

PURCHASED FOR THE
UNIVERSITY OF TORONTO LIBRARY

FROM THE
CANADA COUNCIL SPECIAL GRANT

FOR
ANPHROPOLOGY

# Digitized by the Internet Archive in 2007 with funding from Microsoft Corporation 

## DEPARTMENT OF THE INTERIOR

U. S. GEOGRAPHIICAL and GEOLOGICAL SURVEY OF THE ROCKY MOUNTAIN REGION
J. W. Powell in Charge

## CONTRIBUTIONS

## NORTH AMERICAN ETHNOLOGY

## VOLUME II

PART I


WASHINGTON
GOVERNMENT PRINTING OFFICE
1890



DEPARTMENT OF THE INTERIOR
U. S. GEOGRAPHICAL AND GEOLOGICAL SURVEY OF THE ROCKY MOUNTALN REGION

## J. w. powell in Charge

## TEE

# KLAMATH INDIANS 

OF

## SOUTHWESTERN OREGON

BY

ALBERT SAMUEL GATSCHET


WASHINGTON
GOVERNMENT PRINTING OFFICE

## CONTENTS.

## PART I.

Page.
Letter of transmittal ..... vii
Ethnographic sketch ..... ix
Texts ..... 1
Grammar ..... 199
PART II.
Dictionary-Klamath-English ..... 1
Dictionary-English-Klamath ..... 433
ILLUSTRATION.
Map of the headwaters of the Klamath River Frontispiece.

# LETTER OF TRANSMITTAL. 

Smithsonian Institution, Bureau of Ethnology, Washington, D. C., June 25, 1890.

Sir: I have the honor to transmit to you my report upon the Klamath Indians of Southwestern Oregon, the result of long and patient study. It deals with their beliefs, legends, and traditions, their government and social life, their racial and somatic peculiarities, and, more extensively, with their language. To this the reader is introduced by numerous etlinographic "Texts," suggested or dictated by the Indians themselves, and accompanied by an interlinear translation and by "Notes," a method which I regard as the most efficient means of becoming acquainted with any language. In this report I have given prominence to the exposition of the language, because I consider language to be the most important monument of the American Indian. Archæology and ethnography are more apt to acquaint us with facts concerning the aborigines, but language, when properly investigated, gives us the ideas that were moving the Indian's mind, not only recently but long before the historic period.

Repeated and prolonged visits to the people of the northern as well as of the southern chieftaincy have yielded sufficient material to enable me to classify the language of both united tribes as belonging to a distinct family. In their territorial seclusion from the nearer Indian tribes they show anthropologic differences considerable enough to justify ns in regarding them as a separate nationality.

There is probably no language spoken in North America possessed of a nominal inflection more developed than the Klamath, altlough in this particular, in the phonetic elements and in the syllabic reduplication pervading all parts of speech, it shows many analogies with the Sahaptin
dialects. The analytic character of the language and its synthetic character balance each other pretty evenly, much as they do in the two classic languages of antiquity.

Concerning the etlmography of both chieftaincies and the mythology of the Modoc Indians, I have gathered more material than could be utilized for the report, and I hope to publish it at a later day as a necessary supplement to what is now embodied in the two parts of the present volume.

Very respectfully, yours,

## Albert S. Gatschet.

Hon. J. W. Powell,
Director of the Bureau of Ethnology.

# ETHNOGRAPHIC SKETCH 

of the

## KLAMATH PEOPLE.

# THE KLAMATH INDIANS 0F SOUTHWESTERN 0REGON. 

By Albert S. Gatschet.<br>\section*{ETHNOGRAPHIC SKETCH OF THE PEOPLE.}

## INTRODUCTION.

The Klamath people of North American Indians, the subject of this descriptive sketch, have inhabited from time immemorial a country upon the eastern slope of the Cascade Range, in the southwestern part of the territory now forming the State of Oregon. That territory is surrounded by mountain ridges and by elevations of moderate height, and watered by streams, lakes, marshes, and pond-sources issuing from the voleanic sands covering the soil. The secluded position of these Indians within their mountain fastnesses has at all times sheltered them against the inroads of alien tribes, but it has also withheld from them some of the benefits which only a lively intercourse and trade with other tribes are able to confer. The climate of that upland country is rough and well known for its sudden changes of temperature, which in many places render it unfavorable to agriculture. But the soil is productive in edible roots, bulbs, berries, and timber, the limpid waters are full of fish and fowl, and game was plentiful before the white man's rifle made havoc with it. Thus the country was capable of supplying a considerable number of Indians with food, and they never manifested a desire to migrate or "be removed to a better country."
The topography of these highlands, which contain the headwaters of the Klamath River of California, will be discussed at length after a mention of the scanty literature existing upon this comparatively little explored tract of laud.

## BIBLIOGRAPHY.

The list below contains titles of books and articles upon the two tribes of the Klamath people, which are of scientific interest, whereas others, also mentioned in this list, are of popular interest only. Several of the latter I have never been able to inspect personally. During the Modoc war a large number of articles apperred in the periodical press, expatiating upon the conduct of that war, the innate bravery of the Indian, the cruelty of the white against the red race, and other commonplace topies of this sort. As the majority of these were merely repetitions of facts with which every reader of the political press was then familiar, I did not secure the titles of all of these articles.

## Army and Navy Journal:

A weekly periodieal published in New York from 1863 to 1880. 40. During the Modoc war of 1872-1873 many strategic artieles appeared in it upon the conduct of that war, composed by a speeialist.
Atwell, William:
War eorrespondent of the periodical "Saeramento Reeord" at the time of the Modoe war. Mentioned in Note to Texts (p. 48).
Bancroft, Hubert Howe:
(1) In section: "The Northern Californians" (Vol. I, pp. 326-361) of "Native Races," where the Kłamath Lake and Modoc tribes are referred to in conneetion with other tribes. Notes and literature, pp. 443, 444.
(2) Remark on the Klamath language; list of numerals. In "Native Raees," Vol. III, p. 640. (San Franeiseo, Cal., 1882. 80.)
Bland, T. A.:
Life of Alfred B. Meaeham, together with his lecture, "The tragedy of the lara beds," delivered in Park Street Church, Boston, Mass. Illustrated by seven portraits. Washington, 1883. $8^{\circ}$. 48 pp . (Published by the author.)
Clark, W. O.:
Vocabulary of the Modoe of Southern Oregon. Manuseript, $12 \mathrm{pp}, 4^{\circ}$. Colleeted in 1878 at Yancks. In the Library of the Bureau of Ethnology.
Clarke, William J.:
Rock piles and aneient dams in the Klamath Valley. Ameriean Antiquarian, 1885, pp. 40, 41. (Refers to the obstruetions in the river at Linkville, etc.)
Drake, Samuel G.:
The Aboriginal Races of North Ameriea, ete. Fifteenth cdition. By Professor Williams. New York, 1880. 80. Appendix: The Modocs and the Modoe War, pp. 707-714.

Fields, Captain, U. S. Aray:

The Modoe War. The canses which led to it and the results. Correspondenee of the Constitution, Athanta, Ga., Sundays, Oetober 13 and 20, 1889.
Frémont, Col. J. C.:
The Exploring Expedition to the Roeky Mountains, Oregon and California, ete. New York and Auburn, 1856. Small 80. 456 pp . and map. (May, 1842, to August, 1844.) Klanath Country of Oregon, pp. 283-294. Snake Indians, p. 297. Summer Lake, p. 290. Abert Lake, p. 292. (Passed only through the eastern part of the country and from Klaniath Marsh northward.)
Gabb, Dr. William M.:
Voeabulary of the Klamath of Sonthern Oregon. MS. 10 leaves. 40. 150 words. Colleeted by means of the Chinook Jargon in 1864. In the Library of the Bureau of Ethnology.

## Gatschet, Albert S.:

(1) Adjeetives of eolor in Indian Languages. In Ameriean Naturalist, XIII, pp. 475-485. Philadelphia, 1879.
(2) The same was, with few ehanges only, published in German under the heading: "Farbenbenennungen in nordanerikanischen Spraehen." In Zeitsehrift fiir Ethnologie, Vol. XI, Berlin, 1879. The first of the seven languages spoken of is the Klamath of Oregon.
(3) Sketeh of the Klamath language of Southern Oregon. In Amer. Antiquarian, I, pp. 81-84. (1878-1879.)
(4) Mythologic text in the Klamath language of Southern Oregon, with translation and comments. Ibid., I, pp. 161-166.
(5) The numeral adjeetive in the Klamath language of Southern Oregon. Ibid., II, pp. 210-217. (1879-1880.)
(6) Volk und Sprache der Maklaks im siidwestlichen Oregon. In Globus, illustr. Zeitschrift f. Läuder. und Völkerkunde, Vol. 35, No. 11, pp. 167-171 und 187-189. 40. Braunsehweig, 1879.
(7) Three short texts were published in the First Anmual Report of the Bureau of Ethnology, Washington, 1831. Imp. So. pp. 58:-587, with commentaries: Details of a conjurer's practice; The Relapse; Sweat Lodges. (They are also embodied in the author's Report, under "Texts."
Hadley, Lewis F.:
Voeabulary of the Modoc. Manuseript in three blank books, ou 34 unpaged leaves. $4^{0}$. In the Library of the Bureau of Ethmology.
Hale, Horatio:
Ethnography and Philology of the United States Exploring Expedition during the years 1838-1842, under the command of Charles Wilkes, U. S. Nary. This work furms Vol. VI of the report of that expedition, and was published Philadelphia, 1846. 40. It enntains about 190 words of the "Lntnami" or Klamath language, pp. 570-629. The words whieh Mr. Malo obtained for father, nine, yes, dead show that his informant was a Klamatli Lake and not a Modoc Indian.

## Jackson, William Menry:

Photographs of Klamath Lake and Modoc Indians were taken by him, and the subjects described in his Deseriptive Catalogne of the Photographs of the U. S. Gcological Survey of the Territorics, from 1869 to 1873, inclusive; F. V. Hayden in charge. $8^{\circ}$.
Latham, Robert G.:
Comparative vocabnlary of the Lutuami, Shasti, Palaik, and Yakon. In "Elcments of Comparative Philology," London, 1862, pp. 407-403. Compare with it the list he gives in "Transactions of Philological Socicty of London," 1856, pp. 74-76.
Mattinews, Dr. Washington :
Notes and Vocabulary of the Modoc. Obtained from Slílks or George Demy, prisoner at Alcatraz Fort, in the harbor of San Francisco, CaI. Manuseript, pp. 50 , fol.
Meaciam, A. B.:
(1) Wigwam and Warpath, or the Royal Chief in Chains, with portraits, cte. Boston, John P. Dale \& Co.; second edition, 1875, " 80.700 pp .
(2) Winema and her People. Hartford, Conn., Bliss \& Co., 1876. $122^{\circ} 160 \mathrm{pp}$.

Miller, Joaquin:
Life amongst the Modocs: Unwritten History. London, Bentley, 1873. So. 400 pp. Also with the title transposed: Unwritten History: Life anongst the Modocs. Illustrated from new desigus. Hartford, Conn., Amer. Publishing Co., 1874. $8^{\circ} .445 \mathrm{pp}$.
Monocs, the, and Deatir of General Canby:
In the "Republic," of Washington, D. C., Vol. I, 118. (1873.)
Modoc Massacre, the:
In Harper's Monthly, Vol. 47, p. 139. (1873.)
Müller, Dr. Friedrich:
Grundriss der Sprachwissenschaft, Vol. II. (Wien, 1882.) P. 431, the numerals of the "Lutnami."
Newberry, J. S., M. D.:
Geology of Pit River and Klamath Basins. In "Report upon Explorations for a Railroad Route from the Sacramento Valley to the Columbia River; made by Lient. R. S. Williansou." Washington, 1855, Vol. VI, Part II, pp. 34-39.
New York Herald, the:
J. G. Bennett, the proprietor of this daily paper, had dispatched a special correspondent to the seat of the Modoc war, who sent home many loug and graphic accounts, which were published in the Herald, accompanied by maps.
l'owers, Steiphen:
(1) Vocabnlary of the Modoc Language. Manscript, 1 fol, sheet, 31 words. In Library of Burean of Etlinology.
(2) The Modok. Forms Chapter XXVII of his "Tribes of California," printed in J. W. Powell's Contributions to North American Ethoology. Washington, 1877. Quarto. Vol. III, pp. 252-266; numerals also on p. 45.
(3) The Modocs. Forms No. 8 of a serial of Powers's articles: "The Californian Indians" (1872-1874), and is coutained in the Overland Monthly, San Francisco, Carmany \& Co., 1873, June number, pp. 535-545. With a myth, "The woman of stone" (at Nilakshi mountain).
Russell, Israel C.:
A Geologienl Recomaissance in Southern Oregon. In Powells Fourtl Anmal Report of U. S. Geological Survey, Washington, 1884. Imper. octavo; pl. 433 to 461, with maps and illustrations. This article has furnished several data to my "Ethnographic Sketch."
Shastas, the, and them Neighbors. 1874:
A manuseript in the possession of Mr. H. H. Bancroft, San Francisco. Turneli, W. M.:

Scraps of Modoc History. In Overland Monthly of San Francisco, Vol. XI, 21-25. (1873.)
Victoti, Mrs. Frances Fuller (of Salem, Oregon):
(1) History of the Modoc War. In manuscript.
(2) Indians of Oregon. In Overland Monthly of San Francisco, Vol. VII, 344-352, especially p. 348. (1871.)
(3) All over Washingtou and Oregon. Sau Francisco, 1872.

Williamson, Lieut. R. S., and Crook, Lieut. George H.:
Vocabulary of the Klamath Langnage. In Reports of Explorations, Vol. VI, Part 1, pp. 71-72, Washington, 1857. $4^{\circ}$.

## GEOGRAPHY OF THE KLAMATH HIGHLANDS.

The first part in the historical and social study of a tribe or nation must be a thorough examination of the country and of the climate (in the widest sense of this term) in which it has grown up, for these two agencies give character to peoples, races, languages, institutions, and laws. This principle applies equally to the cultured and to the ruder or less developed populations of the globe, for none of them can possibly hold itself aloof from the agencies of nature, whether acting in a sudden manner or gradually, like the influences of climate. The races inhabiting coasts, islands, peninsulas, jungles, plains, prairies, woodlands, foot-hills, mountains, and valleys differ one from another in having distinguishing characteristic, types indelibly impressed npon their countenances by their different environments. That npland and mountaineer tribes have made very different records from those of nations raised in plains, lowlands, on coasts and islands is a fact of which history gives us many well-authenticated instances.

## THE HOME OF THE PEOPLE.

The home of the Klamath tribe of southwestern Oregon lies upon the eastern slope of the southern extremity of the Cascade Range, and very nearly coincides with what we may call the headwaters of the Klamath River, the main course of which lies in Northern California. Its limits are outlined in a general manner in the first paragraph of the treaty conchuded between the Federal Government and the Indians, dated October 14, 186t, which runs as follows: "The Indians cede all the country included between the water-shed of the Cascade Mountains to the mountains dividing Pit and McCloud Rivers from the waters on the north; thence along this water-shed eastwards to the southern end of Goose Lake; thence northeast to the southerı end of Harney Lake;* thence due north to the forty-fourth degree of latitude; thence west along this same degree to Cascade Range." It must be remarked that the liomes and hunting-grounds of two "bands" of the Suake Indians were included within these limits, for these people were also made participants to the treaty.

Here, as with all other Indian tribes, the territory claimed must be divided into two parts, the districts inclosing their habitual dwelling-places and those embodying their hunting and fishing grounds, the latter being of course much larger than the former and inclosing them. The habitual latunts and dwelling-places of the tribes were on the two Klamath Lakes, on Klamath Marsh, on Tule Lake, and on Lost River. Some of these localities are inclosed within the Klamath Reservation, of which we will speak below.

The Cascade Range is a high mountain ridge following a general direction from north to south, with some deflections of its main axis. The line of perpetual snow is at least 10,000 feet above the sea-level, and the altitude of the highest peaks about 12,000 to 14,000 feet. On the west side the sloping is more gradual than on the east side, where abrupt precipices and steep slopes horder the Klamath highlands and the valley of Des Chintes River. The range is the result of npheaval and enormous volcanic

[^0]eruption, the series of the principal peaks, as the Three Sisters, Mount Jefferson, and Mount Hood, marking the general direction of the ridge.

The formation cousists of a dark and lard basaltic and andesitic lava, whicl also forms numerous extinct volcanic cones and basins lying on the cast side of the range (Mount Scott, Crater Lake, craters in Sprague River valley, etc.). This formation underlies the whole of the Klamath River headwaters, but stratified deposits cover it at many places, consisting of sandstone, infusorial marls, volcanic ashes, pumice-stonc, etc. Prof. J. S Newberry* describes this volcanic rock as "a dark vesicular trap".

East of the basin of the Klamath Lakes and south of the Columbia River water-shed lies an extensive territory extending to the east towards Owyhee River, and having its largest area in Nevada and Utah. It has been called the Great Basin of the Interior, and has an average altitude of 5,000 feet. The numerous fault-fissures intersecting it from north to south form its principal genlogic feature. In the Quaternary period long and narrow lakes marked those faults on the obverse side of their dip; and even now, when evaporation has left these depressions almost dry, small bodies of water mark the site of the fissures even where erosion lias obliterated most traces of a fracture of the earth's crust. The most conspicuous of these fissures in the basaltic formations are in Oregon, northern California and Nevada: the valley of Quinn River, Alvord Valley with Pueblo Valley, Guaṇo Valley, Warncr Lake with Long and Surprise Valley, Abert, Summer, and Silver Lake Valley. A geologic reconnaissance of the country west of this northwestern portion of the Great Basin, the central parts of which were once filled by the Quaternary Lake Lahontan, with its enormous drainage basin, would probably prove a similar origin for the two Klamath Lakes with Klamath Marsl, and for Goose Lake Valley.

These two secondary basins lie nearest the base of the great mountain wall of the Cascade Range, and therefore receive a larger share of the rain precipitated upon it than the more distant ones. The supply of water received during the year being thus larger than the annual evaporation, the excess flows off in the streams which drain the basin. There is much analogy between the basin of the Klamath Lakes and that of Pit River;

[^1]both form elongated troughs, and the waters escaping from them reach the lowlands through deep cuts in the resistant material. The difference lies only in this, that the drainage of the Klamath headwater basin has been less complete than that of the Sacramento and upper Pit River; and large portions of its surface are still occupied by bodies of water.

The lakes which show the location of longitudinal faults are the more shallow the more distant they are from the Cascade Range, and those which possess no visible ontlet necessarily contain brackish water, as the alkaline materials in them are not removed by evaporation. It is a noticeable fact that those lakes which were nearest the seats and haments of the Klamath Indians are all disposed in one large circle: Klamath Marsh, Upper and Lower Klamath Lakes, Rhett or Tule Lake, Clear or Wright Lake, Goose Lake, Abert Lake, Summer Lake, Silver Lake with Pauline Marsh. Besides this sereral other depressions now filled with marshes and alkali flats show the existence of former water-basins.

## TOPOGRAPHIC NOTES.

The most prominent object of nature visible from the level parts of the Klamath Rescrration is the Cascade Range with its lofty peaks. Seen from the east shore of Upper Klamath Lake, it occupies nearly one hundred and fifty degrees of the horizon. Thongh Shasta Butte, visible on the far south, does not properly belong to it, the ridge rises to high altitudes not very far from there, reaching its maximum height in the regular pyramid forming Mount Pitt. 'This pyramid is wooded on its slopes, and hides several mountain lakes-Lake of the Woods, Buck Lake, and Aspen Lake—on its southeastern base. Following in a northern direction are Union Peak, Mount Scott, and Mount Thiclsen, with many elevations of minor size. At the southwestern foot of Mount Scott lies a considerable lake basin about twenty miles in circumference, and at some places two thousand feet below its rim. The water being of the same depth, this "Crater Lake" has been pointed out as probably the deepest lake basin in the world ( 1,996 feet by one sounding), and it also fills the largest volcanic crater known. At its southwestern end a conical island emerges from its brackish waters, which is formed of scorire-proof that it was once an eruption crater. The altitude of the
water's surface was found to be 6,300 feet; and this remarkable lake is but a short distance south of the forty-third degree of latitude. Capt. C. E. Dutton, of the U. S. Geological Survey, las made an examination of the lake and its surroundings, and gave a short sketch of it in the weekly "Science" of New York, February 26, 1886, from which an extract was published in the "Ausland" of Stuttgart, 1887, pp. 174, 175.

On the west side of Mount Scott and Crater Lake rise the headwaters of the North Fork of Rogue River, which run down the western slope, and a narrow trail crosses the ridge south of the elevation. Northeast of it and west of Walker's Range lies a vast level .plain strewed with pulverized pumice-stone, and forming the water-shed between the affluents of the Klamath and those of Des Chutes River, a large tributary of the Columbia.

Upper Klanath Lake, with its beautiful and varied Alpino scenery, verdant slopes, blue waters, and winding shores, is one of the most attractive sights upon the reservation. Its principal feeder is Williamson River, a water-course rising about thirty miles northeast of its moutl. After passing through Klamath Marsh it pursues its winding course south through a cañon of precipitons hills, six miles in length; then reaches a wide, fertile valley, joins Sprague River coming from Yaneks and the east, and after a course of about sixty miles empties its volume of water into Upper Klamath Lake near its northern end. The elevation of this lake was found to be about eighty feet higher than that of Little Klamath Lake, which is 4,175 feet. Wood River, with its affluent, Crooked River, is another noteworthy feeder of the lake, whose shores are partly marshy, partly bordered by prairies and mountains. The lake is embellished by a number of pretty little islands, is twenty-five miles long in an air-line, and varies between three and seven miles in width. On the eastern shores the waters are more shallow than on the western.

The waters of the lake first empty themselves through Link River (I-ulalóna), and after a mile's course fall over a rocky ledge at the town of Linkville. From there onward the stream takes the name of Klamath River: Passing through a marsh, it receives the waters of Little Klamath Lake, then winds its circuitous way towards the Pacific Ocean through a hilly and wooded country, cañons, and rapids, innavigable for craft of any
considerable size.* Hot springs of sulphuric taste flow westward east of Linkville, one of them showing a temperature of $190^{\circ} \mathrm{Fahr}$.

The Klamath Reservation is stndded with a large number of isolated and short volcanie hill ridges, with a general direction from northwest to sontheast. South of Klamath Marsh there are elevations culminating at 5,650 and 6,000 feet, and in Fuego Mountain 7,020 feet are attained. Yámsi Peak, between Klamatlı Marsh and Sykan Marsh (5,170 feet) reaches an altitude of not less than 8,242 feet, thus rivaling many peaks of the Cascade Range. The Black Hills, south of Sykan (Saikéni) Marsh, rise to 6,410 feet, but are surpassed by several elevations soutl of Sprague River, near the middle comrse of which the Yáneks Agency ( 4,450 feet) is situated. Spraq̧ue River (P’laikni kóke), the most considerable tributary of Williamson River, drains a valley rich in productive bottoms and in timber:

The basaltic ridge, which forms a spur of the Cascade Range and passes east of Fort Klamath (I-ukak), slopes down very abruptly toward the Quaternary lake basin, now forming a low marsly prairie and watered by Wood River (E-ukalkshíni kóke), which enters upper Klamath Lake near Koháshti and by Seven Mile Creek, nearer the Cascade Range. This basaltic spur, called Yínalti by the Indians, represents the eastern side of a luge faultfissure. Its altitude constantly decreases until it is crossed by a rivulet oneeighth of a mile long, called Beetle's Rest ('Tgúlutcham Kshutélsh), which issues from a poud, drives a mill, and then joins Crooked River (Yánalti kóke, or Tutashtalíksini kóke). This beautiful spring and stream were selected by the Govermment as the site for the Klamath Agency buildings. The old agency at Koháshti (Guhuáshkshi or "Starting-place") on the lake, three miles south, was abandoned, and a subagency established at Yáneks. The agency buildings are hidden in a grove of lofty pine trees. South of these the ridge rises again and culminates in an elevation, called Pítsua ( 4,680 feet). The junction of Sprague and Williamson Rivers is marked by a rock called Ktái-Tupákshi, and described in Dictionary, page 149, as of mythic fame. Sonth of Sprague River the ledge rises again, and, approaching close to the lake shore, forms Modoc Point, a bold head-

[^2]land, which culminates in an elevation east of it, measuring 6,650 feet, in Nilaks Mountain (Nílakshi, "Daybreak"), on the lake shore, and in Swan Lake Point ( 7,200 feet), about eight miles from Klamath Lake. A deep depression south of this height is Swan Lake Valley (4,270 feet), and a high hill north of the two, near Sprague River, is called Saddle Mountain ( 6,976 feet). Yáneks Butte, with a summit of 7,277 feet, lies midway between the headwaters of Sprague River and the Lost River Valley. A long and steep ridge, called the Plum Hills, rises between Nilaks and the town of Linkville.

We now arrive at what is called the "Old Modoc Country." The main seat of the Modoc people was the valley of Lost River, the shores of Tule and of Little Klamath Lake. Lost River follows a winding course about as long as that of Willianson River, but lies in a more genial climate. The soil is formed of sandstone interstratified with infusorial marls. Nushaltkága is one of its northern side valleys. At the Natural Bridge (Tilhuántko) these strata liave been npheaved by a fault, so that Lost River passes underneath. The sandstone is of volcanic origin, and contains pumice and black scoria in rounded masses, often of the size of an egg. The largest part of Tule Lake, also called Rhett Lake and Modoc Lake (Móatak, Móatokni é-ush), lies within the boundaries of California. It is drained by evaporation only, has extinct craters on its shores, and the celebrated Lava Beds, long inhabited by the Kómbatwash Indians, lie on its southern end.

Clear Lake, also called Wright Lake (by the Modocs, Tchápszo), is a crater basin, with the water surface lying considerably below the surrounding country. Its outlet is a tributary of Lost River, but is filled with water in the cooler season only. Little or Lower Klamath Lake (Aká-ushkni e-ush) is fed by Cottonwood Creek, and on its southern side had several Indian settlements, like Agáwesh. It has an altitude of 4,175 feet, and belongs to the drainage basin of Klamath River. South of these lakes there are considerable volcanic formations, which, however, lie beyond the pale of our descriptive sketch.

Peculiar to this volcanic tract is the frequent phenomenon of the pond sources (wélwash, nushaltkíga). These sources are voluminous springs of limpid water, which issue from the ground at the border of the ponds with
a strong bubbling motion, withont any indication of other springs in the vicinity. They are met with in soil formed of volcanic sands and detritus, have a rounded shape with steep borders, and form the principal feeders of the streams into which they empty. Ponds like these mainly occur in wooded spots. Some of them have a diameter of one hinndred feet and more, and are populated by fish and amphibians of all kinds.

The lake region, east of the Reservation was often visited in the hunting and fishing season by the Klamath Lake, Modoc, and especially by the Suake Indians. Goose Lake was one of the principal resorts of the Snake and the Pit River Indians; and even now the numerous rivulets flowing into it make its slores desirable to American stockmen and settlers. Warner (or Christmas) Lake, fully thirty-five miles in length, was once enlivened by the troops camping at Fort Warner, on its eastern side.* Chewaukan Marsh (Tchma $\bar{e}^{-}$ni) has its name from the tchna or "water potato", the fruit of Sagittaria, and is by its outlet comected with Abert Lake.

The Indians of the Reservation annually repair about the month of June to Klamath Marsh (Énkshi) to fish, hunt, and gather berries and wókash or pond-lily seed, which is one of their staple foods. Its surface is somewhat less than that of Upper Klamath Lake. Its shores are high on the sontheastern, low and marshy on the northwestern side. Water appears at single places only, insufficient to warrant the marsh being called, as it often is, a lake.

The Oregonian portions of the country described belong politically to Klamath and to Lake Comities, the county seats of which are Linkville and Lakeview, on the northern end of Goose Lake. The latter place also contains a United States land office.

FLORA AND FAUNA.
Vegetation usnally gives a characteristic stamp to a country, but in arid districts, as those of the Klamath highlands, it is rather the geological features which leave an impress on our minds The further we recede from

[^3]the Cascade Range and its more humid atmosphere the less vegetation is developed. The lake shores and river banks, when not marsliy, produce the cottonwood tree and several species of willows, and the hills are covered with the yellow or pitch pine and the less frequent western cedar. 'In the western parts of the Reservation large tracts are timbered with pitch pine, which seems to thrive exceedingly well upon the volcanic sands and detritus of the hilly region. These pines ( $k \bar{o}^{\prime} \mathrm{sl}_{1}$ ) are about one hundred feet in height, lave a brownish-yellow, very coarse bark, and branch ont into limbs at a considerable height above the ground. They stand at intervals of twenty to fifty feet from each other, and are' free from manzanita bushes and other indergrowth except at the border of the forest, leaving plenty of space for the passage of wagons almost everywhere. A smaller pine species, Pinus contorta (kápka, in Modoc kúga), which forms denser thickets near the water, is peeled by the Indians to a height of twenty feet when the sap is ascending, in the spring of the year, to use the fiber-bark for food. Up high in the Cascade Range, in the midst of yellow pines, grows a conifera of taller dimensions, the sugar-pine (ktéleam $\mathrm{ko}^{-}$'sh). The hemlock or white pine (wā'ko), the juniper ( $k t i^{\prime} l o$ ), and the mountain mahogany (yúkmalam) are found in and south of Sprague River Valley.

The lake shores and river banks produce more edible fruits and berries than the marsly tracts; and it is the shores of Klamath and Tule Lakes which mainly supply the Indian with the tule reed and scirpus, from which the women manufacture mats, lodge-roofs, and basketry. The largest tule species (má-i) grows in the water to a height of ten feet and over, and in the lower end of its cane furnishes a juicy and delicate bit of food. Woods, river sides, and such marshes as Klamath Marsh, are skirted by various kinds of bushes, supplying berries in large quantities. The edible bulbs, as camass, $k^{\prime}{ }^{\prime} l$, l'bá, ipo, and others, are found in the prairies adjacent. Pond-lilies grow in profusion on lake shores and in the larger marshes, especially on the Wókash Marsh west of Linkville, and on Klamath Marsh, as previously mentioned. The Lost River Valley is more productive in many of these spontaneous growths than the tracts within the Reservation.

It is claimed by the Klamath Lake Indians that they employ no drugs of vegetal origin for the cure of diseases, because their country is too cold
to produce them. This is true to a certain extent; but as there are so many plants growing there that nareotize the fish, how is it that the country produces no medical phants for the cure of men's diseases? Of the plant she'édsh, at least, they prepare a drink as a sort of tea.

The fauna of the Klamath uplands appears to be richer in species than the vegetal growth. What first strikes the traveler's attention on the eastern shore of the Upper Lake is the prodiginus number of burrows along the sandy road, especially in the timber, varying in size from a few inches to a font in diameter. Ther are male hy chipmonks of two species, and others are the dens of badgers, or of the bhe and the unve common brown squirrel. The coyote or prairie-wolf makes burrows also, but this animal has lately become scarce. No game is so frequent as the deer. This is either the black-tail deer, (shuá-i, Cervus columbianus), or the white tail deer (múshmush, Cariacus virginianus mucrurus), or the mule-deer (pakólesh, Cervus macrotis). Less frequent is, the antelope (tehé-u, Antilocapra americana), and most other four legged game must be sought for now upon distant heights or in the deeper canons, as the elk (vín), the bear in his three varieties (black, cinnamon, and grizzly; wità'm, náka, lû'k), the lynx (shlóa), the gray wolf (kï'-utchish), the silver or red fox (wán), the little gray fox (kétchkatch), the cougar (táslatch), and the mountain sleep ( $k \delta-i l$ ). Beavers, otters, minks, and woodclucks are trapped by expert Indians on the rivers, ponds, and brooklets of the interior.

The shores of the water-basins are enlivened by innumerable swarms of water-fowls, (mä'mäkli), as ducks, geese, herons, and cranes. Some can be seen day by day swimming about gracefully or fishing at Modoc Point (Nilakshi) and other promontories, while others venture up the river courses and fly over swampy tracts extending far inland. Among the ducks the more common are the mallard (wéks), the long-necked kilidshiks; among the geese, the brant (lalak) and the white goose (waíwash). Other waterbirds are the white swan (kúsh), the coot or mudhen (túhush), the loon (típlal), the pelican (yamal or kúmal), and the pinguin (kuitsia). Fishhawks and bald-headed eagles (yanzal) are circling about in the air to catch the fish which are approaching the water's surface unaware of danger. Marsh-hawks and other raptores infest the marshes and are lurking there
for small game, as field-mice, or for sedge-hens and smaller birds. The largest bird of the country, the golden eagle, or Californian condor ( $p$ 'laíwash), has become scarce. Blackbirds exist in large numbers, and are very destructive to the crops thronghout Oregon. Other birds existing in several species are the owl, lark, woodpecker, and the pigeon. Migratory birds, as the humming-birds and mocking-birds, visit the Klamath uplands, especially the Lost River Valley, and stop there till winter.

The species of fish found in the country are the mountain trout, the salmon, and several species of suckers. Of the snake family the more fiequent species are the garter-snake (wíshink), the black-snake (wáměnigsh), and the rattlesnake (ké-ish, $\mathrm{ki}^{-1}$ sh). Crickets and grasshoppers are roasted and eaten by the Indians, also the chrysalis of a moth (púlquantch).

## THE ASPEOTS OF THE CUUNTRY.

Elle est riante ainsi que l'Italie, Terrible ainsi que les rives du Nord.

The Klamatlı plateau presents very different aspects and produces very different impressions, according to the observer's condition and the character of the localities he enters or beholds. Traveler's coming over the monotonous rocky or alkaline plains extending between Malheur Lake and the Reservation are gladdened at the sight of rivulets and springs, imparting a fresher verdure to the unproductive soil, and greet with welcome the pineries which they behold at a distance. Feelings of the same kind penetrate the hearts of those who enter the highlands from the Pit River country of California when they come to the well-watered plains of Lost River after crossing the desolate lava formations lying between. The scenery can be called grand only there, where the towering ridge of the Cascade Mountains and the shining mirrors of the lakes at their feet confront the visitor, surprised to see in both a reproduction of Alpine landscapes in the extreme West of America.* The alternation of jagged and angnlar outlines with long level ridges on the horizon suggests, and the peculiar lava color retained by

[^4]the lighest peaks confirm the eruptive origin of these mountains. The pure azure sky and the perpetual silence of nature reigning in these uplands add impressions of grandeur which it is impossible to describe. The sense of the beautiful has no gratification in the austere forms of these mountains, but the blue and limpid waters of the lakes, their numerous islands, and the lovely green of the shores, delight it in the highest degree.

The other eminences perceptible on the horizon lack the boldness of outline seen upon the main ridge, and with their dusky timbers deeply contrast with it. They seem monotonous and commonplace, and people easily impressed by colors will call them somber. The open country, whether marshes, plains, clearings, meadows, or bare lills, presents an extremely bleak aspect, especially when under the influence of a hot summer sun. Its unvarying yellowish lue, produced by the faded condition of the coarse grasses, renders it monotonous.

The solitude and serenity of these places exercise a quieting influence upon the visitor accustomed to the noisy scenes of our towns and cities. Noiselessly the brooks and streams pursue their way through the purifying volcanic sands; the murmur of the waves and the play of the water-birds, interrupted at times by the cry of a solitary bird, are the only noises to break the silence. Beyond the few settlements of the Indian and away from the post-road, scarcely any trace of the hand of man reminds us of the existence of human beings. There Nature alone speaks to us, and those who are able to read history in the formations disclosed before hin in the steeper ledges of this solitary corner of the globe will find ample satisfaction in their stud $y$.

The Klamath plateau, though productive in game, fish, and sundry kinds of vegetable food, coinld never become such a great central resort of Indian populations as the banks of Columbia River. The causes for this lie in its secluded position and chiefly in its climate, which is one of abrupt changes. The dryness of the atmosphere maintains a clear sky, which renders the summer days intensely hot; the sun's rays become intolerable in the middle of the day at places where they are reflected by a sandy, alkaline, or rocky soil and not moderated by passing breezes. Rains and hailstorms are of rare occurrence, and gathering thunder clouds often dissolve or "blow
over," so that the running waters never swell, but show the same water level throughont the year. Nights are chilly and really cold, for the soil reflects against the clear sky all the heat received from the sun during the day, and the dry night air pervading the highlands absorbs all the moisture it can. Winters are severe; snow begins to fall early in November, and in the later months it often covers the ground four feet high, so that the willow lodges (not the winter houses) completely disappear, and the innates are thus sheltered from the cold outside. The lakes never freeze over entirely, but ice forms to a great thickness. The cold nights produce fiosts which are very destructive to crops in the vicinity of the Cascade Range, but are less harmful to gardening or cereals at places more distant; and in Lost River Valley, at Yáneks-even at Linkville-melons, turnips, potatoes, and other vegetables rarely fail. The mean annual temperature as observed some years ago at Fort Klamatlı was $40.47^{\circ}$ Falır.

There are several instances in America where highlands have become centers of an aboriginal culture. Such instances are the plateaus of Anahuac, Guatemala, Bogotí, and of Titicaca Lake. They contained a dense population, more cultured than their barbaric neighbors, whom they succeeded in subjugating one after the other through a greater centralization and unity of power. The Klamath highlands can be compared to the plateaus above named in regard to their configuration, but they never nourished a population so dense that it could exercise any power analogous to that above mentioned. Moreover, there was no intellectual and centralizing element among these Indians that could render them superior to their neighbors, all of whom maintained about the same level of culture and intelligence

## TOPOGRAPHIC LIST OF CAMPING PLACES.

To form a correct idea of the dissemination of Indians in this sparsely inhabited country, the following lists of camping places will furnish serviceable data. The grounds selected by the Maklaks for camping places are of two kinds: either localities adapted for establishing a fishing or hunting camp of a few days' or weeks' duration or for a whole summer season, or they are places selected for permanent settlement. Winter lodges (luldamalaksh) or slab houses are often built at the latter places; whereas the
transitory camps are marked by fiail willow lodges (látchash, stinā'sh) or other light structures. Indian camps are as a rule located near rivers, brooks, marshes, springs, or lakes. Hunters generally erect their lodges in convenient places to overlook a considerable extent of territory.

In the lists below the order in which the localities are mentioned indicates the direction in which they follow each other. I obtained them from the two interpreters of the reservation, Dave Hill and Charles Preston; and as regards the old Modoc country, from Jemnie Lovwer, a Modoc girl living in the Indian 'lerritory, who remembered these places from her youth. The grammatic analysis of the local names will in many instances be found in the Dictionary.

## Camping places on klamath marsir.

The permanent dwellings upon this marsh have all been abandoned; but the Modocs and Klamath Lakes, together with some Snake Indians from Sprague River, resort there annually, when the pond-lily seed and the berries ripen, for a period of about six weeks. Its shores were permanently inlabited in 1853, when visited by the United States exploration party under Lieutenants Williamson and Abbott, and even later. Dave Hill's list below follows the localities in their topographic order from northeast to southwest and along the southeastern elevated shore of the marsh, which at some places can be crossed on foot. A few rocky elevations exist also on the northeast end of the nuarsh.

Katā'gsi "stumpy bushes."
Táktaklishkshi "reddish spot."
Yaúkeclam Láshi "eagle wing."
Vísh=Lama'ds "projecting willow."
Sjuúklish Láwish "sweat lodge on promontory."
Mbákualsi "at the withered tree."
Kmuteluyáksi "at the old man's rock;"
a man-shaped rock formation near the
open waters of the marsh and visible at some distance.
Lalawas $\chi$ énii "slaty rock."
Taktxísh "cricket noise."
Tsásam Péras "skunk's dive."
Ktai-Wasi "rocky hollow."

Suals $\chi$ ēni "at the rock-pile."
Lúlpakat "chalk quarry."
Kapgā'ksi" dwarf-pine thicket."
Wáptas $\chi$ äni "water moving through ponds perceptibly."
Tchókeam Psísh "pumice-stone nose."
Káksi "raven's nest."
Iwal "land's end."
Luyánsti " within the circle."
Yaúkělain Suólash "eagle nest."
Tchíkas=IValákish "bird-watch;" secreted spot where hunters watch their feathered gamc.
Tuílkat "at the small rail pyramid."
Awalnasle $\chi \bar{e}^{\prime} u i$ "at the island."

Txalaugiplis "back away from the west;" probably referring to a turn of the shoreline.
Wák=Talíksi "white pine on water-linc." Wíshinkaın Tínnash "drowned snake;" place where a garter snake wits found drowned in the open waters of the marsh.

Lg $\hat{u}^{\prime} m=-\ddot{A}$-ushi "coal lake," with waters looking as black as coal.
Símile "at the inouth or outlet."
Núsksì "skull-place;" a hunau skull was once found there. This is one of the spots where the natives subincrge their dug-out cauoes in the inud or sand at the bottom of the lake for the wintry scason.

Some of the above places near the ontlet are also mentioned in Pete's Text on the "Seasons of the Year," and the following additional may be inserted here from it ( $74,15-17$ ):
Lemé-isham Nutē'ks "impression of thuu- Stópalsh-tama'ds "peeled pine standing derbolt."
Lál'lāks "steep little eminence."
alone."
Kák=Ksháwaliäksh "raven on the pole."

## CAMPS ALONG WILLIAMSON RIVER.

In this list Dave Hill enumerated old camps and present locations of lodges (1877) on both sides of Williamson River, from the lower end of Klamath Marsh ( 4,547 feet) to Upper Klamath Lake. The river runs for six iniles or more through a ravine about two hundred feet deep, and the road follows it on the east side, leading over the hills. The wigwams are built in proximity to the river course. At its outlet Williamson River forms a delta, projecting far out into the lake, and filled with bulrushes.*

Kakago'si "at the ford."
Samka-ush $\chi$ ai'ni "cliffs in the river;" a fishing place.
Yále-alant "clear waters."
Tánuaz=Iutílsh "flat rocks nuder the water."
$\underline{K} \ddot{a}^{\prime} \underline{k}=T a l i ́ k s h$, or K $i^{\prime} \underline{k}=T a l i ́ s h ~ " t w i n ~ r o c k y ~$ pillars."
Awalokaksaksi "at the little island."
Mbíshaksham Wa'sh "where obsidian is found."
T $\chi$ álmakstant (supply: Ktái-Tupáksi) "on the west side of (Standiug Rock)."
Tchpinóksaksi "at the gravegard;" cemetery and ancient cremation ground of the E-ukshikni.
Kta-iti "place of rocks."
Tchikēsi "at the submerged spot."

Kúltam Wā'sh "otter's home."
Stílakgish "place to watch fish."
Yá aga "little willows." Here the road from Linkville to Fort Klamath crosses Williamson River ou a wooden brisge built by the United States Government; here is also the ceuter of the Indian settlements on Williamson River.
Kúls=Tgé-ush, or Kúlsam=Tgé-us "badger standling in the water."
Witä'mantsi "where the black bear was." Kuyám=Skia-iks "crawfish trail."
Slánkoshksöksi, or Shlaukoshkshft'kshi "where the bridge was."
Kokáksi "at the brooklet."
Kuyága, a former cremation place in the vicınity of Yá aga.

[^5]
## CAMPING PLACES AND OTHER LOCALITIES AROUND UPPER KLAMATH LAKE.

Places situated on the lake are as follows:

Skohnáshki, commonly called Koháshti, Kulnáshti by Americans and Indians, "starting place of canoes, boats." Formerly location of the United States Agency; now numbering four or five Indian lorlges.
Tulish, fishing place near the outlet of Williamson River: "spawning place."
Tókna or Tíkua, near the outlet of Williamson River. From this the neighboring part of the lake is sometimes called Túkina Lake.
Nílakshi: lit. "dawn of day;" is now used to designate Modoc Point also, though it properly refers to the Nílaks mountain ridge only.
Á-nshmé, an island in the lake near Modoc Point.

