### NOTES ON THE CHEMAKUM LANGUAGE.

#### BY FRANZ BOAS.

When George Gibbs wrote on the tribes of western Washington (Cont. to N. Am. Eth., vol 1, p. 177), the Chemakum still numbered 90 souls. When I visted Puget Sound in the summer of 1890 I learned of only three individuals who spoke the language—one woman, living near Port Townsend, and one man and his sister. who live at Port Gamble. As the Indians of Puget Sound are very restless in summer I had great difficulty in finding any of these individuals. After a protracted search I succeeded in meeting "Louise." who lives at Port Gamble, where she makes a living as a washerwoman. Although she speaks Chemakum occasionally with her brother, she uses mostly Clallam in conversing with the other Indians of the village, and the Chinook jargon in her intercourse with the whites. She has, therefore, undoubtedly forgotten part of her language. She stated that neither she nor her brother and the woman living near Port Townsend speak Chemakum fluently and properly. Besides, she was somewhat addicted to the use of liquor, and as she herself and the white man with whom she lived indulged alternately in their libations, the conditions for the collections of good linguistic material were not very favorable. Still, I was able to collect about 1,250 words, grammatical forms, and sentences, which were all corroborated by repeated questioning. From this material the following notes have been derived:

According to Gibbs the original country of the Chemakum, who call themselves Aqoqulo,\* embraced Port Townsend, Port Ludlow, and Port Gamble. According to the uniform testimony of Louise, a few Clallam and a Puyallup, they were restricted to the peninsula between Hood canal and Port Townsend.

Phonetics.—The vowels are not quite as variable and indistinct as in the neighboring Salishan dialects, but still obscure vowels are

<sup>\*</sup>  $\eta$ =deep guttural k.  $\check{e} = e$  in flower.  $t_0 = dento-alveolar t$ .

q = ch as in Scotch "loch." 1' = explosive posterior 1.

<sup>!</sup> following a letter indicates more than ordinary strength of articulation.

very frequent. Diphthongs are rare. I am sure only of the occurrence of ai and au.

The following consonants are found in my list of words:

h. 
$$k$$
,  $\gamma$ ,  $q$ .  $y$ .  $n$ ;  $t$ ;  $s$ ,  $c$ ,  $t_g$   $ts$ ,  $tc$ .  $m$ ,  $p$ .  $l$ ,  $l$ .

The following sounds begin words:

 $\bar{a}$ , a,  $\bar{e}$ , e,  $\bar{e}$ ,  $\bar{I}$ ,  $\bar{o}$ . u is not found in my list as an initial sound. All consonants with the exception of y and  $t_0$  are found as initial sounds. Combinations of consonants in the beginning of words are very rare. I found only the following examples:  $ts\eta$ -, striking;  $sptc\bar{o}$ 0, berry basket.

The following terminal consonants and combinations of consonants are found in my collection:

The Article.—It seems that nouns have two genders, masculine and feminine, which have separate articles.

qō hē'na, my father. kō hē'na, my mother. qō ō't!tēts, thy house. kō hē'elōtsēts, thy canoe. qō hā'maa, the tree.

The plural article is the same for both genders:

hō tsitsqa'll'ē, my cousins.

In interrogative sentences other articles are used—qa for masculine, tca for feminine, qā for plural.

yō'oy qa hē'nēets?—Where is thy father?
yō'oy tca hē'nēets?—Where is thy mother?
yō'oy qa tětc'ukl'as?—Where is my arrow?
yō'oy tca hē'elōyul'ĕs?—Where is my canoe?
yō'oy qa tayō'lyulĕs?—Where is my axe?
yō'oy tca yuē'lēs'ēts?—Where is thy knife?
ātc'ĕs qa hā'acēttēts?—What have you bought?
yō'oy qā ō't!l'ē?—Where are my houses?
yō'oy qā tsilō'leyl'ĕs?—Where are my canoes?

The Noun.—It appears from the examples given above that the noun has two genders. It is of interest to note that pronominal gender, by means of which male and female are distinguished, is found in all Salishan dialects spoken west of the Cascade range and on the coast of British Columbia, while real gender occurs in all dialects of the Chinook.

