x/ɬ - see above

x/x^W - /xíxuʔtam/ girl: /x^Wɪst/ walk
 /kɬiʔɪx/ canoe: /t'ak^Wantɪx^W/ slap

x/x̣ - /xaʔxaʔúlaʔx^W/ rattlesnake: /x̣axaʔnúʔ/ nine

x/x̣^W - /xaʔxaʔúlaʔx^W/ rattlesnake: /x̣^Wátx̣^Wat/ duck
 /ʔaxɪʔcaʔ/ strings to lace hide: /nʔax^Wtús/ downstream

x/h - /xaʔxaʔúlaʔx^W/ rattlesnake: /haʔwaʔhɪʔwas/ yawn

The phoneme /x^W/ contrast with /k^W x̣ x̣^W w/ as follows:

x^W/k^W, x^W/x̣ - see above

x^W/x̣ - /x^Waʔx^Waʔyús/ grouse: /x̣ax^Wálc'aʔam/ smoked meat

x^W/x̣^W - /x^Waʔx^Waʔyús/ grouse: /x̣^Wátx̣^Wat/ duck

x^W/w - /x^Wiʔɪt/ many: /wɪsxn/ long

Back velar (uvular) fricatives, /x̣/ and /x̣^W/, occur in all positions in word roots and affixes. Both the labialized and the unlabialized back velar fricatives occur both singly and in consonant clusters in these positions.

The phoneme /x̣/ contrasts with /x̣ x̣^W x̣^W h/ as follows:

x̣/x̣, x̣/x̣^W - see above

\dot{x}/x^w - /xást/ good: /mx^wá1?/ cradle board

x/h - /xa²x^wá1c'a²am/ smoked meat: /hatfsx^wa²am/ sneeze

The phoneme /x^w/ contrasts with /x x^w x^w/ as follows:

x^w/x , x^w/x^w , x^w/x - see above

x^w/w - /x^wátx^wat/ duck: /wápuxkn/ bobcat

The glottal fricative, /h/, occurs infrequently in words elicited for this paper. The glottal fricative appears to occur in all positions in word roots, and occurs both singly and in consonant clusters.

The phoneme /h/ contrasts with /s x x/ as above.

The Resonants

The bilabial nasal, /m/, occurs in all positions in word roots and affixes. This phoneme occurs singly and in consonant clusters in these positions. The bilabial nasal occurs frequently in clusters with the alveolar nasal phoneme.

The phoneme /m/ contrasts with /n w/ as follows:

m/n - /mak^wák^w/ snow: /nak^waním/ sing

/c'íxam/ roast on a spit: /sípan/ son's wife

m/w - /t'k^wałamín/ roasting stick: /sciwí²xa²/ creek

The alveolar nasal, /n/, occurs in all positions in word roots and affixes. This phoneme occurs singly and in consonant clusters in these positions. The alveolar nasal occurs frequently in clusters with the bilabial nasal phoneme.

The phoneme /n/ contrasts with /m l r/ as follows:

n/m - see above

n/l - /nik'n/ cut: /lik'ík'an/ tumpline
 /q^wín/ green: /k^wíl/ red

n/r - /xaxaʔnúʔtaʔúpanikst/ ninety: /cárak^w/ crooked

The alveolar lateral resonant, /l/, occurs in all positions in word roots and suffixes. This phoneme occurs both singly and in consonant clusters.

The phoneme /l/ contrast with /n ʔ r/ as follows:

l/n - see above

l/ʔ - /lik'ík'an/ tumpline: /ʔíx/ smooth

l/r - /caʔ^waláx/ swim: /taraqám/ dance
 /q^wílam/ song: /yaramán/ push

The alveolar flap, /r/, does not occur initially. This phoneme occurs in clusters, although it does not occur as the third consonant in the canonical root form, CVCC, except as a reduplicated second consonant, as in /c'árr/ bitter.

The phoneme /r/ contrasts with /n l/ as above.

The palatal glide, /y/, occurs in all positions other than the final consonant in the word root structure CVCC in words elicited for this paper. This phoneme occurs both singly and in clusters.

The phoneme /y/ contrasts with /w/ as follows:

y/w - /yús/ fuchsia-colored: /wusʔáwasaʔ/ robin

The velar glide, /w/, does not occur in the final consonant position in the word root structure CVCC. This phoneme does occur in all other positions in word root and affixes. /w/ normally occurs singly.

The phoneme /w/ contrasts with /m x^w x^w/ as above.

The pharyngeals, /ʕ/ and /ʕ^W/, occur rarely in words elicited for this paper. Because the presence of these phonemes is as yet difficult for me to confirm, they are tentatively hypothesized as phonemes on the suggestion of Dr. Kinkade. Examples of the occurrence of the pharyngeals are: /yaʕyaʕt/ all, /caʕ^Waláx/ swim, /máʕ^Want/ break and /saʕ^Wsaʕ^Wás/ prairie chicken.