Shuyakē'ksi or "jumping place."
1-nlalóna, or Yulalónan, Link River above the falls at Liuk ville; lit. "rubbiug, moring to and fro." The name was afterwards trausferred to the town of Linkville, which is also called Tiwish $\chi \bar{c}^{\prime}$ 'ni "where the cascade noise is."
U Xótuash, name of an island near Linkville.
Wákaksi Spúklish, a ceremonial sweatlorge ou west side of the lake.
Kímbat "in the rocks." Locality on westerus side of lake, called Rocky Point.
Láknashti "at the hot water." Name for the hot sulphuric springs about half a mile east and northeast of the town of Linkville, and of some others west of that town.

EMINENCES AROUND UPPER KLAMATH LAKE.
Of the majority of these names of hills and mountains I could not obtain the English name, the usual excuse being that they had only Indian names.

## In Cascade Range:

Gíwash, or Géwash, Mouut Scott; Gíwash é ush, Crater Lake, in a depression west of Mount Scott.
Knkumé'kshi "at the caves or hollows;" northwest of the Agency.
Kakásam Yaina "mountain of the great blue heron;" northwest of Ageney.
Mö'dshi Yaína or Long Pine; lit. "on the large mountain;" mō'dshi or mū̌nptehi is a componad of the adjective múni, great, large.
Mbá-ush Shnékash "bosom burut through," legendary name of a mountain located west sonthwest of the Agency; mbá-ush here refers to a piece of buckskin scrv. ing to eover the bosom.

Kē'sh yaíuatat, Mount Pitt, a high mountain lying southwest of the Agency. The Modocs call it Mélaiksi "steepness;" the Klamath Lake term siguifies "snow on the mountaiu," suow-capped peak. Only iu the warmest months Mount Pitt is free of suow.
Tíloo-it, an cmiuence sonth of Monnt Pitt; lit. "drip water."
Wákakshi, Kä'käshti,'Tchiutchíwäsantch, mountains bordering the southwestern portion of Upper Klamath Lakc.

On the east shore of the lake:
Watanks, a hill ou sout theastern side of the lake.
Kálalks, hill near Captain Ferree's house, south of the Nilaks ridge. A ceremonial sweat-lodge stands in the vicinity.

Nilaksi, lit. "daybreak;" a point of the steep ridge of the same name extending from Modoc Point, ou east side of lake, along the shore, and thence in the dircetion of Lost River Valley.
Wálpi, Múyant, 'Tóplaměni, Láxit: other elevations of the Nílaksi hill ridge.
Pitsua, hill ridge extending north of Williamson River.

Yánalti or Yánaldi, a stee 1 voleanic range stretching due north from the Agency to Fort Klamath and beyond it. It is the continuation of the Pitsua rilge.
E-ukalksini Spûklish is an ancicut ceremonial sweat-lodge near Wood River, and not rery distant from Fort Klamath (I-ukák).

## CAMPING PLACES IN SPRAGUE RIVER VALLET.

Of this portion of the reservation I submit two separate lists of local nomenclature. The more extensive one I obtained from Charles Preston, who remembered more place names because he then was employed at the Yáneks subagency, which lies near the center of the Sprague River settlements. Both lists follow the course of the river from east to west. Both Sprague River and the settlements above Yáneks are frequently called P’laí, "above".

Charles Preston's list:
Tsuitiákshi "dog-rose patch," near headwaters.
Ulákshii "cottonwood."
Pálan E-ush "dry lake;" a large flat rock is near the ricer.
Welékag-Kunklěkshákshi "at the stooping old woman," called so from a rock suggesting this name.
Aísh Tkalíks "colmmn rock."
Tsá $\chi c a k ~ T k a ́ w a l s ~ " s t a: ı d i n g ~ b o y, " ~ f r o m ~ a ~$ rock of a boy-like shape.
Suítstis.
Wuksi "fire-place;" at same place as Suítstis.
Tchä'kěle Tsíwish "running with blood;" a little spring with redlish water; a settlement of Snake Indians.
Kōs Tnēts "stauding pine;". settled by Suake Indians.
Kawamkshi'ksh "eel fishery."
Suawati "ford, crossing-place."
Lúldam Tchi'ksh "winter village."
Spawauksh, on bank of Sprague River.

Yaínaga "Little Butte," a hill at the subagency.
Yaínakshi, Yáneks, "at the Little Butte;" location of subagency buildings, two miles from Sprague River, on left-hand side.
Tatátni, a butte or hillock in the vicinity. Lunkosh "willows;" name of a creek, called by Americans "Whiskey Creek."
Skiiwashkshi, or Skii'wash, "projecting rocks"
Kātsi, name of a little water spring.
Lúluknashti "at the warm spring."
Tchákawètch.
Káwa "eel spring;" inhabited by Modocs.
Yétkash.
U $\chi a ́ s l ı k s h$ "in the coomb."
Káktsamkshi, name of a spring and creek at the subagency.
Té-utolsh "spring running down from a hill."
U Xadé ush "planting a willow." (?)
Shlokópashkshi "at the house cavity."

Aralókat "at Little Island," iu Sprague Rirer.
Té-ukish "eoufluenee."

## Dave IItl's list:

Híshtish Luélks "Littlo Sueker Fishery;" on headwaters.
Kaílı=Tálam, for Ktia"lı Tkálannish "juniper tree standing on an eminence."
Hópats "passage" to the timber.
Líldaw Trhi'ksh "winter houses."
Tsïuórlanksh "eoufluence."
Yainakshi "at the Small Butte."

Stáktaks "end of hill."
Kĕmuteham Látsaskshi "at the old man's honse," name of a hill; kemíteham is said to stand here for K'mulámtsam.
Káwanxaini "eel spring."
Kóka đäni, or Kókïiksi "at the ereek."
K'mmï'ksi 'at the cave."
Katsuaits "rocks sloping into the river."
Nakósksiks "river dam, river barrage," established for the capiture of fish.
Ktaí=Típaksi, or Ǩtá i=Tópoks, "standing rock," situated near junetion of Sprague with Williamson Ricer.

## CAMPING PLACES OF THE MODOC COUNTRY.

On Lost River, close to Tule Lake, were the following camping places: Wá-isha, where Lost River was crossed, three or four miles norihwest of the lake, and near the hills which culminate in Laki Peak; Wátchamshwash, a village upon the river, close to the lake; Nakōsh $\chi \overline{\text { én ni }}$ "at the dam," at the mouth of Tule Lake.

On Tule Lake, also called. Modoc Lake, Rhett. Lake: Páshza, or Pás za, name of a creek and a little Modoc village on the northwest shore, whose inhabitants were called Páshzanuash; Kálelk, canp near Pás $\not a$, on northern shore; Lé-ush, on northern shore; Welwashyē’ni "at the large spring," east side of the lake, where Miller's house is; Wukazéni "at the coomb," one mile and a half east of Welwasȟē'ni; Késh-Láktchuish "where ipo grows (on rocks)," on the southeastem side of the lake; Kúmbat "in the caves," on the rocky southern side of the lake, once inhabited by about one hundred Kúmbatwash, who were mainly Modocs, with admixture of Pit River, Shasti, and Klanuath Lake Indians.

On Little or Lower Klamath Lake: Agáwesh, a permanent Modoc settlement upon what is now called "Fairchild's farm," southwestern shore; Ke-utchishyén' ni "where the wolf-rock stands," upon Hot Creek; Sputuish$\chi_{\bar{e}}{ }^{\prime} n i$ "at the diving place," lying close to Ke-utchish $\chi \bar{e}$ 'ni, where young men were plunging in cold water for initiation; Shapashyéni "where sun and moon live," camping place on the southeastern shore, where a crescentshaped rock is standing; Stuikish $\chi e^{\prime} n i$ "at the canve bay," on north side of the lake.

## TRIBAL NAMES AND SUBDIVISIONS.

The two bodies of Indians forming the subject of the present report are people of the same stock and lineage through race, language, institutions, customs, and labitat. In language they radicaily differ from the neighboring peoples called Snake, Rogue River, Shasti, and Pit River Indians, as well as from the other inhabitants of Oregon, California, and Nevada.

For the Klamath people of Southwestern Oregon there exists no general tribal name comprehending the two principal bodies, except Máklaks, Indian. This term when pronounced by themselves with a lingual $k$ has a reflective meaning, and points to individuals speaking their language, Modocs as well as Klamath Lake Indians; when pronounced with our common k it means Indian of any tribe whatsoever, and man, person of any nationality. The derivation of máklaks will be found in the Dictionary. I have refrained from using it in the title and body of my work to designate these Oregon Indians because it would be invariably mispronounced as mä'kläks by the white people, and the peculiar sound of the $\underline{k}$ would be mispronounced also. To call them simply Klamath Indians or Klamaths would lead to confusion, for the white people upon the Pacific coast call the Shasti, the Karok or Ara, the Hupa, the Yurok or Alikwa Indians on Klanath River of California, the Shasti upon the Siletz Reservation, Oregon, and our Máklaks all Klanıaths. It was therefore necessary to select the compound appellation, "the Klamath Indians of Southwestern Oregon." The Warm Spring and other Salaptin Indians possess a generic name for all the Indians living upon this reservation and its vicinity: Aigspaluma, abbr. Aigspalo, Aikspalu, people of the chipmunks, from the innumerable rodents peopling that pine-covered district. This term comprises Snake, Payute, and Modoc Indians, as well as the Klanath Lake people. The name of Klamath or Tlámat, 'Tlamet River, probably originated at its mouth, in the Alikwa language.

The two nain bodies forming the Klamath people are (1) the Klamath Lake Indians; (2) the Modoc Indians.

THE KLAMATII LAKE INDIANS.
The Klamath Lake Indiams mmber more than twice as many as the Modoc Indians. They speak the northern dialect and form the northern chieftaincy, the head chief residing now at Yá-aga, on Williamson River. 'Their dwellings are scattered along the eastern shore of Upper Klamath Lake (É-ush) and upon the lower course of Williamson (Koketat) and Sprague Rivers (P’laí). They call themselves E-ukslikni maklaks, abbreviated into líukshikni, É-nkskni, Ä-nksni neople at the luke. The Shasti near Yreka, Cal., call them Ańksiwash, some western Shasti: Makaítserk; by the Pit River Indians they are called Alámmimakt ish, from Alámmig, their name for Upper Klamath Lake; by the Kalapuya Indians, Athlímeth; by the Snake Indians, Síyi.

According to locality the Klamath Lake people may be subdivided into the following groups: The people at the agency; the people at Koháshti, at Yé-aga, at Modoc Point and upon Sprague River. 'Their settlements at Klamath Marsh, at Nilaks and at Linkville are now abandoned; the last named (Yulalona) was held by them and the Modocs in common.

## THE MODOC INDIANS.

The Modoc Indians speak the southern dialect, and before the war of 1872-1873 formed the southern division or chieftaincy, extending over Lost River Valley (Koketat) and the shores of Little Klamath and Tule Lake. Of their number one hundred and fifty or more live on middle course of Sprague River; some have taken up lands in their old lomes, which they cultivate in their quality of American citizens, and the rest are exiles upon the Quapaw Reservation, Indian Temitory. They call themselves Móatokni máklaks, abbreviated Móatokni, Mō'dokni, Mós'dokish, liviny at Moatak, this being the name of Modoc or Tule Lake: "in the extreme sonth." A portion of the Pit River Indians calls them Lutuámi, "lake," by which Tule Lake is meant; another, through a difference of dialect, Lutmáwi. The Shasti Indians of Yreka call them Pyínai, the Sahaptins upon and near Columbia River call them Mówatak, the Snake Indians, Saidoka.

The more important local divisions of this people were the groups at little Klamathı Lake (Agaweshkni), the Kumbatwash and the Pás\%anuash
at Tule Lake, the Nushaltyágakni or "Spring-people" near Bonanza, and the Plaikni or "Uplanders" on Sprague River, at and above Yáneks. Formerly the Modocs ranged as far west as Butte Lake (Ná-uki) and Butte Creek, in Siskiyou County, California, about sixteen miles west of Little Klamath Lake, where they fished and dug the camass root.

## THE SNAKE INDIANS.

A body of Snake Indians, numbering one hundred and forty-five individuals in 1888, is the only important fraction of native population foreign to the Máklaks which now exists upon the reservation. They belong to the extensive racial and linguistic family of the Sloshoni, and in 1864, when the treaty was made, belonged to two chieftaincies, called, respectively, the Yahooshkin and the Walpapi, intermingled with a few Payute Indians. 'They have been in some manner associated with the Máklaks for ages, though a real friendship never existed, and they are always referred to by these with a sort of contempt, and regarded as cruel, leartless, and filthy. This aversion probably results from the difference of language and the conflicting interests resulting from both bodies having recourse to the same hunting grounds. (Cf. Sā't, shāa t, Shā'tptchi.) They are at present settled in the upper part of Sprague River Valley (P'laí) above Yáneks. They cultivate the ground, live in willow lodges or log louses, and are gradually abandoning their roaming proclivities. Before 1864 they were haunting the shores of Goose Lake (Néwapkshi), Silver Lake (Kálpshi), Warner Lake, Lake Harney, and temporarily stayed in Surprise Valley, on Chewaukan and Saikän Marshes, and gathered wókash on Klamath Marsh. They now intermarry with the Klamath Indians. As to their customs, they do not flatten their infants' heads,* do not pierce their noses; they wear the hair long, and prefer the use of English to that of Chinook jargon. Before settling on the reservation they did not subsist on roots and bulbs, but lived almost entirely from the products of the chase.

Among other allophylic Indians, once settled outside the present limits of the Klamath Reservation, were a few Pit River and Shasti Indians,

- By the Modocs they are called conical-headed (wakwáklish hin'sh gì'tko).
staying before the Modoc war among the Kimbatwash-Modocs (q. v.) in the lava beds south of Tule Lake.

A few families of hunting Molale Indians, congeners of the "Old Kayuse" Indians near Immatilla River, were formerly settled at Flounce Rock, on the headwaters of Rogue River, and farther north in the Cascade range. 'The Klanath Indians were filled with latred against them; they were by them called Tchak:i'nkni, inhabitants of Thehak $\overline{\mathrm{c}}$ 'ni, or the "service berry tract," and ridiculed on acconnt of their peculiar, incorrect use of the Klamatl langnage. In former times Molale Indians held all the northeastern slopes of the Willamert Valley, claiming possession of the hunting grounds; the bottom lands they left in the lands of the peaceably-disposed, antochthonic race of the Kalapuya tribes, whom they call Mókai or Móke.

## OHARACTERISTICS OF RACE.

These are either bodily or mental. 'Io ascertain the former no measurements were made by me by means of instruments when I was anong the Klamath Lake Indians, and hence all that follows rests upon ocular inspection. For Modoc skulls some accurate data are on hand, published by the United States Surgeon-General's Office, Washington, D. C.

The Mongolian features of prognathism and of high cheek bones are not very marked in this upland race, though more among the Modocs than in the northern branch. If it was not for a somewhat darker complexion and a strange expression of the eye, it would be almost impossible to distinguish many of the E-ukshikni men from Americans. The forehead is compressed in the tender age of childhood and looks rather low, but does not recede so acutely as might be expected from this treatment. Prognathism, where it exists, does not seem to be a consequence of head flattening. The cheek bones are more prominent than with ns, but less than with the Central Californians. The fact that the head-man, 'Tatapkash, who was among the signers of the treaty of 1864 , was called after this peculiarity shows that high cheek bones are rather uncommon. The nasal ridge is not aquiline, but rery strong and forms an almost continuous line with the foreliead. Convergence of the eyes is perceptible in a few individuals only, and anatomists have shown that it is nowhere produced by the structure of the skull
itself, but it is the result of the mother's manipulation on the baby's eyes, and causes them to look sleepy, the opening of the eyelids becoming narrower. (Cf. Texts 91,5-8.)

These Indians have a piercing look and their eyeballs are of the deepest black, a circumstance which accounts for their great power of vision. In many Indians, namely in children, the white of the eye shows a blue tinge, perhaps the result of head flattening. The mouth is small and the teeth good; but with many Indians the thyroid cartilage, or Adam's apple, is very prominent. The hair upon the head is straight and dark. I did not find it very coarse, but with many Modoc women it is said to be so and to grow to an extreme length. On other portions of the body the hair is short and scarce, the natives doing their best to weed it ont, the beard especially, with metallic pincers or tweezers (hushmoklon'tkish), which they always carry with them. As among most American aborigines, the beard is of scanty growth. The late chief Lelékash wore a beard, but I never saw any Indian wearing one except Charles Preston, the Yáneks interpreter: The contents of the song $185 ; 44$ should also be noticed in this connection. Baldness is rare, and in fact it appears that the dearth of hairy covering of the skin is fully compensated in the Indian race by a more exuberant growth of hair upon the head, to protect them against excessive colds and the heat of the sun.

Among the Lake people the complexion is decidedly lighter than among the cinnamon-hued Modocs, and a difference between the sexes is hardly perceptible in this respect. Blushing is. easily perceptible, though the change in color is not great. 'Those most approaching a white complexion like ours are numerous, but their skin is always of a yellowish lurid white. Owing to their outdoor life in the free and healthy mountain air, these Indians are well proportioned as to their bodily frame, and apparently robust; but their extremities, hands and feet, are rather small, as the extremities are of the majority of the North American Indians.

The average of Modoc men appear to be of a smaller stature than that of the Klamath Lake men, but in both tribes a notable difference exists between the length of body in the two sexes, most men being lank,
tall, and wiry, while the women are short and often incline to embonpoint. Nevertleless obesity is not more frequent there than it is with us. No better illustration of their bodily claracteristics can be lad than a collection of their personal names. These sketch the Indian in a striking and often an unenviable light, because they generally depict the extremes observed on certain individuals. The sex can not, or in a few instances only, be inferred from the name of a person. We frequently meet with designations like "Large Stomach," "Big Belly," "Round Belly," "Sharp Nose," "Grizzly's Nose," "Spare-Built," "Grease," "Crooked Neck," "Conical Head," "Wide-Moutl," "Small-Eyes," "Squinter," "Large Eyes," "Halfblind," or with names referring to gait, to the carriage of the body, to habitual acts performed with hands or feet, to dress, and other accidental matters.

With all these deformities, and many others more difficult to detect, these Indians have bodies as well formed as those of the Anglo-American race, and in spite of their privations and exposure they live abont as long as we do, though no Indian knows his or her age with any degree of accuracy. A very.common defect is the blindness of one eye, produced by the simudge of the lodge-fire, around which they pass the long winter evenings. With the majority of the Indians the septum of the nose hangs down at adult age, for the nose of every Indian is pierced in early years, whether they afterwards wear the dentalium-shell in it or not.

Stephen Powers, who had good opportunities for comparing the Modocs with the tribes of Northern California, says of them:

They present a finer physique than the lowland tribes of the Sacramento, taller and less pudgy, partly, no donbt, becanse they engage in the chase more than the latter. There is more rugged and stolid strength of feature than in the Shastikia now living; cheek bones prominent; lips generally thick and sensnal; noses straight as the Grecian, bnt depressed at the root and thick-walled; a dullish, heary cast of feature; eres frequently yellow where they should be white. They are true Indiaus in their stern inmobility of conntenance.*

Passing over to the psychic and mental qualities of these Oregonian natives, only a few characteristics can be pointed out by which they differ from the other Indians of North America. The Indian is more dependent

[^6]on nature, physically and mentally, than we are. What distinguishes the civilized man from the primitive man of our days and of prehistoric ages is his greater faculty of turning to account the patent and the hidden powers of nature, or the invention of handicrafts, arts, and sciences. In this the savage man lags far belind the man of culture, and although we often have to admire the ingenuity and shrewdness displayed by the American native in his hunting and fishing implements and practices, the art of agriculture, without which there can be no real human culture, has never been pursued to any considerable extent by the Indians living north of the thirtieth parallel of latitude.

The climate of their home compels the Maklaks Indians to lead an active and laborions life. Except in the coldest days of winter they are almost always engaged in some outdoor work, either hunting, fishing, or cutting wood, gathering vegetal food, or traveling on horseback. Pursuits like these and the pure, bracing air of the lighlands render their constitu. tions hardy and lealthy, their minds active, wide awake, and intelligent. They are quick-sighted and quick in their acts, but slow in expressing delight, wonder; astonishment, or disgust at anything they see. Often they do not grasp the meaning of what they observe being done by the white people, and thus appear to us indifferent to many of the highest attainments of modern culture. Children and adults are prone to reject or slow to adopt the blessings of civilization, because many of these are of no practical use to a linnting and fishing people, and others are past their understanding.

The first things they generally adopt from the white people are the citizen's dress and handy articles of manufacture, as beads, tobacco, knives, gruns, steel traps; also wagons and other vehicles; for when in possession of these last the horses, which they had obtained long before, can be put to better account They are also quick in adopting English baptismal names, sometimes discarding but oftener retaining their descriptive or burlesque nomenclature from the Klamath language. Gradually they adopt also with the money of the white man the elements of arithmetic, and learn to compute days and montlis according to his calendar. After another lapse of time they introduce some of the white man's laws, discard polygamy and slavery,
bury their dead instead of cremating them, and commence to acquire a smattering of English. Indian superstitions, conjurers' practices are not abandoned before the white man's ways have wrought a thorough change in their minds; and a regular school attendance by children can not be expected before this stage of progress has been reached.

In his moral aspects the Klamath Indian is more coarse and outspoken than the white man, but in fact he is not better and not worse. He has attacked and enslaved by annual raids the defenseless California Indian simply because he was more aggressive, strong, and cunning than his victim; his faurily relations would be a disgrace to any cultured people, as would also be the method by which the chiefs rule the community. But the passions are not restrained among savages as they are or ouglit to be among us, and the force of example exhibited by Indians of other tribes is too strong for them to resist.

The character of men in the hunter stage depicts itself admirably well in the mythic and legendary stories of both chieftaincies. Low cunning and treacherous disposition manifest themselves side by side with a few traits of magnanimity hardly to be expected of in people formerly merged in a sort of zoolatric fetichism. There is, however, a considerable power of imagination and invention exhibited in these simple stories, and many of the ferocious beasts are sketched in a truly humorous vein.

Man's morals are the product of circumstances, and the white man who judges Indian morals from the Christian standard knows nothing of human nature or of ethnologic science. The moral ideas of every nation differ from those of neighboring peoples, and among us the moral system of every century differs from that of the preceding one. The fact that the Modocs showed themselves more aggressive and murderous towards the white element than the Klamath Lake Indians may thus be explained by the different position of their homes. The latter being more secluded have not molested Americans sensibly, whereas the annals of the Modocs, who lived in an open country, are filled with bloody deeds. They are of a more secretive and churlish disposition, and what Stephen Powers, who saw them shortly after. the Modoc war, says of them is, in some respects, true: "On the whole,
they are rather a cloddish, indolent, ordinarily good-natured race, but treacherons at bottom, sullen when augered, notorions for keeping Punic. faith. But their bravery nobody can deny."*

## THE PREHIS'ORIC PERIOD.

Before the middle of the nineteenth century the Makkaks people was unknown to mankind except to the nearest neighbors in Oregon and Califormia. We are therefore justified in beginning its period of documentary history at that time, and in relegating to the domain of prehistorics all that is known of their previous condition. The information upon these points is furnished by three factors: tradition, archroologic remains, and language.

## A. TRADITION BEARING UPON HISIORI.

Traditional folk-lore, when of the mythic order, generally dates from an earlier epoch of fixation than historic traditions. The remote origin of genuine mythic folk-lore is sufficiently evidenced by the archaic terms embodied with it, by the repetition of the same phraseology for ages, and by the circumstance that all nations tend to preserve their religious ideas in an nnchanged form. I am laying peculiar stress upon the term gensinc, for Indians have often mixed recent ideas and fictions with archaic, original folk-lore and with ancient mythic ideas, the whole forming now one inextricable conglomerate which has the appearance of aboriginal poetic prose.

The Klamath people possess no historic traditions going further back in time than a century, for the simple reason that there was a strict law prohibiting the mention of the person or acts of a decceased individual by using his nome. This law was rigidly observed among the Californians no less than among the Oregonians, and on its transgression the death penalty could be inflycted. This is certainly enough to suppress all historic knowledge within a people. How can history be written without names?

Many times I attempted to obtain a list of the former head chiefs of the two chieftaincies. I succeeded only in learning the names of two chiefs recently deceased, and no biographic details were obtainable.

This people belongs to the autochthonic nations of America, called so because they have lost all remembrances of earlier habitats or of migrations.

[^7]As a result of their seclusion, all their geogonic and creation myths are acting around the headwaters of Klamath River and in Lost River Valley, and the first man is said to have been created by their national deity, K'mukámtchiksh, at the base of the lofty Cascade Range, upon the prairie drained by Wood River. I have obtained no myth disclosing any knowledge of the ocean, which is scarcely one hundred and fifty miles distant in an air line from their seats. They have no flood or inumdation myths that are not imported from abroad; and what is of special importance here, their terms for salt ( $\bar{a}^{\prime}$ dak, shō'lt) are not their oun, but are derived from foreign languages.

There is an animal story embodied in the 'Texts, page 131, forming No. II of the "Spell of the Laughing Raven," containing the sentence: "Hereupon the Klamath Lake people began fighting the Northerners." I believed at first that this contained a historic reminiscence of some intertribal war, but now an rather doubtful about it. The song 192; 1 was supposed by some Indians to be a very old reminiscence, while others referred it to the presence of the Warm Spring scouts in the Modoc war.

I conclude from the foregoing facts that historic traditions do not exist among these mountaineer Indians. If there are any, I was unable to obtain them. The racial qualities of the Modocs, and still more those of the E-ukshikni, indicate a closer resemblance with Oregonians and Columbia River tribes than with Shoshonians and Californians.

## B. ARCINAOLOGIC REMAINS.

The Klanath people have not evinced any more propensity for erecting monmments of any kind than they have for perpetuating the memory of their ancestors in song or tradition. In fact, structures the probable age of which exceeds one hundred years are very few. Anong these may be particularized the three ceremonial sweat-lodges and perhaps some of the river-barrages, intended to facilitate the catch of fish, if they.should turn out to be of artificial and not of natural origin. In the Lost River Valley is a well, claimed by Modocs to be Aishish's gift-probably one of the large natural springs or wélwash which are seen bubbling up in so many places upon the reservation Stephen Powers reports that near the
shores of Goose Lake, chiefly at Davis Creek, a number of stone mortars are found, fashioned with a sharp point to be inserted into the ground, and that in former times Modoc, Payute, and Pit River Indians contended in many bloody battles for the possession of this thickly inhabited country, though none of them could obtain any permanent advantage.* Since the manufacture of this kind of mortars can not be ascribed with certainty to the Modocs, we are not entitled to consider them as antiquarian relics of this special people. The three sudatories and the river barrages are regarded as the gifts of Kmukámtch, a fact which testifies to their remote antiquity. Excavations (wásh) forming groups are found on many of the more level spots on the Reservation, near springs or brooks. They prove the existence of former dug-ont lodges and camps.

## C. Linguistic affinities.

Anthropologic researches upon the origin of a people do not always lead to decisive results as to the qualities of the primitive race of that people, for the majority of all known peoples are compounds from different races, and thus the characteristics of them must be those of a medley race. As to antiquity, language is second to race only, and much more ancient than anything we know of a people's religion, laws, customs, dress, implements, or style of art. Medley languages are not by any means so frequent as medley races, and less frequent still in America than in the eastern hemisphere; for in this western world the nations have remained longer in a state of isolation than in Asia and Europe, owing to the hunting and fishing pursuits to which the natives were addicted-pursuits which favor isolation and are antagonistic to the formation of large communities and states. This explains why we possess in America a relatively larger number of linguistic families than the Old World when compared to the areas of the respective continents. It also explains why races coincide here more closely with linguistic fanilies than anywhere else on the surface of the globe. Instances when conquering races have premaled upon other nations to abandon their

[^8]own languages are scarcely heard of on this hemispliere, but the annals of the eastern parts of the globe make mention of such.

Whenever it is slown that the language of some American people is akin to the language of another, so that both are dialects of a common linguistic family, a more cogent proof of their comnion genealogic origin is furnished than lies in a similarity of laws, customs, myths, or religion. 'To decide the question of affinity between two languages is generally an easy, but sometines a very difficult task. When a relatively large number of roots and affixes having the same function coincide in both, this argues in favor of affinity. The coincidence of single terms in them is never fortuitous, but we have to find out whether such terms are loan words or belong to the stock of words of the languages under process of investigation. Other terms show an external resemblance which is not based on real identity of their radicals, but only on a deceptive likeness of signification.

From all this the reader will perceive that we can not expect to steer clear of shoals and breakers in determining by the aid of langnage the affinities of our Klanath Indians. But the inquiries below, whether successful or not, will at least aid future somatologists in solving the problem whether linguistic areas coincide or not with racial areas upon the Pacific coast between the Columbia River and the Bay of San Francisco. In making these investigations we must constantly bear in mind that the track of the migrations was from north to south, parallel to the Pacific coast, whicl is sufficiently evidenced by the progress of some Selish, Tinné, Sahaptin, and Shoshoni tribes in a direction that deviates but inconsiderably from a meridional one.

To establish a solid basis for these researchen, a list of the Pacific coast linguistic families is submitted, which will assist any reader to judge of the distances over which certain loan words have traveled to reach their present abodes. The country from whicl a loan word has spread over a number of other family areas is often difficult to determine, because these languages have not all been sufficiently explored. The families below are enumerated according to the latest results of investigation. Some of them may in the future be found to be dialects of other stocks. The Californian tribes have been mapped and described in Stephen Powers's "Tribes of California"; Contributions to North American Ethnolngy, Vol. III.

The Shoshoni family extends through eastern Oregon, Nevada, southern Idaho, Utah, pairts of Wyoming and California, and embodies the tribes of the Snake Indians, the Shoshoni, from whom the Comanches separated centuries ago, the Paviótso and Bannok (Panaíti), the Pai-uta, Uta, Móki, and the Kawnya branch of California. This family occupies an area alnost as large as the Selish stock, but the population is very thinly scattered over the vast tervitory of the inland basin.

Washo Indians, near Carson, Nevada, inclosed on all sides except on the west by Shoshoni tribes.

Selish Indians occupy Washington, portions of the Oregon coast and of Vancouver Island, northern Idaho (from which they extend into Montana), the Fraser River Valley, and the adjoining coast of British Columbia. Some dialects of this family are remarkable through a profusion of consonantic clusters. Chinook dialects show many Selish affinities.

Sahaptin family, dwelling around middle Columbia and Lower Snake River. An offshoot of it-the Warm Spring Indians-settled in Des Chutes Valley, Oregon.

Wayiletpu is a Sahaptin name given to the Kayuse people on the Yumatilla Reservation, which has abandoned its former tongue, called the "Old Kayuse," to adopt the Yumatilla dialect of Sahaptin. Molale is related to old Kayuse; its former area was east of Oregon City.

Tinne or Athapaskan tribes, wherever they appear near the Pacific coast, are intruders from the northern plains around Mackenzie River and the headwaters of the upper Yukon. Those still existing on the Pacific coast are the Umpqua and Rogue River, the Húpa and Wailáki Indians, whereas the 'Tlatskauai and Kwalhioqua have disappeared.

The following three families on and near the Oregon coast were explored by Rev. Owen J. Dorsey in 1884 (Amer. Antiquarian, 1885, pp. 41, 42):

Yáliwina, subdivided into Alsis ${ }^{-1}$, Yakwina on the bay of the same name, Kú-itch on the Lower Umpqua River, and Sayusla.

Kus, Coos Indians on Coos Bay and Múlluk on Lower Coquille River:

Takilma or 'Takelma Indians, south of the Kus, on middle course of Rogue River.

The Kalapuya Indians once occupied the entire Willámĕt River Valley save its soutleastern portions. Its best studied dialect is Atfálati, also called Thúlati and Wípatu Lake.

On the lower Klamath River, California, and in its vicinity, there are four tribes of small areas speaking languages which require further investigations to decide upon their affinities. At present their languages are regarded as representing distinct fanilies, as follows:

Ara, Ara-ara or Karok, on both sides of Klamath River.
Alikicu or Yurok, at the month of Klamath River.
Wishosk or Wiyot, on Humboldt Bay.
Chimariko or Climalíkwe, on 'Trinity River and environs.
The Pomo dialects are spoken along the California coast and along its water-courses from $39^{\circ} 30^{\prime}$ to $38^{\circ} 15^{\prime}$ latitude.

Yuki dialects were spoken in the mountains of the Californian Coast Range upon two distinct areas.

Wintun (from witú, wintú man, Indian) is spoken in many dialects upon a wide area west of Sacramento River from its mouth up to Slasta Butte.

Noja, spoken near Round Monntain, Sacramento Valley.
Muidu (from maidı man, Indian) dialects are heard upon the east side of Sacramento River from Fort Redding to the Cósumnes River and up to the water-shed of the Sierral Nevada.

Shasti dialects properly belong to the middle course of Klamath River and to the adjoining parts of Oregon; the language of Pit River or Achomawi, southeast of the Shasti area, is cognate with it.

Mutsun dialects, nortly and south of San Francisco Bay, are cognate with the Miwok dialects, which are heard from the San Joaquin River up to the heights of the Sierra Nevada. The littoral family of the Esselen is inclosed upon all sides by the Mutsun dialects. We have vocabularies from the eighteentlo century, but its existence as a separate family has been put in evidence but lately by H. W. Henshaw in American Antlropologist, 1890, pp. 45-50.

## RADICALS WHIOH KLAMATH HOLDS IN COMMON WITH OTHER FAMILIES.

A number of radical syllables occur in the same or in cognate significations in several lingnistic families of the Northwest, and some of them extend even to the stocks east of the Rocky Mountains and of the Mississippi River. This fact is of great significance, as it proves certain early connections between these Indians, either loose or intinate. If the number of such common radices should be increased considerably by further research, the present attempt of classifying Pacific languages into stocks would become subject to serious doubts. From the quotations below I have carefully excluded all roots (and other terms) of onomatopoetic origin. I have made no distinction between pronominal and predicative roots, for a radical syllable used predicatively in one stock may have a pronominal function in another family
-im, - $m m,-a m,-m$ frequently occurs as a suffix for the possessive case in the Pacific coast languages. Thus in Klamath -am is the usual suffix of that case, -lan being found after some vowels only; cf. Grammar, pages 317 et seq., and suffix -m , page 355 ; also pages $474-476$. On page 475 I lave called attention to the fact that -am occurs as marking the possessive case in the Pit River language; itóshě̌am yánim deer's foot-prints; -am, -im in Molale: pslıkaínshim, possessive of pshkaínsh beard. The Sahaptin dialects use $-n m i,-m i$, etc., to designate this case.

Ka occurs in many languages as a demonstrative radix; though it often assumes an interrogative and relative signification and changes its vocalization. In Apache-Tinné dialects it is interrogative: $\chi$ áte who? in Návajo; in the Creek ka is the relative particle, a substitute for our relative pronoun who. In Yuki kau is this and there; in Yókat (California) ka- occurs in kahama this, kawío here, yokaú there. East of Mississippi River we have it in Iroquois dialects: $k e^{\prime n}$ in $k e^{\prime n} t^{\prime} h o$ here ( $t^{\prime} h o p l a c e$ ); in Tuskarora: kyä' that or this one (pointing at it), kyä' nän this one; tho i-käñ that one is.* In the Klamath of Oregon this root composes kánk so much, kíni somebody,

[^9]kani? who? and kat who, pron. rel. As a suftix -ka, -ga is forming factitive verbs and is of great frequency (cf. Part I, pp. 341, 342); ka-á, kí-a, kā is adverb: greatly, strongly, very.

Kit-i and similar forms are serving to deny statements and to form negative and privative componnds. In Shoshoni dialects g'ai, ka, kats, karu-u, etc., stand for no! in Zmini kwa is the reul negative particle, like aka!! no! in Tonkawē. In Kwakiutl no! is kets and kie; in Pani káki; it also occurs in some northern dialects of Algonkin as kā, kawine etc. In Klamath ká-i is no! and not; it composes kíya to lie and such words as are mentioned in Grammar, p. 633; cf. also p. 644. In some of the Maskoki dialects $-k \overline{0},-g \bar{o},-k ı$ is the privative particle in adjectives and verbs.
$\mathbf{m i}$ is a pronominal demonstrative radix, like nn, ni, and also serves to express personal and possessive pronouns. In Creek mat that points to distant objects and also forms istä'mat who (interrogative). In many western families it expresses the second person: in Mutsun dialects men is thou, in Miwok mi; in Winthn mi, me is thou, met thine, thy; in Maidu mi is thou, mimem ye, monn, min-um that one; in Yuki meh, mi is thou and in Pomo mat is ye (me this); in Ara and Sahaptin mi is transposed into im, thou. Shasti has mayi and lit liver milh, mi for thou; Sahaptin im, imk thou, ima, imak ye. In Klamath mi stands for thy, thine, mish for thee, to thee, but i for thou; -ma is a verbal suffix, q. v. There are languages where mi, ma makes up the radix for the first person and not for the second, as Sioux and Hidatsa of the Dakotan family; while in the Shosloni dialects thou is omi, umi, um, em, etc., and in Yuma ma-a, mā̄. In the Nez Percé of Sahaptin ma is the interogative pronomn who? and which? and also forms plurals when suffixed to nouns.
náka, the Kl. term for cimamon bear, probably related to nákish sole, as the bears are Plantigroulu, has many parallels in American langnages. The Yuma dialects have nagóa bear in Hnálapai, nakatya, nogudia in Tonto; Yókat has nohólo bear, Allkwa níkwi\% grizzly bear. If the yáka of Sahaptin is from nyaka, it belongs here also. East of Mississippi River there is only one species of the bear, the bluch bear. The radix nak-, nok-occurs in the 'Tonica langnage nóknshi, and in the Maskoki dialects: nok'husi in Creek, nózusi in Hitchiti, but nikta in Alibamu.
nkol, nliûl, nxól in Klamath designates the gray white-tailed rabbit, and the same radix appears in $\mathrm{ko}^{\prime} \mathrm{lta}$, kolta fish otter and in kûlsh badyer. In the San Antonio language of Southern Califormia the radix is represented by kôl hare (rabbit is map), in Kasuá (Sa. Barbąra dialect) by kú'ı, in Tonto by akolá, kulá, in Hualapai by gula. Even in the Inuit dialects we find for rabbit: ukalik (Hudson Bay), kwélluk (Kotzebue Sound).

111 or ni. A pronominal demonstrative radix n- followed by almost any vowel (na, nu, ni, etc.) is of great frequency in America as well as in the eastern hemisphere, where it often becomes nasalized: nga, ngi, etc In American languages it forms personal possessive and demonstrative pronouns, prefixes and suffixes of nouns and verbs. In South America nu, nû designates the pronoun $I$ or me so frequently that the explorer $K$. von der Steinen was prompted to call Nu-languages a large group of languages north and south of Amazon River, including Carib dialects. In America nu, ni designates more frequently the first person of the singular and plaral ( $I$, we) than the second thou, ye. It stands for the first person in Quichlina, Moxo, Tsoneka, in Nahuatl, the "Sonnra" and Shoshoni languages, in Otomi, Yuma, the Tehua and Kera (no in hi-no-me $I$ ) dialects of New Mexico; in Wintún, Maidu, Wayíletpu, Sahaptin, and the numerous Algonkin dialects. For the second person it stands in Yákwina, Tonkawe, Atákapa, and in Dakota and Tinné dialects. As a demonstrative pronoun we find it used in many languages, e.g., in the Onondaga of Iroquois, where nā'ye' means that, that it is, and nän (ä long) this. In Klamath nû, nı̂ is $I$, nútoks myself, nîsh me, to me; nāt, nā we, nálam ours; -na is case suffix and transitional verbal suffix; n- prefix refers to objects level, flat, sheet- or string-like, or extending towards the horizon.
shúm, sû'm is the Klamath term for mouth of persons, of animals, and of rivers. Forms parallel to this are disseminated through many of the Pacific coast languages. In Kayuse it is súmqaksh, in Molale shímilk, in Nishinam and other Maidı dialects sim, in Yokat sama, shemalh.* Intimately connected with mouth are the terms for beard: shú, shó, shwó iu Sahaptin dialects, slimkémush in Kayuse, and for tooth: sí, shí in the

[^10]Wintún dialects, sii\% in Yuki, sit, si-it in Mutsun (coast dialects), sa in Santa Barbara, tcháwa in some dialects of Maidn. It is justifiable to regard Kl. shún as auncient pussessive case of the sí, sa tootl of Central Californian languages; of. what is said concerning the suffix -im.
tít tooth appears related to tugt tooth of Sayusla, a dialect of Yakwina and also to tit of the Salhaptin dialects; ititi "his tooth" in Walawála.
tchi-, $t s i-$ is a radical often used on the Pacific coast referring to water or liquids, their motions, and the acts performed with or within the watery element. While in Klamath it figures as a prefix only, q. v., other tongues make use of it as a radical. Tchí is uater in Yákwina, in Takílma, and in the Yuchi of the Savamalı River; in Zuñi 'tchawe is water ('t alveolar) in Nơja tehúdshe. The Sahaptin dialects show it in Warm Spring tchiu'sh water, atá-tchash ocean; in Klikatat tcháwas water, atástchis oceun, tcháwat to drink; while in Nez-Percé tchū'sh changes to kúsh. Chinook has 'ltchúkwa water, Ch. J. salt-tchuk oceen, but the Selish languages employ a radix se-14l, si-u'l, shí-u instead to designate any liquid.
wá to exist, live, to be within, and to grow or generate is a radix to be traced in many of the Western tongues. In Klamath we refer to wá and its numerous derivatives, as wawápka to sit or be on the ground, wá-ish productive, wá-ishi, wéwanuish, wék arm and limb of tree, lit. "what is growing upon," wē'ka offspring, wékala, wásh hole to live in, wā'shla (a) to dig a burrow, (b) ground-squirrel, and many others. In Kwákiutl wāts, wátsa is doy, but originally "living being, animal," and is represented in Klamath by wăsh prairiowolf, wátch horse, watchága dog, lit. "little animal." the idea of "domesticated" or "belonging to nau" to be supplied. In Chinook the suffix -uks (for -waks) points to living beings also. The Sahaptin languages slow this root in wásh to be, exist, in Nez Percé wázosh alive, wátash place, field, earth, in Yákima wakzash liviny, and in other terms.

## AFFINITIES IN WES'IERN LANGUAGES.

Many of the Western families exlibit but little or no affinity in their lexicon with the Klamath language, the reason being undoubtedly that they are but little explored. Thus in Mutsun a single term only was found to correspond: tcháya shallow basket in the dialect of Soledad; of tchála and
tchákěla, by which two kinds of root baskets are specified in Klamath. The Sayúsla tséokwa leg answers to tchūks, Mod. tchókash leg and to shō̄ksh, Mod. telec-o ${ }^{\prime}$ kshlı crane, this bird being called after its long legs. The Shoshoni stock, with its extensive array of dialionts, spoken in the closest vicinity of the Klamath people, is alnost devoid of any resemblances; cf. ká-i not, and nápal egg, compared with nobáve in Payute, nobávh Chemehuevi, nópavh Shoshoni. This probably rests on no real affinity. In the Noja language, spoken near Redding, California, putsi humming-bird corresponds to Kl. pî'shash, and teháshina, tcháshi, a small shenk species, to Kl. tcháslish. For Wintuin may be compared Kl. pán to eat with ba, bah; kálo sky (from kálkali, round, glohiformı) with k'áltse skiy.

From Selish saíga field the Kl. saíga, saika prairie, field, meadow was certainly borrowed, and t'táze grasshopper of Kalispelm reappears here in ta'htá-ash and in Mod. kamtáta. Kanikawak yellow of Chinook is kaukí-uli, kevkévli brown of Kl.; and ténas young, recent reappears in Kl. té-ini new, young, te-iniwá-ash young woman; cf. ténāse infant in Aht dialect of Vancouver Island. The long array of words which Klamath has borrowed from Chinook jargon are enumerated in Grammar, pages 220-222.