The plural is, more properly speaking, a collective, but is frequently used in a way similar to our plural, namely, when the collective and plural ideas nearly coincide. The difference between the two is, however, brought out clearly in the following instance:

ē'sa-i (1) tc'ā'l'ai (2) tca'qul' (3)—many (1) stones are (2) on the beach (3).

l'ē'sai tc'ā'tc'al'a—a heap of stones.

The collective is formed in a variety of ways:

(1) By the prefix is with the first vowel of the stem:

Singular. Collective.

ha'maa tsa'hamaa tree.
tsu'qot tsitsu'qot lake.
a'māas tsaa'māas grandparent.
hēlō'lexl' canoe.

(2) By reduplication:

hau'atska hahaua'tska deer.
quë'ltëm qaquë'ltëm European (borrowed from yu'ēlěs knife. [Clallam).
tē'el'lāas tētēel'ā'as husband.

(3) By diæresis:

tcā'atcis'is tcāatcā'is'is my mother's sister.

(4) By amplification of the stem according to unknown rules; frequently with the infix ts:

koō'tlis kutsi'tlyaas my wife. qā'aqāas qatç'ĕqāas my sister's husband. tayō'olyul' tatsyō'olyul' axe. ĕtç'ĕ'yaa ōot!'ō'qyaa house.

(5) From distinct stems:

ts'ĕ'yatcil' kō'la dead.

A few nominal suffixes (nouns as used in compounds) form plurals:

-ātcět, plural: -ts'ā'it, blanket; pěcā'tcět, white blanket; tlakuats'ā'it, two blankets.

-tē'ia, plural: -ta, day; kuētē'ia, one day; mě'ēsta, four days. -xtsěl, plural: -axal, person in canoe.

### Numerals.---

Counting. P		Persons.	Canoes.	Fathoms.	Dogs or horses.	Persons in canoe.
I	kuē'l'	koā'l'	kuē'ĕkō	kē'l'ōlō	kuē'ĕns	kuē'ytsĕl
2	l'a'kua	l'a'wuyas	l'a'kuakŭ	l'a′kuēlō	l'a'kuāns	l'a'wayayal
3	γoā'lē	γoa'l'tsō	γoa′lakŭ	ōľ'āloĸ	yoalā'ns	hyoā'lētsayal
4	mĕ'ēs	mě'ēs	mĕ'ēskō	mĕ'ēsa'lō	mě'ēsěns	mĕē′saxal
5	tcā'aa	tcā'aa	tcā'aakŭ		tcā'aans	
6	tsĕ'l'as	tsĕ'l'as	tsĕ'l'askŭ		tsĕ'l'āsĕns	
7	7 ts!γō′olkoant		ts!yō′olkoantkō		ts!yō'olyo	antěns
8	x!'oa'yēkoant		η!'oa'yēko	oantkō		
9	kuē'l'tsqal		kuē'tsqalk	ō		
10	tc!'ē'taa		tc!'ētā'aki	i		
11	tc!'ē'taa qsī kuē'l'					
20	koā'l'atstci					
30	yoalā'koanlo					
40	mě'ēskoanlō, (etc., up to)					
00	tc!'ē'tkoanlō					

The numerals seven, eight, and ten mean the first, second, and fourth fingers, respectively. Nine is derived from one, meaning, probably, ten less one; twenty is one man, thus indicating the vigesimal origin of the numerical system. It appears from the above list that numerals may be compounded with any of the innumerable nominal suffixes.

kuē'esělō, once. l'a'kuasělō, twice.

#### Personal Pronouns.

lā'al', I. tsē'ia, thou. ō'ĕtcō, he. mā'al', we. tsē'ial', you. ? they.

### Possessive Pronouns.

tā'ēlaai—it is mine. hēĕlē'ets'ē—it is thine. (hēĕlē'ets'ai ō'otcō—that is his.) (hēĕlēets'ai ō'uksō—that is hers.)

mā'al'ōoi—it is ours. hēĕlēesti'tcē—it is yours. hēĕlēetcā'as—it is theirs. -ĕs, my. -ĕts, thy. -qĕs, his. -tcuks, her. -tcuk, our. -stĕtc, your. -tcāas, their.