Syllabics

The resonants occur occasionally as phonetic syllabic peaks. This allophonic variation occurs most frequently with the alveolar nasal, and occurs when this resonant is in the immediate presence of unstressed fricatives and stops. Some examples of these syllabic peaks are: [mʕk'tU₁t₁] /mʕk'tutn/ April; [ʕfat₁n] /ʕfatn/ May; [mʕx^Wá1ʕ] /mʕx^Wá1ʕ/ cradleboard; [c'ár₁r] /c'arr/ bitter; [ʔ₁fk] /lʔfk/ thin.

The Vowels

The high front vowel phoneme, /i/, has the following allophones: [i] [I] [e]. The high front allophone [i] occurs after labialized stops, all fricatives and all resonants except the alveolar flap. [i] also occurs after an initial glottal stop. [i] is normally stressed. The lower-high front allophone [I] occurs in all vowel positions in all environments. This allophone is unstressed. The higher-mid front allophone [e] occurs after unlabialized stops, and flaps. [e] is normally stressed. Examples of this allophonic distribution are:

[i]		
[q ^w flən]	/q ^w flən/	<u>cheat</u>
[x ^w fst]	/x ^w fst/	<u>walk</u>
[mík'toʔ]	/mík'tuʔ/	<u>sunflower</u>
[ʔíkst]	/ʔíkst/	<u>get revenge</u>
[I]		
[pIʔəscəʔák]	/piʔascaʔák/	<u>summer</u>
[mIt'mít'k ^w]	/mit'mít'k ^w /	<u>dull</u>
[e]		
[kakén]	/kakín/	<u>where</u>
[k ^w r'éʔ]	/k ^w r'íʔ/	<u>yellow</u>

The phoneme /i/ contrasts with /a u/ as follows:

i/a	- /t'ík ^w t/ <u>lake</u> : /t'áxt/ <u>sugar</u>
	/siʔák ^w t/ <u>bulge</u> : /saŋ ^w saŋ ^w ás/ <u>prairie chicken</u>
i/u	- /x ^w iʔít/ <u>many</u> : /x ^w úyʔ/ <u>go</u>
	/ʔíp'n/ <u>wipe</u> : /ʔúpanikst/ <u>ten</u>

The low central vowel phoneme, /a/, has the following allophones:

[æ] [ə] [a]. The low-front allophone [æ] occurs only after or before laterals; [æ] is unstressed. The mid-central allophone occurs in all vowel positions in all environments; [ə] is unstressed. [æ] and [ə] appear to occur in free variation after and before laterals. The low-central vowel [a] occurs in all vowel positions in all environments; [a] is normally stressed. Examples of this allophonic distribution are:

[æ]		
[læsəwám]	/lasawám/	<u>embroidered</u>

[nʔæleʔxósʔ]	/nʔalaxús/	<u>upstream</u>
[ə]		
[kʔəkʔáx ^w átʔ]	/kʔakʔáx ^w átʔ/	<u>narrow</u>
[máɿ ^w ənt]	/máɿ ^w ənt/	<u>break</u>
[yámx ^w əʔ]	/yámx ^w əʔ/	<u>basket</u>
[a]		
[čikʔ ^w ákʔ ^w]	/cikʔ ^w ákʔ ^w /	<u>spilled</u>
[máɿ ^w ənt]	/máɿ ^w ənt/	<u>break</u>
[ʔáqʔ]	/ʔáqʔ/	<u>wide</u>

The phoneme /a/ contrasts with /i u/ as follows:

a/i - see above

a/u - /nmáʔ/ warm water: /mús/ four

/cʔixam/ roast on a spit: /cʔx^wúy/ come

High back vowel phoneme, /u/, has the following allophones:

[u] [U] [o]. The high back allophone [u] and the high-mid back allophone [o] both occur stressed and in all vowel positions in all environments. Occurrence of these two allophones appears to be in free variation. The lower-high back allophone [U] occurs unstressed in all vowel positions in all environments. Examples of this allophonic distribution are:

[u]

[x^wúyʔ] /x^wúyʔ/ go

[tIʔmút] /tʔiʔmútʔ/ Indian bag

[o]

[ʔópənIkst] /ʔúpanikst/ ten

[mós]	/mús/	<u>four</u>
[U]		
[tʃʌx]	/tʃʌx/	<u>stand up</u>

The phoneme /u/ contrasts with /i a/ as above.

Stress

Stress phonemes occur at two levels--high and low. The high stress phoneme is indicated /'/; the low stress phoneme is left unmarked. /'/ occurs at vowel phonemes /i/ on [i] and [e], /a/ on [a] and /u/ on [u] and [o]. High stress normally occurs once within a word, but occasionally occurs more than once, as in /kək'áx^wát/ narrow. High stress does not occur on consonants in words elicited for this paper.