Maidu.-An uncommon number of affinities are found to exist between Klamath and the Maidu dialects east of the Sacramento River. Of these terms some are not loan words, but appear to be derived from some common stock.
halá slope of mountain; Kl. lála, hlála to slope downwards.
kála hot-water basket; Maídu, kóllo cup-basliet.
káwe cel; Maídu, kowó.
ugúlu, kúlu, kúlo female animal; Maídn dialects: kü'le, kü'lle, kúla, woman, wife, and female animal. This word also composes the terns father and child, and hence means "to generate."
pán to eat: Maídu, d. pen, pap, pā, pepe to eat ; pán to smoke in Maidu, corresponds to Kl. páka; páni, pan is tobaceo iu Maídu.
pēu, pai'n again, a second time; Maídu, pēne two.
vúlal, úlal cottomiood tree; Maídu, wílili.
From the Shasti language Modoc has borrowed more than Klamath Lake, and the terms as far as known are all mentioned in the Dictionary.

They are ipō, ipshúna, etchmū́nma, $\bar{a}^{\prime}$ dak, hápush (cf. also hápa kangaroo rat and striped squirrel in Noja) and probably also kála hot-water basket, midnal sunfower.

Its sontheastern or Pit River dialect shows a number of terms probably not loaned, but resting $11 p o n$ some indefinite common affinity. Thus édshash milk, breast, ulder is in Pit River ídshit female breast (cf. Ara: utchis milk), wán silver fox, dim. wánaga, in Pit River kwán silver fox and wan- in wanckpusha fox; kaíla earth is in Pit River kéla, taktákli red is taytáze, tidshi good is turssi, túshi, ko'sh pine tree is kashú.

The only fanilies in which a considerable number of terms possibly rests upon a real and not fancied kinshis are those of Wayiletpu and Sahaptin.

## WAYÍLETPU DIALECTS.

Wuyiletpu, of which two dialects only are known or accessible to us, Kayuse and Molale, shows the following affinities:

Kl. gî to be, to exist, Molale, gîsht he is, gíshlai he will be. Compare to this in Maidu: bishi alive and dwelling place; Wintún: bim to be (present tense).

Kl. kē, kēk this; Kayuse, ka, kě, ke, kai this, this one.
Kl. gn, kū, kunē that; Kayuse, ku, kâ, ku yúwant that man, káppik they.

Kl. ína, d. yána dowmovrd, yaína mountain; Molale, yángint elevation.
Kl. lák foreheud; Molale, lakunui face.
Kl. lā’pi, lāp two; Molale, lápka two, lápitka seven; Kayuse, lipúyi, liplint two; liplil twins.

K1. lukua to be hot, warm, lókıash warm, hot, and heut, lúluks fire; Kayuse lokoyai warm, hot.

Kl. mukmúkli cimamon-complexioned (originally "downy"), tch'múka to be llark (as inight); Molale, móka dark, mukimuki dark complexioned; míkimuk'=waí "black man," negro.

Kl. mpaíto, paíto cheek, cf. patpátli; Molale, páktit eheek.
Kl. nā̊dsh me; Kayuse, na one; Molale, nánga one, composes nápitka sis.

Kl. nánuk all, nánka some, " part of; Kilyuse, náng, nanginâ-a all; Molale, nángkai all.

Kl. nápal egg; Kayuse, lúpil, laupen egy.
Kl. pán to eat ; Kayuse, pitánga; Molale, pá-ast to eat.
Kl. páwatch tongue; Kayuse, púsh; Molale, apá-us.
Kl. pä' $\chi$ tgi to dawn, the dawn; Molale, pákast morning.
Kl. píla on one's body, on the bare skin; Kayuse, píli meat; Molale píl body.

Kl. shuaí black-tailed deer; Molale, suaí deer and white-tailed deer.
Kl. túmi many, much; Molale, tám many.
Kl. waíta to pass a day and night, or a day, waítash day; Kayuse, ewé-iu or uwâya, wéya day, u-áwish, huéwislı sun; Molale, wásh day and sun, wásam summer-time.

Kl. wáko white pine; Molale, wákant, wákint, wákunt log.
Kl. wēk limb of tree; Kayuse, pasiwä'ku limb of tree.
Kl. wekétash green frog; Molale, wákatinsh frog.
In the morphologic part we also detect a number of close analogies between the two families:
hash-, hish-, is a prefix forming a sort of causative verbs by anathesis in Molale. like h-sh of Klamath; e. g., íshi he said, hisháshi he replied.
-gála, •kála, a Molale case-suffix to, towarl, corresponds to -tála toward of Klamath.
-im, -am forms the possessive case in Wayileptu; am in Klamath.
p-is prefix in terms of relationship in both families, and -p also occurs as suffix in these and other terms; cf. Sahaptin.

Distributive forms are made by syllabic reduplication in Kayuse exactly in the same manner as in Klamath: yámua great, d. yiyímu; laháyis old, d. lalháyis; luástu bad, d. laluástu; suáyu goorl, d. sảsuáyı.

## SAHAPTIN DIALECTS.

The Sahaptin dialects coincide with Klamath just as strikingly in some of the words and granmatic forms as do those of Wayiletpu, and it is singrular that in a number of these all three mutnally agree, as in hikua, mukmúkli, and two numerals.

Kl. ka-ukáı-uli, kevkévli, ke-uké-uli burown: Nez-Percé, ka-uұká-u\% drab, light yellow, dark cracam.

Kl ke, kek this : Nez-Percé, ki, pl. kima this : adv. kina here, kimtam near.

Kl. kitchkéni little, adv. kitcha, kétcha; kuskus, Nez Percé, small, little; ikkes, Yákima; kískis, Warm Springer.

Kl. ktá-i rork, stone; ktii't harl, Yakima.
Kl. lā'pi, lāp two; lápit, lépīt two, Nez Percé; napit, Walawála; naipt, Warm Spring.

Kl. lúkua to be warm, hot, lókuash and lushlúshli warm; lúluks fire; luózuts urarm, Nez Percé; ilíksha fire in Nez Percé and Walawala; ílksh, Warm spring; elusha to burn, lókautch cinders, Yakima; lázui\%, láloi\% warm, Yakima; lizwai, Warm Spring.

Kl. mukmúkli, makmákli cinnamon-colored; mázsma\%s, Nez Percé, yellow; mázsh, Yakima and Warm Spring (also as múksh blonde, auburn, Warm Spring).

Kl. mû̂lk worm, maggot, mānk, fly; mu\%limu lí fy, Warm Spring.
Kl. múshmush cattle, cow, originally meant "lowing like cattle," from the Sahaptin min cattle; cf. Texts, Note to 13, 13.

Kl. nánka somic, a portion of; nánka some in seveval Sahaptin dialects.
Kl. páwatclı tongue; páwish, Nez Percé.
Kl. pé-ip danghter ; pap, Nez Percé, Warm Spring, daughter (not one's own).

Kl. pí he, she, p'na, m'na him, her ; pína self, oneself, himself, etc., Nez Percé; píni he, this one, Warm Spring.

Kl. taktákli level, cven, flet ; tíkai flut, Yakima; cf. tii-i'h bottom land.
Kl. tatáksni children; (na)títait man, Yakima; titókan people, Nez Percé.

Kl. tchěmúka, tsmúka to be dark, cf. mukmúkli; tsěmúఝtsěmu\% dark brown (prieto), of dark complexion, black, Nez Percé; shmúk, Yakima; tchmūk, Warm Spring, larli; slimukakúshan to blacken, Yakima.

Kl. vû'nsh, u-ínsh boat, canoe, dug-out; wássas boat, Yakima, Warm Spring.

Of agreements in the morphologic part of grammar we notice considerable analogy in the inflection of the Sahaptin substantive with its numerous case forms:

Rechuplication for inflectional purposes is syllabic also, but not so generally in use as in Klamath; Nez Percé táyits good, abbr. ta'lhs; plur. tita'hs.

KI. -kni, ending of adj. "coming from;" -pkinih, subst. case, from; init house, initpkinih from a house, in Nez Percé.
p- prefix forms most names of relationship: píka mother, píap older brother, pet sister; -p as suffix appears in Nez Percé aszap younger brother, asip sister (ísip Walawala). The prefix pi-forms reciprocal verbs; hak-, hah-, radix of verb to see, forms pilaksil to see each other.

K1. -na is transitional case-suffix ; cf. Nez Percé kína here, from pron. ki this.

## conclusions.

The conclusions which can be drawn with some degree of safety from the above linguistic data and some mythologic facts, concerning the prehistoric condition of the people which occupies our attention, are not unimportant, and may be expressed as follows:

Although it is often a difficult matter to distinguish the loan words in the above lists from the words resting upon ancient affinity, the table shows that the real loan-words of the Maklaks were borrowed from vicinal tribes only, as the Shasti, and that those which they hold in common with other tribes more probably rest on a stock of words common to botl, as the pronominal roots. The affinity with Maidu appears more considerable than that with other Californian tribes only becunse the Maidu dialects have been studied more thorouglly. Scarcely any affinity is traceable with the coast dialects of Oregon and California, and none with the Tinné dialects, though the Umpkwa and Rogne River Indians lived in settlements almost conterminous with those of the Máklaks. The latter were acquainted with the Pacific Ocean only by liearsay, for they have no original word for salt or tide, nor for any of the larger salt-water fish or manmals, and their term for sea is a compound and not a simple word: múni é-ush "great water-sheet," just as the Pernvians of the mountains call the ocean "mother-lake," mama= cocha. The scanty knowledge of the sea, which was scarcely one hundred
and fifty miles distant from the mountain homes of the Klamath people, proves more than anything else their protracted isolation from other tribes and dlso their absence from the sea-coast during their stay about the headwaters of the Klamath River.

No connection is traceable between the languages of the Klamath and the Shoshoni Indians, both immediate neighbors, nor with the Kilapuya, Chinook, and Selish dialects north of them. They must have remained strangers to each other as far back as language can give any clue to prehistoric conditions. The Salaptin and Wayfletpu families are the only ones with whom a distant kinship is not altogether out of the question. Some of the terms common to these languages could have been aequired by the Máklaks through their frequent visits at the Dalles, the great rendezvons and market-place of the Oregonian and of many Selish tribes. Friendly intercourse with the Warm Spring Indians (Lókuashtkni) existed long ago and exists now; friendly connections of this kind are frequently brought abont by racial and linguistic affinity, just as inveterate enmity is often founded upon disparity of race and language.*

The resemblances in the lexical part of the three families are not unimportant, but in view of the small knowledge we have of either and of the large number of words in these languages showing neither affinity nor resemblance, we have to maintain the classification prevailing at present and to regard their dialects as pertaining to three linguistic families. Sahaptin shows more likeness in phonetics and in morphology with Wayiletpu than with Klamath.

Nowhere is syllabic reduplication so well developed in Oregon and about Columbin River as in the three families above mentioned and in Selish, the distributive as well as the iterative. The latter exists in every language, but of the former no traces could be detected in the Kalapuya and Northern Californian languages, and but few in Shoshoni dialects, though in Mexico it is frequent. This point will prove very important in tracing ancient migrations.

[^11]The mumeration system of a people is a relic of a remote age, and therefore of importance for tracing the ancient comections of tribes. The quinary system is the most frequent counting method in America, and often combines witl the vigesimal. The pure quinary system prevails in Ara, in the Chimariko, Yuki, and in the Shasti-Pit River family, in Sahaptin and Wayíletpu, and it is also the system found in Klamath. Curiously enough, the Maidu Inclians count by fifteens, and the decimal system forms the basis of the Wintún, Mutsun, and Selish dialects. The mystic or "sacred" number occurring hundreds of times in mythologic stories is five among all the Oregonian tribes.

T'o sum np the result of the above linguistic inquiry, it may be stated that our present knowledge does not allow us to connect the Klamath language genealogically with any of the other languages compared, but that it stands as a linguistic family for itself. It has adopted elements from the tongues spoken in its neighborhood; and a common element, chiefly pronominal, underlies several of these and the Anerican languages in general.

## THE HISTORIC PERIOD.


On account of the superstition previously alluded to, the traditional historic lore which forms so attractive a feature in the unwritten literature of the nations east of the Rocky Mountains and of Mexico is wanting entirely among the Maklaks, and we have to rely upon the meager reports of travelers and Government agents for accounts of the condition of the tribes in the earlier part of this century. Such notices of historic events are as follows:

According to a tradition recorded by Stephen Powers, an epidemic of small-pox broke out among the Modoc Indians in 1847, by which one hundred and fifty individuals perished.

The earliest historic conflict which can be ascertained with some chronological accuracy is the massacre of eighteen immigrants to Oregon by individuals of the Modoc tribe, and Ben Wright's massacre, consequent upon that bloody deed. The massacre of the immigrants occurred at a place on Thle or Rhett Lake, since called Bloody Point. Undonbtedly this was only
one in a series of sinilar butcheries. Apparently it occurred in 1852, and the particulars are all given in 'Texts, pages 13 and 14.

One of the earliest reports upon these tribes made to the Burean of Indian Affairs at Washington is that of Joel Palmer, Superintendent of Indian Affairs for Oregon, dated Dayton, Oregon, September 11, 1854. Paluer states that the lands of the Klamath Indians extend upon the eastern base of the Cascade range for about thirty miles east, and that east of them live the "Mo-docks," who speak the same language as the Klamaths; and east of these again, extending farther south, are the "Mo-e-twas" (Pit River Indians). These two last-named tribes have always evinced a deadly hostility to the whites, and the Modocs boasted of having within the last fom years murdered thirty-six whites. Palmer entered into an agreement with the Klamath Indians to keep the peace with the white people, and also sent messengers to the Modocs and Pit Rivers, helieving that henceforth the immigrants would be spared from their attacks. The Klamath Lakes were then enfeebled by wars with the surrounding tribes and by conflicts allong themselves, and were said to number but four handred and fifteen sonls. He counted seven villages on Upper Klamrath Lake, two on Pliock Creek (P"laikni or Sprague River), three on Toqua Lake (T'úkua), and one on Coasto (Koláshti) Lake.* The Indians had some guns, horses, camp equipage, and the aboriginal war-club and "elk-skin shield" (kaknōlsh). Little Klamath Lake he calls An-coose, a corruption of Agáweslı.

Neither Klamath Lake nor Modoc Indians have taken any part in the great Oregon war of $1854-56$, although their sympathies were of course strongly in favor of the aboriginal cause.

For the year 1854 Powers records a battle fought by Captain Judy against Modoc and Shasti Indians on the Klamath River, north of Yreka, in which some women of the Shasti were killed.

The Report of 1859 speaks of continued hostilities on the side of the Modocs against passing immigrants and of the murdering of a party of five white mien in Jackson County, Oregon. Two of the murderers belonged to the tribe of Chief Lelekash, and three of the perpetrators were seized and killed by the Klamath Indians (page 392).

[^12]Alexander S. Taylor has the following passage in his "California Farmer" of Juné 22, 1860: "Cuntukus, Lalacks, Schonches, and Tertupkark are names of chicfs among Klanath Lake Indians of the Oukskenah tribe. The big Klamath Lake is called Toakwa." Except the first, the above head-men were all identified in the Dictionary with the well-known names of Lelékash, Skóntchish (a Modoc chief) and Tatápkaksh. Cumtukni, who died about 1866, is mentioned by Stephen Powers as a great orator, prophet, and rain-maker. $\dagger$

Whether the two incursions made upon the Klamath Lake people by the Rogue River Indians of Timne lineage, across the Cascade range, of which detailed accounts were furnished in our Texts by Dave Hill, took place about 1855 or earlier I have not the means of ascertaining. The Lake tribe were not slow in inflicting vengeance upon the attacking party, for they crossed the monntain pass and fell npon the camps of their enemies, making sad havoc among them.

Frequent disputes and encounters occurred between the two chieftaincies and the Shasti Indians around Yreka, California; but the warlike qualities of the latter were often too strong for the aggressors, and the couflicts were not very bloody. $\dagger$ With the Pit River or Móatwash tribe the matter was different. They were not, like the Shasti, possessed of the warrior spirit, and therefore had to suffer terribly from the ammal raids perpetrated upon them. In April and May the Klamath Lakes and Modocs would surround the camps, kill the men, and abduct the women and children to their homes, or sell them into slavery at the international bartering place at The Dalles. Some of these raids were provoked by horse-stealing, others by greed for gain and phunder, and the aggressors never suffered heavily thereby. When they began is not known, but the treaty of 1864 put an end to thein. The recitals in the Texts, pages 13-27 and 54, 55,

[^13]give us graphic sketches of these intertribal broils. Some of the eastern l'it Rivers seem to have lived on friendly terms with the Modocs; but the bands farther south, especially the Hot Spring and Big Valley Indians, were the principal sufferer's by these incursions. In a raid of 1857 fifty-six of their women and children were enslaved and sold on the Columbia River for Cayuse ponies, one squaw being rated at five or six horses and a boy one horse.*

The Pit River Indians were a predatory tribe also, and very dangerous to the immigrants passing through their country to northwestern Oregon. Their continued depredations made it a duty of the Government to inflict upon them a heavy chastisement, and Maj. Gen. George Crook, commanding the Colorado Department of the United States Army, was intrusted with its execution. This campaign of 1867 is described by him as follows : $\dagger$

I continned the campaign into the Pit River eonntry with Company H, First Cavalry, Lientenant Parnelle; Company D, Twenty-third Infantry, Liencnant Madigan, First Caralry, commanding; and Archie McIntosh, with his twenty Fort Boisé Indian sconts. We found on Pit River a party of warriors in camp. They fled. The next day we discovered a large party of warriors in the bluffs on the riser. We had a severe fight, lasting two days and nights. They cffected their cscape by means of holes and crevices in the ground. A great many were killed, among whom were some of note; how many could not be ascertained. Our loss was Lientenant Madigan and three men killed, and eight soldiers and one citizeu wonnded.

The more unruly portion of these Indians were subsequently removed to the Round Valley Reservation, California, and about two hundred are still in their old homes.

Between the Klamaths and the neighboring Suake tribes there was always a sort of disaffection, based upon difference of race, language, and habits; but whether their earlier relations were always those of open hostility or not is past finding out. $\ddagger$ The wording of the treaty makes it probable that the hunting grounds north and east of their present seats on Sprague River were shared in common by both, and that the Snake Indians frequently

[^14]changed their settlements, as hunting uations are in the habit of doing. Thus Pauline Marsh, near Silver Lake, and Pauline Lake, on one of the head springs of Des Clutes River, were both named after the Snake chief Pamaina of our Texts. The bauds established upon the Reservation since the treaty was concluded are called Walpapi and Yahushkin. At first they ram off and committed depredations in the vicinity, whereupon the Government was compelled to force them back. General Crook made several expeditions in the execution of the task. These campaigus were short and decisive, and the Klamath Lake sconts engaged in them did good service, as evidenced by General Crook's reports* and Dave Hill's Text, pages 28-33. Upon the defeat and killing of Panaina, the Walpapi chief, the tribe fintally quieted down and remained neutral in the commotion caused by the Modoc war of 1872-'73.

No indications are at hand of the number of Indians formerly inhabiting the headwaters of the Klamath River. Before the first census was taken estimates deserving no credence were made, varying from one thousand to two thousand Indians. In those times the scourges of small-pox, syphilis, and whisky did not inflict such terrible ravages as they do now among the Indians; but instead of these the continual tribal quarrels, fanily vengeance, the ordeals of witchcraft, dearth of food, and the inhuman treatment of the females must have claimed many more victims than at present. Emigration and intermarriages with other tribes were rather the exception than the rule, and are so even now.

## THE TREATY OF 1864.

During the ten years following Wright's massacre the country began to assume a somewhat different aspect through the agricultural and stockraising settlements of white people that sprung up in Lost River Valley, around Little Klamath Lake and in other places. The cession of lands to the "Oregon Central Military Road Company" from Eugene City, in Willamet Valley, through the Cascade range, across the Klamath Marsh, to

[^15]Wraner Lake, and thence to the boundary of Idaho, with its "six miles limit" grauts on both sides, took place before the conclusion of the treaty.

In order to subject the tronblesome Suake and Modoc tribes to a stricter control, and to secure more protection to settlers and the immigrauts traveling through Oregon, Fort Klamath was established north of Upper Klamath Lake, in Lake County, and garisoned with several companies, who were of great service in preserving order in these sparsely inhabited tracts. The Klamath Lake Indians were more inclined to keep up friendship with the white people than the other tribes, uevertheless some turbulent characters among them necessitated military restraint.

The Superiutendent of Indian Affairs of the Northern District of California, Jurge E. Steele, adjusted some grave difficulties between the Shasti and the Mraklaks Indians, which threatened to break out into a terrible war of devastation against the Shasti and the white settlers alike. Some of the Máklaks "braves" had been killed upon the lands of white settlers, and the injured Indians had begrun retaliation already. Colonel Deew, stationed at Fort Klamath (who fought marauding bands of Shoshoni aud Baunocks during the summer of 1864), had arrested and executed "Captain" George, a Klamath Lake chief, for criminal acts, and killed an Indian commonly known as Skukun John. The chiefs and some representative Iudians of the contending tribes met Judge Steele near Yreka, California, on February 14, 1864, and for some trifling consideration agreed to forego all further hostilities among themselves, to allow free passage to anybody traveling through their territories, and to maintain terms of friendship with all whites, negroes, and Chinese. The Modocs also made the special promise to harass no longer the Pit River Indians by amual raids. It also appears from Mr. Steele's allocution to the Indians that they had been selling to whites and others Indian children of their own and of other tribes, and also squaws, the latter mainly for the purpose of prostitution.*

The establishment of Fort Klamath, the increase of white men's settlements, the possibility of Indian outbreaks on account of the greater vicinity of the farms to the Indian villages, and the desire of the Indians themselves to obtain rations, supplies, and annuities brought the opportunity of a

[^16]treaty with these Indians more forcibly before the Government than ever' before. In compliance with instructions from Indian Commissioner William P. Dole, Superintendent J. W. Perit Huntington, accompanied by Agent Logan, went through the Des Chutes Valley to Fort Klamath, and found there a large number of Indians of both sexes assembled, seven hundred and ten of whom were Klamath Lake, three hundred and thirty-nine Modoc people, and twenty-two of the Yahuskin band of Snake Indians. They unanimously concurred in the desire that Lindsey Applegate, a settler of Jackson County; Oregon, be appointed as their agent. The treaty was concluded on the 14 th of October, 1864, and duly signed by the contracting parties, including twenty-six chiefs and principal men of the tribes. Huntington's estimate of funds uecessary for fulfilling treaty stipulations and subsisting the Indians the first year amounted to a total of $\$ 69,400$. The text of the treaty being too long for insertion entire, I restrict myself here to the contents of the principal paragraphs:

Article 1 stipulates the cession of the territory described above ( $p$. xvi), and sets apart as a reservation for the tribes referred to the tract included within the limits following: Beginning upon the Point of Rocks, about twelve miles south of the moutl of Williamson River,* the boundary follows the eastern shore north to the mouth of Wood River; thence up Wood River to a point one mile north of the bridge at Fort Klamath; thence duз east to the summit of the ridge winch divides the upper and middle Klamath Lakes (now called Klamath Marslı and Upper Klamatlı Lake); thence along said ridge to a point due east of the north end of the upper lake; thence due east, passing the said north end of the upper lake to the summit of the mountains on the east side of the lake; thence along said mountain to the point where Sprague's River is intersected by the Ish-tish-ea-wax Creek (probably Meryl Creek); then in a southerly direction to the summit of the mountain, the extremity of which forms the Point of Rocks; thence along said mountain to the place of begimning. The tribes will remove to this reservation immediately after the ratification of the treaty and remain thereon. No whites, except employés and officers of the United States Govermment, are allowed to reside upon this tract, and the Indians have

[^17]the exclusive right of taking fish and gathering edible roots, seeds, and berries within the reservation. Provision is made by which the right of way for public roads and railroads across said reservation is reserved to. citizens of the United States.

Article 2. As a payment for the ceded lands the Indians shall receive $\$ 8,000$ per anmum for a period of five years, $\$ 5,000$ per ammem for the next five years, and the sum of $\$ 3,000$ per ammm for the five years next succeeding.

Article 3 provides for the payment of $\$ 35,000$ for removing the Indians to the reservation, subsisting them during the first year, and providing them with clothing, teams, tools, seeds, etc.

Articles 4 and 5 provide for the establishment of a saw-mill, a flouringmill, a manual-habor school, and hospital buildings, all to be maintained and staplied with working material at the expense of the United States for the period of twenty years. Employés for rumuing these establishments shall be paid and housed by the Government also.

Article 6 reserves the right to the Government to provide each Indian finmily with lands in severalty to the extent of forty to one hundred and twenty acres, and to guarantee possession to them. Indians are not allowed to alienate these lands.

Article 9. The Indians acknowledge their dependence upon the Govermment of the United States, and pledge themselves to be friendly with all citizens thereof, to commit no depredations upon the persons or property of said citizens, and to refrain from carrying on any war upon other Indian tribes.

Article 10 prohibits the sale and use of liquors upon the Reservation, and Article 11 permits the Govermment to locate other Indian tribes thereon, the parties to this treaty not losing any rights thereby.

The treaty was proclaimed February 17, 1870.
Like most of the treaties concluded between the United States Goverument and the Indian tribes, this compact was made much more to the advantage of the white man than of his red brother. Not only were the stipulated ammities rather stuall for a body of Indians, which was then considered to number about two thousind people, but these ammities were
to be paid only after the ratification of the treaty by the President and the Senate, which did not take place till five years after the conclusion, viz, February 17, 1870. Meanwhile the Indians were always subject to the possibility of being removed from the homes of their ancestors by the stroke of a pen. The bungling composition of the document appears from the fact that a grave mistake was committed by inserting the term "east" instead of west (italicized in on text above), and by not mentioning the land grant made to the Oregon Central Military Wagon Road Company before 1864, which, when insisted upon, would, with its twelve-mile limits, take away the best parts of the Reserve, the Sprague River Valley, for instance. At the time when I visited the country, in the autumn of 1877, the Klamath Lake Indians showed much animosity against the settlers establishing themselves within their domain. The company laving left many portions of their projected wagon road unfinished, Congress, by act approved March 2, 1889, directed the Attorney-General to cause suits to be brought within six months from that date, in the name of the United States, in the United States Circuit Court for Oregon, to try the questions, among others, of the seasonable and proper completion of said road, and to obtain judements, which the court was authorized to render, declaring forfeited to the United States all lands lying conterminous with those parts of the road which were not constructed in accordance with the requirements of the granting act. (Cf. on this subject Ex. Doc. 131, House of Representatives, Forty-ninth Congress, first session, and Ex. Doc. 124, Senate, Fiftieth Congress.)

The first representative of the Government, Subagent Lindsey Applegate, erected some buldings at the nortliwest point of Upper Klamath Lake, called Skohuáshki (abbr. Koháshti); but as early as 1866 he called attention to the fact that the place had no suitable water-power, but that three miles above the little creek at Beetle's Rest was a most excellent motor for driving a saw-mill and a grist-mill, and, being on the edge of the pine woods, was a well-fitted and shady place for the agency buildings. This advice was followed in 1868, two years before the ratification of the treaty. In the same year the old practice of cremating dead bodies was abandoned and inhumation introduced. The grave-yard was established around the ash-pile of cremation, still visible in 1877 , and in 1878 a second
cemetery was inaugurated between the Williamson River and Modoc Point, one mile and a half south of the bridge.

President U. S. Grant's peace policy in regard to the Indians was inaugurated by atet of Congress dated $\Lambda_{1}$ ril 10, 1869. The supervision of the Indian agrencies was placed in the hands of the authorities of religious denominations, a board of commissioners appointed,* and the spiritual interests of that reservation turned over to the Methodist Church.

## sulentific researches on these indians.

The study of the ethography of a tribe usually precedes that of its language; sometimes hoth are pursued simultaneously, and this is undoubtedly the correct method. In the case of the Máklaks, Horatio Hale, $\dagger$ the linguist of Ch. Wilkes's United States Exploring Expedition (1838-1842), and still holding forth as a pioneer in his lines of research, took down a vocabulary from a Klamath Lake Indian whom he met on the Columbia River in 1841. No ethnographic remarks upon the tribe accompany this vocabulary, probably because infornation obtained from interpreters, who speak the Chinook jargon only, is notoriously unreliable.

Next in time follow the extensive explorations of John Charles Frémont $\ddagger$ of the interior basin west of the Rocky Mountains and of the Pacific coast from 1843 to 1844, and again from 1845 to 1846 , during which the Klamath Lakes and Klamath Marsh were visited and explored. His reports contain graphic sketches of all that was seen and observed by his parties; but scientific accuracy is often wanting, and many countries are described without giving the Indian local names, which are indispensable to identification.

The acquisition of the Pacific coast by the United States (California in 1846, Oregon in 1848) natnrally suggested projects of connecting the two oceans by a transcontinental railroad, starting from the Mississippi River and reaching to the Bay of San Francisco. The Central Govern-

[^18]ment sent out in different directions amm officers and engincers to survey the proposed routes, and to publish the results in a series of volumes.* For this purpose the Thirty-second Congress appropriated, by ant act passed May 3,1853 , the sum of $\$ 150,000$, which was by two later appropriations in 1854 increased to a total of $\$ 340,000$. A branch of this railroad was to run up the Sacramento Valley to the Columbia River. In this portion the Klamath headwaters were principally concerned, and it is that which was surveyed by Lient. Robert Stockton Willianson, $\dagger$ assisted by Lient. Henry Larcom Abbot, both of the Corps of Topographical Engineers. Their joint report, together with the reports of specialists on zoölogy, botany, geology, etc., is contained in Vol. VI $(1855) \ddagger$ These reports are valuable and on a level with the condition of science as it was in those days; but the use of the volumes is inconvenient when reference has to be made to the bulky maps, all of which are contained in other volumes than the reports themselves. Lieutenant Williamson, assisted by Lientenant Crook, when on the border of Klamath Marsh (August 22, 1855), obtained one hundred and two terms of the Klamath Lake dialect, which are published in Vol. VI, Part I, pp. 71, 72. This vocabulary is brinful of mistakes, not through any want of attention of these officers, but because they questioned their interpreter throngh the imperfect mediums of gestures and the Chinook jargon.

The vocabulary taken in 1864 by Dr. Williann M. Gabb at Koháshti shows the same defects, and was obtained through the "jargon" also; other collections were made by Dr. Washington Matthews, W. C. Clark, and Lewis F. Hadley. The words of Modoc as quoted in the publications of A. B. Meacham are misspelt almost without exception. From Stephen Powers we possess a short Modoc vocabulary, as yet unpublislied.

Whosoever inspects these word collections will see at once that the study of the Klamath language had never gone beyond the vocabulary

[^19]stage liefore the publication of the present volume. Even the author experiencel considerable difficulties before he conld pass beyond that limit. When he reached the reservation agency he found not over three or four individuals who were able to speak a tolerable Finglish, and the knowledge of this tongue is absolutely necessary to any one who aspires to the position of an interpreter of his own language in those parts. The Indians were nearly all pure bloods, and most of them knew scarcely more than a dozen Englisin terms. Many could converse in Chinook jargon, but the majority, especially the females, were not acquainted even with this precarions means of intereourse. Indeed, these people must be slow in acquiring am Aryan language like English, for it presents so many characteristics entirely opposite to those of Klamath. English is not provided with reduplication, prefixes of form, nor with the multiple suffixes of Klamath; it differs from it also by its more complex syntactic structure, its imperfect nominal inflection, by its distinetive form for the nominal plural, the gradation of the adjective and adverb effected by suffixation, its personal inflection of the verb, and a long array of irregular and auxiliary verbs.

Thus it will be easily perceived that the obtaining of correct and reliable ethographic and linguistic information in such a tribe is franght with many difficulties. Sometimes it is practicable to get the terms for visible objects by making gesture signs or by pointing at the objects, but it just as often misleads; and if the investigator has to do with people who know no other lauguage than their own, he must revise his notes with many of them before he can place any trust in what he has written down from dictation. The Indians and mixed bloods who lave made some progress in the acquisition of English pronomnce $f$ as $p, v$ as $b, r$ as $l$-are modeling English after their own language, nsing he for our he, she, it, they, him, her, them; all this being liû'k, lî̂̀'t, hî́'uk for them. They do not know how to use our conjunctions, a defect which makes all the tales, myths, and other textual iuformattion unintelligible. The only means of obtaining results is to pick out the best people from the crowd and to train them for awhile for the purpose wanterl, until they are bronght so far as to feel or understand the scope of the investigator. Women will be found more useful than men to inform him albout mythis, animal storios, the gathering of regetable form, house-
hold affairs, and terms referring to colors; men more appropriate than women in instructing him about their hunts, fishing, travels, their legal customs, wars and raids, house-building, and similar work. Omit asking them about the deceased, for it makes them angry and sullen. They do not as a rule willfully lead the investigator into error when they see that he is in earnest. Errors often originate in preconceived notions or theories and inappropriate questions of the investigator, sometimes also in the want of abstract terms in the interpreter's language. 'To insure correctness in an Indian myth, animal story, or any relation whatever, it slould first be taken down in Indian, and of this a verbatim translation secured.

Ethnographic sketches of both tribes, but chiefly of the Modocs, were published in the newspapers of the Pacific coast at the time of Ben Wright's massacre, but they were not accessible to me; more circumstantial were those written at the time of the Modoe war (1872-'73), and specimens of these may be seen in A. B. Meacham's publications, in the "Overland Monthly" of San Francisco, and in Stephen Powers's "The Modok," in Contributions III, pp. 252-262.

Etlmographic objects manufactured by and in actual use among both tribes were purclased at different periods by collectors. The National Museum in Washington owns several of them; but the most complete collection is probably the one made in 1882 by the Swiss naturalist, Alphons Forrer, a native of St. Gall, which was partly sold to the Ethnographic Museum of St. Gall, partly (eighty-five articles) to that of Berne, the capital of Switzerland. Forrer lived several months among the Klamaths, and thus was enabled to secure the best specimens. There are two hänaisish or "magic arrows," an implement which has probably become very scarce now. The majority of these objects are manufactured from wood, furskin, and basket material. There is no suitable clay found in the Klamath River Highlands, hence these Indians never made any pottery.

The report of Lieutenants Williamson and Abbot contains a large array of astronomic positions and of meteorologic observations made during the expedition, which will prove useful to later observers. The zoölogic, botanic, and geologic reports made by different scientists were considered of higin value at the time they were first published. . It will be remembered
that these explorations were the starting-point of all further researches upon the Pacific coast, and as snch they are creditable to the men with whom and the epoch at which they criginated.

The topographic map of the Klamath headwaters is now being prepared by the U. S. Geological Survey. It is laid.out upon a scale of 1 to 250,000 , with contom intervals of 200 feet, the rivers and water sheets in bhe. The sheets are mamed as follows: Ashland, Klamath,* Shasta, Modoc Lava Bed, Alturas-the last three belonging to California. The smreys were made from 1883 to 1887 by Hemry Gamett, chief geographer, A. H. Thompson, geographer in charge ; triangulation by the George M. Wheeler smrvey, by Mark B. Kerr ; and topography, by Eugene Ricksecker and partly by Mark B. Kerr.

## THE MODOC WAR OF 1872-1873.

The well-known maxim, "it is cheaper to feed the Indians than to fight them," has forced itself upon the governments of all Amierican countries in such indelible characters that it has become a rule for them to conclude treaties with the different "nations" to keep them at peace, feed them by rations or annuities, and confine them within the limits of certain territories. The treaty of 1864 was not attended by all the favorable results expected. The Snake Indians ran off from the Reservation during April, 1866, the Modocs in 1865. The latter tribe were not compelled to leave their old domain, now ceded to the United States, till 1869. Moreover, it always takes several years to gather straying Indians upon a reservation after a treaty has become an accomplished fact. The Superintendent of Indian Affairs in Oregon, Mr. Meacham, on December 30, 1869, after a long and excited "talk," succeeded in bringing two hundred and fifty-eight Modocs to Modoc Point, upon the reservation allotted to them. On April 26,1870 , the supply of rations was exhansted, and the more obstinate half of the tribe left the Reservation again for the old domain upon Lost River and the lakes, whereas the other half, under Skóntchish, went to Yáneks, on Sprague River, where the Superintendent located them. All Modocs

[^20]had become disgusted at the close neighborhood and secret enmity of the Klamath Lake Indians, their congeners.

The presence of the Modocs in their "old country," though contrary to the letter of the treaty, was tolerated by the Government until the autumn of 1872, when the complaints of the white settlers against the Indians became too frequent and serious to be further disregarded. A struggle to secure the enforcement of the treaty could no longer be postponed. The Modocs' open defiance to the authorities could no longer' be endured, and this brought on the Modoc war.

Space does not permit me to give more than an outline sketch of this bloody contest of a small, sturdy people of mountaineers against the regular army and a large body of volunteers; but many references in detail have been made to it in the Texts and Notes, to which the reader may refer: A monograph of the Modoc war doing full justice to the importance of this event and to its ethnographic features would alone fill a volume of considerable size. Here, as well as in all other Indian wars, the result was that the strong conquered the weak, which is always the case in the end, especially when the former has the law on his side.

According to the war chronicle obtained by me in the Modoc dialect from the Riddle fanily the war originated in a petition sent by the settlers to the President to have the Indians removed from their old homes to the Reservation, in fulfillment of the treaty stipulations. The President agreed to this, and sent an order to the commander at Fort Klamath to have them removed-"peaceably if you can; forcibly if you must!". In the morning of November 29, 1872, Major Jackson surrounded the Modoc camp upon Lost River, near its mouth. When he tried to disarm and capture the men they escaped to the hills. The soldiers and the settlers of the neighborhood then fired upon the unprotected women and children of another Modoc camp farther north, for which brutal act the Modoc men retaliated in the afternoon by killing fourteen settlers upon their farms. Hereupon the Modocs retreated with their families to the Lava Beds, south of Tule Lake, the home of the Kúmbătwash, and there they strengthened some select positions, already strong by nature, through the erection of stone walls and earth-works. Kíntpuash or Captain Jack, who now was not the
chief only but also the military leader of the Modocs, selected for his headquarters the spacious cavern called Ben Wright's Cave, and there the tribe remained, unattacker and unharmed, until the 17th of Janary of the year ellsuing

The wintry season and the difficult condition of the roads, or rather trails, in these monntainous tracts delayed the concentration of the troops and provisions to the Lava Beds for nearly two months. On the day above mentioned Colonel Frank Wheaton, then in command, resolved to attack from two sides the seventy* sturdy warriors in their stronghold. Many of the troops were fresh from Arizona, and had fought against Apaches armed with bows and lances only. The Modoes carried the old octagonal small-bore Kentucky rifle with the greased patch and small ball, which within its limited range had a very flat trajectory, and consequently a large dangerous space.t The fog was so thick that men could not see their right or left hand comrades, but in spite of this the commander ordered the attack. Scarface Charley, a leader possessed of the best military and engineering capacity in this war, claimed that he held lis station, with three squaws to load, against a platoon of cavalry. The troops counted in all about four hundred men. One corps had to attack from the north, viz, the shore of Tule Lake, the other from the west, and without connecting both by a field telegraph the commander ordered them to unite upon the top of the hills after storming the Indian positions. The fog amnihilated these plans entirely, and the decimated troops were in the evening withdrawn to Van Bremer's farm, west of the Lava Beds.

After this signal discomfiture another officer, General Alvin C. Gillem, was assigned to the command, and the troops were reinforced by four companies of the Fourth Artillery from San Francisco. Instead of attacking the Modocs again on a clear day and bombarding their positions, it was deemed proper to negotiate with them for peace. There was a party of extremists for war in the Modoc camp and another inclined to listen to peace overtures, and upon the latter the body of the Peace Commissioners $\ddagger$

[^21]principally relied. Several attempts at parleying were unsuccessful, but finally the parties were appointed to convene on April 11, 1873. The capture of Kintpuash's ponies by the troops, in spite of General Camby's promise of a total suspension of hostilities, had exasperated the chief to such a degree that he and his aids resolved upon murder by treachery: The dark deed was successfully perpetrated upon two members of the Peace Commission. The others fled, and henceforth, after the dastardly murder of General Canby, a new plan was adopted for a speedy termination of the war.

Wright's Cave and surroundings were bombarded with heavy shells on April 16, 17, and 18, and attacks made by the troops sinultaneously: By this time about ninety Indian scouts had joined the Army, two-thirds of whom were Warm Spring, one-third Wasco Indians, all under the command of Donald McKay. The Modocs vacated the cave on April 19, and were met by a detachment of regulars and thirty scouts at Sand Hill, fonr miles from the cave, on April 26 . This engagement was more disastrous to the troops than to the Modocs; but at the Dry Lake fight, May 10, the latter were forced to retreat. This was the beginning of the dissolution of the Modoc forces; their provisions commenced to give out, and one portion of the warriors becane dissatisfied with Kíntpuash's leadership. This party surrendered May 25 to the commander-in-chief, General Jefferson C. Davis, who had on May 2 relieved Colonel Gillem, the intermediate commander. Soon after this, on June 1, Kintpuash, with the few men who had remained true to him, gave himself up to a scouting party of cavalry, led to his hiding place by the treacherous Steamboat Frank,* who, it must be acknowledged notwithstanding, had been one of the most valiant defenders of the Modoc cause.

The captured Modocs, numbering with their women and children about one lindred and forty-five persons, were for awhile fed at the expense of the Govermment, and then bronght to the northeastern corner of the Indian Territory, where their remnants live at the present time. Before their departure a number of them, while being conveyed in a wagon to some place near Tule Lake, were fired upon and some females killed by the revengeful settler's. The murderers of General Canby and Dr. Thomas

[^22]could not remain unpunished. Brouglit before a jury at Fort Klamath, Kíntpuasl, Chief Skóntẹhîsh, Black or Híka Jiim, and Boston Charley were condemned to the gallows and hung at the Fort October 3, 1873, while two accessories to the deed-Bántcho and Slû̀lks (now George Denny)-were condemmed to incarceration at Fort Alcatraz, San Francisco Bay:*

Thus ended the long-contested struggle of the little Modoc band against the Oregon and California volunteers and the regnlar troops of the United States Army: Certainly the heroism and ingenuity displayed by the Modocs would have been worthy of a better cause, and would have passed down to posterity in the brightest colors of patriotism had not the murderous "entreacte" and Canby's death deprived the struggle of its lieroic luster. The inworthy termination of this war is well typified by the fact that the skeleton of the Modoc captain is now dangling as an anatomical specimen in the museum of the Surgeon-General's Office, at Washington, District of Culumbia.

## STATISTICS.

From the end of the Modoc war to the present year the condition of affairs has not changed much in the Klamath Highlands. The reports of the United States agent repeat the same story of progress towards civilization every year; but in view of the difficulty of bringing a hunter tribe into the high road of Christian culture and industrial progress we can not attach much credence to such reports so long as they are couched in generalities and do not contain special facts attesting mental improvement by schooling.

In agriculture success is possible onily in the Sprague River Valley, but pasturing will succeed almost on every spot of the Reservation. The report of 1888 , compared with that of 1880 , slows a considerable improvement in this direction. The 2,500 horses and mules counted in 1880 had increased to 4,532 in 1888; the 200 head of cattle to 2,201 . In the latteryear the number of swine figured 208, of domestic fowl, 1,000 . Of the 20,000 tillable acres of land 1,400 were cultivated by the Indians in

[^23]> 1888 and 500 broken by them; 10,000 acres were inclosed by fences. The crops of 1888 amounted to 8,000 bushels of wheat, 4,000 of oats and barley, 1,000 bushels of vegetables, 3,000 tons of hay; and 500 pounds of butter were manufactured. Of lumber 100,000 feet were sawed. The Indians transported with their own teams 500 tons of freight, and thereby earned $\$ 1,500$. The two boarding-schools, one at the Klamath Agency and the other at Yáneks, in the same year boarded 215 pupils at a cost to the Government of $\$ 18,764$-about $\$ 10.40$ a month per capita.

The number of acres contained within the Klamath Reservation is $1,056,000$, and of these only abont 20,000 acres are considered to be tillable land. The rest is occupied by woods, marshes, rocks, and other hindrances to cultivation.

The school and church interests are in the hands of the Methodist Episcopal Church, which also has a vote in the appointment of the United States agent.