For instance: taxō'lxul'es—my axe. he'nēetcuks—her father. he'nētcux—our father.

# Intransitive Verb.---

			Singular.	Plural.
ıst p	erson,		-la, -lē	-ma
2d	"		-ĕts	-ětsāl'
3d	"	masc.,	-těq, -ē	} -aē
3d	"	fem.,	-uks	∫ -ae

For instance:—from kuētsā'at, sick:

kuētsā'atěla-I am sick. kuētsā'ataē-they are sick.

Tenses are formed by a series of affixes, which are placed following the stem of the verb and preceding the pronominal suffix. There are a great many of these suffixes, but I am sure of the meaning of the following only: -kuē, future; -tsī, perfect; -lěm, imperfect (see following page, transitive verb).

yōtcilekuē'la—I shall drink. takuil'tsē'la(1) kuē'tsaatāis(2)—yesterday I have been (1) sick (2).

# Interrogative:

kuētsā'atal'ē—am I sick?
kuētsā'atatts—art thou sick?
kuētsā'at'ē—is he sick?

kuētsā'atātětsl'—are you sick? kuētsā'at'aē—are they sick?

# Negative:

## Singular.

ıst j	person,	,	kuā'alqa kuētsā'al'1'ē.
2d	"		kuā'alqa kuētsā'al'tēts!
3d	"	masc.,	kuā'alqa kuētsā'al'tētca'as.
3d	"	fem.,	kuā'alqa kuētsā'al'tē'etcuks.

## Plural.

ıst person,	kuā'alqa kuētsā'al'tē'tçuŋ.
2d ''	kuā'alqa kuētsā'al'tēstětc.
3d "	kuā'alqa kuētsā'al'tētca'as.

It appears that the endings of the negative coincide closely with the possessive pronouns, while those of the indicative agree with the personal pronoun.

### Transitive Verb.

I have only an imperfect record of the forms of the transitive verb with incorporated pronominal object. The most striking peculiarity of these forms is the separation of pronominal subject and object by the temporal character. In the following table = signifies the stem of the verb, — the temporal character:

me.	thee.	him.	her.
I	=q—la	— laē	= —layuks
thou=l—tsa		─tsaaē	= —tsayuks
he =ē—la	<b>=</b> ē —tsa		
we	=q $-$ ma	= —maē	= —mayuks
us.	:	you.	them.
I	<b>=</b> q—lä	─layaē	
thou=lao—tsa			─tsāēyaē
$he = \bar{e} - ma$	<b>=</b> ĕ <b>-</b> -t	sāʻal'ōlʻ	
we	<b>=</b> q-n	ıā'al'ōl'	= —ma'yaē

For instance:—aĕltsē'squkuē'la, I feed thee. tĕpātĕlaolë'mtsa, thou hast vanquished us. āĕltsēsqukuē'ma, we feed thee.

Suffixes which are used for forming derivations are placed in the same position in which the temporal characters are found. For instance, with -t!'atl, which forms the desiderative:—taxuksělot!a'tlěma, he wants to strike us (from tāx-, to strike).

The reflexive is formed by the suffix -itqa:—qoatst!atcitqala, I wash my hands (qoats-, washing; -t!atc, hand; -itqa, reflexive; -la, I).

When the verb is accompanied by an adverb, the latter is inflected, while the verb remains unchanged. A frequentative is formed by amplification of the verbal stem.

# Formation of Words.

A great number of nouns are found in two forms, independent and dependent, the latter being used for the formation of compounds. When numerals, adjectives, verbs, or other nouns are connected with such nouns, the dependent form must be used. It seems that all these dependent forms are suffixed. For instance: -spa, fire; kuē'espa, one fire; mā'ttcaspa, a great fire; la'uspēela, to pour water into fire.

It seems that in many cases there is no traceable connection between the dependent and independent forms of the noun.