Word Structure

After the manner of Kinkade (1967) in considering the Methow and Okanogan dialects, the structure of Okanogan is here described in units of the word or word part--root, prefix and suffix.

The word root in Okanogan is the basic meaningful morpheme to which may be added inflectional and lexical affixes. This root may occur as the single unit of a word or with a prefix and/or a suffix. The normal structure of the word root is the form CVC or CVCC. Examples of these forms are:

CVC - /cák/ red; /t'íʃ/ dirty; /ʃíx/ smooth; /q'^wáy/ black

CVCC - /tíʃʃ/ straight

Word roots with intervocalic consonants, of the form CVCVC also occur, as in /ʔasil/ two. And frequently, reduplication

of all or part of the word root occurs, as in /yaʕyáʕt/ all, /xaxaʔnúʕt/ nine and /mit'mít'k^w/ dull. Less frequently, word roots exhibit initial consonant clusters of the form CCVC, as in /xʕ'úʕt/ rock.

The most common Okanogan prefix form occurring in words elicited for this paper is C. Examples of single consonant prefixes are these forms with nominalizing prefix /s/: /sp'íc'aʔ/ Indian rope, /sqéʔpts/ springtime and /staʔmált'/ beef. Prefix forms CC, CV and CVC also appear to be present in Okanogan, although no clear examples of these forms occur in material elicited for this paper.

The word suffixes in Okanogan exhibit more variation in structure than either word roots or word prefixes. Derivational, inflectional and lexical suffixes all occur.

The word suffix forms C, CC, CCC, CCCC, VC and CVC appear to be present in Okanogan, although clear examples of all of these forms do not occur in the material elicited for this paper. Examples of some of these forms are:

- C - /q'íʕt/ to be sick; /q'ʕ'ʕ't/ to be full. Suffix /-t/ indicates an adjectival inflection.
- VC - /sk^wúʕ'us/ face; /ʕ'qúmus/ cheeks; /q'^wíʕus/ Negro. Suffix /-us/ is lexical suffix for face.
- CC - /mík'tutn/ April; /síatn/ May. Suffix /-tn/ is a nominalizer.
- CVC - /q'awásq'aʕqan/ long hair; /sq'áʕqan/ bad headache. Suffix /-qan/ is lexical suffix for head.

/k^wiʔiscút/ dress; /st^wpincút/ cover up. Suffix /-cut/ is a reflexive.

Clustering

Consonant clustering occurs in Okanogan both within word stems and affixes, and at morpheme boundaries. Although it is not within the scope of this paper to describe the locations of occurrence for each phoneme in detail, it does appear that most of the consonant phonemes occur in clusters within roots and affixes, and at morpheme boundaries. Exceptions to this general structural statement are noted in the discussion of individual phonemes.

The phonemes /c/ and /c^w/ are phonetically distinct from consonant clusters /ts/ and /t^ws/ respectively as these clusters appear at morpheme boundaries. Likewise, the glottalized stops are phonetically distinct from clusters involving stops in conjunction with glottal stops. And the lateral affricate and the labialized consonants are phonetically distinct from clusters containing the lateral fricative and lateral resonant, and the velar glide, respectively.

Occurrences of /ts/ and /t^ws/ in the material elicited for this paper are rare, and are limited to consonant clusters at morpheme boundaries. These two particular clusters contrast with the palatal affricates as follows:

c/ts - /cik^wák^w/ spilled: /ʔa^wiyúts/ in-between child

c^w/t^ws - /sp^wí^wc^wa^w/ Indian rope: /st^wkat^wsap^wfna^w/ braid hair

Examples of clusters involving glottal stops in conjunction with stops in environments similar to those of glottalized stops do not occur in words elicited for this paper. And forms involving lateral fricatives and lateral resonants, and velar glides do not occur in environments similar to those of lateral affricate and the labialized consonants, respectively.

Primary justification for the hypothesization of the affricates; the labialized stops, fricatives and pharyngeals; and the glottalized stops and pharyngeals rather than the respective consonant clusters described briefly above is found in the canonical forms of word roots and prefixes. The presence of such clusters rather than these individual phonemes would not allow the relatively well-defined structure described for roots and prefixes. For example, the word root pattern CVC would become CCVC in */pʔúm/ (/p'úm/ orange; brown) and CCCVC in */qʔwáy/ (/q'wáy/ black).

Most important, accurate description of reduplicating segments could not be accomplished in a general sense with such open-ended canonical root structure; reduplication of the root structures CVC and CVCC would no longer be predictable. An example is the form CVCCVC in /ʔ'ux^wʔ'áx^w/ chokecherries which would become CCCCCVCCCCCVCC in */tʔxluxwtʔxláxw/ if clusters were indicated rather than the glottalized lateral affricates and the labialized velar fricatives.

Although the distribution of phonemic consonants selected for this paper does appear justified on the basis of material used

for this paper, I certainly think that some further investigation to confirm this pattern is necessary.

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