The statistics of population have furnished reliable data only from the time when ammities were first distributed among these Indians. This necessitated an amnual count of each family, giving the number of the individuals belonging to each. One of these was made during my presence on the reserve on October 30, 1877, before the winter supplies were dealt ont to the tribe. The summary is as follows:
David Hill, chief, at Agency and on Williamson River ........................... . . 225
P'hí, head chief, at the bridge, Williamson River............................ . ..... . 124
Long John, chicf. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 103
Jack, chief . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 92
Lílo, chief . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 23
Total . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 565
The census taken in the Sprague River Valley, Yáneks subagency, furnished the following figures, Klamath Lake ìndians and Modocs being indiscriminately included:

Skóntchish, chief . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 18
Modoc Johnson, head chicf . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 71
Ben, chief. . . . . . . . . .............................................................. . . . . . . . 61
Brown, chief. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 30
Total ..... 194

The Snake Indians were not counted at that time, but were assumed to have the same population as in $1876: 137$. This gives a total of Indians for the Reservation of 896 . This count included about eight mixed bloods and seven Warm Spring Indians from the Des Chutes River. The board-ing-sehool at the Klamath Agency then had eighteen pupils of both sexes.

The reports of the Indian Commissioner for 1880, 1881, 1882, 1883, and 1884 can not be fully relied on, since they give the same figures for each of these years with an unvarying total of 1,023 Indians-Klamaths, 707; Modocs, 151 ; Snake Indians, 165.

The report of 1888, Joseph Emery agent, gives 788 Klamath Lake and Modoc Indians and 145 Snake Indians, a total of 933 individuals.

Probably the most reliable data were furnished by the Indian census made in 1881 for the United States Census Bureau, from March to August :

|  | Klamaths. | Modocs. | Molale. | Suakes. | Totals. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total of tribes on Ruservation................... | 676 | 122 | 55 | 165 | 1,018 |
| Number of uales | 286 | 58 | 30 | 80 | 454 |
| Number of females. | 390 | 64 | 25 | 8.5 | 564 |
| Uumarried at fourteen years and upwards.... . | 109 | 6 | 9 | 11 | 135 |
| Number married | 286 | 55 | 14 | 65 | 420 |
| Number olf full bloods. | 664 | 122 | 53 | 16 (i) | 1,004 |
| Number of mixed bloods | 12 |  | 2 |  | 14 |
| Number below twenty-one years | 291 | 58 | $3 \overline{5}$ | 89 | 473 |
| Number above twenty-oue years ................ | 385 | 64 | 20 | 76 | 545 |
| Supported one half or more by civilized indus- <br> tries | 36 | 6 | 7 |  | 49 |
| Supported one-lualf or more by Government | 33 | 3 |  | 2 | 43 |
| Nomber weariug citizens' dress . ................ | 630 | 112 | 55 | 165 | 962 |
| Acres under cultivation | 2,249 | 140 | 36 | ......... | 2,425 |
| Number attending school | 36 | 1 |  | 3 | 40 |

This enumeration is remarkable on account of the large number of Molale Indians mentioned in it, an element of the population which is nowhere else designated as such in the periodical reports made by the agents.

## NATURAL PEILOSOPHY.

In the manner of considering the transcendental world and in viewing the problems of the supernatural we perceive enormous differences among the various races of mankind. These differences mainly arise from the degree of animism and antlropomorphism applied to the deities supposed to represent the powers of nature and to rule the world. The primitive man regards everything showing life or spontaneons motion as animated by a spirit and endowed with certain luman faculties; whereas among the more advanced nations these sanne gods and genii appear more fully anthropomorphized, and their moral and intellectual attributes more accurately defined. In monotheism all the physical and moral powers supposed to rule the universe become unified into one "Supreme Being."

A people's religion always rests upon a basis laid down in remote ages, and faithfully depicts the intellectual and moral qualities of its spiritnal leaders at that period. Were they ferocious and cruel, the gods whom they imposed upon the people are barbaric also; were they kind and mildmannered, then their deities show these same mental qualities. Deities act by miracles, and are miracles themselves; for a miracle or act contravening the laws of nature is the only causality which the mind of primitive man is able to imagine to solve the difficult problems of physics, meteorology and other processes of nature As there is no connected system in any of the savage religions, it is by no means difficult to overthrow the beliefs of a primitive people and to substitute others for it, provided the new ones are resting upon the same fundamental principle of spirits, deities and miracles. Dreams are to the savage man what the Bible is to usthe source of divine revelation, with the important difference that he can produce revelation through dreams at will. The more thoughtful religions of Asia establish a thorough distinction between spirit and matter, and thus dualistically establish idealism as opposite to materialism; but in America no religion goes any further than to attempt such a distinction. The higher Asiatic religions establish priesthoods, idols, ceremonial worship, divine oracles, prayer and sacrifice, and attempt to elevate man's character by moral teachings; here in the western hemisphere ceremony is magic and
witcheraft ouly, religious feasts are orgies, divine revelation is human hallucination, and the moral element, when present in religion, is not urged upon the community: While in the religions of the white man the gods originally representing nature's powers gradually become teachers or examples of morality and mental improvement, those of the other races remain the stern and remorseless deities of the sky, the atmosphere, and the earth, whose good will has to be propitiated by sacrifice.

As zoodemonism is the most appropriate form of religion for man in the animistic stage, the majority of the mythic characters in American religions are animals, especially quadrupeds; and even the fully anthropomorphized deities sometimes assume, in Oregon and elsewhere, the masks of animals. The earlier Indians firmly believed that such animals as weré the prototypes of their own species had human faculties, and talked and thought as men do; in whatever tribe there are totemic gentes or clans the members of these are supposed to have descended from that prototype of a bear, deer, alligator, eagle, or whatever animal a gens is called after. Certain qualities of man, physical and intellectual, found their closest antlogies in those of animals, and the animal world is much nearer akin to man in the mind of the Indian than in the white man's mind. Scurrilous and grotesque acts ascribed to so many Indian deities were not intended for derision, as with us, but for faithful portrayings of the habits of typical animals; and zoodemonism-not exactly zoolatry, as in Egypt—is the form of religion existing among the wild Indians of America.

The large amount of mythologic and transcendental material obtained among the Indians requires subdivision into several chapters. I present it under the following subdivisions: $a$. Elementary deities; $b$. Spirit deities; c. Animal deities.

Of the mythologic data embodied in the present article the larger part were obtained by myself, but not all. The others were gathered by Messrs. Stephen Powers and Jeremiah Curtin, mainly by the latter, who obtained over one liundred Modoc mytls in 1883 and 1884, now forming part of the unpublished collection of the Bureau of Ethnology.

## THE ELEMENTARY DEITIES．

In the Klamath theology the deities of the elements have preserved almost intact their character as representatives of the powers of mature． Imperfectly anthropomorphized as they are，they appear rather as spirits than as gods；all of them，the Earth perhaps excepted，are of the male sex． Like the animal genii they assume the adjectival suffix＝ámtchiksh，abbr． －anitch bygone，ancient，belonging to the past，＊though less among the Modocs than in the northern chieftaincy．The splendor，power，and awe－inspiring qualities of these superhuman beings is not diminished in the least by the grotesque exterior and acts ascribed to some of them．The sky gods were more plastically defined by popular imagination than the subterranean deities，and hence we begin our sketch with the former．

Ille mihi par esse deo videtur， Ille，si fas est，superare divos．

The clief deity of the Klamath people，the creator of the world and of．mankind，is K＇múkantch，or the＂Old Man of the Ancients，＂the＂Pri－ meval Old Man．＂The full form of the name is K＇nuk＇＝amtchiksh，and Modocs frequently use the shorter form Kěmúsh，K＇mísh，an abbreviation of k＇mútcha，he has grown old，he is old，or of its participle k＇mutchátko， old．He is also named P＇tísh－amtch nálam，our old father．He was also designated P＇laitálkni，the one on high，though the term is now used for the God of the Christians．In every way he is analogous to the＂old man above＂or the＂chief in the skies＂of the Indians of Central California．

What the Indians say and think of their chief deity I have outlined in the Dictionary，pages 138－140，and what follows here will substantiate the data given there．Though K＇múkamtch is reputed to have created the earth，what is really meant is only the small portion of the globe known to and inhabited by this mountaineer tribe，and not the immense terrestrial globe，with its seas and continents．Neither have these Indians an idea of what the universe really is when they call him the creator and

[^24]maintaner of the miverse. The Indians do not clam that he ereater! the world with all in it by one single and simultaneons act, but when he is creating, metamorphosing, or destroying, his acts are always special, directed towards certain objects only. After making the earth, the lakes, isfands, prairies, and mountains he gave a name to each locality ( $p$. $142,1 \mathrm{sqq}$ ). Some of these names must be regarded as giving indications as to the earliest places inhabited by these Indians, especially when they designate fishtraps and ceremonial sudatories. Thus on Upper Klamath Lake we find Kû̀mbat, Túkwa, Tulish, Kohóshti as fishing places, Ǩtí-i-Tupáksi and Yulalóna as fisli-traps, the special gifts of the deity to the people. Other places of this kind are Shuyakē'kish and Ktí-i=Tupáksi. In the old Modoc comntry, on Lower Klamath Lake, there is a rock slaped like a crescent and called Shapashyē'ni, becanse "sun and moon once lived there." On Sprague River there is a lill called "at K'míkamtch's Lodge"-K'mntcham Látsaslısshi. Other legendary residences of the deity were at Yámsi, "Northwind's residence," a high mountain east of Klamath Marsh; others on Tule Lake, at Nílakshi Mountain; and finally K'múkamtch was changed into the rock Ktá-iti, which stands in the Williamson River (q. v.). The old people of both chieftaincies remember many localities alleged to have been the theater of his miraculons deeds.

K'múkantch creates the Indians from the purplish berry of the servicetree or slad-bush (Amelanchier camadensis, in Kl. tchák), and the color of both has evidently suggestel this idea. He also provides for man's sustenance by supplying him with game and fish and the means to capture them; also with the necessary vegetal products. Objects noticeable throngh their peculiar shape are called after him, e. g., the thistle, the piercer of K'múkantcl, K'mukámtcham kiz'́‥ A peculiar haze sometimes perceptible in the west or northwest, shmíish, is regarded as his precursor or that of his son Aíshisl.

Although but a passing mention is made of a wife or wives of his, K'míkaintel las a family. The myths speak* of a father, of a daughter, and of Aíshish, his son "by adoption," as members of it. The name of hiss

[^25]daughter is not given, but she represents the clouded or mottled evening sky. When she leads him to the under-world they meet there a vast crowd of spirits, who for five nights dance in a large circle around a fire, and on each of the intervening days are changed into dry bones. K'míkamtch takes with him some of these in a bag, and when reaching the horizon at daybreak throws the bones around the world in pairs and creates tribes from them, the Modoc tribe being the last of these. Then he travels in the path of the sun till he reaches the zenith, builds his lodge, aud lives there now with his daughter.

K'núkåmtch also figures as the culture-hero of his people ; but since he does so only in one of the myths which came to our knowledge, this myth may be borrowed from some neighboring tribe. In that myth the primitive arts and practices, as lunting and bow-and-arrow making, are taught by him to men, as was done also by Quetzalcoatl, by Botclika, and in Oregon by the Flint-Boy of the Kalapuyas, in whom the sun's rays were personified.

What the national myths relate of him is not of a nature to make lim an object of divine veneration. He resembles men in every particular, is born and dies, acts like other Indians, travels about with companions, starts on gambling jaunts, is indigent and often in want, aud experiences more misery throughout his eventful career than Zeus ever did on account of his illicit love-making. Like the chief gods of other Indian nations, he is the great deceiver and trickster for all those that have dealings with him, is attacked and drubbed repeatedly for his meanness and crimes; but after coming out "second best" or being killed over and over he recuperates and comes to life again just as if nothing had occurred to disturb him. Compared with other fictions representing powers of nature, he is fully the equal of such characters as Nanabozho and Gluskap, or of the Kayowe é demiurge Sínti, "the Deceiver." Some of the most attractive fictions describe the various tricks and stratagems by which K'múkamtch allures his son Aíshish into perilons situations, from which rescue seems impossible. Prompted by him to climb a tall pine-tree, he would have perished on it by hunger had not his charitable wives, the butterflies, succored him in time. The general conflagration by which the earth and its inlabitanis
were consumed through a rain of burning pitch was also brought about by K'míkamtch's hatred for his son. Aishish escapes from this inhuman persecution, and subsequently seeks to revenge himself upon his father. Aishish's son jerks off the glowing tobacco-pipe from his grandfather's neek and throws it into the fire; Aishish pushes it farther into the flames until burnt, and thereby K'muikamtch's death is brought about.

It is singulau that when he and his son Aishish are expected to join social or gambling parties the other participants always experience some difficulty in recogninzing the one from the other. The canp-fire which K'múkantch made on approaching the meeting-place was buTning badly, the smoke seeming almost to stifle the flames; but that of his son, purpleblue in color, sent the smoke straight up, while the fire of Silver Fox, the companion of K'míkamtch, was yellow. When shooting at the mark, Aíshish's arrow hit it every time, but the arrow of K'múkantch struck the ground short of the mark. While gambling, Aishish became the wimer of all his companion's stakes.

Assuming the mask of the Marten (Skē̄l, Skē lamtch), K'múkamtch sends out his younger brother, Weasel (Tchásikai), to look out for oneeyed women and to bring them home as wives (Texts, pp. 107-118). Both try to stop the Northwind and the Southwind at the very orifice whence they are blowing. Weasel loses his life in the attempt, but Marten kills both winds. After Weasel has come to life again, both proceed to the lodge of the five brothers, the Thunders. When inside of the lodge Marten. puts on the head-cover of the dead Northwind, and the Thunders feel his gigantic power. At night an internecine fight takes place between the brothers, and while their lodge is on fire their hearts explode in succession.

From the almost infinite wealth of Klamath folklore many more particulars about this chief deity could be adduced, but what stands above is amply sufficient to indicate the powers of nature which he represents. The facts that Wán or Wanáka, the sun-halo, is his constant companion* and that the seat in the sky which he constantly holds is that of the sum at

[^26]noontime, would alone suffice to show that he represents the sun, the most potent, we may say mique factor in giving life, nourishnent, and health to living organisms, the most inportant of the sky-gods, and the great center of myth production among all nations of the world. In one of the Modoc myths it is stated that "at the call of the morning star K'mush sprang from the aslies (of the fiery sky or aurora) as hale and as bright as ever, and so will he contimue to live as long as the (solar) disk and the morning star shall last, for the morning star is the 'medicine' (múluash?) of the disk." In other myths he appears in the form of the golden or bright Disk, inhabiting the higher mountain ridges and becoming the suitor of females afterwards deified. Thus, like Hor, Rē, and Atum, he appears sometimes as the morning sun, at other times as the noonday and evening sun, and in the myths referring to weather he is either the summer or the winter sum. The burning pipe which Aíshish's son takes from his grandfather and destroys in the camp-fire represents the sun setting in a glowing red evening sky. As the summer sun with his gigantic power he brings on a conflagration of the world and as a cloud-gatherer he causes an inundation. In the warm season he appears wrapt up in haze and fogs, which the mytl in its imagery represents as "a smoky camp-fire," almost impenetrable to the sun-rays: "his arrows fall to the ground before they reach the inark."* 'To typify his sagacity and omniscience, K'múkamtch appears under the symbolic mask of a quadrnped, the pine-marten or Skél, in Modoc Tchke'l, which changes its black winter fur to a brown coating in the hot months of the year, and thereby became a sort of portent to the Indian. Similar changes occur with all the fur animals, but with the marten the difference in the color appears to be greater than with others. Skél sends his brother 'Tcháshgai, or Weasel, to obtain one-eyed women for botl, these being sun and moon, which the Eskimos also represent as one-eyed, deified persons. $\dagger$ The North wind, which is blowing in alternation with the South wind, is attacked and killed by $S k{ }^{-}{ }^{\prime} l$. Here $S k e^{\prime} l$ represents the sum of the summer months, for the summer's heat defeats the cold blasts of the wintry

[^27]and eqninoctial seasons; when he places the North wind's hat upon his head he puts an end to tho noise of tho 'Thunder brothers and then represents the wintry sun.
'The attitude which K'múkantch observes toward his son Aishish will be spoken of under the next heading. It is necessary to add that the former's position is by no means restricted to that of a solar deity; several of his attributes mako lim also a god of the sky, or at least of the clouds, for clouds and the weather's changes are due to the sun's agency. When the sum is environed by lamb-clouds, or a mottled sky, this is figuratively expressed by: "K'múkamtch has taken the beaded garments of Aishish and dressed himself in them." A peculiar red smoke or haze appearing in the northwestem or western sky, shnuish, amnounces lis amival; he is also recognizable by his bulky posteriors, or, as the Modocs say of him: "K'múkantch munish kutúlish gitko." By this they evidently refer to the white and heary, monntain-shaped summer clouds.

Greek mythology depicts the fecundation of the earth by rain showers and thunder storms as the illicit amours of the sky-god Zeus with the wives and daugliters of mortal men. Exactly in the same manner K'múkamteh, as sky-god, seeks to approach illicitly the numerous wives of Aishish, of whom the majority refuse him, though he has by some stratagem previouslyremoved their husband from the scene.

In the aboriginal mind the creation of organisms; vegetal and animal, seems to be in connection with the fecundation of the earth, whereas the creation of the earth, world, or universo implies an act entirely different. All the names of Klamath localities are said to come foom K'múkamtel. The manner in which he created plants and animals was, as we are told in one Modoc myth, by thinking and by wishing, this probably implying that after forming an idea of some creature he made that idea a reality by the strong energy of his will. Many creatures, especially birds and quadru-perls-even men-the myths tell us, were brought forth by him in this manner. 'The moral qualities ascribed to this deity are in keeping with what is known of his plysical and intellectual powers. He provides for mankind, which he las created, but does not tolerate any contravention of his will; for he punishes had chatacters by changing them intorocks or by
burning them. Our ideas of jnstice, eqnity, protection, or love towards men do not and can not enter into the spiritual range of a god whose prototype is constituted of physical powers only.

## aíshisir.

## 

Aíshish, or Aíshishamtch, the second in importance among the Klamath deities, and certainly the most popular of all, is the son of the world-creator, K'múkamtch, and also his companion and rival. He is beautiful in appearance, beloved and adnired by men, and is the husband of many wives, selected by him among the birds, butterflies, and the smaller quadrupeds. His name signifies the one secretcd or conccaled, and was given him at the time of his birth; and since "The Birth of Aíshish" myth explains the nature and position of this deity better than any other myth, I translate it in full from the Indian text obtained from a Modoc woman at the Modoc Reservation, Indian Territory.* The name of Aíshish's mythic mother, as other natives informed me, is Le=tkakáwash. This is an Oregonian bird of the size of the tho' ${ }^{-}$kshash, or blackbird, with a brilliant red or yellow plamage, colors rarely found in birds of that western State. Ornithologists identify it with the Louisiana tanager: Pyranga ludoviciana. 'Thus the bird is an appropriate symbol of the bright sky at moonrise or sunrise, which phenomenon Aishish's mother is representing. 'The myth rmns as follows:

In order to cremate the body of an old sorceress, Le=tkakáwash gatliered wood while carrying her baby son on the back, piled up the wood and set up the ceremonial mourning wail. Proposing to leap into the fire lierself, she was uncertain what to do with her son. She fastened him tightly to her back, and when she had applied the fire K'múkamtch perceived that she was in tears and ready to leap into the burning pile. "What on eartl is this pretty woman going to do?" said le to himself; and when he saw her retreat more than once before accomplishing the dangerous leap he approached, intending to reach her in time to restrain her ; but she rushed

[^28]into the fire, and K'múkamtch, regretting to have arrived too late, managed, however, to withdraw from her back the baby, and to rescue it. He wept as he carried the child off in his arms. But where should he place it? If he placed it on his forehead it would look quite ugly, thought he; therefore he placed it on his knee and went home. He complained that he had an ulcer upon his knee, and asked his daughter to open it, for it pained him excruciatingly. She spread a sheet under the knee and another over it, to squeeze the ulcer open He exclained: "It hurts me terribly! Go easy! Be careful!" Then she replied: "What is the matter with you? Something like hair comes ont in a bunch from the core. Why does it look like hair?" And when the baby appeared on the surface and began to cry she said: "What have you been doing? I have suspected you for quite a while before!" And the babe cried and cried, until the "father" proposed to give a name to him. None was found to answer, for the child cried on and on. Then he proposed to call it Aisliflam'nash ("the one secreted about the body"). 'This stopped its cries somewhat, but not entirely; so he proposed the name Aíshish, and then it became restful and quiet. So the child grew up with this name, then lived in the company of K'múkamtch, became an expert in making shirts, and when gambling won all the stakes, even from his father, who became jealous on account of his superiority.*

This is the extent of the myth so far as needed for our purpose. The jealousy of the grim and demoniac K'múkantch against his more popular son forms the subject of a considerable number of Aíshish myths, which are highly imaginative and interesting. By various stratagems based on low cumning he brings his son into perilons positions, from which he is rescued only with the ntmost difficulty by others, or is perishing in the attempt to save himself. Meantime he is robbed of his garments by his "father." These constant persecutions finally force Aishish to revenge himself upon his father, who is killed by him repeatedly, but not by any means so often as he is killed himself.

[^29]Aishish's camp fire is of a clear, bright pmrplish-blue color (yámnashptchi); he makes his shirts with his own hands and ornaments these and his leggings with all sorts of beads As a marksman he excels all his companions, whose arrows do not even strike the target (Texts, pag. 99, 4-6). According to the Modoc story his wives are Mole, Badger, Porcupine, Bitch, Crane, Mallard, two Maídiktak-birds, Wren, Tchektiti=bird, Yaulikiks or Snowbird, Butterfly, and a host of others; the Klamath Lake myth (Texts, p. 99, 9.10) names five: Coot, Long-tailed Squirrel, Crane, Mallard, Chaffinch. Tcháshkai or Weasel, the younger brother of Skél, scmetimes plays the part of Aishish, but he is not found in this quality so constantly as his brother Ske'l is in that of K'múkamtch.

The varions attributes ascribed to this deity by the myths show Aishish to be in many respects similar to Quetzalcoatl of Nahuatl mytlology, who has been made alternately the genius of the morning star, of the calendar and of the atmospheric changes. As to Aíshish and the personal beanty invariably ascribed to him, it may appear doubtful, in view of so many other complex attributes, which idea was the starting-point that created this mythic figure, and subsequently gathered other but less material attributes about this son of the sum. He could represent originally the norning star, or the rainbow or the moon, but after mature reflection upon his complex attitudes I now believe him to be a lunar deity. The splendor of the full moon is of a yellow line, like Aíshish's camp fire (kiikä'kli) and the shadow of the famished Aishish, as seen from below through the pine-trees of the forest, is the narrow crescent of the waxing moon following its disappearance at the new moon period. At the new or "dead" moon Aíshisl is famished or dead, to revive again on the days following, and this, like other phases of the moon, which result from her changeable position in regard to the sun, are represented to be the result of the jealousy and enuity of K'múkamtch against Aíshish-and whenever Aíshish succeeds in killing lis father, this implies the decrease of sun-heat during the winter season. No myth shows a more striking analogy to the "Birth of Aishish" than that of the birth of Bacchus from the thigh of Zeus after the destruction of his mother Semele by a thunder-stroke caused by Zeus, the Sky-god.

The noon is the originator of the months, and the progress of the
montlis brings on the seasons with the new life seen spronting up everywhere during spring and summer. So the quadrupeds and birds which are the first to appear after the long winter months are considered as the wives of Aishish, and the flowers of summer vegetation are the beads of his garments. He enjoys more popularity than his father, for the moon's light is mild, not burning nor offeusive, nor does it dry up vegetation and make men and beasts drowsy like the rays of the midday sun. Many nations also believe that the changes of weather are partly due to the phases of the moon. Although the "Birtl of Aishislı" myth obtained by me represents Aishish rather as the adopted than as the real son of K'múkamteh, other myths state him to be his son resulting from the union of the sun-disk to the red sky of the morning or evening, symbolized by the woman Le-tkakáwash. We must recall to mind that the term for father, p'tishap, in Modoc t'shíshap, is really the nourisher, feeder, and not the progenitor, for it is a derivative from t'shín to grow.* Most other mythologies consider the relation of sun to moon as that of man to wife, or of wife to man (ef. Deus Lunns), but here the thing is different. There are no female characters of importance in Klamath mythology, nor does the language distinguish grammatically between the sexes.

The difficulty which we experience to distinguish solar end lunar deities from each other in some of the American religions is eaused by the cireumstance that in many languages of this western hemisphere the term for sun and for moon is the same. In such languages both orbs are distinguished from each other by being ealled day-luminary, or night-sun, nightluminary, and with some tribes the belief has been found, that both are actually the same eelestial body, one being merely the image or shadow of the other. In the Maskoki languages lási answers for both, but the moon is commonly ealled níli hási or "night sun." In the Tonica language tí $\chi$ tcliksh, abbrev. taytehi stands for sun, moon, and star, but the moon is usually named lá-u táxtchi "night luminary," the stars táxtchi tipulá, while the smi is either ázshukun tíztehi, "day luminary" or simply tá $\chi$ tchi. Of the 'Tinné languages many have tsī, sī̀, of the Algonkin languages kísis or parallel forms for both celestial bodies, separate distinetions being

[^30]added for "day" and "riight." In the Trimsian and in some of the Selish dialects the terms for both also agree, but in the Shoshonian and Pueblo languages they differ entirely. In Utah and other Shoshonian dialects the term for inoon shows the archaic or reverential suffix - pits, -puits previously noticed (ma-atáwa-pits in Utah), which closely corresponds to $\pi \alpha \lambda \alpha i \varphi \alpha \tau o 5$ as used in the Homeric poems.

While the sun divides time into days, seasons, and years, our sections of time called weeks (quarters of the moon) and montlis (lunations, moons) are due to the revolutions of the moon. This is what caused the Klamath Indians to call both orbs by the same name: shápash the one who tells, which signifies: "which tells the time," or "time measurer." For the moon a parallel form exists in the Timucua, once spoken in Florida: acu=liba star which tells, viz: "star measuring the time" and in the name of the Egyptian moon-god Tehuti, called Thoth by the Greeks,* also in our Germanic mân, English: moon, Germ. Mond, "the measurer."

Here as elsewhere the moon appears under different names, for in Klamath she is also called ukaňōsh "the one broken to pieces." This ter:n never applies to the sun, but only to the moon in the four phases, as a changeable body. $\dagger$ Originally this was only an epithet of the moon, but in course of time it gave origin to a separate deity, for Ukańōslı distinctly appears as moon-god in a myth, which relates his marriage to Wekétash, a frog-woman living with tem beautiful sisters on the west side of Upper Klamath Lake. Ukaú\%ōsh now carries her, the frog, in his heart, and this is what we are wont to call "the man in the moon." Should only a little bit be left of him when in the bear's mouth (referring to eclipse), she would be able to bring lim to life again.

LEMÉ-ISH OR THUNDER.
All elementary deities in the Klamath religion, except K'múkamtch and Aíslish, are mysterious, shadowy beings, not sufficiently antlropomor-

[^31]phized and too dimly defined to deserve the name "gods." Those among them that are most frequently mentioned in myths and popular stories are the genii of the 'Thunder and of the Winds.

The genius of the Thunder, Lemé-ish, is sometimes mentioned as a single person, or abstract mythic being, but more frequently as a company of five brothers, the Thunders or Lemmelemé-ish. At times they make themselves formidable, for their terrible weapon is the lightning or thunderbolt; they cleave the morntains, rocks, and trees, kill, roast, and devour human beings, in which character they are called máklaks-papish. The interior of their lodge is dark, for a sky obscured by a thunderstorm is lacking the full daylight. K'múkamtch entering the lodge, disguised as the "strong man" under the mask of Skēll or pine-marten, annihilates them, for the winter sky with its cold blasts is antagonistic to the display of celestial electricity. The eldest of the Thunders is married to Skinle, the meadow lark, who is the sister of pine marten. After having made themselves thoroughly odions upon the earth, they were, as the myth tells us, relegated to the faroff skies, where they can frighten the people by their noise only and do no further harm

The parents of the Thunders are supposed to live in a small hut or kayáta, and in their stead two dogs are often mentioned as accompanying the Thunders. Of these there are five, becanse the thunder rolling along the momntains is heard in repeated peals, and these peals are in the myths likened to repeated explosions of the Thunders' hearts. The shooting up of lightnings from the earth to the skies gave rise to the idea that their home is undergromin, and that the lightnings coming down from the skies are simply the Thunders returuing to their homes. As the spirit of the Thunder Yayayí-ash is mentioned in a mythic tale.

The Thunder-bird, which plays so prominent a part in the myths of the Eastern and Northwestern tribes, does not appear here under this name, but is represented in some stories by the Raven or K K ik.*

[^32]North wind (Yámash) and South wind (Múash) are more important to the inhabitants of the Klamath highlands than any of the other winds, and therefore are mentioned more frequently. Winds always appear in connection with K'mukamtch or his representative among the animals, Ské'l. Thus when Skél visits his sister, Meadow Lark, who is married to the oldest of the Thunders, he is accompanied by Kik (the Raven, or stormbird), Yámash, T’chákinksh, Yéwash, Míash, Tkálamash, and Gû́pashtish. The Thunder receives and feeds them with the blood of the people slain by him.

The conflict between Skē'l and Tcháshkai on one side and the Winds on the other is related on page 111 of the Texts and is purely meteorological. The South Wind obscures by clouds the face of the moon, and thus kills him temporarily; but when the summer sun appears in the form of Skéll both winds disappear at once to make room to an unclouded sky. The hat of the dead Yámash afterwards serves to frighten the Thunders, as related on the same page. Which was the southern home of Múash is not pointed out in the myths, but that of Yánash was Yámsi Mountain, which is called after hinı. Yámash corresponds to some extent to the Kabibonokka or Northwind of the Ojibwe Indians, and is as much an object of folklore as he is. In other mythologies of America the winds are the blasts of monsters or big beasts; for the animisun prevailing in all the ancient myths requires them to be the manifestation of some living being.

## küíla or the fartif.

The Earth is regarded by these Indians as a mysterious, shadowy power of incalculable energies and influences, rather mischievous and wicked than beneficial to mankind. The Indians ascribe anger and other passions to it, but never personify it in clearer outlines than the ancients did their " $E \rho \alpha$ and Tellus; and it never appears as an active deity in the numerous mythic tales gathered by Mr. Curtin for the collection of the Bureau of Ethnology. I know of it only through the song-lines gathered by myself from individuals of both tribes.

Among all nations of the world we find the idea, which is real as well
as poetical, that the Earth is our eommon mother. "She is dealing out her bonntifnl gifts to her ehildren, the hmman beings, withont envy or restraint, in the shape of eorn, finits, and esculent roots. Her eyes are the lakes and ponds disseminated over the green surface of the plains, her breasts are the hills and hilloeks; and the rivulets and brooks irrigating the valleys are the milk flowing from her breasts." This is the poetical imagery in use among the Eastern Indians when the Earth is mentioned to them.* 'Ihe idea that earthquakes and minecountable tremors or noises within the body of the earth, also the malarial fevers, are the utterances of threat or displeasure at the misdoings of mankind, is as general among Indians as among other nations, and a consequence of the animistic tendency of primitive nations. The Indian prophet Smúzale at Priest Rapids, on Middle Columbia River, and his numerous followers, called the "Dreamers," from the implicit faith these Sahaptin sectarians place in dreams, dissuade their adherents from tilling the gromml, as the white man does; "for" it is a sin to wound or eut, tear up or seratel our common mother by agricultural pursuits; slie will revenge herself on the whites and on the Indians following their example by opening her bosom and engnlfing sneh malefactors for their misdeeds." This adviee was probably cansed by the common observation that gronnd reeently broken up exhales miasmas deleterious to all people dwelling near.

That the Larth was regarded as an anmate if not personified being is slown by the form kaílash of the objective case $(125,1)$, this ease being formed in -ash only in terms applied to man and quadrupeds. Their myth of the earth's creation of course does not refer to the whole globe, but only to the small part of North Ameriea known to these Indians. The earth's interion is also the home of the Thunders, because lightnings are often observed to shoot up from the earth into the skies.

Speeial songs referring to the Earth are eontained in 175; 16: kaíla nû shuinálla; $176 ; 3$ kaîla ai nn̂ wálta; $158 ; 48$ kaílanti nû shílshila-

[^33]the two latter alluding to r'umblings below the carth's surface, In the song 192; 3 the term hïmola should be changed to thämóla, temóla, was covered with huze or mist, a phenomenon often producing malarial and other fevers, and therefore regarded by these Indians as of bad augury. Other passages mentioning the Earth, personified or not, are quoted in Dictionary, p. 123; in one of these, K'mikamtch is threatening to "whirl the earth around" in a dance, and probably this song forms part of some mythic story. (Texts, pg. 192; 9.)

## MUNATÁLKNr.

Besides the Earth there is another chthonic deity known to the Klamath people, Munatalkui or the Genius of the Underworld. I have met his name in one story only, which is that of the creation and first sojourn of the people around Wood River, between Fort Klamath and the Upper Klamath Lake. English-speaking Indians readily identify him with our deril; but no wicked or immoral qualities are ascribed to him, as morals enter into the religious ideas of the hunter tribes but sporadically. There is something of the aboriginal in him, and he is also called Lěmunákni, the signification of both names being analogous.

He appears in the following tale: When K'múkamtch created this world, he made one man, and one woman intended to be the man's sister. The creator placed them in a garden (háshuash) studded with trees producing sweet fruits and built a house for them. The adjoining stable contained domestic animals for their use. All this was upon the prairie watered by Wood River. Man and woman were both blind, and had to remain so until the fruits would be ripe. K'mikamteh told them he would visit them on a Sunday and would knock at the top of their honse. Should anybody knock at the door, the knocks would be those of Mnnatálkni and they must not open. Munatálkni came and knocked at the door, informing them that the fruits were ripe and that he brought them all kinds of berries. The woman said to the man: "Open the door, K'mikantch is here!" but the man said: "Don't open; it is not K'múkamtch who stands at the door!" 'The woman opened; Munatálkni put one sweet berry in her month and she tasted it. He was wearing a long heardress of feathers tied to the top of his hair, his emblem ats conjurer, and this string of feathers was so long as
to tonch the ground. He then stole all the fruits in the garden and went with them to his undergronnd abode.

Then K'míkamteh, who had observed all this from a distance, arrived and knocked at the top of the house. This time it was the man who opened. When asked what had become of the fruits he excused himself by stating that Mmatálkni lad taken all of them. This put K'múkamteh into such a rage that he threw the woman out of the house and whipped her to death. Then he cut open the eyclids of both, which previously had been fastened together, and the man said: "I can sce the sun." K'múkamtch then instructed the man how to make his livelihood by using the bow and arrow, and how to manufacture sinew-strings and obsidian arrow-heads. Upon this he brought the man's sister into life again and both went into the mountains to hunt, for they had nothing to eat. Ever after this K'múkamtch remained angry with them.

This is but the commencement of a long tale designed to show the miraculous growth of the family which sprang from the first man and woman, and their progress in the life-sustaining arts and manufactures. There is no doubt that the above is a singular distortion of the Bible talc concerning Adam and Eve in paradise. The question which remains to be solved is this, whether or not Munatálkni limself is borrowed also from the Jewish story. If he is, then in connection with him we may recall Aishish, who, according to some Modocs, is nobody else but Jesus Christ, who two thousand years ago passed through Lost River Valley and dug a deep well there which lie presented to the Modocs-all this on account of a phonetic similarity between the mames Aishish and Jesus.

The remainder of the story is exactly like what other Oregonian myths relate concerning the origin of mankind and is incontestably of Indian origin. No further mention is made in it of Munatalkni.

## SHŪ'KASI OR WHIRLivind.

Another of the numerous elementary deities is the Whirlwind or Shū'kash. An interesting mythic tale about it, which I have obtained among the Modocs in the Indian Territory, makes of the Shu'kash an engine brought into play from time to time with tremendous effect by the
genius presiding over it. This genius is called Tehitchats ${ }^{\text {ai }}$ '-ash or "Big. Belly;" he is represented to be an old man whose vigor of life is on tho decrease. When he leaves his lodge, his appearance embodies the rainladen, dark-hued, thick nimbus clouds overhanging the earth. When his engine* comes into action, he attracts by it all the objects within reach, ho oppresses the earth with his weight, and forces wayfarers to walk in other paths than they intended to travel lest they may incur danger to life. When he has spent his force by this wanton display, he is rent by a stroke of lightning or a strong gust of wind; he is dissolved into atoms, and the bones filling his big paunch, which had produced the rattling noise attending the course of whirlwinds, fall down to the ground. Tsáskai, the Weasel, the brother of Marten, wrestling with the old man and conquering him after a hard struggle, is the mythic agent who brings about his final discomfiture.

## SPIRIT DEITIES.


No people has ever been discovered that did not believe in the return of human souls after death to their former homes in the form of ghosts. Ghosts or spirits hovering through space are invisible and may inflict damage to anybody without danger of being recognized; therefore they usually inspire awe and terror, and wherever the existence of these fanciful beings is recognized imagination fills the earth, the atmosphere, and the waters with such spooks. Not all of these are necessarily supposed to be the souls of the deceased, but they may also represent the souls of auimals, the spirits of mountains, winds, the celestial bodies, and so forth, for animism has its widest sway in this sort of superstition. Very different qualities are ascribed to each of these hobgoblins or spooks. They are either gigantic or dwarfish in size, powerful or weak in body, attractive or repulsive, of beneficial or wicked influence. They chiefly appear at night or in stormy weather; some are seen single, others in crowds, and a few of their number

[^34]can be pereeived only by the trained eye of such as are initiated into the conjurer's profession.

The classes of specters mentioned more frequently than others in mythology are the spirits of the dead, and giants, dwarfs, and fairies.

The Shiot 'is, or spirits of the deceased, occupy an important place in the psychologic marvels of the Klamath Indian, and are objects of dread and abomination, feelings which are increased by a belief in their omnipresence and invisibility. The popular idea of a ghost is suggested in all climates and historic epoclis by that of a shadoo of somebody's former self, and in several Indian languages the same word is used for shullow, soul, and ghost.* The proper signification of sko${ }^{\prime} k s$, shk $\bar{u}^{\prime} k s h$ is "what comes out of;" like skó'hs, skó spring of the year; it is derived from skóa to come out of, to emerge from, sprout up.

In the mind of the Indian the appearance of a skō'ks comes pretty near the popular idea of a witch or spook as held by the uneducated classes of our population. The soul of a man becomes a skiks as soon as the corpse has been buried or consumed by fire. It hovers in the air around its former lome or the wigwams of the neighbors and at night-time only. Its legs hang down and prodnce a rattling noise, and the whole appears in a white or a black slade of color. Usmally nobody sees them, they do not harm anybody, nor do they produce any dreams; they appear to the senses and sight of the living only when they come to presage death to them. They indergo no metempsychosis into animals or plants; after hovering awhile around their former homes they retire to the spirit-land in the sky, "somewhere near K'míkamtch." 'Their arrival there is afterwards revealed by dreams to the surviving relatives, who express in songs what they have seen during their slumbers.

[^35]The common belief of the Oregonians is that after death the soul travels the path traveled by the sun, which is the westward path; there it joins in the spirit-land (é'ni) the innumerable souls which have gone the same way before.* If the deceased was a chief, commander, or man of note, his "heart" can be seen going west in the form of a shooting star. The Egyptian belief was that the soul of the dead was following Atum, the sinking sun, to the west; and since then innumerable nations and tribes have adhered to the same belief.

From the 'Texts obtained from Dave Hill, pp. 129, 130, we learn that other abodes of dead men's spirits are the bodies of living fisl. Perhaps Hill learned of this belief among the maritime and river Indians with whom he lived on the Columbia River, where the idea of fish eating corpses could suggest itself more readily than upon the lakes of the Klamath highlands. The Notes which I added to these curious texts give all the explanations which it is at present possible to give. It appears from them that such spirits can enter the bodies of "spirit-fish," that one skíks can see another, and that Indians, not white men, sometimes see the skúks, but at the peril of their lives. A distinction is also made between good and bad skúks, the latter being probably those who render the Indian's sleep uncomfortable by unpleasant dreams.

Some natural phenomena often appear to these Indians in the form of specters or hobgoblins, as clouds, water-spouts, snow-storms, columns of dust, ete Noisily and rapidly they pursue their lonely path, and their gigantic, terrific frames reach up to the skies; wheever meets them unawares is knocked down senseless or killed outright, or must exclange his body for another. Some of these specters look dark on one side and light on the other.

In northern latitudes, where polar lights are frequently visible, they are supposed by the Indians to represent the dance of the dead, and whenever Christianity is introduced among them they identify this beautiful spectacle with the last judgment, when the spirits of the deceased move about in the expectation of the coming Christ.

[^36]From a Klamath myth we gather the information that there is a guardian over the spirits wafting through the sky, called Wásh k'músh, or the gray fox. This name is evidently borrowed from the coloring of the sky, as it appears before or during a polar light, and must be compared with another beast name, the wán or wanaka, the red fox, which is the symbol of the sun-halo.

Another class of spirits embodies the spirits of those animals which have to be consulted by the kíuks or conjurer when he is called to treat a case of disease. Such persons only who have been trained during five years for the profession of conjurers can see these spirits, but by them they are seen as clearly as we see the objects around us. To see them they have to go to the home of a deceased conjurer, and at night only. He is then led by a spirit called Yayayá-ash appearing in the form of a one-legged man towards the spot where the animal-spirits live; this specter presides over them; there the conjurer notices that each appears different from the other, and is at liberty to consult them about the patient's case. Yayaya-ash means "the frightener," and by the myth-tellers is regarded as the Thunder. or its spirit.

Giants.-The imagination of every primitive people has been busy in producing monsters of all qualities and shapes, human and animal, even walking mountains and trees. What we call giants are generally personifications of irresistible powers of nature, which are supposed to perform feats impossible for man's utmost strength; by dwarfs are symbolized powers of nature which achieve great and wonderful things by steady and gradual work unnoticed by the generality of human beings.

Giants are often the originators of geological revolutions of the earth's crust. Thus the giant Léwa represents the circular, lofty island lying within the waters of Crater Lake or Gíwash. He went by an underground passage (fissure?) from his seat over to Yámsi Mountain to wrestle with Skéll, the all-powerful pine-marten, whose home is at Yámsi. After conquering him, he carried hin through the same passage again to Crater Lake for the purpose of feeding lim to his children, and his daughter, Léwam pé-ip, struck him with a heavy flint-stone.

Like the walls of that lake and the whole Cascade range, the island in
question is of volcanic origin. 'The natives avoid going near the lake or even ascending the smronnding leights.* Earthquakes are often ascribed by foreign nations to giants stretched out below, who are shifting their underground position. Giants often appear also as ravishers, ogres, and nan-eaters, like the Scandinavian Yiittur, and two giant-women of the Elip tilikum or "Primeval People," were changed into two colunns of sandstone, near the Yákima country, on Middle Columbia River, for having preyed upon the human race. $\dagger$

Dwarfs.-A miraculous dwarf is mentioned under the name of na'hnias, whose foot-prints, as small as those of a child, are sometimes seen upon the snow-clad slopes of the Cascade Range by the natives. But the dwarfish creatures who make them can be seen only by those initiated into the mysteries of witchcraft, who by such spirit-like beings are inspired with a superior kind of knowledge, especially in their treatment of disease. The name is derived either from néna to swing the body from one to the other side, or from naináya to shiver, tremble

Another dwarf genius, abont four feet high, Gwinwin, lived on Williamson River, where he habitnally sat on the top of his winter lodge and killed many people with his black flint hat. He is now a bird.

The Klamaths appear to know abont certain spirits having bodies of a diminutive size, but the characteristics of such are not distinct enough to permit identification with the fairies, Erdmänuchen or Kabeiroi of European mythologies.

## ANIMAL DEITIES.

The deification of animals in the primitive forms of religion is highly instructive, and instances are so numerons that it would take a series of volumes to comprehend its details. Animal stories and shamanism are

[^37]chapters of ethnology which afford us the deepest insightit into the thoughts which guide the untutored reasoning of the so-called savages.