It	idependent.	In compoun	ds.
back	η!'ē'enōkoat	-ਸ਼ੵ!ĕnuk	t'cā'apalĕnukoatqala, I warm my back.
belly	ya'mātcit	-ē'tcē	kuayē'tcē, scar on belly.
breast	tamětsa'ml'it	-tsaml'ō	t!'ětstsa'ml'ōt, half fathom, viz., middle of breast.
blanket	pē'ests'atc	-atcĕt	tcenā'nōҳatcĕt, dog-hair blan- ket.
canoe	hē'lōla <b>y</b> l'	-kō	mē'ĕskō, four canoes.
day	sing.	-tē'ia	l'ákuata, two days.
-	plur	ta	-
dollar		-tcě′sīt	l'akuatcĕ'sīt, two dollars.
domestic a	nimal	-ans	kutsā'patans, bitch, mare.
(dog a	nd horse)		
ear	sisl'ált	t!'a	ηuηuyēt!'ā'a, deaf.
face	kul'ō'yul'	-l'ō,-l	kuáxl'ō, scar on face; qoats- litqala, I wash my face.
finger		·-koanu	n!'au'ikoanut, finger-ring.
fire	nē'ia	-spa	mā'ttcaspa, a great fire.
foot	láakut	-anqō	kōolánqō, lame.
hand	t'atct	-t'atc	ng!'aut'átct, bracelet.
head	qa'nět	-t'ēォ!	cā'act'ēx!, bald.
		-t!'ĕt	tō'pt!'ět, head-ring; == "tied around head."
house	ot!l'ē	∙tĕ′tcō	alĕutĕtcō'ola, I build a house.
language		-tyulō	Bostontyu'lō, English.
mind		-ēqatc	l'!ōomē'qatc, courageous = strong-minded.
moon	ts!ĕtsu'yl'a	-t!'el'ō'a	kuā'ਸ਼t!'ĕl'ō'a, half moon.
mouth	<b>җō′</b> otō	- <b>₮</b> !ō	tsāuqoā'y!ō, mouth bleeds.
neck	y!'amō′ys	sō <b>ŗ</b> -	pā'atěyōs, collar bone.
nose	sĕmō'sĕt	-ōs	l'ōx!'ōsĕt, perforation of nose.
point		-t!'ēҳoa	luy!'ut!'ē'yoala, I cut off point.
river	yu'māa	-atsit	mā'ttcatsit, large river.
trail	mō'ylunt	-l'ĕmĕt	kuēĕl'ĕ'mĕt, one trail.
tree	hámaa	-tcat	kuē'etcat, one tree.
		-pat	ηā'ěltcitpat, maple;="paddle tree."

water	ts!'ō'ua	-sĕna	tcitc'e'senaala, I jump into water.
to look		-al'sē	ts'ělěkož'l'sē, looking up.
made with	<del></del>	-tcil'	ta'xstatcil', chips, "made with axe."
instrument		-yul'	koā'ataul', whetstone;="in- strument for sharpening."

THE MASARWA OF THE KALAHARI DESERT, SOUTH AFRICA.-"These Bushmen bear no sort of resemblance to the small Chineselike Hottentot Bushmen of the old Cape Colony. As a rule, they stand from five feet four inches to five feet six inches in height, and their skins are of a deep red brown. Their language is burdened with an extraordinary succession of clicks, often sounding like a querulous grumble, and is apparently of a very primitive order. Their weapons are assegais and small bows, shooting tiny poisoned With these light reed arrows, tipped with bone and smeared with the poison of the N'gwa caterpillar or of snakes and euphorbia, they will bring down even the tall giraffe. To do this, however, they have to steal up and pierce this animal beneath the legs, in the thinnest part of its tough hide, and even then they often have to follow their quarry four or five days before the poison completes its work on so huge a frame. \* \* \* As a rule, we found these people thin and poorly nourished, and their legs and arms were \* \* \* Their skin cloaks are small and barely often mere sticks. reach to their middles, and, from lying close to the fire at night, they burn their legs in a dreadful manner. I have seen a great many Masarwas, but I never yet saw one who had not his or her legs either scarred with sores or burnt perfectly raw from this cause. -H. A. Bryden, in Longman's Magazine for September, 1801.

KITES IN THE SOLOMON ISLANDS.—Hugo Zöller has observed that the natives of Bougainville Island, where they seem to be especially fond of playthings, make and fly kites, a thing which he does not remember to have seen among any other savage people. These kites are made of bast and leaves.—Petermann's Mittheilungen, 1891, No. 1.