Wherever we find deities in the stage of imperfect anthropomorphism we are likely to find also deified animals in the stage of zoodemonism and not in that of zootheism or zoolatry. Where gods and goddesses have reached a fully anthropomorphic slape, which occurred in a few American nations only, there we also find priests, temples, ceremonies, oracles, sacrifices, and prayers; but where deities remain in the undeveloped condition of spirits and demons, propitious or malevolent to mankind, we may expect to see the natives deifying quadrupeds, birds, or suakes, instead of giving their gods the luman form, which is the most perfect form of this world's creatures. For in many physical qualities animals surpass the human being. This excites the admiration of man in his ruder stages; le wonders at their cunning and shrewdness, and thinks them his equals in more than one respect. Why should he not express such feelings as these by reverencing them and including them in his unpolished and naïve, but pictorial and candid folklore stories?

It would be a mistake to assume that the animals which the folklore of the Indian in the hunter stage chiefly celebrates are game animals or such as are of material advantage to him. Folklore selects for its purpose such beasts which the hmuting and fishing Indian, with his great practical knowledge of animate creation, admires above others for such qualities as their surprising sagacity, their wonderful agility, the love for their offspring, the help afforded by them by discovering the hidden causes of disease, the beauty of their skin or other covering, and the change in the coloring of their fur-skins wrought by the alternation of the seasons-or such animals as he dreads on account of their ferocity, their nightly habits, their power of bringing about storms, thunder, or rain-fall, and last, but not least, for their demoniac power of presaging future events, especially war, disease, and death. The great scarcity of certain animals is also a sufficient cause for introducing them into the popular stories.

The animals which form the subject of mythic stories and beast tales are pretty much the same as those mentioned in the magic songs of the medical practitioners, of which I have bronght together a considerable collection in 'Texts, pp. 153-181. The birds get an unusually large share in
these curious song lines; the loon (táplal) is noticed there for being the best diving bird of these upland waters; the yellow-hamnier, or tché-ush, a woodpecker, for its beautiful red plumage; the kilíwash, another woorpecker, for its precious scalp. The ducks are well remembered in these songs on account of their ubiquity, their numerous species, the elegance of their exterior. Birds renowned for their inflnence upon the weather are the whinash and the tsiutsíwäsh, who can produce snow-fall; the kā'ls or kílzalsh, who possesses the power of making fogs (166; 22.23).

The amphibians, insects and the organisms standing below these in the zoogenetic scale, are also reputed to possess magic powers; the songs of the toad and of the spider are supposed to be especially effective. That the plants did not impress the mental capacity of these Indians to such a point as to make them objects of reverence can not be wondered at, as the mind of the Indian in cold climates is not turned in this direction Plants in which the Klamatlıs were interested are all mentioned, p. 180; 19, and the pond-lily, with its seeds, stands at the head of them. Even among the totem naves of Eastern tribes only a few plant names are represented, maize being the most frequent among these; but in tropical countries, with their luxuriant vegetal growth, many trees, bushes, and stalks become objects of worship, like the copal and the ceïba tree of Central America.

The deified animals of Klamatl mythology are all capable of assuming the predicate ámtchikslı, abbr. -ántch, -amts primeval, of which mention has been made previously, and many also appear collectively, as five (or ten) brothers or five sisters, sometimes with their old parents (titchka-iga). This is the case only with gregarious animals, and also applies to the Thunders. Many of the larger quadrupeds appear constantly with two young only.

The personified animals which receive the most frequent attention in Klamath Lake and Modoc myths are the marten, the weasel and the prairiewolf or coyote.

Marten or Ske ${ }^{\prime} l$, Skélamtch always appears in connection with Weasel or Tcháshkai. Weasel is reputed to be the younger brother (tripiap) of Skél and acts as his servant and errand-boy. In the execntion of the dangerous errands he is intrusted with, Weasel is often killed, and Ske'l
sometimes also, but they manage to revive again and to revenge themselves on their enemies. What brought these two beasts into mutual comection in the popular mind has been already pointed out: both change their furs, more than other animals, from a darker lue in summer to a lighter one in winter, when the weasel's fur becomes white. They are both supposed to live at Yímsi, "Northwind's Home," a high peak east of Klamath Marsh. To act like Skélamtch is to do something not meaning to do it apparently. Skél is a great wrestler, and like K'múkamtch has the faculty of changing himself into a bird, beast, dog, old woman, etc., at will. To a certain extent he is the counterpart of K'múkamtch and performs the same deeds as he does, it appearing as if K'múkamtch acted under the mask of Marten and Tcháskai under that of Aíshish, in whom we recognize a lunar deity. But there are other acts by which the two pairs differ considerably, and where Marten and his brother appear to represent the wintry season only and the rough weather attending it.

Another deity of the same type, and far-famed over all the Pacific coast, is the prairie-wolf, little wolf, or coyote. This quadruped belongs rather to the gemns jackal than to the wolves, looks as smart as a fox, carries a beautiful fur, and does not attack people unless mited in packs of a dozen or more. His habit of living in earth holes, and his doleful, human-like, whining ululation, heard especially during moonlit nights were probably what set him up in the esteem of certain Indians, like the Eastern Selish and the Central Californians, so high as to make of lim the creator of the world and of man. In Modoc stories he appears more frequently than in Klamatlı Lake folklore, and at present there are but few of these animals left on the headwaters of Klamath River. Wásl, or Wáshamtch as the Klamatlis call him, always appears in sun and moon stories, and is, like Skē ${ }^{-} 1$ and Tcláshgai, a substitute for the sun-and-moon deities. When he ran a race with the clouds he thought at first that there were two of him, for he always saw another person, his shadow, going by his side. When he stayed in the lodge of the Firedrill brothers he took the fire-sticks of these in his lauds and they all blazed up. In the lodge of the ten HotWater Basket brothers he was burut terribly by the inmates, and when repairing to the Ants' lodge the immates punished him fearfully by their
savage bites. Once when caught in the act of "stealing" a woman, he was captured by the tivo husbands of the same, who skinned him and hung up the skin to dry, after which the woman was abducted by the five Bear brothers. The female prairie-wolf also appears in folklore with her progeny, e. g., in the tale of the "Creation of the Moons," page 105, which exists in several variations. Such stories and others represent the coyote-wolf as a being which has many points of contact with K'mikamteh, but is distinct from him. Both are regarded simultaneously as sky-gods and as funny clowns. As traits distinguishing the one from the other, we notice that the wolf's body is believed to harbor wicked spirits (Texts, page 128,4 ) and that his lugubrious voice is the presager of war, misfortme, and death (133, 12 ). A distinction has to be made throughout between the coyote as an animal and the coyote as representing powers of nature in a deified, abstract form

Of the three varieties of the bear species, the grizzly bear is the most popular, but also more dreaded than the uthers on account of his enormous physical force. What makes him popular is a peculiar bonhomie which he exhibits in his beloavior, and which forms a peculiar contrast to his bodily strength. In the myths he, or rather the female bear, is called Luik, Lukamtch, Sháshapantch, Sháshapsh, and her two young Shashápka, the latter name probably referring to the fact that this beast was at one time more than other quadrupeds made the subject of mythic and folk-lore tales (shapkéa, shapke-ía, shashapkaléa to narrate a story, shapkaléash, distr. shashapkěléash legend, tale). The tale of the "Bear' and the Antelope" is perhaps the most attractive of our collection of 'Texts. Generally the bear is the aggressive party in these stories, and le also gets generally worsted whenever a fight occurs or a stratagem is played on him. Sometimes there are five bear brothers acting in unison. In the "old yarn," narrated p. 131, this bear is killed by Gray Wolf near Modoc Point, and in his magic song $(157 ; 46)$ he is made to say that he has five springs which are all dried up. He is often mentioned in the song-lines, but always under the name Lúk, not as Shásliapamtch.

Gray Wolf or Ké-ntchish, Ké-utchiamtel is another of the carnivores which sometines appear prominently in folklore stories. Gray Wolf is
reputed to be at relative (shá-amoksh) of Marten, and consequently of K'míkaintch; he stayed at the lodge of the five Thunders at the time when it was burnt down, pp. 112.113. One of his residences is at Mount Shasta.

Other quadrupeds frequently mentioned in these stories are the skunlo (tchíshash), the three different kinds of deer, the antelope (tché-u), the elk (vī'ı), the mole (mû'nk, Mod. mî-íe). Men or Indians appear but incidentally in beast stories, as pshe-utíwash, a plural nomn, and are engaged only as a passive element in every occurrence where they are mentioned.

Among the lirld the most prominent part is assigned to the raven (Kík, Kákamtch), for he is Fate personified, and his office is to punish by death all those who act antagonistically to his or his allies' interests. This is done by changing them into rocks. In all nations the croaking, doleful cries of the raven leave a deep impression on the human mind, and hence in mythology the raven fulfills the function of a soothsayer and messenger of woe. In British Columbin and farther to the northwest he is (as Yehl) considered the creator of all organisms, and almost all the folklore centers around him as the main figure.

The golden cagle or the one "floating in the skies" (P"laiwash) is in the Klamath lore mentioned as often as the raven, either alone or as a family of five brothers, but does not command so much respect as the raven does.

The rater birds, as cranes, ducks, geese, coots, form the light infantry of the mythologic make-up, and mostly figure in crowds of five or ten, the coot representing the Ojibwe Shingibis so well known through Longfellow's Hiawatha. Some of the lower organisms rise to an unexpected dignity, like the woodtick or shk $\bar{o}^{\top} \mathrm{ks}$, which becomes the wife of the tricky Marten, and a caterpillar of beautiful colors, whose exterior makes him the rival or "master of the sun" (shápsam ptchíwip). Aíshish counts among his plural wives two butterflies of the gayest colors.

## PRINCIPLES OF MYTHIFICATION.

The idea that every phenomenon and every change observed in nature and mind is caused by some spirit, ghost, genius, god, or other mysterious, generally invisible agent, embodies what we call animism, and forms the foundation of all religions of the world, however abstract they may have
become in course of time. The working of animism can best be traced in polytheism and polydemonism, in the shamanistic ideas as well as in the religious. The principles traceable in the myth-making of the Klamath Indians, which differs in some points from those of other Indians, may be summed up as follows:

The sky-gods, as sun, moon, winds, thunder, etc., here as elsewhere surpass in importance and strength the other deified powers of nature, for "theology is meteorology." Some of these chief gods assume the mask of animate beings and inanimate things when they appear among men.

Creation myths do not generally mention the material from which or the mode by which objects were created, but simply state that K'múkamtch produced them by his thinking and will power.

The spirit, life, or heart of a deity is made distinct from the deity itself and can live at a distance from it. Cf. the pipe of K'múkamtch burnt in the fire, which in another myth figures as a small ball (ké-iks) and is his spirit or life.

The burlesque element, which the religions of Asia and Europe have banished almost entirely, appears here as an almost integral attribute of a god or genius. This appears to form an offset for the dire cruelties ascribed to the same demons, and is also characteristic of the religions studied east of Mississippi River.

The element of obscenity is only incidental to the burlesque element, but is sometimes very pronounced, especially in the beast stories. It was added to cause merriment only, and not for such immoral purposes as we see it applied to in the Decameron of Boccaccio and other products of a corrupt age.

The deified beings of a lower order, as animals, etc., appear sometimes as one person, but just as often in the mystic number of five, if not of ten. Fire, waters, springs, and plants are not deified, but lakes are sometimes. Clouds do not appear here deified as witches, as they do among the Eastern Indians.

Certain miracles are here achieved by bodily contact and symbolic acts; so dead animals are brought to life again by jumping three or five
times over them or by blowing at them, an act which is supposed to impart life.

## CONOLUDING WORDS.

The limited space allowed for this etlnographic sketch forces me to suppress the larger part of the matter for the present and to relegate it to a future volume. A few points characteristic of the two tribes may, however, be added on the last page of this Report.

The Klamath Indians are absolutely ignorant of the gentile or clan system as prevalent among the Haida, Tlingit, and the Eastern Indians of North America. Matriarchate is also unknown among them; every one is free to marry within or without the tribe, and the children inherit from the father. Although polygamy is now abolished, the marriage tie is a rather loose one. This tribe is the southernmost one of those that flatten their infants' skulls, this practice continuing about one year only after birth.

Cremation of the dead has been abolished since 1868, though during the Modoc war these Indians burned several of their dead. The custom of suppressing the personal names of the dead is rigidly kept up at the present time. Art never had any encouragement or votaries among the Klamaths, and the only objects seen that could be regarded as art products were a few rock paintings and a head-board on a grave near the Agency buildings, which was painted in the Haida style and represented a human face flattened out to the right and left. Some baskets are artistically formed. As there is no clay to be found on or near the reservation, pottery could never become an art among these Indians. Their songs and poetry are also artless, but nevertheless instructive, and several songs have beautiful tunes that should be preserved. The musical and sonorous character of the language fits it well for poetic composition; but a national poetry, to be of success, would not have to adopt the rhyme as a metrical factor. Alliteration, assonance, or the prosody of the ancients would be more suitable to this upland language, with its arsis and thesis, than the artificial schemes which poets are devising for the modern Emropean tongues. Who will be the first to teach the Muses the Klanath language?

# TEXTS OF THE KLAMATH LANGUAGE, 

 WITH EXPLANATORY NOTES.
# THE KLAMATH INDIANS OF OREGON. 

By Albert S. Gatschet.

## INTRODUCTION TO THE TEXTS.

The most important and valuable monument of itself which a people can transmit to posterity is a national literature. But to answer the requirements fully, the literature of a people must possess a certain degree of completeness in portraying the national peculiarities. It should embrace not only sketches of contemporaneous history, of national habits, customs, and laws laid down in the native idiom, but we expect from it also a truthful rendering of the spiritual side of national life, of its physical and metaphysical speculations as we find them embodied in its myths, beliefs, superstitions and conjurers' practices, and of speeches and discourses of its representative men held on solemn occasions. The most fragrant flowers in any national literature are certainly the poetic productions, if a. full account of their origin and purport is added to make them easily comprehensible.

While cultured nations are constantly engaged in perpetuating the memory of their thoughts and achievements by means of some alphabetic or syllabic system of writing, the uncivilized hunting or fishing tribes possess none, or only the most imperfect means of recording their affairs. All of them possess mythic tales, traditional history, and songs for various incidents of life; not a few are even originators of didactic folklore, of proverbs, and of versified rhythmic poetry. Many of these mental productions are remarkable for artistic beauty, others for a most interesting variety of detail; but all of them will, if collected with accuracy and sound
judgment, throw a profusion of light upon the physical and mental charac. teristics of the natives and on their past and present condition.

The task and care of fixing the unwritten mental productions of uncultured races and tribes thus devolves upon the white man. It is by no means an easy undertaking, and success can be attained only when the investigator is favored by circumstances. Etlmologic texts taken from an uncivilized people are of much intrinsic value only when the seientific collector is lucky enough to secure the services of intelligent and wellinformed individuals whose reracity is above suspicion, and who lave constantly resided among their own people.

Considerations of this nature guided me when I endeavored to commit to writing the strange mythology of Oregonian tribes, replete witl the most fantastic stories of their elementary deities and tricksy animal daimons; and when the weird and unearthly strains of their war-whoops and danceyells first struck my ear, I considered even these worthy of notation. I lave not hesitated to assign the first and foremost place in this linguistic volume on the Klamath language to the "Texts" obtained from tristworthy Indians of the Klamath Lake and Modoc tribes, for I know that they faithfully portray the characteristic features and idiosyncrasies of these dusky denizens of a sceluded upland region. These literary specimens are the foundation and basis upon which I have rested my investigations.

The language of these specimens, as the organ of transmission of the national ideas, had to be carefully sifted and overhanled before it could become the basis of linguistic and ethnologic investigation. Numerous revisals and comparisons were needed to eliminate involuntary mistakes of Indian informants, who never clevate themselves above a purely empiric mastery of their native idiom. That an accurate grammar can be composed upon the solid foundation of faultless texts only, nobody will contest. Neither will it be doubted that the more copious the specimens are the safer the conclusions of the linguist will be concerning the principles governing the forms of specch.

Literary productions enlarging upon national and ethnologic matters are of much greater importance for the scientific study of the langnage in which they may be composed than any other texts. How poor and fray-
mentary would our knowledge of Latin and Greek be, if the poets, orators, and historians who wrote their compositions in these sonorous idioms were lost, and if nothing in them had come down to our age but versions of foreign books and reproductions of foreign speculations and ideas! $\quad$ I writer or informant is most capable of acquainting us with matters concerning his own people, country, and epoch, because he feels more interested in these topics than in any others, and he will select from the national stock of words the proper term for each object or idea he desires to express. Investigators will therefore, when they address themselves to intelligent natives for national, tangible and concrete topics of every-day life, generally obtain correct and trustworthy information on their objects of research, but will meet with disappointment when inquiring for equivalents of terms or ideas totally foreign to the simple understanding of the native population.

An experience of short duration will convince any linguistic investigator that a multitude of characteristic, quaint, and unfrequent expressions, idioms, phrases, and inflectional forms can never be obtained by mere questioning. The natives must be allowed to speak out their own free minds, without bias or trammelling; after a short acquaintance they can easily be induced to recount popular stories, myths, incidents of history, or intertribal wars, to reproduce speeches and national songs from their own reminiscences, and thus they will spontaneously use peculiar forms of language which often yield a deeper insight into the genius of their vernacular idiom than pages of information gathered after the usual method of the scholarly lexicographer or the pedantic verbal translator.

Legends, myths, and lyric productions, when obtained in their original shape from unsophisticated relators, furmish us with the best material for inquiries into a far remote antiquity, even when the historic horizon of the informant's tribe does not exceed the limit of two generations. If facts and dates do not, words and radical syllables will tell us a tale, and may enable us to trace ancient migrations or intertribal connections, teach us the origin of certain customs, habits, or national ideas, and inform us of the shaping, the material, or uses of old implements. In some instances they will guide us into remoter periods than prelistoric archæology can, and supply us with
more useful dates and facts. Such results as these may be confidently looked for when several dialects of one linguistic family can be compared; and a careful comparison of one language with others spoken in the vicinity, belonging to the same or a different family, will always be attended with beneficial results for the increase of our scientific knowledge.

The aboriginal literary monuments printed below are authentic national records of a brave and industrious mountain tribe of Indians. Ethnologic notices have at a comparatively early period been gathered concerning the Modocs and Klamath Lake Indians, but most of them were of doubtful scientific value, becausc the information was gathered from them in the English language, which they understood but very imperfectly. Even now, the dates and facts recounted by them, as well as by Indians of many other tribes, in English, are so cxtremely confused, that only texts written in their own language can give us a clear insight into their traditions, myths, and mode of thinking.

No Indian tribe possesses a history of itself reaching back further than two or three generations, unless it has been recorded by whites at an early date, and what goes beyond this limit is tradition, on which we must be careful not to place any implicit reliance. But mythology records in a certain sense the intellectual history as well as the metaphysical ideas of a people, and thus by the gathering of the numerous mythic tales and legends of the Máklaks a start at least is made for the investigation of their intellectual development. A very moderate estimate puts at several hundred the more gencrally circulated myths of the Klamath Lake or É-ukshikni alone, and the nuraber of their popular song-lines, so interesting and unique in many respects, may be called infinite, for their number is increased cvery day by new ones. The bulk of their mythic folklore is of great poetic beauty, fieshness, and originality, and, like that of other tribes, full of childike "naïvete." This latter characteristic forms one of their greatest attractions, and the animal myths of every uncultured people will prove attractive, because they were invented for religious or poctic and not for didactic purposes. To some of the nytlis given below we may confidently ascribe an antiquity of over three centuries, for their archaic terms
and locutions, repeated from generation to generation, are not always understood at the present day by the young people, who most attentively listen to the aged rhapsodists, when they expound these miraculous stories in the lurid glare of the nocturnal campfire. Nothing in them indicates a migration of these upland tribes from any part of the country into their present homes, and hence the Máklaks must lave had undisturbed possession of the headwaters of Klamath River for some centuries prior to the advent of the white population.

The various texts obtained clearly exhibit the character of the language actually spoken and the difference existing between the two dialects, but they do not all possess the same linguistic value. The texts of Dave Hill and others are worded in the conversational language of the tribe, which in many particulars differs from the more elaborate and circumstantial mode of speech which appears in the mythic tales given by Minnie Froben. The "Modoc War" and some of the shorter pieces could be obtained only by putting down the English first and then getting sentence for sentence in the dialect, whereas the best worded stories and specimens were written in continuous dictation. All texts obtained were carefully revised first with the informants, then with other natives, and all the necessary explanations added at the time.

From a purely linguistic view the popular songs or song-lines are the most valuable contributions. The melodies of some of their number deserve to be called pretty, according to our musical taste. To the natives all of them appear harmonious; but when the Western Indian calls some melody "pretty," guided by his musical principles, he very frequently does so in opposition to what our ear tells us to call by this predicate.

The Klamath Lake dialect was spoken by the majority of the contributors to my linguistic anthology. I obtained these specimens, with the exclusion of the Modoc texts, in the autumn of 1877, at the Klamath Reservation, Lake County, Oregon. Though many of these natives speak the Chinook jargon more fluently than English, I never availed myself, for obtaining any information whatever, of that imperfect and hybrid medium, through which the Indians of the Northwest carry on so much of their intercourse.

The following is a list of the most important contributors :

1. The Riddle family, consisting of Frank Tazewell Riddle, a native of Kentucky, born about 1836; lis wife Toby, a pure-blood Modoc woman, who was, as stated in her biograplic notice, born in 1842, and their son Jeff. C. Davis Riddle, born about 1862. Among several texts of linguistic importance I obtained from then a circumstantial chronistic account of the Modoc war of 1873, in which Mr. and Mrs. Riddle had served as interpreters of the Peace Commission. Having been introduced to them in December, 1875, in New York City, by Mr. A. B. Meacham, late Superintendent of Indian Affairs in Oregon, when they travelled with him in the eastern States in connection with the Meacham Lecturing Company, I took down the contents first in English from Mr. Frank Riddle, then added the translation from the other members of the family. Mr. Riddle had no intention of giving a full and authentic account of that desperate struggle, but merely wished to render his own impressions, and to relate in the plainest words the events witnessed by limself. Here we have the opportunity of hearing also the Modoc side of the contest.

The wording of the other Modoc texts was the almost exclusive work of the boy Riddle, who speaks the language perfectly well, and only in the more difficult portions was he assisted by lis mother. From the Riddles I obtained also several hundred sentences, over sixty songs, and about two thousand three hundred vocables, which were twice revised with their assistance in New York City, and twice again with the efficient help of such natives at the Klamath Lake Agency as were conversant with the Modoc dialect.
2. Dave Hill, a dusky, pure-blood Indian, subchief of the Klamatl Lake tribe and interpreter, born about 1840. Having been a prominent warrior of his tribe up to the treaty of 1864 and a scout in subsequent expeditions against hostile Indians, he has also seen much of the white man's ways by staying for years in Northwestern Oregon and by traveling East with Mr. A. 13. Meacham on his lecturing tour in 1875. How he was then kidnapped in New York City, confined in a cellar, restored to liberty, and how he worked his way home, is related with full particulars in Meacham's Winema, pages $95-102$. In the Modoc war ( $1872-73$ ) he was put in command of the auxiliary forces of lis chieftaincy, which were detailed to observe the
belligerent Modocs and to check any dangerous movements whieh thoy might have undertaken against the settlers or the Indian Reservation. Hill's father, Skaititko, or the "Left-Handed", was for some time a guide to General Frémont on one of his expeditions through Oregon, Nevada, and California.

Readers of Hill's texts will notice that his diction is very concise, pregnant and to the point, and so is the speech of these Indians generally. But since that conversational language, or popular jargon, as we may not improperly call it, moves along in contractions, elisions, metatheses and ellipses, I have had to revise his texts many times with him and other Indians before I could make them practically available. In the myths, Dave Hill is not so pictorial and graphic as Minnie Froben, but in narating liis feats of war he readily furnished all the points that could be expected. Concerning the conjurers' practices and national beliefs, he was more communicative than the majority of the Klamath Indians, whom superstitious awe still deters from revealing all that the investigator desires to know. Hill's list of topographic names is a very important addition to aboriginal topography, since he lias added the correct etymology to the majority of these local designations.
3. Minnie Froben, born about 1860, the daughter of a pure-blood Klamath woman, who lives on the Williamson River, and of a (deceased) French settler Froben or Frobine, was, at the time of my visit, the assistant of Mrs. Nickerson, the matron of the boarding-school for native children at the Agency. She and the subchief Hill were the most important contributors to my mythic and other etlonologic anthology, and the pieces dictated by her excel all the others in completeness and perspicuity. Moreover, I oltained from her a multitude of popular songs, the names and uses of esculent roots and plants, the Klamath degrees of relationship, a large number of words and sentences, a good deal of grammatic information, and revised, with her assistance, the whole of the Modoc contributions, as well as the majority of Klamath Lake texts.

If any further books should be composed in or about the Klamath Lake dialect, her assistance would perhaps be preferable to any other native help to be found at present in the tribe; for during her stay witl white people
she has succeeded in acquiring more mental training than Indians usually acquire on reservations.
4. Charles Preston, a pure-blood Klamath Lake Indian, born about 1840, is now stationed as interpreter at the subagency of Yaineks. Preston had previously sojourned five years at Oregon City on the Willámet River and vicinity, and there he learned to converse in English quite fluently, acquiring also the idiom of the Wasco Indians, of which he las furnished me over three hundred of the most usual terms. During a stay of three weeks which he made at the Klamath Lake Agency, I obtained from him valuable grammatic and lexical information, texts, popular songs, and proper names, and revised with him the Modoc dictionary.
5. Sergeant Morgan, a pure-blood Indian, living at Koháshti, born about 1830, and jocosely called "Sergeant" on account of his wearing an old sergeant's uniform which he had obtained from soldiers at Fort Klamath. From this good-natured, intelligent old Indian I obtained a few short texts and some ethnologic information especially relating to mythologic and shamanic subjects.
6. "The Captain" or "Captain Jim", a pure-blood Indian, living at the junction of Spragne and Williamson Rivers, about five miles from the Agency buildings. When I saw him he was about fifty years old, and as he spoke but Klanatlı and Chinook jargon, all the mythology which he remembered was obtained through Minnie Froben. He received his nickname "Captain" from having been a help on a steamboat plying on the Willámet River, Oregon.
$7-11$. Other informants of whose assistance I have availed myself are mentioned at the head of the texts. They were Johnson, the liead chief of the Modocs at Yaíneks; the conjurer Kákash or Doctor John; and several young Indians then scarcely over twenty-five years of age: Pete, Frank, and Long John's Ben. All of them are pure-blood Indians.

To facilitate the study of the Klamath language, and to increase the popular interest in the acquisition of Indian languages in general, I have - inserted with the texts an interlinear translation, and subjoined to them a variety of commenting notes of linguistic, ethnographic, and historic import. The large majority of the Indian words could be rendered in their literal meaning; but in some instances, where literal translation was nearly
impossible, the sense of the word or phrase was reproduced as faitlifully as could be done within the narrow space allotted. Words in brackets were inserted only to render the sentence complete.

But to the student striving after a thorough understanding of the texts all these helps will prove of partial assistance only. A thorough study of the Grammar ought in fact to precede their perusal, and reference to all the three portions of the work will frequently be necessary.

The material portion of a language can be faithfully conveyed to our understanding only by the correct pronunciation of its words, sentences or texts. Hence all that is said of Klamath phonetics must be studied first, and more especially the alternating processes, the proclisis and enclisis, the sounds not occurring in English (as the linguals, the aspirate $\chi$, the vowel $i \ddot{i}$, and first of all the pronouncing list of alphabetic sounds, which is subjoined. To initiate readers into the distinction, empirically obtained frons the mouths of the natives, between the clear vowels $a, e, i, u$, and the dumb or deep-sounding $\hat{a}, \check{e}, \hat{\imath}, \hat{u}$, the earlier pages of the texts contain more indications than are given in the later. In certain terms long vowels can turn into short, and short into long ones. Special attention must be paid also to the study of elisions, apocopes, metatheses, etc.

In the morphologic part of the Grammar, the verbal and nominal paradigms are particularly recommended to the student's attention, and a previous knowledge of the mode of forming the distributive reduplication from the absolute form is indispensable to the reader of my Texts, not only for their full comprehension, but even for the use of the Dictionary. The suffix of the future tense is written -uapka, to distinguish it from a homonymous form -wapka, of different signification. The apocopes occurring in the conversational style of language will soon be recognized as such by the reader; for example, -th for $-t k 0,-k s$ for -kshi, dropping of $-a,-a s h$, etc.

To make the study of the Texts too easy by a flood of notes would be as obnoxious to the true interests of science, as to present unsolved too heavy grammatic difficulties to intellects yet untrained in the modes of Indian speech. Scholars may decide to what degree I have succeeded in avoiding both extremes.

## LIST OF SOUNDS OCCURRING IN THE KLAMATH LANGUAGE.

lingual guttural produced like $g$ by bending the tip of the tongue backward, holding it against the palate, and then trying to pronounce $k, c$, in kindness, killing, cool, craft. The tongue must be placed more firmly against the fore portion of the palate than in the $g$, in order to allow less breath to escape.
$\boldsymbol{\chi}$ the aspirate guttural in lachen, trachten, Rachen, Sache, as pronounced in Southern Germany; not occurring in English, French, or Italian; Spanish, mujer, dejar; Scotch, loch. It has nothing in conmon with the English $x$.

## ALPHABEIIC NO'AATION.

1 as in lull, loon, lot; German, Lilie; French, lance.
m as in madam, mill, mimic, mum; German, Memme:
mb as in ramble, gamble, nimble.
mp as in sample, thumping.
n as in nun, net, noose; German, nein; French, nuire.
ng as in ring, bang, singing; German, singen, hangen.
nk as in prank, rink, spunk; German, Schwank; French, cinquante.
nk a combination of n with $\underline{\mathrm{k}}$.
$\mathrm{n} \gamma \quad$ a combination of n with $\chi$.

- as in home, lonely, most; German, Molken; French, sottc.
$\overline{\mathrm{o}} \quad$ longer sound of 0 , as in note, rope; German, Floh, Boot, roth; French, sauter.
ö as in bird, burn, surd; German, blöde, Römer; French, deuil, cour.
p as in pipe, papa; German, Puppe; French, pied.
s
as in sad, sale, soul, smell; German, Seele, Sichel; French, saucc, seul.
sh as in shaft, shingle; German, Schale, schön; French, chercher.
t as in trot, tell, tiptop; German, Tafel; French, tour.
tch as in church, chaff, chook; German, hätscheln; Italian, cicerove; Spanish, chaparral, chicha.*
u as in smooth, truth; German, Fuss; French, loup, poutre, outrage.
$\bar{u} \quad$ longer sound of $u$, as in crude, flume, fool; German, Stuhl, Rulkr,
Blume; French, lourd, sourd.
û as in full, pull; German, Flucht, Kluft, Russland; Italian, lungo.
ii not in English; German, kühl, Gcfühl; French, lune, puce.
v as in valve, vcer, vestige; German, Wollie, Wasser, webcn; French, vautour, veut.
w the $\hat{\mathrm{u}}$ before vowels; water, waste, wolf, wish, wayward; in German it corresponds nearest to short $u$, not to $w$; nearly as French ou in oui, ouate.
z as in zeal, zonc, frozen; German, Hase; French, zèle, rose.
The English $x$ is rendered by $g s$ or $k s$, the German $z$ by $d s$ or $t s$, all being compound articulations. The two points on $a, o, u(\ddot{u}, \dot{\partial}, \ddot{u})$ are not signs of diæresis; they mark softened vowels.

The pronunciation of the diphthongs may be easily inferred fiom their component vowels; it is as follows:
ai as in life, mine, sly, die, dye.
all as in mouse, loud, arouse.
ei a combination of $e$ and $i$ resembling the vowel sounds in the word greyish, united into a diphthong.
yu or iu as in pure, few, union.
oi
as in loin, groin, alloy.
as in watch, wash; Frencl, loi, roi.
wi or ui as in squid, win, switch.
All the diphthongs being of an adulterine character, they can generally be separated into two vowels, and then are hyphenized, as in $i-u, o-i, a-i, a-u$.

## Graphic signs.

- arrested sound: skónhs, spring time; tchú-ka, to swim up stream.
, apostrophe marking elision of a vowel, of ě or any other sound: heshuámp'li for heshuámpěli, to recover one's health.
- hiatus, separating two vowels as belonging to two different syllables: pála-ash, flour; lěmé-ish, thunder; or two consonants: tsiäls-hä'mi, at salmon-time.
$=$ separates the parts of compound terms: skúks-kiii'm, spirit-fish or letiferous fish.
, acute; the only accent used for marking emphasized syllables.
- vowel prononnced long: mū́ni, large, great.
- vowel pronounced short, except 厄, to which a distinct sound is given: yúmăltkă, to return from berry-harvest.


## EARLY TRADITIONAL HISTORY OF MODOCS AND CAPTAIN WRIGHT'S MASSACRE.

## Given in the Modoc Dialect by Toby Riddle.

 tánktchîkni káai pēn nadshā'shak tchía. Gúmpatûash E-ukshîkníshash

Ká-iu mákľ̌kshash shéllualsht, tû̀mi Bóshtin Yā'matala médslantko Before the (Modoc) people had fought, a numher of Americans to Oregon emigrating kó-idshă welekápkash Mōdokíshash shnúka, yówîsh ktéktaknan túntísh an ulaly old woman Modoc caught, (both) heels haring cut throngh a mpye shtúnka, topítan wäg'n shlítchta, shpukû́gatchnan shiúka, Shátash Bóshti- 6 passed betind a wagon tied (her), hy dragring killed (her), Smakes A meri. nash sluuénksht pallóttan hû́nkělam Bóshtinăm sha-ámakshash. Bóslitin tánkt lūpidána hûn weléksăm tchékěli kítitchna. at that
time
Arrstiy
of this
old woman the hiood spilied.
 i-amnatko Mō’doka käíla gátpa, mákľ̆kshash shana-ulióka shishókash. haring with him (to the) Modoce conntry came to the (Moloco) pooplle heeause he destred to make war.

 he hired; heinstrncted this woman (tosay): that the should come to meet inconncil with giúgra máklăks; shapíya, mákľ̌kshash nāsh mû́nish wúshmûsh shiukiéstka. the Modocs; hernnounced (for) the Modocs one large of we woull kili. Máklăkshash shapiyúlan Tá-unî shpaútîsh shniáktcha. At tû́m Mō ${ }^{\circ}$ dokni The Modocs having notified, to Yreks poisou heseut for. Then many Modoes gátpa; at tchēk hûnk wúshmûsh shiukúlan shpaútîsh itá. Nō'sh tchēék 15 thenfortiwith theor having hutchered

 kínka, Mōdokni at gri'mpēle.





 $\underset{\substack{\text { lákpeks } \\ \text { awhese }}}{\text { shuyéga; pákshtga }}$ lifted up;
 9 túnep toks kshi'ta.

## notes.

13, 1 . There is no pretense that the number of years given here is acenrate, and the slight difference existing between the two dialects proves that the separation of the tribes is of recent date. The separation never was a thorongh one, for evell the latest raids made on the Pit River Indians were made by Modoes joined to Klanath Lake Indians under the same war-elief. The Kínbatuash lived on southeastern end of Tule (or Rhett) Lake, California.

13,1 and 3. For illóla at, "years elapsed now", Klamath Lakes would say: illolńla, or illolólatko.

13, 4. Ká-in m. shellualsht refers not only to a period anterior to the Modoe war of 1873 , but to the massaere of a party of eighteen white settlers, emigrants to Northwestein Oregon, by Modoe warriors, who had watehed them, lying in ambush, on the eastern beach of Rhett Lake. This terrible wholesale butehery of defeneeless whites was the immediate cause of Captain Wright's massaere in the ensuing year.

13, 6. Shátash, ete. The informant intends to say: Amerieans, immigrating to the Rogue River or Willámet River Valley, dragged to death an old Modoe squaw behind their wagon, thinking her to be a Snake squaw; they did so in retaliation for a robbery committed by Snake Indians on their party, and for murders perpetrated on immigrants by the same Indian tribe.

13, 9. An artiele in the "Overland Monthly" of San Franciseo, July, 1873, page 21, signed Wm. M. Turner, gives the following partieulars eoneerning Wright's massaere:

In 1852 a train of eighteen emigrants attempted to reach Oregon by the Rhett Lake route. They had eneamped for dinner at the eastern shore of Thett Lake, unter a bluff since called "Bloody Point". Snddenly the sage-brush aromnd them stood in a blaze of fire; they started up in terror, and were at onee surrounded by swarthy and painted savages, who groutly ontnumbered them, and dealt ont the deady blows, whieh destroyed their whole numbers in inconceivally short time. One man alone
escuped on horseback to Yreka, which is over eighty miles distant, to tell of the disaster. The general indignation aroused by his recital prompted Capt. Ben. Wright to organize a force of fifty-one volunteers at Yreka into an independent company in the ensuing spring, and to make the tribe atone for the bloody deed. The spot selected by Wright for the council was on the north bank of Lost River, a few lundred yards from the Natural Bridge (Tilhuantko), and this was also the seene of the massacre.

Coneerning the time of Wright's massaere, 'Turner differs from our informant about one year.*

13, 13. For the Modoe wúshmush, un'shmush, the Klamath Lake dialect has the original Sahaptin term, múshmush, the primary signification of which is, "lowing lik , eattle." The Lower Chinook has emúsmus, the Kalapuya, amísmus. The Nez Peral dialeet of Sahaptin has mú for ox, cow, cattle.

13, 13. shiukiéstka is the verbal desiderative of shiukía, to kill for somebody, to butelier for somebody's benefit.

13, 14. tû'm Mṑ ${ }^{\prime}$ dokni instead of: tû'mi Mō̃'dokni. This lavguage favors elisions of short and singlo vowels standing between two consonants pronounced with the same vocal organ.

13, 16. Yámakni is "Northern Oregonian, Northern man", in general. But this informant was, in faet, a Warm Spring Indian from Des Chutes River.

13, 17 and 18. tídsh hemkánka means: to diseuss an arrangenent resulting in good to both parties; this is, in most cases, equivalont to "coneludo peaco".

14,4 . shtalálashtak is a contraction of shtalálasht tak, both particles tak being correlative to each other, and referring here to the future.-shtalalasht is verbal conditional of stalála, to fill, derived from stáni, full, through assimilation of consonants: shtalála for stanála.

14, 6. î-alya, distributive form of the verb filqa, elza: every ono had unstrung and laid down his own bow.

14, 7. The lifting-up of ashes from the couneil-fire by Wright was the signal for the soldiers to fire at the forty-six Modoes. Forty-one were killed on the spot.

14, 9. kshíta not in use among the Klamath Lakes.

[^38]
## G-uisheni shéllital Walamskíshash.

## FIgH'TS BETWEEN KLAMATH LAKE AND ROGUE RIVER indIANS.

## Given by Wawálike, or Dave Hill, Subchief, in the Kilamatif Lake Dialect.

Lap'ní sha shéllual Walamski'sas Clushkni. Tîná sha luluágsla

3 Tìtná́ E-uksknî ktaklísh géna Wálamsî̀ tsúi slëá tû́ma telî́pksh. The first time the Lake tribe arrayed for war went to Rngiselilver and found many encamped.
Tsúi gakiámna tchìsh (nî'shtāk gákiamna), tsúi mîlka, tsúi Wálamsknî Then they surrounded the lodges (the samenight they enrronnded) then it dawned, and the Rogue Rivore papátkal slûshû̀dshapêlîsh. T'chúi E-uksknî shuîlpka, tsúi tî'ntkal sa,

 tchî'luk sä'satk Wálamsknî lakí. Tsúi sa nelī'na lákias hû'nk, nánzatch sla nelīna; tû̀m tánkt hushtchóka sa, lúluagsla tû̀m wéwanuish ndéndtloy oealped s good many. killed they, maleo olazes of many women ehil.






Some a slave grew up in the power of hle then cacaped (and)returned. Then he


> Tsúi gátpa tumí máklaks Mbu'saks=sáwals tsiäls-hä'mi, tsúi gákua Kobke,
> And arrived many Rogne Rivers to tho "Obaklian-Place" at malmon-time sud they crossed Willam-



 wero encarupod men from Nilakahi that time, and these they fonght, pat to fight them in their

T’súi gátpampěli nánuk E-uksknî' hûk, at sa haítsna Walamskí'sas. After this returned the wholo Lake tribe, new they puraued the Rogue Rivers. Tsúi sa släá hû́nk tû'nipnis híhassuaksas, tsúi sa wûtla hû́nkiast tû́nipäns, 6 and they asked thoae five men.

 "not I amafraid; inmy lury start out I (even againat), al large Then I so spoke to



Tsúi vûssá nā’lsh, kokä’tat gewá sa, udodámkua sa; tsúi sa sä'ksa 12
There- they took at us, into the river leaped they, awazi over they; and they reported
ná-ast hû'ksa tû́nepnî. Tsúi É-ukskni ná-asht gî: "haítsnat sas pä'n, tha: (to ns) thesc five men. Then the Lake men thna arid: "pursne ye them once more,
 dsasam, tiä'mishtka tsúi nánka látkak tsóka, nánka toks gä'mpěle. Ngeísätk 15 pursaicer, by alarvation then soine right there porished, aome however retarned home. Wounded hû́nk sa shlícslila tsókapks tcha.
(unirs) thery fonud dead wnos also.

 ouly a fow (they) old wouren old meu too. That is all I know
hû̀masht siállual $\ddot{A}^{\prime}$-uksknî Walamskî'shash; ká-i tatá lû́luagsla $\ddot{A}^{\prime}$-ukskî'how fonght the Lako triloo againut the Rogno Rivera; norer they made elaves of the Lake
 nánukash=kìsas gai'nta käílatat, ká-i tatá yuyálks=-sîtlk sấta máklaks 21 sll sulutuundiog Indlans in thls conntry, never sorry=allike rendered the Indians
Ä-ukskí'sas.
tho Lake tribe.

Sá-alalas tsi's Moatuásas tsi's n̂dúyua, Sastiásh tsis Walamskî'sh tsî.s  3 wáts lí-ushkni.<br>boreen the Lake men.

## NOTES.

16. Dave Hill took part himself in one of these shirmishes. His historical aecounts are all given in the conversational style, which ahnost throughout substitutes the simple $s$ for $s h$. I have not been able to determine the exaet dates of these Rogue River raids; but they must have occurred before the end of 1855 , when the Oregon war broke out, tor after its termination most of the Rogue River Indians were removed from their old homes to the coast reservations of Northwestern Oregon. The raids oceurred in the early youth of Dave Hill, who was born about 1840; so they may be placed between the years 1848 and 1855.

16, 2. tinatoks torms antithesis to tina of the preceding elanse. The literal meaning of both is: "one time . . . . the other time."

16, 3. Wálamsî. The suftix -i, -i, is the adverbial particle hí, and forms a locative case, mainly found in local and topographical terms, as in Yámsi, Kakágosi, Ktaíwashi; also in a few generic nouns designating localities, encampments, mountains, etc.

16, j. shîshûddshapělish. The suffixed -sh is the pronom sha, they, and in this suffixed form also appears as -tcle, -s. This verb stands in the distributive form; shúdshapělì, to rebuild a fire, being the absolute form.

16, 7. nánzatch, for náņ̌a tehîsh, "others also".
16,10. yakanapkuk, verbal cansative of the future of yakna. The forns yälka, yä'ka, jékna, séka, are preferable to yákna, yáka.

16, 11. sfatsa. It is a common custom among western, and some rastern, wild tribes to force their captives to dance in honor of the victory gained over their own tribe. This is done especially during the scalp-danees.

16, 14. Titná lû́ks, etc. Here begins the aecount of a raid made by the Rogue River Indians upon the Klamath Lake settlements. It may have oceured one year after the raid previously narrated.

16, 15. sapíya, ete. After escaping, he informed his own countrymen of all the local conditions of the Klamath Lake people and their country, and used all his topographical knowledge in guiding their wamiors to the attack.

17, 1 and 2. Tsíi nē’lka. Indians and nneivilized races in all portions of the world begin their raids upon the enemy before dawn, or at the earliest appearance of daylight.

17, 9. gäkín and gekuánapka, inflectional metathesis for gäkuí and gekánuapka.
17, 14. Imshtchṓktat for hushtchō'kat ant, ăt (ye) being repeated twice.
17, 16. tsókapks telıa is a contraction from tsokápkash tchî'sh a.
17, 17. Tchíssa, for tchi sha: thus they.
17, 20. sellólok: synizesis of the longer form shéllualuk, shellualúga: through fighting.

17, 21. yuyalks=sitk, abbreviated from yuyálkish $=$ shitko, looking like persons mourning over their lost companions, wr made sorrowful by londage to Indians of : foreign tribe.

# E-ugseni séllual Moatuáshash. <br> PIT RIVER INDIANS RAIDED BY KLAMATH LAKE WARRIORS. 

## Giver by Dave Hill in the Klanath Lake Dhaect.

$\underset{\text { The }}{\text { Take men }}$ E-ukskit titatna séllual


## kî́llitk, ká-a wō'sěs slllāō'tak Ä-ukskî'sas ti'nsna, kía-itat sa nelli'nat 3 bellicose, reers derpondent at the mere alght of lake men they ran amany, - never they sectiped

 hû'stchok-huya hak sa; tû'm tát sa hustsóka Móatuash. Ǩá-itata sîukat Ä-ukskísas Móatuash.the Lako men tho Pit Rivera

## Wawáliks lupî́ shéllual Moatuéshash.

## DAVE HILI'S FIRST FIGHT WITH THE PIT RIVER INDIANS.

 Éukskni gelṓla pá-uk Kokáksakshi, nā̄sh nā̉ds Bósltin tû̀la. Tsúi Lake men durmonntd dor repaet ai Litile River, oue with us $\Delta$ mettean (coming). Then








tûkláktsnank.
otopplag at intervals.

tínsina Móatuash, vussōk sas tillî́ndsa wéwanuish; tsúi sa lû́luagsla.

 lifhassuaksh Móatuash; Ê-ukskni toks lápîk. Tsúi wigábănî shenótankmen lit Rivers; Lakemers two wete And asbortwhile skirmisbed
 :imbu hátakt hínhiuatk. 'J'súi nísh kái-a kä'dshîka, tsúi nî kakídsapěle, at the water there glving way. Aud the grealls It fatiguod, and I went ty turne,


6 káhhiank tchípkash wéwanuish, tsúi sa shläá yástat lî́ukaipksh. Tsúi sà lomklng out fortheassem. women, and thoy fonnd (them) in thowiliows crowded, And they


9 Nāsh sē'gsa tánkt ÉE-ukskni sûkō'lkipăluk. 'I'súi Tiunō'leshtat mák'lak-


12 ksáksi gûkí́kak líluags. Kíái sa hû́nk haítchant; unák tā'ds mû́luapěle (away from) ran emay coptivees Not they them puisued; early howerer got ready agstin. Tsúi sa guhuáshktcha, tsúi sa gelō'la Kokeíksaks; tsúi sa sakatpampělćAnd they startell ont, nud they dibmuusted wit Litule Ritere ; then thes wanted to perform


 É-uksi lî́tyî. Tsúi sa tchía gátpampと̀lank, tsúi qué-u quikak hû́k lû̀'gs

18 spunî'sh; ná-ens lissuáksas spunî'n hầnk. Tsúyuk hunkělámskni gúikak, thetransferred to snothor Inne fiven her. And she from hls lodge ran awny, one;
nánzatoks sa éna Ampzzia'ni sésatui tchû̂k wátchat; tsúi sa i'tpa tû'm but otbers they bronght tothoDulles, traded there forhorses; and they hronght many wátch hû́nk lû̀gs sesatuí'tkuk. horsug thoso slavers hariugsold.
21 Tsinn sáyuakta tína Moatuashash séllualst Eí-ukskni.

## Wawítiks tapî́ hefllualsia Moituáshash.

# DAVE HILI'S SECOND FIGHT WITE THE PIT RIVER INDIANS. 



tpä- $6 k$ nāılsh hishtcháktnuk Moatuáshash. Tsúi nat shenotankákska hátak. 3 ivriting nas for he had become anpry at the Pit Riterers. Then wo nlmost fonght therr: Nánka tchîllúk Nûshaltzagakî'shash kaknōls těméshka; nāt hûnkantí

 Hî̀masht nat hátokt máklě̌zank; tchúi nat géna mbî́sant, tchúi nat Thna (did, acted) we thern whilecamplagi thon wo traveled bext lay, and wo

Tiunōlsh. Móatokni nánka sí-ulantchna, tsúi sa ksî́ulę̌ kî́uks suavvíuuk 9 at Tiumolsh. Hoctocs soome went with (an), and they danced a conjurer when examited





tsúi wetō'li lalî'shtat; kokálam hâk pálkuish mûná tû. Hátokt gakáyapguk 15 nnd slid down tho slope; -or ariver there tho dry bell deep:idown. At that place entering the wodds
 Tsánash tchîsh sli'ksga nqak-ksaksína; ngä'-ish lhû́k ngak-ksáksh John alioo they came near on head.top right there; bullet that on the head top
ntíkshtcha. Ná-ends tchîslı núsh shlín Móatokish. T’súi nat lé wak ká-a: 18 graver. Another tom in the was shot (a) Modocman. And we (werc) un. very:
head
lî'wa hû́k tû mûna sha lěméwaliêksltat î-utíla; nánuk wéwansni hátokt wore those down-hoiow they driftwood-beap nuder; all women and all thero orowded
 wernlimped decp below. Then I jast thero sboro thelrcamping-place was; nul together
látokt nî'sh a gishî̀: "Lia' a nat wák ka-á; lä' nat wák galdsawiá-a!" tsí sa, there I whlle Btayed: "Not we know what to not we (know) to approsch closolyt" so thes
 nî hû́tsna tû́, tsúi nî hû́tpa híhassuaksas látokt lî-ukétîisì láátakt tcliútunk

senótankash. Tsúi nísh sa läwii'-ûla hû̀kuapksht kî́kalam palkuísham; fighting. But mo they notnllowed toinnacross theriver's dry botturi
6 hátakt gunî'gshtant nánka E-ukskni lé-uptcha; senótank ktáyat lícuptsank.

 láátaktk. Tsúi nî: "hû̀tchanuapk" tchí nî kî', "wiká an' gáldsuish sánathere eald. Then I: "I shall rush oreer" so I said, "closely I to apprrach I

 hutapěnō'lshi n's náyěns Móatoknî shlî́n pä'n núsh; tsúi káhaha shlî'slăm after Ihad reached snother Modoc was shot also in the and he ached throngh his
there runing woad; wong.
12 Tsúi nat léwak nà'-ulěka, tsúi nî ná-astg: "hággi! î'sh ktîyuiakî'at!" Then we wereata for arranging, sod $I$ so spoke: "lookberel me liftnpthereyet" tsí nî gi. 'T’súi nî'sh sha ktîwî' $\chi$ i, tsúi nî ktsî'tsā, tchúi nî gita Moatuáshash no I said. And mo they placed on top, nnd I erept forwsra, theu I there the Pit Rivers





 Tsini hû́k ná-as hátokt, tû'shtûk Móatuash lî'wa, nánuk sa hû'nk ngä'-is And to wheman there, where lhe Pit Rlvers were all (others) to blm gathered, $\begin{gathered}\text { (their) } \\ \text { arrows }\end{gathered}$
21 sïwána, ná-adsiak hû̀nk î-û'ta satslx́ámitk lû'paks. Tsúi tchín a nî

shléwal lóloksgish, tstii nî shlín hû́nk, kát hâk yū’ta, tsúi ndéwanga; tsí cocked (my)gnn, and I sbot him, theone who was shoot- and hefoll; thus tánkt at nat síuga hû́nkst.
utlast we killed that fellow.
At hû̀ksa líwatk tû’m wáltka tánkt. Tsúi Múatokni nán xa tû́měnatk 3
Now they, erowied much talked then. And Modoce somo understood
Móatuasam hémkanks; tsúi hû́k tû́měna at Móatuasam wáltoks. Hû'k of the Pit Rivero the language; and they underistood of the Pit Rlvere the dibecouree. They
 shash; ná-asht nen wáltka." Tsúi gakayúluk É-ukskni shíshať̃a 6 wĆwanuish, tsúi hứk kînualk sa; náұqं huliashthina kaítua shnû́kuk. women, then went on the they; some naireiled bone bavingohtained.
Tsúi núts häméxe: "shnû'kshtkan nā'sh siwák hû'nk ātínsh hûk lák gîtk!"; And Itoo said: "want toget I ono girl thlo loog bair wearing1";



Tsuii tinnkt at híhassuaks at int ink
theronpon
tsúi at nánđa tinî' $\chi$ i. Shtá tok sa É-ukskni hashánppa; tsúi sas gaviína 12 when some wentup Corppectly they tho Lake men encircled (them); then themt rejo

Tsúyunk vû'ssa E-ukskni, tsúi hû'k Móatuash tì'nzansha; tû̀ atí yainatat Then wefright. the Lake men, as the Pit Rivers man out of the cir- over-jon- to the moon-
ened
tûshtámpkank ü-óho=uátchna, tsúi shnûshnáta. Tchúi nî nû hựlipêli, tsńi 15 coming lear they hallood while rnn. and built fires. Therenpon I I enteredagain and
(the canon),
nî hōpělánsa, tsúi nî hupáklěxa láp’a hílhassuaksas. Tsúi nî'sh hû́k




tî́ntpa sa É-ukskni tánkt, tsúi sa hû́nk síuga kándan hû̀nk shlín. Tsúi arrived (thoy) the Lake men at hast, and they bim killed whom I bad bbot. Then

plia'ntankni kínshakpkank. Tsnîpal sa shlín; ná-äns shlín, hî́k tchaká-

3 'Tsúi nat at gai'tak, a nát sukî̀lkipl' tû'shtok spuká slili'tk E'uksknî. Ancor the wo ceased (aghlutug), aud wo reaseembled where lay a wounded Late man. Nátak lư̂́nk hî'slıan Móatuashash ksápok; láki ngû́mslıka ngii'-ish hû̀k.

Tsúi nat wátsat shutiàla má-i skû́lhash pet; tsúi nat ksiálapk hû́nk shlípks;

6 kayúds hîk klä'kat. 'Tsuii nat guháslhktcha shewatzû́lsî; tsúi nat gia'
 $\underset{\text { gent on }}{\text { gena }}$ hûnk ngä'-isapksh ánok ndánna: nās nû'sly shlli'tk Móatokni woot on thwee wooded earriog three (mes): one in the lead wounded a stultos

9 ishtka, kánda nat hấnk wátsat shutä́lank ä'na. Tchúi nat mák'lakp'l'
 hî́ulinush tyálamta.
of tho maral wetward.
 ntû́ldsaunuish wigáta gáwal híssuaks; tsû'tskam snû́lash sïkälalō'nank the iry bottom cleas by foand a man; eqgoirrel's a halo luaring corered up




 mā’sa nút staínas hîshlá-uk. 'Tchí nánza gî́ank síukshtka; tchúi sa síuka,

18 at kléka hîk. Wák tchíhuk pä'tch gítk! stiksluiesshitk hû́k tutíla stákělinsand died be. How so (curronos) he feet badt bootilike they projected at the

ksaksi, tánkt sa hû́nk gáwal kîkaskánkatk.
man las. then thers that (Pit Ririer mana) whilio walk ing thont.


# 38912 <br> PIT RIVER RADDS. 

 kînkák i nat lúluagsla. Tchín at nat at gä'tak ndáni táměnotk. few only there wo enslaved. So $I$, when we quit (ighting), three times bad been there.

## NOTES.

19. The long and fertile valley of the Pit River, an eastern affluent of the Saeramento River, is inhabited by several tribes of Indians who speak dialects of the same language family. Of the pecmliarities of these tribes, Stephen Powers has given the first comprehensire sketeh in the Overland Monthly, 1874, pp. 412-416, and in Contributions to North Ameriean Ethnology, vol. III, pp. 267-274. The various tribes greatly differ in their physieal and mental qualities. The Paeamallies, on Hat Creek, at the lower end of the valley, were nuch dreaded by peaceable travellers on accomut of their sudden attacks trom an ambush. The Indians in Big Valley are a fleshy, stont, and physieally well-made people, while the Hot Spring Valley people has become deteriorated throngh prolonged national misfortunc. Against both of these the slaving raids of the Klamaths and Modoes were mainly direeted.

19, 2. The raids were mertaken by the Klamaths and Modoes just before wókashtime; that is, in April and May. They had no other pnrpose than to make slaves of the females and ehildren of the unwarlike, poor, and suffering Pit River Iudiaus, and to keep them either at their homes or sell them for ponies, provisions, beads, otc., at the Dalles to the Colnmbia River tribes. Adult men were not enslared, but killed outright if eaptured. Similar instances of suppression of weaker tribes of the West by warlike Indians who were their neighbors are those of the Kayuses on Middle Columbia River, of the Yuki between Saeramento River and the Pacifie Ocean, of the Húpa ou Trinity River, Cal., all of whom were, at the advent of the whites, the terror of the districts surrounding their homes.

19, 3. shliótak for shlióta ak; the Pit Rivers ran away at the mere sight of the Klamath men; Eá-i tata sińkat, the Pit Rivers never killed any Klamatlı men. Both statements are exaggerations; Hills own aecount and Toby Riddle's biographie notice tend to prove the eontrary.

19, 3. nellínat, or neli'rnat. When they had killed an enemy, they did not follow the eustom of the Oregonians of taking the sealp. This enstom is not found among any of the Central Califormian tribes.

19, 4. hư'stehok-huya; by the snffix huya, -nya, the action of the rerb is shown to take place at intervals, or in a small degree. "They did only little damage by killing or massaering." Cf. shenótank-huya, 20, 2, and -uya in the "List of Suffixes".

10,4 . tû'm tát sa. Change of the snbjects introduced by the pronoun sha, sa, in conseeutive sentences, is sometimes observed, as here and in 19,16;20,3. Hill often uses sha when speaking of the Klamath Lake men, where nat, wee, would be more appropriate.

10, 6. Kitchkanin nû for kitchkáni nû (or mî) nû. Pronouns and particles are repeated quite frequently.

10,11 . Wúksalks is a eamping-place distant about six miles from Linkville. It was not possible for me to obtain definite information about the trail followed most generally in those raids, but Dave Hill said that from there they went due south. He
was born abont the year 1840, and since he was a boy then, carrying only a pistol, this raid may have taken place about the year 1858. His second raid, which was mender. taken the year afterward, was made when he was nearly twenty years old. After this he stayed five years in Oregon City, on the Lower Willamet River.

19,16 , and 20,1 . What is said here up to the word snawai'ds is evidently an antieipation of what follows in 20, 6. 7.

19, 16. sas tillindsa, or shash tilindsha: shash is apposition to wéwanuish, which stands here, as frequently, for wewamishash; 23, 5, we find : wewámishash.
$20,2$. lápilk for lápi gi: "two are, two were."
20, 9. Tiunō'leslitat. The nistance between Klamath Marsh and the Pit River country was estimated at three days' Indian trivel; but it often took four days to reach there on horseback.

20, 10 and 11. maklaksksalisi refers to the encampment and immediate surroundings of the Indian captors, the Klamath Lake men and the Modoes, who had gone with them.

20, 13. guhnáshktela. They seem to have returned hone orer the same trail which they had followed in going south. They passed between Little Klamath and Rhett Lake, whiel latter is also ealled Tule and Modoe Lake.
¿0, 17. tsúi ge-n, ete. This sentence has to be construed as follows: tsíi griikaka liu'k lûgs spunísh gén: "hercupon that slave, transferred by me, ran away."

21, 2 and 3. Bóshtin tpä-ok. This man was an American settler on Lost River, who, with other settlers, had previously attaeked one of the Pit River tribes, in punishment for depredations committed. In the fight which took place, some whites were killed loy the l'it Rivers, and this prompted the abovementioned settler to slanghter an ox for the Jake men, in order to laise their spixits for deadly revenge on the common cnemy. The beef was slanghtered and eaten at his farm.

21,5. Tsúi nat, ete. This ineident was explained to me by Dave Hill, as follows: The famous Captain George was at that time war-chief botlo of the Klamaths and the Morloes. He had ordered Kinkamteh, the head-man of the Nnshaltkága=Modoes, to join the expedition against the Pit Rivers. His refusal to go prompted Dave Hill and others to deprive him of his elk-skin cmirasses; but finally, to secure snecess to the expedition, the parfleshes were returned to their owners.

21, 7. Húmaslıt nat. A verlb like gî or shinta has to be snpplied.
21, 12. séllaluish, translated here by "war-expedition", still retains its verbal nature; for it is comected with two temporal adverls: lupî' and lin̂nk. More circum. stantially the sentence ean be rendeved: "wo rode far beyond the terminal point of our previous raiding campaign."

21, 18. léwak, a verb composed of two particles. Gétak and kánktak, formed almost in the same mamer, are also nsed as verbs. Below, léwak is separated into its two components by a pronoun: lä nāt wák ka-á; lä' nāt wák galdsa wiáa.

21, 19. wéwansni. The terminal -ni turns the wéwanuish into a kiud of adjectival phrase. See the peculiar use made of this ending in the Dietionary and in the Grammar.

22,8 . látaktk. The final $k$ is the rerb gî, kî, "said"; tehín látaktk is: telí hû hâtakt gî.

22, 21. sliatchlzámia is one of the various modes of painting face and body in use among the western Indians. White paint was put on in this manner (see Dietionary) only when the Indians were on the war-path. From the same verhal base is derived
shatehō $/ \mathrm{gi}$, to contract the half-opened hand or fingers. Compare also: shat $\mathrm{a}^{\prime}$ dsha, shátuaya, shátělakish.

23, 6. gakayilúk refers to the women, not to the Klamath men. These latter retired with the eaptmed females to the top of a hill, to seeure themselves better against further hostile attacks. shíslatya, distributive form of shíat $\%$ a.

23, 11. tinkayúla. The Pit River men tan out of the timber to flee from farther attaeks, and some rau up the steep bank from the dry river-bed. While they did so, the Lake men surrounded them and completely elosed the circle (shtá hashámpka). Nevertheless, some of them managed to break through the intervals; this frightened the Klamath men, and then the other Pit Rivers also escaped towards the hills.

23, 12-14. The three men and the boy who went up the hill belonged to the Pit Rivers. The Klamath Lake warriors were so surprised at their sudden retmin to their surrounded eompanions, that the Pit Rivers had an opportunity to eseape during the eonfusion.

24, 4. Nátak. The sentenee has to be eonstrued : nátak híshlan hî̀uk, Moatuáshash lî̂'nk ksápolz. "None others but ourselves shot at him; thouglu he was one of onr men, we thought him to be a Pit River man".

24,4 . láki. He had been shot in the eye-bone.
24, 6. kila'kat stands for klia'ka at ; ef. 28, 12. gátpant for gátpna at.
24, 6. shewat $\% \hat{u}{ }^{\prime} l_{\text {sin }}$ : for shewat $\chi \bar{o}^{\prime}$ lash $\hat{1}$, or shewat $\chi \bar{o}{ }^{\prime}$ lish $\hat{1}$; the $\hat{1}$ appearing here not as a loeal, but as a temporal ease-suffix. shewatya, noon; lit.: the day divides itself in two; shewatzölla, afternoon, the day has divided itself in two a while ago.

24, 8. luluksgä'-islı, uneonmon form for lúluksgîsh, lóloksgîsh, riffe, gun, lit. "firemaker".

24,17 . síulshtia stands for the full form síukshtka gi.
24, 18. tutitla. By iuadvertence the distributive form is insed here instead of the absolute form tuila, for the Pit River man spokon of had an abnormal fleshy excrescence on one foot ouly.

25, 1. shelhalshuk: he means fighting with the Pit River Indians.
25,1 . ndánnitaksni, incomplete grammatie form for udanuitánkshni.
25, 2. kínka-ak i, only a few; meaning females of the Pit River tribes.

# E-uksni séllual Sátas. <br> HOW THE LAKE MEN FOUGH'T THE SNAKE INDIANS. 

Given by Dave Hill in the Kilamatil Lake Dialect.

## Lupí séllual. THE FIRST FIGHT



 píla. TYnkt $A^{\prime}-u k s k n i, ~ h u ́ k t o k s ~ h i s s u a k s ~ g e ́ p k a, ~ k i l e v i d s h a p k a ~ l u ́ e l a ~ g i ́ u g ~$
only. That the the Lake tribe, kiiinn.

Afh.
 tchúi $A^{\prime}-u l$ skni hihassuaks gasáktsna. Tsúl mák afterthis the Lake pursned. And encamped that Snake chief Dried.
 Leg (so he was Snako (the) chiefhero); then tho Lake men espied him toboencsmped.

lakias. Tchúil nánka Sát g"impele, nánұatoks hû́shtchok.
leader.
Upon this some

12) ká-itata gatpant Shát; at vushá Ti-nkskíshash.
never agaln came tho snakes; (for) they the Lake tribe.

## Lớldatkîsh Bóshtinash rớla shenótanka Shátash.

## DAVE HILL FIGHTS THE SNAKE INDIANS ON THE SIDE OF THE AMERICANS.



 sésatk, nā'sh tchîg: Panaína tchí' sésatk. Tchúi sōㄲldshas shawiga, tsúi named, oulv (man) beeidea: Panaína so pamed. Upon thle the military was arousued, and

 shéslatk lakí slû̂́ldshash, nā'sh tchík Lieutenant Small ná-ashan shéshat named (was) chier of ofldiers, ono beaides Lieet. Small thas pamed ( (man)


Tsúi nat é-ushtat géluandsa, tsúi náts shläpka Shā't; kílilks shläá; Then we alako wentaround, and ns noticed the Gakes; tho dust tbeyper-
 hûk $n$ nāsh hû́k sésatk é-us). T'chúi Camp Warner mák'lěk tiná nat waíta; ?
 tsíi nat guháshktclà tálaat tzalamti'tal. T'chúi nat telō'lì "Tchéwam ther we started out directly towarle weet. And we looked down "Antiopets
 laláki), tsúi shnä'-uldsha nat. 'Tchúi nat tälō'li; gälōla nat k'makuápkuk 12 coummenall and galloped off wo. And we sconted; diemonsted we to reconnatro ems)
Šátas máklaksas, tsúi nat wawápk k'makká nat, tsúi mã̀ntsag gítk lā pi







Tsúi tû̀'hak náts a gépksî at shlǎa'pka, tsúi tássuîpk, tsúi ktaítal Then alongway when wocamedown theysaw (the and charged (them), and to the rocks behind (the
tî́nshampk Sá-at hûk. Sänótanksi nat sash gátpa, tsúi tû' shlikshgan's scampered off the Snakes. At themoment of we them reached, and nearly shot me
 the Far np the voldiery all climhed up to dislodge the Snakes; the packer
Sarker.
nän pî'la yáma shláka wátch lû́nk. Tsúi sa senótank; wátch nā'sh hátakt of army alono bolor ganded linrses (thelrs). Now they fonght; borse aslnglo over there bageago
tkálamna, tsúi nā'slı É-ukskni shnuktsástkak hû́nk wátch. T'ssii nî stoocl on a Lill, wlen one Lake man started to catch that horese. And I


 gatpánkoblkshi hấnk wáts. Tsúi keiddsûksaksína lä'kshktsa gai'-ish hû'k.

6 'Tssni uat káli hû̂'nk snû́kat wátch hûnk; tsúi hûk Sā't tî'usna kát luû'k Aud wo not caught horsco that; and the Snakes rananay who him


 the meckelifif, the earee also there inteecil many men. And in thero stayjing
9 salwîka hûk Sā't, suashuála sa hû̂'nk ktá-i, táii vû'ssa shū'ldshash. At
 yána tílza sháppăsh, tstii nat gémpě̀le.

 12 lissuákshas ktáyat tsutíla. Mî̀ni kä̀lo hátakt túya; húnkant tsíg ts'hálanınank láyipk lûluksgislıtka. T'súi ndé-ulzau shlia-ánk hấnkt layí
 pakst, tsúi ni síktsaslan wiḱ́i; tsíi nî shlilíwal nánuyank tyiailza; tchúi

 sikěnítkstka. 'Tsúi sṑldshash tìntpa, tsúi nelī'na nû, tsúi kúizan Sā'tas

18 hứnk, kándan hû̀nk shî'uga. Gitákui hû’k P’laíkni; E-ukskíshash that. whoms halkiltel. Mailing ho frompprague to aklamath Lake
(womian)

 sctting.
 by.



 nílka.
stopped lhere
in the early hours.
Lấluagslash tánkt lápksapt wéwanuish; äná nat hî̀nk, tsúi nat pän 6




Tsúi nat watsátka täluak-húya; tsúi gáya-a nā'ts hû'k Sā̀t. Mbúsant Then we on horselack rode after them; aid were bididing before us the Snakes. Yo the morn ng

 gave women to us those, of the Snake horsee also two. then we te-



## NOTES.

28. The various bands of Snake Iudians inhabiting Oregon cast of the Cascade Monntains are gaining their sustenance chiefly by the chase. This accounts for their constant wanderings and ubiquitous presence sometimes at Camp Harner, or the Owyhee and Suake River, at other times near Warner Lake, or the Klamath Marsh.

The date of this raid could not be determined; it may have preceded the fight related below by ten or twenty years.

28, 1. E-uksi, "to Klamath Marsh"; on Willianson River (EEGke), which forms the outlet of the Marsh, the Snakes saw women of the Lake tribe erossing or passing down the river in their dug-out canors, whirh they use for gathering wokash (the seed of the poud-lily) on the Marsl.

28, 2. gêpkapsh, formed by syllabic elision from gepkápkash; cf. 29, 19.
28,2 . sáliatla, to come up, to arrive by the trail.
28, 3 and 4. wéwalailis pîla, the old women only; the jounger ones, on whom prineipally devolves the work of wokash-gathering, fonnd time to eseape in their canoes from the raiders.

28, 4. k'lewidshipka. The men had gone fishing to distant places, leaving their females in the camp, not apprehensive of any hostile attack.

28, 8. kilo's, or kiln's, is the epithet given to "Dry-Leg", the Suake ehief; it means a bold fighter, leader of a fighting band; literally: "irate, wrathfnl", and may be here taken as an equivalent to "war-chief" (sessalólish lalií).

28, 13. Moadokî'slı, apocopated for Moadokíshash; also 28, 1: Wéwamish (wéw:u'sh) for wewannishash (shläí géplapsh). Nā'lsh tclıî'sh, us also; that is, we of the Klanath Lake tribe, were gathered by Mr. Perit Buntington into one district, the newly established Klamath Reservation. A large nmmber of the Iake People were then seattered about Klamath Marsh, which is visited by them now in snmmer only for fishing, gathering wókasli and berries, and for hunting.

28, 14. Dave Hill, now interpreter (lúldatkish) at the Klamath Lake Agency, took a part in this short bnt interestiug expedition, in the capacity of an Indian scout. He fixcs himself the date of it by the words "tina illololatko", or a full ycar after the Indians had becu gathered on the Reservation by Mr. Perit Huntington. The treaty was conchnded on October 14,1864 , and the campaign was undertaken in 1866 by a small boly of American troops for the purpose of bringing back to the Reservation a band of Smake Indians who had run away from it. This unrnly tribe, jealons of its former independence, has left the Reservation even since then, and could only after much exertion be induced to retnru. The fights took place west of Warncr Lake, and north of the border-line betwecn California and Nevada, within the former hannts of these western Shoshonis.

The Report of the Acting Commissioner of Indian Aftairs for 1867, page 99 si. , mentions this expedition in the following laconie terms: "October 27, 1866, troops consisting of 21 men, First Oregon infantry, and five Indian Klanath scouts, under Licutenant Oatman, and 27 men , First Oregon eavilry, under Lieutenant Small, lind is fight with a band of hostile Snake Indians near Lake Abbott [should read: Abert], in the Klamath conntry, Sonthern Oregon. The Indians had so chosen their position that the troops were obliged to dismount to attack them. The fight lasted one and a half honr, and 14 Indians were killed and many wonudecl."

On page 100 of the sane Report, another fight against Suake Indians is spoken of: "Late in November, 1866 , in a contlict between the troops and Snake Indians near Fort Klimath, 10 Snake Indians were killed by the troops, and three more by the friendly Klamath and Moadoes who accompanied them." This may have been the same fight as the one above, reported with much less accuracy of detail.

20, 3. Spá-ish Valley, name corrupted from Surprise Valley. This valley is situated in the northcastern angle of California, and on the shore of its two alkali lakes several Ancrican settlcments have sprung up. A few Snake Indians live peaceably aronnd Fort Bidwell, which is located at the northern extremity of the valley.

20, 10. táleat t\%alantî'tal, consonantie assimilation for tálaak tyalamtî'tal, duo west.
29, 17 and 19. nā'ts, 山atch, for nā'ls, nū'lsh, nā'laslı, us; náts a gépksî, for nālash a gépkash í.

29, 17 and 18. gayá-itsampk. The advance of the troops was ordered in consequence of Hill's report that Suake Indians had been seen by him and his fellow-scout.

29, 19. tû̀ ${ }^{\prime}=h a k^{\prime} ;$ hak means: on this side of something or somebody, referring to an objeet located between the speaker and something more distant.

29, 19 and 20. shlä'pka (for shlä'apka) and tássuîpk (for tássui-apk) "they saw and attacked them in Hill's absence"; tinshampk "they scampered off unseen by Hill". If the simplex verbal forms shlä'a, tássni (or táshui), tínshna were used, they would imply that Hill then saw the Snake Indians himself, that he was among the troops eharging them, and that he had seen them in person scampering off.

30, 3. lewé-ula really means : not to permit, not to allow, to forbid.
30, 3. tehín gî, short for tchí uî gî : "so I said."
30, 5. Instead of gatpánkshkshi could also stand in the text: gatpanuápkshi; the final -i being used in a temporal sense in both terms.

30, 8. kû'mets, contr. from k $\hat{u}^{\prime}$ mme tchîsh, or from kû'metat tchîsh.
30, 9. suashuála, etc. They piled up rocks to serve them as barricades to shoot from behind.

30, 11. u-í'tsna, distributive form of ó-itchna; see Dictionary.
31, 7. Nä'wapksh, etc. Transeribed into the fuller and more explicit grammatic forms, this phrase would read: Nä'wapkash yamakíshtana kétcha tálamna, "to the northwest of Goose Lake." For Nä’wapksh, Né-uapksh, see Dictionary.

31, 13. This campaign terminated in a decided victory over the runaway Snake warriors, but failed to accomplish its real purpose of bringing them back to the Reserve. Nevertheless, these Indians had been severely chastised by losing quite a number of men killed and wounded, and seven women of their tribe eaptured by the military.

## Mṑdokni Máklaks shéllual.

## THE MODOC WAR.

## Obtained from the Riddle Family in the Modoc Dialect.


shualaliámpka T $\not$ álamtala; Mōdokíshȟsh hushtánka ne-ulákshôishi K Koke-

 lutatkétkiti.
to bo interepreters.


 mā'lash nû shioulkishxéni itchanuápka Ê-ukshitala."
ye I to the reservation I shall remove to Klamath Lake."
 sheshä'tuî; hennkánka nû Bóshtinash, liä shaní́-ulî medshápkash, tchía. did eoll; huve said I to Amerlcans, if wlahed to ejnigrato (there), they cunld
Kí-itoks nû gén táta käíla sheshä'tuî, hâ'toks Skóntchîsl sheshä'tui." Not I tile ever coantry did sell, thit ho skontehsh sold (tt),"
6
 shê'slash shúmǎluash ; pēn nánukaslı tû shaná-ulî itchámpělìsh shiû̀lkîshusme had written on it; agaln all peopio over ine waated to take back there the rearcis

 at tineï'ga mákloks i-amnán lóloksgîsh. Bóshtin tchísh. Toby hotámsza


12 pělángshta samtchátka. Meacham mā̄lăm hû shī'tchlîp, hemkánka tídsh,

 Bóshtin, at nû tálaak shî́ta! Nánuk wawálzan î́lkat mā’ăm lóloksgîsh!


 genuapkúga shiûlkishxénî=källa.

Shiûlkîsh $\chi$ éni "Mōdok Point" shéshash gîshî gátpa; at Meacham Mō'dokîWithio the reeerra. to "MFodoo Point" (ithe) name they went; then Meacham tion
shash shulō'tîsh nanukénash shéwana shapíya, tídsh p'nálăsh shualaliampa-

21 kutupgasht. At Mṑdokni Ei-ukshikíshash tî̀la wawálkia; at hátak

tálta at káyak hishtcháktnan nadshā'shak tchi-uapkúga, Bóshtinash slitcchpromised atno getting incensed in a common home they wonld live, (and) to the Ameri- they winled



At Mō̄ỏdokni ktchínksh ntchayetámpka shtîshtnaō'tan; ndankshap$\substack{\text { Uponn } \\ \text { thfis }}$ the Slodoces rails to gplliteommenced to hald honeses; eight
 né-uľa, nánuk ktchínksh Mō’dokishăsh tĕméshka, lemkankótia: "käíla 6 neted, . all the riils from the Molocose they took amay, deolaring: "the land p’nálăm", kshápa; "Mōdokíshash lóloaksh", kshápa; "Bóshtin kléksht", to thom (be so they ald; "the Modocs (are) bondsmex", so they said; "whlte peoplo they will be-
longs)",
kshápa. Mō’dokni lakí kéái yámtkîn Meachàlăm hémkanksh, Bóshtinash
 (hûnk liû Meacha shapíya), tídsh shlepakuápkasht Mōdokíshǎsh, Bóshtin 9 that he Meacham said). well wolld protect tho Molooes the Amori. lákiash

 $\underset{\substack{\text { dokíshash } \\ \text { dooles }}}{\text { dotchínksh }}$ the rils

Mōdokíshash slewanátki. Pēn Bóslıtin lakíi Mōdokíshǎsh wénni shiáshla; to the Mudocs to pay (for them). Again the Ameri. agent the Modoes elsewhere removed:



ktchínksh pēn pállash, ká-i shaná-ulî E-ukshikíshash pēlpéliash hunáshak; 18

shaná-uli kitchákêlan pî́sh ktchínkslı shnû́ktgî. At agent pēn nádshash




Bóshitin lákiash shapíya E-ukshikíshash pî'sh tála shewanátkî ktchínkshtat. the Amerl- agent toid the Klamath Lakos to hlm money shouid pay for (hls) Fails,
Bóshtin lakí at killlhuan heméze: "Hä î ûn pēn gépktak, tchû́i mish nû The Amori- agent now gettlogen. apoles: "If sou again comoliere, then jon I




 shélualsht.
while fonght.
9 Capt'n Al’pa Yaínakshi-gîshí Mōdokíshash máklăkshash Koketat Captain Applegate at Yánesa the Modos Indians on Lost River

Bóshtin lakí tídsh shualaliampáktak, géntak nû ûn Agency; hï tchîsh ûn the Amorrt ageñt well will protect wolld go I to the agency; if aiso

 gḕsh, ndáni Bóshtin lákiăm kíyan ne-ulkíash; shaná-uli kánash dálaak

 P'nátak kä́latat tchi'sh hámeñe shíldshash pî'sh shiukátki, kíi shpû'nshnan shiûlkish $\chi e ́ n i$, hashtáwan shiukátki pî'sh.
cation forclily amasas to the reaerration, by atarration in orter to kill him.
18 Kaitua shấta tchî'sh pánî shálam 1872. Bóshtin latak=tchít tko
 kshunálpash käíla shana-ulióga. Máklăkšăm wewaníshash kódi shû'ta patarecelands coveting.
of Indians
the females ball ontraged
21 Bóshtin. Kóketatztchîtko Bóslıtin pípa slumáhan mû'ni lákiash shnigóta, the whitem. On Lost Piver-settlenl Anerienns apeti. setting uj fion the pipabient sent (hy uail),
ká-i shana-ulióga máklǎkshash hî tchî'tki. Mâ'ni lakí wálqa: "Idshá not wantling the Indians there to remaln. The Preslident repliced: "Remove máklăkshash Agency káyak hishtcháktnan; ká-i gé-isht, tpûdshántak."
the Indians to the agency not boleteronely; not (they) going, drive (them there)."

hatak=tchítchîsh túla ûnā’k gakiámna. Bóshtin lakí heméxe: "î lakí gépkî!"
 Scarface Charley géknan heméxe: "Jack ká-iu pátkal!" Bóshtin lakí BarScarfiace Charley coming out sald: "Jack not yet fae got np!" Llentenant Bar.




 ment
shellualtámpka.

## Tánktak Bóshtin tû'gshta Kóke yutetámpka; at nánuk shellualtámpka. 12 Jnet then the whites on opposite of Lost to shoot-comnenced; then all to fight-commenced.

'Tánkt lápi taúnep máklăks tchía, tunépnî taúnep shû́ldshăsh Bóshtin tchî'sh That time twenty $\begin{gathered}\text { Modot war- } \\ \text { riors }\end{gathered} \begin{gathered}\text { staged } \\ \text { (in camp). }\end{gathered}$ nfty soldiers A merican eettlers shûkáltko. Lapgshápta shî́ldshash lúela, kánktak ngē'she-uiva. Mákĭkakkmixed with. Soidiers Feven were as many were wounded. Ufied, In. săm wewánuish tátoksnî nā'sh taúnep kshíkla shuénka ngēshe-uiya. Kí- 15 dian women (and) chlidren eleven were killed (and) ronnded. of the


ktayalshtála géna, pēn nánka gaptóga géna túla; hátaktok tchía 17th Jan- 18 to the lnva-beds went, then othere joined (hlm and) went $\begin{gathered}\text { with ; } \\ \text { (him); there }\end{gathered} \begin{gathered}\text { they } \\ \text { Rtayed }\end{gathered}$ January uary 1873 tché'k.

Tánkt vûnépni hundred pēn vúnîp shựldshash, Bóshtin shûkáltko,
That day four hndred and four boidiers, with settlers mixed,

$\underset{\text { the military }}{\text { shî'ldshăsh }} \underset{\substack{\text { gémpělîn } \\ \text { retrenting, }}}{\text { at }} \underset{\text { then }}{\text { vînî'pni }} \underset{\text { forty }}{\text { taínep }} \underset{\text { they miseed }}{\text { stéwa }} \underset{\text { (in) killed }}{\text { luétan }} \underset{\text { wonnded }}{\text { ngēshótan }}$
 shû̀ldslăm génuish máklǎks shuénka hû́nk. the soldiers' retreat the Indlans killed them.

At mû́ni lakí né-ûlza: Mōdokíshăsh shutankuapkúga, A. B. MeachamThen tho Piesldent pnbilsied a withtbe Modoce to conclndepesce, A. B. Meschim


 gîshî', nā 1 lăm kuálătat, Febr. 20, 1873. At mákľ̌̌ks Bóshtinash hemkankCrook, in onr conntry, nn Febr. 20, 1873. Then the Indians to the Amoricans to talk-com-

 not the whites obonili mako war with the Modoces the peace-contract was being made whilo.

1óloksgîsh tewiuapkúga. At nánka máklaks gátpa Fairchildámkshî; at
12 hassasuakitámpka.
negotlations begau.

lákiam tchíshtat shushotankîsham né-ulaksh slitîltchnû'ka; mákl'Xa tchúi.

 shôsháta, Bbslltin tchúslyak gî' yan máklakshash shtílshoga, shốldshash hûnk conmitted, the whites continually iying on the Indians reported, troops
máklakshash hûnáshak gûtúmpka, máklăksl kái- kópa tû'sh p’nálăm kû̀-i

Máklăksh hémkanka: "hiä à tídsl shutankuápka nā’lash, k’lewiuápka nā Triuc indlans dechared: "If so will negotiato peace wilt ne.

21 máklăks kâ-i lûpí' tewiuápka."
the Indians - not at frot will fro."



 ûn nanukä'năsh." every one."


 Nâ'toks kaitua $\underline{k} \delta$-i gíta shû'ta, ká-i tchík lîsh kaní tat shpûnshanuápka; Myself nothing wrong here have done, not eothat any one hence shonld take away (me); gétak mîsh nû vû́la wákaktoks hû nánuk tchía."
this only of yon I reqneat, in the eame manner as all to live."


lákiăm túbakshăsh. Canby léwitchta shewanápělissh hemkankóta: "tidsh 12 the chieffes to the eister. Canhy refned to return (them) declariug: "very toks nû ûn hûn wátch shualaliampáktak, shû-ûtankûlash . tchēk Mōdokíwell I those horses will care or, (onil) ater makiog peace then to the Mo-




 gíta pēn hemkanktámpka.
there again negotatinge commencod.
Toby lákiash shtíltchna, túmẽna tû shushutankî'shash shuénkuapkasht;
(While) to the chief reported, she learned there the Pence Commissionere were to be asarssinated;
Toby Riddle


 tanksh háměne, ndā'ni taúnep shélualsh háměne. Lakí heméze hû'nkîsh: prace writhel, thirty warfaro wibhed. The chief seaid to her:
3 "Shápí mî lákiash: Gíta nîsh shle-uápka ktáyat, kaítoks nî'sh tû'-una "Toll your genoral: Hero me ho will ind in the rocke, (anali) not for me around Lěmaikshína káyaktgî, ká-i Yainakshína káyaktgî. Gíta hak níshı ûn shlétak; ndiuláksht nî'sh ûn tû́mi shû́ldshash gintî'ltak."


At shûshotankishámgshî gatpámpělan shapíya máklăksham hemkánkThen to the Peasoc Commlaselion having recurned she remitied of the Indians the atter. uish. Toby pên heméxe: "tuí nû mîsh nen shapíy̌ăsh hámẽne." Meacham auces. Tohy then said: $\begin{gathered}\text { namen } \\ \text { thing } \\ \text { ti to gon to teil wish," Moacham }\end{gathered}$ heméze: "nû ûn ká-i kánash shapítak", Dya tchísh né-asht gî ká-i kánash said: "I not to anybody will dlvalgo", Dyar also agreod, not to anybody
9 shapi-uapkúga. Doctor Thomas heméze: "mû'ni lákiash, nā’lam t'shísha to divulge (iti). Doctor Thomas enids "thas great Ryler, oor Father



 "Wâk lîish ā nà̀l shôshotankíshash shuénksh háměne? Nā’lăm mû́ni
Why ye ne Peace Comisisionere to kll want

15 t'shíshap nāl sligúyuen mā̄l shâtánktgî tidshántala käíla māl lăsh idshántkî, Bóshtinash shítko māl tchī'tki. Gátpa nā tchékęli vudshoxalkítki mā’lăm to the whites alike so to live (in). Come wo the llood to wab ont on your

18 Charley vấla: "kaní shapíya, mā’lăsh nā’lăm shuenkuápkash?" Thomas Chariey meleed: "who asya, ye (that) wo are going to murder 1" Thomas



```
21 "klīi shéwa nû hứnkesh."
"Topell thooght I her."
```


 broughta
wousag.
 mish shapíya?" Toby heméxe: "Ḱá-i nû ûn mā'lash shapítak!" At to gon toll (of thisis) $\rangle^{\prime \prime}$ Tobis sald : "Not I to yo wiil talli" Then
 (her)

 Lakí ká-i shaná-uli kí-ukshăsh snawédshash shiukátgi: "snawédshash hâ'-û 6 The not wanted (that) the conjurer (this) woman elronldkill: "a woman who gi, kaítua sháyuaksh." is, - nothing slle knows."

At líťi gémp̌̌̌e, shuldshámkshî gatpámpêli; pän lalakkiash shapíya,

ká-i máklăkshăsh hushtánktgî.
Mbû'shan Meachash kélianta máklăksh gâtpa. Doctor Thomas Canby


 were to meet the wext day, will wout rifies That oven- when ing reing

 ulaķtak. Tóbiash nû 1óla, máklăksh nāl shuenkuápka; ká-i kăní mîsh ûn 15 companat.keep. Toby I bellere, the Indians us intend to kill; noboly to gou ever
 snawédshash hushpátchta; $\frac{k a ́-i}{}$ î p’laikíshăsh lóla tídsl." woman has frightened; not yon in God trust enough." Mbū'shan lã'pi máklăksh shûshotankishámkshi gátpa vâlá: "tamû' lîsh 18 Nextmorning two Indians to the Peace Commissioners' tent came (and) in- "(are)


 the Peace com. gathered Ihen, Frank Ridadle axid: "want I to teil
 akaktántợ̂." Doctor Thomas vâlá: "nâ'toks plaikí'-ishăsh lolátko gî"; ahlanecastopon." Toctor Thomas said: "as forme, in God Inm trustlag"; gûhuáshktcha.
 lıémkanka: "Mî'na gen shû'tanksh hemkankelgî"." Lakí at hémkankă: apoko: "Important this peaco-treaty we will talk over." Capt'n then said:
 toks à hûn nanukénăsh Búshtinăsh; shaná-ulî nû Canby shkuyuepělítki as ye these all americane; want I Gcn. Canly tomoreaway


 at Cánby̌ash shlíu; skétislı lî́lp shlín. Tánkt nánuk hulıégan máklăksh then at Caithy hofren; on the left ejo $\begin{gathered}\text { he ahot } \\ \text { (him). }\end{gathered} \begin{gathered}\text { Simnita- } \\ \text { nconsily }\end{gathered}$ all springing np sodocs


'Thomasăslı shlín; hû'tclına wigá, máklăks shnıkán vutō'lya, hémkanka: Thomas shot; heran abort the Indians selzing (hint threw (him)
distanco, (and) said:


 intending Afacham. Again twice at Meachan theyshot, at aeven piaces hewas
15 Meachăsh ndì-ulězápkash máklaks shaná-ulî nelínash, Toby toks hî́tchnan Meachan when fallen the Indiane attempterl to scalp, Toby but running nkéna: "Shû́ldshăsh gépka!" At máklaks lıû'tchna. Tclumûtch Dy'a hallood: "The eoldiors are comingl" Upon tho Indians ran away. Frank Ridille (and) Dyar. shuashualiámpkîsh kshíta nkî́llan hûhō'tehna.
theagent pscaped quick-mov. ran away.

18 Shuktámpkan ndáni waíta shéllual; pipelántan lákiăm tchīsh shû̀ldTo fight-commencing for three days they hattled; on hoth sldes of the chiefs' qnarters the shash wiwálza, pipelántan kû'mme lalaúshaltko. Shaná-uli kakiámnash toope took position, on both eidce of the cave rocky. They tried to surround tunépni taunepánta nāsh kshîklápkaslı, ámputala kayáhia. Wewánuîsh ta-
tho afty
one,
21 tâ'ksni k â'metat tchía; huk wewánuîsh tatâ'ksnî kûmeti kēktchanuápka. cblldren in the cave were: the women (and) cbildren from the will be withdrawn.
 Mcoloo for three, degs waging wer trio wero killed men man a hig sháwalsh mbáwan shuénka.
shell bnrstiug killed (them).
 They went nextmorning from the cave; racated (it) cariy thes, not far intothelava oney not far
ont



 íyamnatko, taktaklánta hushtánka Wrightăsh shenotánka. Māntch sheno-

tánka. Charley nā'sh máklăks stánodshna; nánka Bóshtinăsh lúela, nánka 9 fonght. Charley one man lost; some Americens $\begin{gathered}\text { thes } \\ \text { killed, } \\ \text { tomo } \\ \text { some }\end{gathered}$

lálaki tchísh káa i shuénka. Máklǎks wálhh'kan yaina-ága-gishlî Bóshtinăsh officers also not werok killeel. Tho Moloes standing on alitile monntain near the $A$ mericans
 Láp̌ni sundē kaítua shî̂́ta. Capt'n Hasbrouck máklaksh̆̌̆sh haítchna.
 tinăsh lapkshápta máklaks shíúka, ndā̀n Yamakî'shăsh; túnep pé-ula 15 ngēshe-úya. Mōdokíshăsh hûtchámpǩǎsh nāsh stanótchna.
 shellûlō'lash, Capt'n Hasbrouck taunepánta túnep pe-ulápkash Mōdokíshăsh 18 fight, Ceptain Hasbroook Afteen Moloces


 Hû snawédshash stíltchna shứtanksh hámẽnîsht Mōdokishăsh. That womsa had reported, to surrender that desired the Modocs.


 shishúka kíti mish kshaggayuápka."
yon fight, not yon thes wirl bang,

 Jim, Boshtinága, Slầlks; Bā’ntcho mákľăks kshaggáya. Lā’p íshka atí


 lăksăm shiû́lkîshoîshî; nánka Yáneks Yámak tchía wigátan māntchnish dlans' reservation; some at Yáneks in Oregon live close by the former
 12 millions tála. millions of dolinrs.

## NOTES

33, 1. Shálam, etc. The return of the Modocs to the Klamath Reserve was not accomplished by Meacham before winter (lúldam); but he had located about 300 Snake Indians on Sprague River in the latter part of November, 1869. Ind. Aff. Rep. 1870, p. 68.

33, 2. shualaliámpka means, in official parlance, to administer or superintend a district; to be agent for.

33, 2. Koketat. This appears to be the same locality where Ben Wright had met the Modocs in council (1852) and where his voluntcers, placed in ambush, massacred over forty of their number. The Natural Bridge, or, as the Modoc has it, the "Perpetual Bridge", is a low and flat natural arch overflowed during a part of the year by the swelling waters of Lost River. Mr. A. B. Meacham, then superintendent of the Indian reservations of Oregon, met the Modocs on that spot to induce them to settle again within the limits of the Klamath Reservation, a large tract of land assigned to the tribes of this section by treaty of October 14, 1864. They had left the reservation in 1865, and in April 1866 the Walpápi band of Snake Indians, under their chief Paulini, followed their example.

34, 4. The treaty of October 14,1864 shows the names of twenty Klamath chiefs and headmen, of four Modoc, and of two Snake chicfs and subchiefs as signers. The Modoc names are: Schonchin, Stakitnt, Keintpons, Cluncke-i-ox. Keintpons is Captain

Jaek, and the original forms of the other three names are Skóntchish, Shlakeítatko, Ndsákiaks. (See Dietionary.) Captain Jaek denied having put his name to the treaty of sale, his refusal being from repugnanee to quitting the ancient home of his tribe on Lost River and on the lakes, where the remains of so many of his aneestors had been buried. Moreorer, the Modocs abhorred the vieinity of the Klamath Indians at Modoc: Point. That Jack should have hinself' signed his name to the treaty is simply in innpossibility, for noue of the Modoes was able to write. The treaty preserved in the agent's office at Klamath Ageney does not even show erosses, other inarks, or totemic signs, as substitutes for signatures; but the proper nanes are written by the same elerieal hand which engrossed the text of the treaty.

34, 6. The words kaí hû, ítpa and hû pē'na would in the Klamath Lake dialect be substituted by: a hî't, épka, hfi'k p'na.

34, 8. The conjurer (ki-nks), who objected to the presenee of Riddle (gé-u) in the eapaeity of an interpreter, was Skóntehîsh, ealled John Sehonehiu by the whites. He was the brother of the preseut Modoe subehief at Yáneks, seems to have exereised more influenee over his tribe thau Jaek himself, and through his unrelenting fanatieism was considered the leader of the faetion of extremists in the Modoe camp.

34, 9. géntge stands for the more commonly used géntki.
34,10 . i-amna, íyamua, to seize, grasp, refers to a plurality of objeets of long shape, as guns, poles; speaking of one long-shaped objeet, íyamna is used.

34, 11. kie, so, thus, stands for kēk or k $\bar{e}^{\prime}$ of the Klamath Lake dialeet.
34, 16. kédsha, kiteha, the adverb of kitehkáni, little, small, refers to hemkankátko, and not to tinōli.

34, 18. Mbu'shan, ete. The returu of the Modoes is referred to in Agent Kuapp's report in the following terms (Ind. Aff. Rep. 1870, p. 68): "On Dec. 18, 1869, the superintendent (Mr. Meachan) and nyself, aceompanied by Dr. MeKay, J. D. Applegate and others, visited the Modoes off the reservation at their eamp on Lost River, for the purpose of indueing them to return to the reserve. After talking for ten days they eonsented to return, and on Dee. 30 we returned to the reserve with 258 Indians. Blankets, \&e., were issued to them, the same as to the other Indians, on Dee. 31. They remained quietly on the reserve until April 26, when I stopped issuing rations; then they left withont eause or provecation; since that time they have been roaming around the country between Lost River and Yreka..... The old Modoc chief, Sehowsehow [should read: Skóntehish], is still on the reserve, and has sueceeded in getting 67 of his people to return and I have loeated them at Samp Yia-nax ..... The Klamaths have made a large number of rails for their own use, also 5,000 for fences required at ageney." The old Modoe chief alluded to is the brother of John Skontehish.

34, 19. The locality assigned as the permanent home of the Modocs was near the base of a steep promontory on the eastern shore of Upper Klanath Lake, sinee ealled after them "Modoe Point". It is an excellent spot for hunting water-fowls and for fishing in the lake, but the compulsory presence of the rival Klamath tribe made it lateful to the Modocs. Many exeavations made for the Modoe lodges are visible there at present. Here they lived first in the lodges of the Klamath Indians, after Meacham moved them to this spot in 1869. After the first eomplaint made loy Kíntpuash or Capt. Jack, Agent Knapp removed them about 400 yards from there, away from the lake; aud the third locality assigned to them was about one mile further north. Then, alter

Jack's band had run off, the remainder went to Yáneks, over thirty miles inland, to settle there.

34, 19. shéshash is here placed between Mṑdok Point and the adessive case-postposition -gishí, which corresponds to -ksaksi in the northern dialect. We have here an instanec of incorporation of a whole word into a phrase, and the whole stands for: Mō’dok Point=gîshî sheshápkash gátpa.

34, 20. shulō'tish. Articles of clothing, blankets, etc., form a portion of the annuities distributed to treaty Indians before the commencement of the cold season.

35, 2. lápi instead of lápěni, láp'ni; also 41, 18.
35, 3. shénuidsla, etc. Captain O. O. Knapp, U. S. A., had assumed charge of the Klamath Agency, under the title of subagent, on Oct. 1, 1860, relieving Mr. Lindsay Applegate.

35, 5. ktchínkslı. The timber-land lics north of Modoc Point on Williamson River, and hence was regarded by the Lake People or Klamath Lake Indians as their exclusive donain. This served them as an excuse or justifieation for taking to themselves the rails which the Morloes had split. In addition to this, they taunted them with the remark that they were in the power of the Americans as their bondsmen, and would soon adopt all the customs of the white population.

35, s. Möddokni lakí. My Modoc infornants constantly avoided giving the name of Captain Jack by which his tribe called him. Western Indians regard it as a crime to mention a dead person's nane before a certain number of years has elapsed. The Kalapuya Indians, who never cremated their dead, arc allowed to speak out their names fifteen years after their decease, for then "the flesh has rotted away from the bones", as they say. The real name of Captain Jack was Kíntpuash, which is interpreted as "one who has the waterbrash".

35, 15. gatpamnan, coming to their camps, stands for the Klamath gatpenank.
35, 18. pélpeli (first syllable short) means: to work; pētpeli (first syllable long): to work in somebody's interest.

35, 19. Kítchakla, to pay a sum owed, to repay a debt, ef. szû́kta, to pay caslıpi'sh : to himself, as the chief of the Modoc tribc.

35, 21. pupalla. The subchief Dave Hill positively denies that such an anount of rails was ever abstracted by his people from the Modocs, and declares it to be a gross exaggeration.

36, 4. shne-ipaksh and shné-ilaksh are two terms for "fire-place, hearth", differing only little in their meaning.

36, 5. amtch, former, previous, is not often placed in this manner before the substantive which it qualifies.

36, 5. gémpěle, etc. The former Modoc encampments on the lower course of Lost River were distant from Modoc Point about 25 to 30 miles, those on its headwaters about 50 miles, and those on Modoc Lake and Little Klamath Lake about the same distance.

36, 6. tzálampanki, or -kni, Modoc for tat\%alampáni in Klamath.
36, 9. Yaínakshiegîshì' implies that Applegate was living at Yáneks at that time; the Klamath Lakes would say instead : Yaínaksaksi, or Yaínakshi, Yainaksh. Superintendent. Meacham had then temporarily divided the reservation, leaving the Klamath Lakes muder the control of the acting agent at Klanath Agency, Captain O. C. Knapp,
and placiug the Modocs and Walpapi under the management of Commissary J. D. Applegate at Yancks. This was done to prevent further broils and stampedes of the tribes. On acconnt of his tall stature, which exceeds six fect, the Modocs called Applegate " Grey Eagle" (p'laíwash), this being the largest bird in the country.

36, 11. géntak nû ûn Agency; Capt. Jack meant to say: "I would go on the rescrvation again with all my Modocs to settle there, if I had the certainty of being protected."

36, 14. A verb like shayuaktan, "knowing", has to be inserted between gésh and ndáni, from which ne-ulkíash is made to depend: "he declined to go, knowing that the government had compacted with the Modocs deccivingly", etc.

36, 15. shlepáktgi could be connceted here with pîsh just as well as with pû'sh.
36, 17. Subject of shpî'nshnan and of shiukátlii is shúldshash.
36, 19 and 20. tû'mı kshunálpash käíla, "land producing plenty of grasses (kshún)" for the cattle. The Lost River country contains the best grazing lands in all Lake County; this explains the unrelenting efforts of the American settlers to get rid of the roaming and sometimes turbulent band of Captain Jack. Could ilso read: käíla tû'm kshunálpkash gî'sht shana-uliúga.

36, 20. wewanishash syucopated for wewanuíshash.
37, 1. hî implies the idea of vicinity to their settlements; "on this ground here".
37, 2. káyak h.: not through arousing their anger.
37, 3. Major John Green, First Cavalry, was then commander of the troops garrisoned at Fort Klamath, which eonsisted of Company B, First Cavalry, and Company F, Twenty-first Infantry; aggregate present, 4 commissioned officers, 99 enlisted men. Major Jaekson, of Company B, left Fort Klamath on Nov. 28 for the Modoc camps, near mouth of Lost River. In the attaek on the Modocs, Lieutenant Boutelle, who tricd to disarm Searfaee Charley, had his coat-slecves pierced by four balls.

37, 7. The Klamath Lake form hishuákshash=shitko is here used instead of the Modoe form hishuátchzash=shítio.

37, 10. All the verbs in this line are refleetive verbs. shakíha for Klamath shashkíhan; tánk for Klamath tánkt.

37, 12. tû́gshta Kóke. The Modoss had a camp on each side of Lost River, one of them quite a distanee below the other. On Nov. 20, the soldiers and scttlers fired across the river at the unprotected lodges of the northern Modoc camp, thus killing about 15 squaws and children, while the Modoc men first retreated to the hills, but returned in the afternoon and recommenced the fight. The "doctor"s" band $(37,16)$, also called Black Jim's band, visited the farms of the vicinity and killed 14 settlers, but did not molest women and children. On the Tule lake settlement three men were killed.

37, 15. Eleven may be expressed also by násh kshilila taunepánta.
37,17 . lúela can only be used when a plurality of objects is spoken of, and therefore in a better wording this sentence would run thus: ㅌá-i nā̀sh gîn snawédshash shíuga sha, tatákiash ké i lúela.

37, 18. ktayalshtála. Captain Jack with his warriors and their families retreated to the lava beds. They quartered themselves in the spacious subterranean retreat called Ben Wright's cave, or, since the war; "Capt. Jack's cave", and began to fortify their stronghold.

37, 21. gúta means: came near (them); hence gutámpka: attacked (them).
37, 21. shellual. The battle of Jan. 17,1873 was the result of a combined attack of the troops on the lava beds from two sides. Owing to a thick fog, which prevailed throngh the whole day, the troops had to retreat with heavy losses and without gaining any advantages.

38, 1. tankt, although adverb, has here the force of a pre- or postposition in connection with génuish.

38, 4. shutánktgí. The Peace Commission, as appointed by the Sccretary of the Interior, Hon. C. Delano, consisted of A. B. Meacham, Superintendent of Indian Affairs in Oregon; of Jesse Applegate and Sannel Casc. They met in Linkville on Feb. 15, and were rejoined there by Brigadier-Gen. Edward R. S. Canby, commanding the Department of the Columbia, as the representative of the army in this commission. $O$. P. Applegate was appointed clerk of the commission.

38, 6. Vûlálkshi. The Klamath Lake Indians call that rivulct Kawé-utchaltko kokága, or: Eel Crcek.

38, 7. nā tlăm källătat: on Californian territory; the place being a few miles south of the Oregon State border.

38, 12. hassasuakitámpka. This interview had not the desired result, and no other authority mentions the conclusion of an armistice. From the sceond peace-mecting Steele, Fairchild, and the Riddles returned on March 1; they had been in Jack's headquarters in the cave and found the chief sick. No result could be obtained then nor by any of the subsequent negotiations.

38, 13. Squire, or Judge Elijah Steelc, a pionecr, and citizen of Yreka, Siskiyou Co., Cal., in 1864 Superintending Indian Agent for the Northern District of California, a steady protector of the intcrests of the Indians, and therefore most popular among the Klamath Lakes, Modocs, Pit Rivers, Shastis and Wintoons.-Mr. William $\Delta$ twell, of Sacramento, Cal., correspondent of the "Sacramento Record" at the time of the Modoc war.

38, 15. The term palpal=tcholcks-gitko is very little in use among the Klamath Lakes and Modocs, for the Amcricans are most generally named by them Bóshtin, Bóshtin máklaks.

38, 17. kópa for the Klamath Lake term hushkánka.
38, 18. Other forms for ktáyat are: ktá-itat, distributive: ktaktíyat, ktaktíyatat; in the Klamath Lake dialect: ktaiksáksi, distributive: ktaktiksáksi.

39, 1. gékish or gékiash k²lewiuápka: until you will yield to his entreaties; until you will give yourself up to him.

39, 3. Yamakíshash: "The wicked Oregonians" are the white settlers on Lost River. 40, 17, they are called Oregînknî Bóshtin. Yamakíshash, bcing the subject of shuenktgi, has to stand in the oljective case.

39, 10. palla. The location of the possessive case after the governing substantive (here: watch, horses) is rather unfrequent. The horses, 34 in number, were captured during a raid or reconnaissance, which Capt. Biddle, of Camp Halleck (Nevada), made with fifty men of 'Troop K, First Cavalry, on March 13, 1873. His men met four Indians herding the horses. While bringing the horses to Van Bremer's ranch, on Willow Creek, the troops were not attacked.

39, 11. shewanaluelitki. The langnage likes to form inverted sentences like this,
where a more regular position of the words wonld be: shewanapelitki wátch Mõdoki. sham lakkiam túbakshăsh.

39, 15. nía: quite recently, a short while ago.
39, 15. shash refers to tpe-n and is at the same time the grammatic subject of shewanap'litki, though standing in the objective case: "give orders to them (riz. to your soldiers), that they return the horses of the Modocs!"

39, 17. shiáshna. The troops located on west side were only half a mile distant from Jack's camp. The army took up these positions on April 1st and 2d, 1873 (Meacham, Wincma, p. 45).

39, 17 and 18. The numbers of men stated here are not quite correct, since there were at no time more than 600 soldiers on duty around the lava beds in the Modoc war, exclusive of the Warm Spring scouts.

39, 22. p'nána p'na, to his cousin. Toby was the consin of Captain Jack, as both descended from brothers.

40, 1. ndā'u pé-ula. tá-unep is sometimes through neglect omitted in numbers running from eleven to nineteen, pe -ula, or any other of the "classifiers", supplying its place.

40, 3 and 4 . Notice the local suffix -na in these names and in tí-una.
40, 4. kayáktgi is not here verbal intentional, but exhortative form of ká-ika, ká-iha, kaíha, to hunt, pursue.

40, 5. nî'sh onght to stand after gintilltak also: "will lie under me."
40, 6. A new Peace Commission had been formed, composed of the following gentlemen: A. B. Meacham; Rev. Elder Eleazar Thomas, D. D., of Petaluma, Sonoma Co., California; Leroy Sunderland Dyar, acting Indian Agent at Klamath Ageney (assumed charge of agency May 1, 18i2); and Gen. Edw. R. S. Canby.

40, 6. hémkankuish, the spoken words; -u-infixed gives the form of the preterit.
40,8 and 11. shapítak stands for shapíya tak.
$40,9,10$. né-ashtgî for the Klamath ná-asht gî, nā'sht gi, "to agree with"; nālam t'shísha shanáhuli nû nc-ásht gî: I desire to go with God, to act in harmony with his will, to agree with him.

40, 12. The participle shî'tan answers to our English: "Nothing doing that day", since both stand for the passive form.

40,12 etc. To bring on the desired opportnnity for the murder of the Peace Commissioners, Bogus Charley was shrewd enough to avail himself of Mcaeham's absence, for he knew him to be opposed to a meeting with Indians when nnarned and unattended by troops. He succecled in capturing the mind of the good "Sunday-Doctor" or minister, who was unacquainted witl the wily and astute character of the savage, by declaring that: "God had come into the Modoc heart and put a new firc into it; they are ashawed for having attempted intrigne, were ready to surrender, and only wanted assurance of good faith." (Meacham, Winema, pp. 52, 53.) Upon this, Dr. Thomas promised that another council of peace should be held, and thus, unconsciously, signed his and Gencral Canby's death-warrant.

40, 13. 19. 20 etc. A quotation of spoken words in oratio recta is more correctly introduced by heméze than by hémkanka, as it is done here.

40, 15. idsha, ídshna, is in Modoc used only when many objects are spoken of.
40, 20. kíya, kî̀'a, gía. This verb is prouounced in many ways widely differing from each other ; cf. $k i, 40,21$.

41, 3. shliwala: to eock a gun; shliwalolan, after having cocked his gun; distr. shlishloalólan, contraeted: shlishlōloblan, each man after having cocked his gun. Shliulola means to take the string off the bow; to uneoek the gun.

41, 4.5. According to Meacham (Winema, p. 50), Toby delivered these plueky words, pistol in hand, from the top of a roek, which raised her above the heads of the angry mob.

41, 5 . tatá, "whence, from whom", is composed of táta? where? and the iuterrogative partiele há. The sentence is ineomplete, though intelligible to the Iudians; the full wording would be: tat́́ nû tû’mĕna, or: tat há nû tuměnátko gî: "from whom I have heard it".

41, 7. kaítua sháyuaksh: "she has not the ability or intellectual disposition to do us any harm."

41, 14. hak, short for hûk; although rendered here by "this", it has to be taken in an adverbial sense : "this time". The adverb corresponding to the hak of the iucident elause is the tata in the priucipal one.

41, 18. tamú lish ete.: "have ye made yourselves ready?"
41, 20. shugúlaggi. See Dietionary, s. v. shukû'lki.
41, 21. After nûsh kánash may be supplied: "I do not want that anybody east a blame npon me."

42, 1 ete. The party, on arriving, were greeted by the Indians with extreme cordiality, and General Canby gave to cach a cigar. Eight men were there, instead of the five unarmed leaders, as promised by Boston Charley. The parts for the bloody work had been allotted as follows: Skóntchish had to kill Meachan; Boston Charley, Dr. Thomas; Black Jim, the agent Dyar; Bantcho, Riddle; and if Gen. Gillem had been present, Híka Jim would have fired on him. Chief Jack had modertaken the assassination of Gen. Canby. The two other Modoes preseut, completing the number eight, were Shaeknasty Jim and Ellen's mạn. Searface Charley also appeared on the seene, but not with hostile intentions. The date of the assassination of the Peace Commissioners is the 11th day of April.

See full aecount of the massaere in Meacham's Wigwam and Warpath, and (much shorter) in his Winema, pp. 57-62.

42, 2. hemkankelgî' is probably: hemkankőla gí: "las to be talked over to the end."

42, 3. After shlépaktgit there is ellipse of shanalmuli, "I desired", or "desire". The rights alluded to were sneh as would be equivalent to Ameriean citizenship. The sentence has to be construed as follows: nû shaná-uli mālash tídsh nísh(-toks) shlépaktgi, wákaktoks, ete.

42, 4. shkuynepĕlítki. Capt. Jack's eondition for further peace-negotiations was the removal of the troops from the Modoc conntry by General Canby.

42, 7. Modoc tgo-ílya for Klamath tgelza.
42, 9 . When Geu. Canby had been killed and stripped of his miform, he was turned with his face downwards and his sealp taken. The sealp was raised on a pole in the lava beds and danees perforned around it, which lasted several days.

42, 11. Dr. Thomas was killed by a seeond bullet, which passed through his head; be was stripped of his garments and turned upon his face, after his murderers had taunted him with not believing Toby's statement.

42, 12. A "Sunday kí-uks", or Sunday Doctor, stands for preaeher, and the meaning of the sentence is a moekery, contrasting Dr. Thomas' voeation of preacher and mediator between the two contending powers with his ignoble death brought on by cowardly murderers.

42, 12-16. Skóntehish's bullet passed through Meacham's coat- and vest-collar; he retreated forty yards, while walking backwards; Toby in the mean time tried to save him by grasping the arms of his pursuers. He fell from exhaustion on a roek, and there was shot letween the eyes by Skóntehish and over the right car by Shacknasty Jim.* This Indian despoiled the uneonseious man of his garments, and prevented another from shooting him in the head, declaring that he was a corpse. These two left, and Toby stayed alone with him. Then Boston Charley eame up, holding up a knife to sealp him. Toby prevented him by foree from doing so, and in the struggle whieh ensued she received a heavy blow on the head from the end of his pistol. Boston Cliarley had completed one-half of the scalping operation, when Toby, though stunned by the blow, shouted "Shúldshash gépka!" Though no soldiers were in sight, this caused the desperado to take to his heels immediately and Meacham's life was saved. Riddle escaped the Indian bullets, being covered by Scarface Charley's rifle, and agent Dyar was rescued by ruming fast, though hotly pursued by Húka Jim.

42,18 . After the massacre of the Peace Commissioners, the services of the Riddles as interpreters were no longer required. From this date, the report given by them becomes meagre in details, because they withdrew from the immediate vieinity of the battle-fields.

42,18 . One of the two divisions was commanded by Colonel Mason, the other by General Green, and the three days' fight took place on the 16th, 17th, and 18th of April. A heavy bombardment of Capt. Jack's headquarters in the eave (kî'mme lalaúshaltko) went on at the same time.

42, 19. kn'mme lalaúshaltko, the rocky cave, forms epexegesis to lakiam tchī'sh, 42, 18: the refuge, or stopping place of the Modoc chief.

42, 20. ámputala. The troops cut the Modoes off from the waters of Tule Lake, the only water they could obtain to quench their thirst.

42,20 and 21 . Wewánuish, ete. The meaning which the author wanted to convey by this sentence is: "the women and ehildren remained in Ben Wright's eave, though a portion of them were to be moved out from it." See kii'ktsma (in Dictionary).

43, 1. Mō'dokni is here an adjective, qualifying the substantive hishuatehzăsh, and shcllualtko is partieipial phrase determining the verb temporally: "two Modoe men, after the fight had lasted three days, were killed."

43, 1. häsh $\not \bar{e}^{\prime} \mathrm{gi}$ is a "plural" verb used only in the Modoc dialect; Klanath: hushtehóza. To kill one, the singular form, is shíuga in both dialects. The two Indians killed by the explosion were boys, who were playing with an mexploded shell which they liad discovered on the ground. One of them was named Watchmatati.

43, 3. kée ktgal, ete. The Modoes vaeated their eave in the lava beds ou April 19 on account of the terrible losses experienced by the three days' bombardment, and retreated, unseen by the troops, to the vieinity of Sand Hill, about four miles SSE. of Ben Wright's cave. The two officers who followed them with about 75 regulars and 30 Warn Spring seouts were Capt. Eran Thomas, Battery A, Fourtu Artillery, and
*This is indicateal in the text by the instrumental case of lap’ui: lapantka, by two shots, which were dired by two men. The five other wounds he had reeeived before.

First Lient. Thomas F. Wright, Twelfth Infantry. The Sand Hill fight took place on April 26 , and lasted about three hours; the troops were surrounded by the enemy and lost 21 men killed, 18 wounded, and 6 missing. The Modoc loss amounted to four men, as supposed.

43, 3. wiga gîn for wikí gēn: not far from there they made another stand.
43, 4. tánkni waitolan can also mcan: "the next day" in the Klamath dialect.
43, 5. Yamakni. The Warm Spring Indians occupy, in common with Wasco Indians, a reservation on Lower Des Chutes River, Oregon, and are congeners of the Nez Percés, both being of Sahaptin race. Bcing the inveterate enemies of the Shoshoni or Snake Indians, the U. S. Government formed a corps of sconts from able-bodied men of that tribe, which did good service in the nmmerous hard-contested fights with the Snake Indians. At the outbreak of the Modoc war, these nseful allies naturally suggested themselves as the best auxiliarics against the revolted tribe. Donald McKay organized a corps of 72 scouts and rejoined with them Col. Mason's camp April 10, 1873. $\Lambda$ few later accessions carried them up to an effective force of about ninety men.

43, 8. To taktaklánta supply käílatat.
43,10 . lápěni taúnep, etc. Instead of giving the numbers of killed and wounded, our informant simply gives the number of the survivors. The Warm Spring scouts are not included.

43, 13. Capt. Hasbrouck, of the Fourth Artillery, was then in command of a mounted battery, and accompanied by Capt. Jackson, in command of B troop, First Cavalry, and by sixty Warm Spring scouts.

43, 14. The fight at Dry Lake or Grass Lake occurred on May 10. Thirty-four Modocs attacked the troops at dawn, but were forced to retreat. The troops sustained a comparatively trifling loss.

43, 15. tínep pé-ula stands for taunepánta tínep pé-ula: fifteen. Cf. 40, 1 and Note.

43, 16. Changes of grammatic subjects, and even their omission, are not unheard of in incoherent Indian speech. Thus Bóshtin has to be supplied here between nāsh and stanotchna, and the meaning is: "the troops killed one of the retreating Modoc warriors."

43, 17. Pahátko E-ush stands for the more explicit form Pahápkăsh E-ush=gíshi ; cf. 43, 13.

43,22. shítanka properly means: "to negotiate", but stands here euphemistically for "to surrender". The same is truc of gawina, 44, 2, the proper signification of which is "to mect again".

44, 1. Gencral Jefferson C. Davis was the officer whom the President had, after Gen. Canby's assassination, entrusted with the conduct of the Modoc war. He assumed command on May 2, relicving the intermediate commander, Col. Alvin C. Gillen, of Benicia Barracks, California.

44, 2. slât’la káyaktcha stands for shátěla kayáktehtki and was preferred to this form to avoid accumulation of consonants.

44, 2. lakí for lákiash. When speaking fast, Klamaths and Modocs sometimes substitute the subjective for the objective case in substantives which are in frequent use, as máklaks for máklaksash, 44, 9. 55, 4.; wéwanuish for wewanuíshash, ete.

44, 3. sundërgíulan, over a week; lit. "a week elapsed". On June 1, 1873 Capt,

Jack and his last warriors surrendered to a scouting party of cavalry, not to the five Modoes sent after him.

44, 5. Fort Klamath ídsha, or better: Fort Klamath $\neq e^{\prime}$ ni ídsha. The national name for this locality is I-ukáka, I-ukák, E-ukák.

44, 5. hashuátko, uncommon Morloc form, contracted from hasluashuakítko, by elision of two syllables.

44, 6. stinā'sh for shtinā'shtat. Generic nouns of places, dwellings, etc., easily drop their locative case-suffixes and case-postpositions; cf. käila for kaílatat, 44, 8 and 9. Yámak, 44, 10, is an abbreviation of Yámatkshi or Yámat-gîshi.

44, 7. kshaggáya is incorrectly used here instead of iggáya, which is said when a plurality of long-shaped objects (including persons) is referred to.

44, 8. íggaya. The cxecution of the four malefactors took place at Fort Klamatle on the 3 d of October, 1873, under an immense concourse of Indians and whites living in the vicinity. It is estimated that the whole Klamath Lake tribe was present, men, women, and children. The gibbet constructed for this purpose, of enormous magnitude, stands there at the present day. Bantcho and Slálks were sentenced to imprisonment for life. Bantcho dicd some time in 1875 in the fortress and prison of Aleatraz Island in the harbor of San Francisco, California, and Slúlks is scrving his term there at the present time.

44, 9. atí käíla. The approximate number of Modocs brought to the Indian Territory for having participated in the revolt, was 145 , women and children included; they were first placed on the Eastern Shawnce reserve, and afterwards removed to that of the Quapaw Indians. Owing to the moist and sultry southern climate of their new home, many of their children died during the first years after their arrival, and the Report of the Indian Commissioner for 1878 states 103 as the whole number of the Modocs remaining in the Territory.

To facilitate a prompt reference to the historical events described in this long article, I present the following division of its contents:

33, 1. Negotiations terminating in the return of Capt. Jack's Modocs to the Klamath Rescrvation.

34, 18. Difficulties causing a split in the Modoc tribc. Capt. Jack returns to the Lost River country with one half of the Modocs.

36, 9. The Government of the United States called to the rescue by the Lost River settlers.

37, 3. The massacre on Lost River, and the attack on the lava beds.
38, 3. President Grant appoints a Peace Commission. Negotiations progressing.
39, 10. The capture of Modoc horses makes further negotiations impossible.
39, 20. Toby Riddle reveals her terrible secret.
40, 12. A Doctor of Divinity among the Modocs.
40, 22. Toby Riddle tricd by her countrymen. Last warnings given to the Peace Commissioncrs.

42, 1. Assassination of the Peace Commissioners.
42, 18. Bombardment of the lava beds and the Sand Hill fight; the fights at Dry Lake and near Fairchild's farm.

44,1 . The closing scenes of the tragedy.

# BIOGRAPHIC NOTICES OF MODOC CHARACTERS. 

## Given by J. C. D. Riddle in the Modoc Dlalect.

## I. TOBY RIDDLE.


 just thea in apring 1882. Her father (in) Trbblkka; her mother



6 illō lash pálla. Mō’doknî wátch haítchna, at pshî'n mákęlěka; mbû'shan in tho year stole. The Modoos the horees prrsened, and at anlyht hes camped ont; next day


 té-unep Moatuáshăsh ípkan lû́lûagshlan. Pän pshín Móatuash gû́lki, ty Pit Rlvers keoping (and) enslaving (lhem). Again at night the Pt Rivers autacked,




15 T'obiash sheshalolî'shǎsh sháyuakta.
Tohy . a fighter knew her to he.
Shálam illólash 1859 at hû hishuatchkáshla Tchmû́tchash. Illólash 1862 at sha'hmū'lgì Sháshtiăsh E-ukshikíshas Mōdokî'shash tchísh, at 1862 athe ealled together the Shastia the Klamath Lakes the Mootocs also, when


Stīl nā́lăm lakí.
Steele our $\begin{gathered}\text { manager } \\ \text { (being). }\end{gathered}$
Tá-uni hûnk hushtánkan máklăksh Oregon Dick shéshätko hû́tnan 3 Near Yreka enconntering an Indian Oregon Dick by name attacking shishóka palpal=tchû́leks=gítkăsh J. Hendricks shéshapksh; lû máklǎks fonght a white:skimned (man) Hendricka hy nawe; ho the Indian

 Hendrieks to shoot (him). Toby aeized the pistol $\underset{\substack{\text { (and) wrenobed } \\ \text { (it from her), }}}{(h e r ~ f i r r u l y ~}$ shnukpápka máklăkshăsh shiukólăsht, tchēk táshka.
she held the Indian untilwaskilled then let (her) go.
(or beaten),

## II. STEAMBOAT FRANK.

$\underset{\text { Steamboat Frank }}{\text { Tchimä'ntko shellualshémi }} \underset{\text { at the time of the war }}{\text { lápěni }} \underset{\text { twenty }}{\text { ta }}$-unepánta $\underset{\text { two }}{\text { lap }}$ pé-ula $\underset{\text { yearsold }}{\text { illólatko }} \underset{\text { was. }}{\text { gî. }}$
 Mû lítchlîtch shishóka shellualshē'mi ; hûk ndā'ni kekó-uya shiû́lkish $\chi$ ēni Very bravely he fonght drring the wor; he thrice triod into the reeervation
 máklăksh hishuátchxash î'-amnatko; tchû̀î hûnk tpugîdshapělîtámna. 12 Indian men having with him; (bnt) bim they drove bsek every tiwe. $\underset{\text { Not }}{\text { Ké-i }} \underset{\text { he }}{\text { hûk }} \underset{\text { tho Commis- }}{\text { lalákiash }} \underset{\text { to kill }}{\text { shuénksh }} \underset{\text { wanted, }}{\text { háménî, }} \underset{\text { to make war }}{\text { shéllualsh }} \underset{\text { towever }}{\text { tads }}$ hî $\underset{\text { be wantedi. }}{\text { shaná-uli. }} \underset{\text { Then }}{\text { At }}$ sloners
 shiû'ga, Módokni lákiash kaigiúga shấldshăsh. Káiliaktoks hî tupáks 15
 húnkělăm snawédshash shéshatko Steamboat, mû'=stûtzámpkash gîsht.
 Firstly bim - orphan-alike she kept, afterwards married (him).

## III. SCARFACE CHARLEY.





nanukénash lalákiash wî́niaxian shéllual. Mōdokíshash shuénksht lalá-
all the chlifs surpassing bofought. (When) the Moducs mundered tho Peaco







## NOTES.

54, 1. ketchkáne or kitchkáni $\mathrm{m} . \mathrm{g}$. is a queer way of expression for the more common gíulya: "was born".

54, 1. Yáaga kóke is the present name of the locality on Williamson River where the Government bridge was built since her infancy, about one mile from the mouth of the river. Williamson River is simply ealled Koke, "river", and on its lower course resides the largest portion of the E -ukshikni or Lake People.

54, 1. Yamatknî'sham, E-ukshiknísham, ete., are forms often met with, though ungrammatic ; the correet forms are Yamatkisham, E-ukshikisham, Mödokísham, ete.

54, 2. T'shikka means simply "old man". He was still living in 1876.
54,5 etc. The event deseribed in these lines took place on one of the raids which the Klanaths and Modocs undertook every year before the gathering of the poul-lily seed against the California tribes on Pit River, for the purpose of making slaves of their females. If the numbers of Indians enslaved, wounded, and killed are correct, the raid of 1857 must have been of unusual magnitude; as will be seen by comparing the statemeuts of Dave Hill in another portion of our texts. Among the horses stolen was a fine saddle-horse belonging to Toby, and this theft may have stirred her personal feelings of revenge to the utmost degree. After her successful charge at the head of her braves, she did not allow the fallen Pit River Indians to be scalped.

54, 9. tpûdshá. The aceent rests on the last syllable because the particle há has coalescel with the terminal -a: tpû́dsha há. Há is equivalent to "with their own hands"; há lúyamna, I hold in my hand. Many other verbs are oceasionally accented in the same manner, as it́á, shnûká, lakialá.

54, 12. yìmeshgapalan; through a difference in the prefix, the Klamath Lake dialeet would say t'meshgápalank.

54, 13. See Meacham, Winema, p. 32 sq., who speaks of three dead enemies only.
55, 1. 2. Mr. Elijah Stcele, Superintending Agent of Indian Affairs for the Northern District of California, met in council the Klamath Lakes, the Modocs, and three tribes of Shasti Indians, with their ehiefs, near Yreka, on April 14, 1864 (not 1862), and to his mediation was due the peace-treaty between these tribes, including also the Pit River Indians (who had not sent any deputies), published in Ind. Aff. Report for 1864, pp. 109, 110. Tobs does not figure among the interpreters at this council; but there are
two other uames of "interpreter for the Modocs": H. K. White aud T. S. Ball. The raids on the Shasti Indians were maiuly undertaken for horse-stealing, and the hostile feeliug between them and the Klamaths and Modoes was never very intense, since frequent intermarriages took plaec. Cf. Steamboat Frank's biographic notice: 55, 9.

55, 1 and 3. Ta-nni. Every town is termed so, as Linkville, Ashland, Yreka; San Franciseo or Portland would be mû'ni tínni. In this connection, Yreka, Siskiyou Co., Calitornia, is meant. Cf. also 54, 4. Tá-uni has the incssive postposition .i suffixed, and means in a town, near a town, or: the country around a town.
$\mathbf{5 5}, 4$. =gitkash is an ungrammatic form standing for =gipkash.
55, 3-7. Meachan, Wiucma, p. 34, speaks of an affray in which Toby interfered in a perfeetly similar manner, though the names of the combatants differ, and the end of the fight was uot exterminatiou, but personal friendship.

55, 8. Tchimä'ntko means "widower".
55, 10. Had Steamboat Frank, with his fifteen warriors, succecded iu entering from the south across Lost River into Klamath reservatiou, near Yáneks, and iu surrendering there, this would have saved him from further prosecution, as lie thought.

55, 12. For úyamnatko and íyamnatko, see Notes to Modoc war, 34, 10.
55,13 . The sentence shellualsh tads etc., refers to the vote taken by the tribe a few days before the ominous eleveuth day of April. Thirty warriors voted for continuation of the war, thirteen voted for peace; cf. 40, 1.2.

55,13 . hî means in the interest of the tribe and its independence. See Notes to Modoc war, 37, 1.

55, 14. He went with the American troops in the quality of a scout. Nothing illustrates the real eharaeter of some Indian wars as well as this instance: an Indian who has fought with the most decided bravery against the enemy of his tribe, is ready, as soon as the elhanees of war run against his chicf, to sell himself for a few eoins to the enemy, body and soul, and then to commit upon his own chief the blackest kind of treason. Cf. Modoc war, 44, 2.

55, 14 ete. From the verbal stíltîsh depends the sentence: ḱt-i kshaggayuápkash hûk shiû'ga (or: shiugatki), and from kéái shiû'ga depends kaigiúga. This is the verbal causative of kailía, to hunt for or iu the iuterest of somebody, and the indirect olject of it is shû'ldshăsh: "for the troops", Hûk in hîk shinî'ga refers to Steamboat Frank, not to Captain Jack; were it so, hûnk would be the correct form, poiuting to somebody distant.

55,17 . stûtzámpkash, to be derived from stú, stó: way, road, passage; meaning passage-way of the voice through the throat.
$55,21.56,1$. The pronoun hî', he, appears here under the form of $\hat{o}^{\prime}$.
56,1 . Scarface Charley was run over by a mail-stage, and obtained his name from the sear resulting from that casualty. For shcllnalshē'mi there is a form shelluashē'mi just as common.

56, 1. 2. Searface Charley surpassed all the other Modoe chiefs in skill, strategy and boldness; he was the engineer and strategist of the Modoc warriors, and furnished the brains to the leaders of the long-contested struggle.

56, 3 etc. Hû lā'p etc. The two commanders referred to were Capt. Thomas and Lieut. Wright. Cf. Modoe war, 43, 7-12 and Notes.

56, 7. nā'sh waitak for: nā'sh waita ak: on one day only, on a single day.

## E-ukshikísham máklaksam né-ulaks.

## LEGAL CUSTOMS OF 'THE KLAMATH LAKE PEOPLE.

## Given by Subchief Dave Hill in the Klamath Lake Dialect.

## I.

E-ukskni nā̀d tchí tchía gitá: P'lú lakí tútas $\chi \bar{e} n i n i, ~ n u ̂ d s ~ D a v e ~$



6 Johnson lakí Moadoknísham Yainakshi. George Kuatîlak ts Módokni Johnsou lschief of Modocs at Yáneks. George Kuatilak also is Modoc

$\underset{\text { Tcháktot }}{\text { Tcháktot }} \underset{\substack{\text { Sof Sanko } \\ \text { Ondiang }}}{\text { Sa chilef. }}$

## II.

9 Nánuk laláki $\mathrm{A}^{\prime}$-nksi $n \bar{a} \neq d$ sant shiû'lgishtat tsí sa hémkank:
All the chiefs on Kiamath on ouesad reservation thus they sameak:
 Not you shall shoot eachother: wouldhang you I; not you seduce each snáwedsh: spûlhi-uapká m's nî, hii' î sas pálluapk. Ká-i î wátsam tchî'kwlves: woold Imprison you r , if you them sednce. NTot jon n borse eball


 15 m's nî shetcháktanuapk.) Hä'doks î snawä'dsh Bóshtinash shä'tolakuapk, at jou I would get nngry.) If you, ns a female, with a white man should eleep, któtchkuapka m's nî. Hä'doks i hä'szalp'luapk nánuktua shéshatuish m'na, will ont of har to gou I. If shouid lavoreturned the whole marriagefee hie.
szóktnank î häs xálp’luapk, hunkantchä' mîsh nî̀ ká-i né-ulakuapk: waké-



 And if yon a per. should cremate, who 18 dead, hearily you I sball punllbb.
Hä' î kiúks tsîs táwioi-uapk, mî́ mî̀h nî nä'-ulakuapk. Hä î shishokuapk 6


 nä'-ulakuapk ; hä'toks snä'wedsh î mî udópkuapk, tchúi mîsh ká-i sekák- 9
will punleh; but if wifo you your beat, and to yon - not returns



 î shnä'l $\chi u a p k$ látchash mû' mish nî nai'-ulakuapk.
fon eet on tro a loggo bard yon will chattiee.
Hä̈ lakí shishókuapk humáshtak nî shnäkělui-úppka; hä' tchik lakí 15
 tínkt nî snä'kělui-uapka nî. Hä' tchik î'-alhîsh tchîsh kúi gî̀uapk, shnäithen I ethall remore (him) I. If ag guardian wrong does, shall

 the matchman; but lif watchnna well, all through well shall act, not $\mathcal{I}$ will


raees;


Hä’ î käliak híshuaksh ná-änds sätólakuapk, hû́k tchîsh híssuaks If jou, uothaving ahnshand, withanother shonil cohabit, this also man kä́liak snáwädsh, spû'lhi-uapka nûi kä'lish snáwedsh. Hiai hû́ksa heslittó (i.e) withoat a wifo, shall imprison I the unmarried (man). If they should live
 in conchibi- of it I hearing will panish (and) will imprison I man that.
 nä'-ulaks lalákiam:
the law of the ohieff.
6
 tage
 aluapk, tû̀nep î n's tála skû'ktanuapk liû'nk pîl mû̀yäns pî'la lákiash ; wedlock, five you to me doliars shali pay only to the prinoipal ooly chief;

 skû́ktish háme̛niuk tû́ma wátch gitk, túnîp î skû́ktanuapk snawä'dshash; to pay want of many borses $\begin{gathered}\text { pos- } \\ \text { sessed, }\end{gathered}$ (horses) you cangive in payment for the wife;
12 liä'toks yúalks tsî î lépi wátch skû'ktanuapk, wakiánhua ndán wátch, tû'ma-kans wátch gî'tkiug.
wany horses when hnving.

 shä'wanuapk snawä'dshash gû'shkank.
rast give (them) (your) wife when ieaving.
Ká-i î láp snawä'dsaluapk; na'sak î snawä'dslank gíuapk; hä'toks î $\frac{\text { Nat }}{}$ you two wives shall marry; one only you marrying mative; bnt if jou

 m'sh nî skuŷ̂'shkuapk, ká-i î tatá mbushäálp'luapk. Ha'toks î mbuseálfrom sou I sball sever her, not you ever can marry her again. Aud if yon assecinte agatu


 (hise sbonld separate (her) from you, tsû'shnî m'sh nî skuyû'shkuapk.
forever from yon I shall divoree (her).




## III.



 Also sometimes $\begin{gathered}\text { she reohtaing } \\ \text { through harter }\end{gathered} \begin{gathered}\text { the price paid } \\ \text { (ifor her) }\end{gathered}$ to them, and by paying
 hû́nk snúkp'la, tsúi nä'-ulěkan titátnan hû'masht=gîsht shnû'kp'lisht làp sháppash spûlhî, titatnatóks nî ndén sháppash, títatna tchín násh shâppash



 sáppash spû́lhi.

Tchúi shishóka títatna, tchúi náyäns wudsáya; hû́nkst nî násh sû́ndē
 kádi shû̀tka, sissukúya hak; tsúi nî né-ulĕka hû'nkiasht kákat hûk sissóka. 18 not injure, bntscaffe merely; then I try those who had the row.
 hû'nks nî hissuáksas spû'lhi ndán sû'ndē; hä káa udópkpakuapk snáwedsh that I hashand look np for three weeks; if roughls he should whip wifo
m'na, húmasht n'unk gíg ndán súndē spû́lhi. Títatna tch snáwädsh 21
 (other i)
 hishuákshash, láp súudē.
3




NOTES.
58-62. The legal practices, regulations, and ordiuances given here by a subchief of the Klamath Lake tribe are observed by all the chicfs, and are apparently fashioned after American models. The principle which seems to gnide most of the judicial decisions of the eliefs, is given in one $(59,20.21)$ of these regulations: "If a chief makes law like white people, that will be right.": This article is composed of three parts:

Part $I$. List of the chiefs acting as julges on the reservation in 1877.
Part II. Legal customs governing the Klanath Lake people.
Part III. Instances of application of these legal customs; amount of fines, terms of imprisomment, etc. These are the "novella" of Klamath legislation.
$58,1-3$. P'lú, Lilı, and some other headmen mentioned here have signed the treaty of Oct. 14, 1864.

58, 4. Moatuash. There are only two Pit River families living on the whole reservation.

58, 8. Teháktot belongs to the Yahískin tribe of Snake Indians. Cf. Ind. Aff. Report 1873, p. 324.

58,10 etc. The future tense cunployed in these behests, regulations and defenses recalls the French finture used in an impressive manner instead of the imperative: tu ne tueras point, tu ue déroberas point.

58,10 . shlí-uapk shash. The prowonn shash has here almost the foree of a reciprocal pronomn, for the meaning of the sentence is: "do not shoot at people of your own tribe." The same is true of sas in palluápk sas, 58,$10 ; 58,13$ (twice); palla shash, 61, 14.

58, 10. ksaggaynapkánsui is pronounced as one werd, as the removal of the atceut frou the syllable -uápk demonstrates; and so in many of the following verbs stauding iu the future tense. For the sake of clearness, I have preferred to resolve these forms graphically into their component elements.

58, 11. Writsam, etc. The possessive watsam stands liere instead of the iustrumeutal caso watsátha throngh attractiou from wïnnikíslıam. Tchíkla here means to ride away on another's horse, the horse being missed by his owner.

[^39]58, 15. shefcláktanuapk stands for the more common form: slitcháktanapk
58, 16. nánuktua shéshatuish m'na: "all what your husband has trausferred to your parents to obtain your hand"; m'na stands for hisháksham. Cf. 61, s.

59, 7. mish, you, to you, is often used in this article for málash, málsh, ye, to ye in allocutions to two or more persons. This is a way of expressing what may be calleat the "inclusive plural of the second person". This mode of speaking is olserved in m"s lápuk, 59, 7; lápuk mîsh, 59, 7. In the same manner î stands for' ât, 59, 8: î sissókuapk, if ye whip each other; also 60, 22.

59,9 . i mî stands for mish mî.
59, 17. hä kúi gî'uapk: if he should fail to do his duty ; 59, 19. hä tídslı gî́uapk: if he does his duty well; nanuktuánta: in every respect.
$59,22 . \hat{1}^{\prime} \not \boldsymbol{z}$ aks mí: what you may win by betting on the horses engaged in the race.
60,2 . kä'lish is the objective case of källiak, kéliak, "not laring", the simple form of which, without -ak, would be kälí or kä'liu (källi hû).

60, 11. túma watch gitk. The horses have, of course, to be transferred to the parents of the bride and not to any of the chiefs.

60, 12. wátch. The horses owned by the Klamath Lake aud Modoc people are valued from 20 to 25 dollars each; they descend from the hardy, enduring race of Cayuse ponies, and were originally obtained by bartering commodities with the Colmmbia River Indians at the Dalles, Oregon.

60,15 . wátch spuni' uapka; wátch refers to one horse only, for the verb spuni', to transfer, is used of one (living) object only; shäwána is: to give many objects. "Not cren one horse your wife has to give to you, if she leaves you; bat if you leave her; you must give her several."

60,17 . láp snawä'dshla. Polygany was abolished by the headmen of the tribe shortly after the establishnent of the reservation, and this ruling was one of the greatest benefits ever conferred upon that tribe by the progress of civilization. But those who had several wives then were not compelled to dismiss all but onc, and so in 1871 two or three men were still polyganists. The irascible and excitable disposition of the Modoc and Klamath females must have produced many chin-music intermezzos with their lusbands at the time when polygany was prelominant.

61, 3. Káai mî'sh etc. In this paragraph, iu: kî̀t gik, ḱ́ktak, hémkanktyîk, gîtkik, the terminal k contains the abbreviated gi, which joined to the foregoing nû, 11 ueans 1 said. The construction runs as follows: Hûnk ni gì kádi mîsh kît tgi ; nánuktaauta káktak gi píla m's n hû́nk hémkanktki gi; nä'-ulakt gî̀tki î suawä'dshash telî̀sh káktak gi pîl. Káa-i etc.

61, 6. tchîk. This particle does not mean if, but cannot be rendered here (and below) with a more appropriate word. It is identical with tchēk, then. A subordinate clauso is here expressed by a co-ordinate one. Cf. 61, 9. 10. 12. 62, 4.

61, 6. ktoktatska: "we clip their hair in every instance", is the distribntive torm of któtchka, któtska, occurring in 58, 16.

61, 9. Tsúi etc. This inverted sentence has to be construed as follows: Tsúi tehîsi. násh híshuaksh wutódshish suawä'dsh m’na pä'n hâ'uk suúkp’la, tsíi nä'-ulěkan cte.

# Húmasht ladéki ne-ulakta Kakíshash. <br> DOCTOR JOHN TRIED BY THE CHIEFS. 

## Obtained in the Klamatil Lake Dialect.

## I. Áccount of dave hill, subchief.

Shíllalsh hû́t gû̀ta. 'Tchái sa tchû'ta nánka kukíikss, Tätěmatchí'sh A discaso him inraded. Then they treated (him) bereral coujurers. (and) Aunt Susie tchúta; tchúi sämtsálya Doctor John a gén táwi; tồ táwipk, tatá Doctor treated then (she) discovered (that) Dr. Johu him bewitched; orer be bewitched wheu Doctor
(him); 3 Johnam suáwedslı shîla. Thankt tawî'pk; tchí hûnk sémstal 'Tétěmatsis, Johu's wife was sick. That time hehnd bo sim) so it found out Ant Susie, ná-ast sémtsal\%. Tsúi Doctor John: "kîi-1-áa a nen Téténatsis", ná-ast thus shediscovered Aud Doctor John (said): "thislies Anut Susie", so
 6 mat hû'nk Tetěmátsis!" ná-ashtak Doctor John hẹ́mkank.

$$
\begin{aligned}
& \text { this Anut Susiej" soagain Dr. John said. } \\
& \text { Tsúi sa spû̀lhî láp’ni illolash; nánuk hû'nk máklaks 16la 'Tetěmatsí- } \\
& \text { Theu they locked (him) fortwo sears; abont all the Indaus believed Aunt }
\end{aligned}
$$ slash. Tsúi vûlá laláki, tsúi hémkank Doctor John, tû́m hémkank ná-asht: Susie. Then iuquired the chiefs, and said Dr. John, at length he spoko thas:

 tchákt'nish; wák lîsh ík loli a nen Tetěmatchíshash? At laláki hû'ntsak relling; how is it soallbelieve Auut Susief Now (Je) chiefs without rear î nen lóla, kêlámtsank sî́tk lựdslna; ká-i nû hû́nk siúgrat. Kátak nî nen se beliere, clostig gour eseeallike walk along; not I bim killed. With vera. I
12 hémkank, p’aítalkni nû'sh shlä'popk hä'mkankst. Tuá nî shatia'-uapk shińgok n̂ nû yá k ḱ-i nî a kúkamtchish gî'-uapk shíugok; tuá nî tála î́slika? by mnrdering I cer. serer I an old man would become, bad I Lilled what I money made?
(him)
tainly tubá nî a tála ya $\mathrm{I}^{\prime}$ 'shka shíugok ? Tidsai' wank tchía, ké-i nî kánts shíuksh what I money over made by killing (him)! I am glad to be liv. not I anybody to kill

 sot we (are) immortel mea all forld sll over. For nocaube thas me
spû́lhi: $\underline{k}$ á-i tchín wák óskank. Undsaí nî né-ulakuapk; lä'nwak nä'(ye) im. not I abont it amangry. Sometime I shaliarraign (ler); not Iknow tobave
prison;
$\underset{\text { ulě̌̃a Tétmatchishash wák hầnk nen sémtsalka; lä nî wák nä̀'-ulaktanuapk }}{\text { Ant }}$ tried AnntSusie for the nianuer by shefound out; not I know bow to pruceed agninst

Ḱái nû shayuáktant Tetĕmatsi'sas; hû́nk polaitélkni shayuákta Tetěmatsísas wák gisllt sä'mstsalkst, wák ta nû'sl tehîslı kátak shià'gshasht


sikî'tnank sä'gsuapk. Kátok ní gé-u sägsia'wa; tchí nî hû'skank."

Tétęmadslish hû'nk ná-asht k.lékuish at gî: "Kátak am’sh nî.sémt-
 salqa, suís mî'sh gé-u sluáa; í hûn síuga, nä'nsak toks î nen sakámka. 9 founueut, tarnás- you my has seen; yon that murdered, in raiu you givo a denial.
 Thus co jurers always afterkiling; fie phensosayingi pretty well sou
nî knixá m's nî. Gáhak hû́k nä'-ulaks K'mukámtsam: ná-asht hû́nk I know yuu I. Long years this (was) tholaw of K'mákametch: ince in manaer


 Then thechiofs deliberated.


## II. ACCOUNT OF MINNIE FROBEN.

Tétěmadshîsh hû'nk shiunû́tnuk shémtchalza tawīsht Doctor Johnash Annt Snaio hy singing tamannash- discovered
songs $\begin{gathered}\text { that had bo- Ditched } \\ \text { wr. }\end{gathered}$
É-ush gunî'gshta máklakshash tchípksh. Tékmal géna Doctor Jólnamksh Uppor Kin. on oppusite an Indian liviug. Tekmal baid gone to Dr. Jobhre locige maiblake shore
 califug (bium) $\begin{gathered}\text { to treat } \\ \text { shániank shíluks gishápa. Tchúi hû'nk Doctor John tchútanhuya; }\end{gathered}$ to have be (and) silied said. And bim Jr. John treated a while
witched


 ceaser; and bext lay beingover on vtber day buricel (him); Jr. Johu
 slıpúllî, tchúi sha ká-ishnank skúkuni-lıouso mpínpatkíl tchikéninatkil.




 náyant waítashtat. Hû'kt pîl nā'dslek; hû'ksha toks, nánka kíli hû́masht aumber on lay. This une (was) the only one; those (mon) (did), otbor (men) lot liko (hito)

12 shislî́tilatk shlíutuapkug hû'ık. Agency tchúi gépksht tapit tî'ta shash,



 ákia, Mínnǐash shahamúyank shnûntatka lákiash hashashuakítki gíug.


## NOTES.

64, 1. In September 1875 Púkish, an elderly Indian, died after a very short illness on the western side of Upper Klamath Lake. The rumor that he had been bewitehed aud thereby felonionsly killed by Kakash, ono of the conjurers who treated him, soon gained eredence, and the excitement in the tribe ran high. The first account of the occuteuce was obtained by one of the subehiefs, who, with his colleagues, passed senteuce over the mfortuwate Kakash.

64, 1. hût, "this one", forms one of the substitutes for hames of deceased persons, whiel ino Indian dares to prouounce. Hu't refers to a persou standing visibly before the speaker, and it is remarkable that the dead are referred to by this pronomo, and not by a pronoun marking distance out of sight, like hûkt, hî'kta etc. Cf. hî't híshuaksh, 64,9 ., gén, 64, 2., lû̂́nk pî'sh, 64, 5., 68, 11. etc. The subject uánkia kukíalis does not exelude the use of the subjort pronoun sha, they, the aceount heing worterl in the conversational style.

64, 1. Tetěmádshish or Aunt Susie is one of the numerous female "doctors", who cke out a scanty living from some patients of the Klamath Lake tribe. She received the above name for having been a washerwoman to the soldiers stationed at Fort Kla. math, and the nickname Wúya-ak was bestowed on her on account of her predilection for small sucker fish.

64, ‥ sämtsálya. The means employed by her to discover that Dr. John had cast upon the patient a spell of a deadly character, were the singing or recital of tamánuash songs, and the dreams which she had on that subject. Her tamánuash songs had scen those of the aceusel conjurer. See 65, 9. The great majority of the tribe still belicres in the possibility of witcleraft.

64, 7. The two sentences contained in this line anticipate the result of the whole trial, and the popular verdict. The proper place for them would be after 65, 15.

64, 9. Tuá ni etc. The defcnsc inade by Dr. Johu in hís own case is not an unable one, nor is it devoid of oratorical powers. But if the arguments were delivered in the order as given by Dave Hill, they ought to hare followed each other in a more logical order to attain their full effect.

64, 10. wák lîsh ete. The logical connection existing between this sentenee and the foregoing has to be supplied by: "why should he have been my personal enemy?"
$64,10,11,15$ etc. $\hat{1}$, îk stands here for att (ye); because, when the headchief is addressed in eouncil, all the others are addressed also. Lóli stands for lóla i. The trial took place on Williamson River.

64, 13. kúkamtchislı. The distributive form is used here instead of the absolute verbal k'mû'tchish, because old age comes on gradually, by degrees.-

64,16 . tchî ínsh instead of tchî nish; the language likes juxtaposition of two short equal vowels, even when a metathesis is requircd.

65, S. Kátak etc. Aunt Susie's opiniou, given just atter Púkish's death and some time before the trial, did not fail to have a striking cffect on the superstitious judges and tribe, for her arguments perfectly agree with the national ideas. But to us the arguments seem so weak, that no conviction scems justificd, if not based on other evidence.

65, 9. nä'ısak etc. "Your defense does not disprove any of the points advanced against you."

65, 11. K'mukímtsam nä'-ulaks : "the old customs of the people."
65,16 . The second account of this tamáuuash-case was obtained a few wecks afier the trial ; Dr. John was present at the ageney buildings at the time of the dictation, furnishing the faets to my informant.

66, 4. ká-ishnank etc. This underground jail was in such an unhcalthy condition that Dr. John conld not have lived in it through the tenth part of his long term of imprisonment.

66, 5. Tchikéskni and Skélag, names of two watchmen (i-álhish); the ehiefs appoint watchinen from time to time. Skélag is "the young weasel" and Tchikéskni "man living at Tchikési camping-place". They were armed with pistols to foil any attempt at escape.

66, 10. nā'dshek for nā’dsh ak: "the only one". Compare nádshiak, 60, 21; waítak, 56, 7. and Notes.

66, 12. shishi'tilatk. The past participle often stands for forms of periphrastic conjugation: slishitilatkn gi, they were earrying in their dress. Cf. illólatko, 55, 20.

66, 13. ge'hlaptehapka. The rerb gelapka means to step on, to mount, aseend; with 'h infixed, to mount upon something by using one's hands; ge'hlípteha is to perform this while on the way, while going or travelling; gélhlaptchapka, to perform this at a distance from other people and unseen by them. Doctor John eseaped, aided by his son, in the midnight hour.

66,14. m'na únakam gatpénótash. Gatpěnóta is a derivative of gátp'na with a durative signifieation, the suffix -6ta pointing to an aetion performed while another is going on. "His son having arrived close by, while he was imprisoned."

66, 16. shnúntatka, verbal intentional of shnn̂'nta, the suffix -tka being sometimes substituted for the usual -tki, -tki gíug.

# PUNISHMENT OF MANSLAUGHTER THROUGH WITCHCRAFT. 

Obtained from "Sergeant" Morgan in the Klamath Lake Dialect.



3 tchíka suákitsuk, tsúi shuákiuk ndéna, tsúyuk túmĕna shuíshuk, kíuksam the old to fetoh the con- and 'to call him out halloed, sud he heard the magic songs, conjurers* man forer,
yainatat shui'sh; áti ha shuíshuk. Tssii géna kíuks tsutánsuk, tû́shtaks a

salxíta. At shû'ta hû'nk, tchúi hántsna. Gétpa mû'ns súmmatka, shuī'shuk shelles Now heworks onher, and sacks. Comesont a higthing through (his)
mewitched.
6 tpéwa, summáka hántsantkiug. Tiui hántchipka, tsúi putá, tsúi húsatchip-
heorders with (his) mouth while he would suck
(those preseul), choked
gapěle hánshish m’na; sxû̀dxa lútatkish. At hû'k sxótka, kú-i hukí tsutísh


 rotire Forse heonuse (aud) passing through thofood; hereupon he (bowels) ape thas epeaks whose own
sheturned not (b)
 sakámka kíuks: "kári a nû táwitt shīlaka hît!" kíuks tchúi nā'sht opposes dealal thecou. "not I did bewitoh had become she!" conjurer then son forer:
12 hémkank. At kำléka snawédsh. nald. Jow Ilen the womnn.



## NOTES.

68,1 ete. This is a pretty good illustration of the method of doetoring by snetion adopted in similar tamánuash eases. Persons sent out to call for the conjurer do not enter his cabin, but loudly halloo outside till he appears; in this instance he is supposed to sing his medicine songs amidst the solitary wilds of the mountain slopes.

68, 1 . mā'utch-gi'tk. This temporal adrerb places the mode of pmishment described by the informant among the ancient customs of the people. Compared to what is stated here, the trial of Doctor John shows a material modificatiou in the dealings with suspected conjurers, attributable to the influence of the white population.

68, 1. 10. salyíta is always used in a passive signification, "to be afflicted with the tamánuash spell or bewitching power", which conjurers can send out at will.

68, 1. 2. The words inelosed in quotation marks anticipate all that follows up to 68, 10.

68, 2. 8. a-i. This particle has the signification: "undeniably, evidently".
68,5 . shû'ta hû'nk. The "working" of a conjurer on a paticnt's body consists in rubbing, pressing, magnetizing, in blowing on it, and in pouring water over the face or other parts. Sucking out the object which eaused the disease is of course the principal operation called for to effect a cure.

68, 5. nû́ns; it is not stated whether this lánshish was a frog, a worm, a small stick, or any such thing; this is immaterial, for the Indian strictly believes that the article was removed from the patient's body and that it caused the disease.

68, 6. hántsantkiug and 68, 8: shúkpaltakiug stand for hántchantki gíug and shukpalitki gíng; cf. shû'kpěli.

68, 6. lántchipka properly means: "he sueks towards himself"; husatchipgápěle "he throws up again to himself"; viz. into his mouth, so as to be able to take it out with his hands.

68, 7. lutatkish is the conjurer's assistant. His offiee is to repeat his tunes or speeches before those present in the lodge, to expound or explain his sayings, to start songs aud tunes in his stead, and to perform such manipulations as mentioned here.
 telshámpka, to be on the point of death.

68, 8. tche-ulza: he rises from his seat on the ground, or on a blanket near the patient's couch, for the purpose of leaving.

69, 1. hushtsóza. The killing of a doctor or doctress by the relatives of the paticut who died under his or her treatment was nothing unusual in the Columbia Basin mitil quite recently. In some tribes the third failure in euring brought certain death on the coujnrel, especially when he had received his reward in advance.

# SHAMANIC DANCE-DIRECTIONS. 

## Given by Dave Hill in the Klamath Lake Dialect.



 laktampka lítstakiank; untsä'g nä'tnag pá-uapk tû'm mbû'shant. "Sílalsh to danco with exertion; by and by then ye shall ent plenty to-morrow. "Dieraso mat nä’bakuapk" kíuks ná-asht shápa, yayayá-as mat ná-asht sápa; "kûtwill come on" the sban thas says, some tanannasb. (to him) "it is so" says; "of small6 kaks mat sissalaluapk" yayaý-as mat nd-ast sad. ma. Sudssuaktch mádi-
pox it says will suffor (the peo
ple)" laks nánuk wussóga kû'tzaks. Nâ-ast kíuks wálok sápa: "Tánni ílksh ple all afraid of smallpox. So the sba before speaks: "How many fondshä'tu āt? tánkと̌ni at î'lksh? $\begin{gathered}\text { do yo connt? } \\ \text { bow many already buokets }\end{gathered} \underset{\text { Twice }}{\text { Lápni tá-unepanta }} \underset{\text { ten }}{\text { pä'n }} \underset{\text { and }}{\text { five; }}$ túnep pé-ula;
9 kánk a nî sä'tû."
so many I count."

## NOTES.

70, 1 etc. This is a fair specimen of the eareless, jargon-like conversational style in vogue among the E-ukshikni, and without commentaries and glosses it would be impossible to get at the true meaning.

These direetions are intended to gather the people at the eommunal dancehouse for a danee lasting five nights. The danee is performed around the fires with almost superhuman exertions, in order to produce profuse perspiration and to prevent thereby any infeetion by disease. The conjurer or shaman is charged with the inaugnration of all dances, most of whieh are of a religious charaeter. This kind of sweating is called "wála", while sweating in a temazcalli or sweat-honse is "spúkli". The kíuks is introduced as speaking all these words. The partiele mat indicates that the words given are those of another than of the narrator.

70, 1. waitólat; in common parlanee: túnepni waítash gî́ulank, or : túnepni gíulank, or in Modoe trinepni waitólan.

70, 1. kshíulaktcha different from ksínlěza; see Grammar (List of suffixes). These danees take place in winter time and are held from two to four times every season.

70, 2. wewaläksh. This is one of the festivities from whieh old women are not exchided; ther often take part in the danee themselves.

70, 2. îlhs (from elza, ilya, to lay down) is the full dish, basket, or bueket (kála), on which the victuals are brought in ; but it means also the food itself, and the dance-feast on which they are eaten. Locative case: i'lksat.

70,3. shuina is often incorrectly pronounced tsuina.
70, 3. nuti'sh; verbally : while burning fivefold; while five fires are blazing.
70, 3. At tchi'sh: the young men, who strip themsclves naked down to the hips during the performance, begin their dance after the women have had one turn.

70, 5. nä'baknapk : sce népka, in Dictionary.
70, 5. yayayáas means a certain tamánuash witcheraft which inspires the conjurer: the conjurer tells the people just what (ná-ast) the yayayá-as said to him.

70, 6. 7. $s, s h$ is here in three words doubled to $s s$ : shíshalaluapka, shuashuáktcha, and wusóga; kîť̌aks forms the indirect object of the first of these verbs.

70, 7. wálok sápa. The kínks gets the inspiration from the yayayd-as only after sweating; then he can tell (śpa) the people, whẹn the disease will come.

70, 8. tánkěni: after tánkěni at î’lksh supply ítpa? (did ye bring in ?).
70, 8. 9. shä'tu, sä'tu for the more usual form shä'tua; pä'n atter tá-unepanta is incorrect and unnecessary; this conjunction should stand there only after ta-unépni or tá-unep.

## DETAILS OF A CONJURER'S PRACTICE.

## Given in the Klamate Lake Dialect by Minnif Froben.


sha'hmóknok; kíuksh toks wán kiukáyank mû́luash m'na kaníta písh. to call (hlm) ont; the conjurer redfox hangingontona as sign bis outside "of him". pole.

 liukiámnank nadshā'shak tchûtchtníshash. Hánshna mà'shish hû'nk
 man, the diseaso to extract, lespcksout then a small frog, small snake,


 ltúixaktgi gíg. for eatiog out.

## NOTES.

71, 1. shuakia does not inean "to call on somebody" generally, but only" "to call on the conjurer or medieine man".

71, 2. wán stands for wanam níl: the fur or skin of a red or silver fox; kanita pi'sh stands for kanítana látehash m'nálam: "outside of his lodge or calbin". The meaning of the sentence is: they raise their voices to eall him out. Conjurers are in the labit of fastening a fox-skin outside of their lodges, as a business sign, and to let it dangle from a rod stuck ont in an oblique direction.

71, 3. tehelya. During the treatment of a patient who stays in a winter-house, the lodge is often shut up at the top, and the people sit in a cirele inside in utter darkness.

71 , 5 . liukiannank. The women and all who take a part iu the chorus usually sit in a cirele around the conjurer and his assistant; the suffix -mna indicates close proximity: Nadshā'shak qualifies the verb winota.

71, 5. tchûtehtnishash. The distributive form of tehît'na refers to each of the rarious inanipulations performed by the eonjurer on the patient.

71, 5. mā'shish, shortened from māshípkash, mā'shipksh, like k'li'lksh from k'likápkash, 68, 8.

71, 6. 7. There is a stylistie ineongruity in using the distributive form only in kukuága (kúe, frog), káhaktok, and in nshendshkáne (ushekáni, udshékani, tsékani, tehékẽni, small), while inserting the absolute form in wishinkaga (wíshink, garter-snake) and in kako; motkaga is more of a generic term and its distributive form is therefore not in use.

71, 7. káhaktok for káakt ak; káakt being the transposed distributive form kákat, of kat, whieh, what (pron. relat.).

71, 8. lgû'm. The applieation of remedial drugs is very unfrequent in this tribe; aud this is one of the reasons why the term "conjurer" or "shaman" will prove to be a better nane for the medicine man than that of "Indiau doctor".
$71,9 . \mathrm{k} \mathrm{f}^{\prime}$ tash ete. The conjurer introduces a louse into the eye to make it eat up the protruding white portion of the sore eye.

## Kálak.

THE RELAPSE.

Given in tie Klamath Lake Dialect by Dave Hill.
Hä náyäns hissuáksas mā’shitk kálak, tsúi kfuks nä'-ulakta tchután-
When another folf siok asarelapso, then the conjurer concludes to treat uapkuk. Tchúi tchúta; tchúi yá-uks luk shlä́ kálak a gèk. Tchí huk 3 shuísh sápa. Tsúi nā'sh shuīslh sáyuaks hû̀mtcha kálak, tchứi nánuk hûk song-rem- Indicates, And ono song-rem. havingfound (that) of the kind of re out then all ased (bo fas), those
edy



## NOTES.

72, 1. náyäns hissuáksas: another man than the conjurers of the tribe. The objective case shows that máshitk has to be regarded here as the participle of an inpersonal verb: mā'sha nûsh, and mā'sha nû, it ails me, I am sick.

72, 1. kálak, relapsc. Relapse is not substantive, but adjective in the sense of a person laving fallen back into the same disease by which he was afflicted before; kálkěla, to fall sick.

72, 2. yá-uks is remedy in general, spiritual as well as material. Here a tamánuash song is meant by it, which, when sung by the conjurer, will furnish him the certainty if his patient is a relapse or not. There are several of these medicine-songs, but all of them (nanuk hâ'k shuī'sh) when consulted point ont the spider-medicine as the one to apply in this ease. The spider's curing-mstrumeut is that sinall piece of buckskin (ubá-ush) which has to be inserted under the patient's skin. It is called the spider's medicine beeause the spider-song is sung during its application. A spidersong in use among the Modocs is given below.

73, 5 . hä'uäshish appears as the subject of an ineantation song in the song-list of Sergeant Morgan.

73, 5. gutiz'ga. The whole operation is concealed from the eyes of spectators by a skin or blanket stretched over the patient and the hands of the operator:

73, 5. kiatéga. The buckskin piece has an oblong or longitudinal shape in most instances, and it is passed under the skin sideways and very gradually.

73, 7. táukěni ak waítash. Dave Hill gave as an approximate limit five days? timc.

## THE MONTHS OF THE YEAR.

> Obtainen from "Pete" in the Klhamati lake Dialect.

|  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathrm{C}-$ |  |  |  |  |  |  |  |

Ktaí=Túpakshi tkálmakstant otìlks lúela hō'ank. At sa kó-ixaktchuapka, of Staudug. Roek to thowestward fish-dan kill whenjnmp. Now they wlll leave homo (soon),

 mat s at, pōksalsuapk mat sa, at sa pópakuapk sátnalhuapka sa, suaftlalthey, will dig camasi they, they will bake (it), roast 11 (3 daysy) they, roast 1 t



 waítash, kínktak wókslat Eúkshikni. Snfkanua nadshgshaptánkni waítash;

 lulína. Nā’sh wíllishik pálasham=wáxoksh láp tála, lxálxamnishti lulínash


 wan'sh pî̀la wō'kshla, hî'hassuaks gánkanka pa $\chi^{\bar{o}}$ 'les, tchä'-u. At sa héwimen oolly gatbor woksh, the men bunt maluderers, antelopes. Now thry will hanl

15 Nu'shkshi, wṑns ílktsat Lěmé-isham Nutē ${ }^{\prime} k s$, Vushî'nkam Tínuash, Láll'âks, at Skulleplsee, canoes therpni away at Thunderbnit, at "Snake-Drowned". at "sinpe


18 Walákgishtat. Lookont.

Spéluishtka at héwi, iwí-idsha wókasl. Nāt a génanuapk! nánuk
In theindsx-montlu they haul, take homo the lily.sced. Wo wili gothsre! all
 of us carry tit hut wo wil malt ono ars soro (wur) horeses, thereforers wo wait tove becauso hasht wátch kä'mat. Nad gitá piénuapk pólokuantch, ktälowalshuápka 3 aro soce horses on hack. We thers will scrapen np moth-chrsemilids, gathor phene.nots




## Txópowatka í-umämi wátch laláa; gépgapěle míklaks kěllia' wiank, 6 In the thomb-month at herry-tims mares foal; rotarn tho Iudians having done

at wéwanuish o-olalóna, at sa $\mathrm{I}^{\prime}$-umaltka. Bûnuapka tchia'kěle $\mathrm{i}^{\prime}$ wam,

tchilálat hûn î'wam. Ánshat ánika shash î'wam; wî'dsika nánka î'wam. huil the bersies. Fou may go and ask them for hokle- retontivo soms (ars) of berries.
Thípeluish auî'k tělûks, tchákěla n's skaí tak; tsákęlatka n's skaítki stá. y

Pahápk tchîsh íwam lúitki n's léwitchta á. Ká-i sheshätuíslitka. Drled too hucklo to gise tome thoy did notwant. Not I iuteud to sell them.

Spéluishttka spû'klislitat kshíwalza, papiä'na luldamalákstat. At hû́k
In thoindex-month in the swert-honse they dance, fnangurats by thowinter-honso. fowst anchat wan




> Tátzělam hehátze tápak.
> In the mendidnger- fall the laaves.

Gáptchělam shináktishtka kä'na.
In tho riug-finger month
it is snow.
ing.
Gáptsatka mû̂ kä'na. In tho month of heavily it snows. the enall floger
Ťópowatka wétko é-ush; kéna.

Spéluishtka ktō'tsa mû; wála kshiúlgishtat.
In theindox-month itralns minch; thoy inthedance-honse.
Tátž̌lam tsuám lúela Nílaksi T'suyakē’ksni. In the m difnger largs bill at Nilaks the Linkvilte Indans.
munth
Gáptsélam shingíktishtka udsáksalsha Koketat, kiä'shla sa.

## NOTLSS.

This text intends to give a sketeh of the various oceupations of the northern tribe or E-ukshikni in every month of the year, and is partially worded in a form which may be called dramatie. These statements are not always arranged in logieal order, but a profusion of ethnologie details gives intrinsic value to them.

The months of the Maklaks year do not eoineide with the months of our ealendar, for they cxtend from one new moon to the next onc, and therefore should be more properly called moons or lunations. Twelve and a half of them make up the year, and they are counted on the fingers of both hands. The first moon of their year begins on the first new moon after their return from the wókash-harvest at Klamath Marsh, which is the time when all the provisions and needful artieles have been gathered in for the winter. Work is then stopped and the communal dances begin, the doctordances as well as those eonducted by the chicfs, and everyborly participates in them except those who are out hunting in the monntains during the latter part of the year. This mode of counting the moons on the digits was once popular, but on aecount of its imperfections it is now forgotten by the majority of the tribe. Instead of it they reckon time by the seasons in which natural products are harvested, as: udsaksä'mi, "in the big sucker time"; i-umä'ni, "in the berry season", or they use our calendar months.

The first moon mentioned in our text, gaptehe, answers gencrally to our May. The two next moons are counted on the thumb and forefinger of the hand not ased immediately before; with this last moon their year has come to an end. The next five moons are connted again on the digits of the first hand, and so forth. The half moon making up their full year is not accounted for in this text.

74, 2. Ktaí=Túpakshi is a loeality of renown in the folklore of the Klamath tribe. It lics near the conflucnce of Sprague and Willianson Rivers, on the property of an Indian naned Tchélozins. The otilks is the fish-dam (from ntila), where the Indians wade in the water with their dip-ncts and eatch the fish while it ascends the river in spring-time in enormous quantitics. This fish-dam does not reach the water's surface.

74, 2. The direct object of lúcla is kápto, its subject máklaks hō’ank.
74, 3. kámalsh pahá incans: they dry the fish whieh they have just caught by exposing it to the sun on limbs of trces, and then make kámalsh by pounding it. Kámalsh is a derivative from gáma, to pound.

74, 3. kó-ǐaga is identical with gúikaka; derived from kní, "away, far off"; gni$\chi$ átehka is: to start out annually to the prairics where roots cte. are harvested.

74, 5. saká a pō'ks: they eat sometimes the camass raw, but only at the time when digging it. Bulbs, roots, pods, chrysalids and berries are gathered by women only.

74, 6. pahá at p .; this is equivalent to pahátko pō ks iwídshat. They bake the camass and put it in their eachés at the plaee where they intend to stay next winter.

74,8 . shnikanna. During the time when a pause is made in the gathering-process, the conjurer earefully watehes the ripening of the pods not yet harvested and arranges public danees. When the sun has done its work, he solemnly announces it to the women, and tucy go to work again in their canocs.

74, 9. shiulina. From the preeeding we should expeet shinlinat, lulínat.
74,10 . willishik is the generic term for larger kinds of provision-sacks; it means here a sack of fifty pounds seed or grain, while the wázoks holds hundred pounds. In pálasham=wáyoksl, however, the latter word is taken in its generic sense of saek, bag.

All these different kinds of satcks or bags were originally made of bulrush-stalks (tule) and the táyash was made of straw.

74, 11. kaítua nû kä'ila. The sense is ineomplete. Probably sháynakta is left out: "I do not know of any in the whole comntry", kiaíla often standing for källatat.

74, 14. áwalues. There are several islands in the shallow waters of the vast extent of Klamath Marsh, but only one is meant here.

74, 15. wō'ns ilktsat. They submerge their dug-outs at several places on the beach, where they are certain to find them in the next wókash-season.

74, 17. pî̀la wíhla (or píla wíllash) contains perlaps a proper name of a locality, or stands in eomnection with Tóilkat, "at the Rail-Pyramid"; wilhaslash means top, apex. The stations from the "Ford" to "Bird's Lookout" are passed by the tribe when they return home with the lily-seed harvest-erop. "They drop the rifle" is: they take a rest. All these loealities are either on the open waters of Klamath Marsh or on Williamson River, which forms its outlet.

75, 1. iwfíidsha wókash. The distance between Klamath Marsh and the Willianson River is from 20 to 25 miles, and horses earrying wókash can make it in one day. The next day they return to earry another load.

75, 2. nátoks waítuapk: we will lie over one day to let our horses rest, or recover from the swellings on their baeks. Nátoks stands for nát toks.

75, 5. klá-ads is probably a kind of wild prunes. See Dietionary : kělátch.
75, 8. widsika íwam. "Some are ceonomical with their own berries, and prefer not to seatter them iu the hands of others"; íwam, huekleberry, has become the generie term for all berries, and i-umä'mi is "berry-season".

75, 11. spû'klish here meaus the large communal sweat-house; it is used frequently for danees and kshiuwáľishtat, contr. kshiñ'ľishtat might stand instead of spíklishtat.

75, 11. papiä'na, vocalic dissimilation for papa-éna; derived from pán, to eat.
75, 13. atì'sh ete. "Heap ye up that hay in two staeks, which must have a leugthy, long-stretehing, and not a ligh, cone-shaped form!" For heaping up long stacks one verb is here used, and another for making the high, round ones.

## Pứlam Shumshe-Élshtat shashapkĕléash.

## A SKETCH OF BALL'S MARRIED LIFE.

Given by Dave Hill, Subchief, in the Klamath Lake Dialect.
 tsúi wä'kala, tsúi tatá mántsak mbusï'lan gî. 'Tsúi kä'tsa, tsúi mbusä̈'and she hall a habe, and then quite a while bo lived with (ber). Then he left (her), nond l.ved with


 'Tsúi hû̀nk pän wutódsua, tsúi päu mbusé-alpěle. Kítidshì hû̂k snawéds; Then her again hogavenp, and again lived with (ber). Misechievoas (isis) that woman;
 conank han



 skEizi'na pállank sas sûldsámkshi. Tsí hûk shû'ta titná huk snawä'ds; tsíi rowed abstracting from to thetroops. Thas acted at a time that and waman ;
awas and
9 laláki nä'-ulza hû'uksht Pû'lam snawï'dsas; ktû'tsga sa hûk laláki siitóthe chiofs triod that Bulls wife; ent hair off thes tho efhieş for lav.
 Ingalept with oolder. Then agoln left (her) Ball; with n Warm spring man ton be lodgeet thin.

 mbû'se-alp’l, tû́sh spungátgapęle É-ustat tchî'pkshî hûnk snawä'dsas. Pû́l he lived with (her), over be brongbtbuck nnLakeshore boue there wife. Ball


 sumsia'-alank tsía.

18 Wakák tsik sa tchía, káa-i nî tû́měnat.

## Notes.

Matrimonial reverses like the one given in this narrative are by no means uncommon among the Klamaths of the present day. They are one of the unavoidable consequences of the gradual emancipation of the females from the former rule of their brutal husbands through the advent of the whites, and also of the obuoxious :und corrupting neighborlood of the soldiers at Fort Klamath.

77, 1. The name Púl is pronouncel in very different ways, and most people think it is the English дame Ball; Póluk is Pō ${ }^{\prime} 1$ hô̂k; tchía, "lived", would be prefcrable to t'shín in this conneetion.

77, 2. 3. kä'tsa, kétsa properly means to cast away; here: to abandon, leave; almost identical with wutórlsna occurring below, 78, 2.

77, 4. sïwána sas: he did not give many horses for her to her parents.
78, 8. pállank sas. This shash properly refers to Pampi and his fanily, for Púl's wife took the dug-out eanoe of Pampi and rowed with it to the soldiers. This was in the northeastern part of Upper Klamath Lake, and oceurred in the winter of $1870-7 \pi$.

78, 13. E-ustat is the location of the old ageney buildings at Koháshti, in northeast corucr of Upper Klamath Lake.

78, 14. hì'-i. On that occasion Ball left his wagon in the midst of the woods; hi, hi-i means "on the ground".

78, 15. nï'ulya sha pia'n. About the middle of September 1877 a strong escort of Indians bronght Ball and his wife to the "law-house" at the Klamath agency to be tried by the chiefs. A delay of several days occurred before he was confronted with the judges, and during the time he was imprisoned at the "skúkum-house", a strong log cabin at the agency serving as jail. He is still a very foung man, and on being brought there he was allowed to ride on horsebaek with a rifle on his shoulders. His father is an Indian from the Spokane tribe, and Sprikän is his name.

78, 16. szókta, to pay a fine; to be fined (by the eliefs). Sce: "Legal Customs", 62, 5.

## Games of the klamath lake people.

Obtained in the Klamati Lake Dialect from Minnie Froben.

## I.



 At tho slender
(sticks)
dlo floger
shlín; vû'ish sha klátchnank shlín, ťopowátka tch lénank shlín. Wû'ishtka
goess; at the they movinghad side. guess, wlth tho thumb also makloga they guess By the raish
vaish aide movo at.



## II.

|  |  |
| :---: | :---: |
|  |  |
|  |  |



Lálakiak tchîsh takanílzuk gélqa, hû́nkant tchîsh a nā'sh wí-uka kshē’sh.

Kshawínasht tûksh kaítua wí-uzant; tchúi sha nánuk héshkûsh shî-1'zaguk



## III.

É-ukskni wéwanuish tchîmma-uk tínkanka nánuk shuékûsh shésham$\begin{array}{cccc}\text { The Klamath women } \\ \text { luke } & \text { in plasi'igtchim. rnu forthand erery one (willow-) poles } \\ \text { mask, }\end{array}$ each uther


9 tchúi sha wutû'walqa shuekō'shttka tchímma-ash. Kawû́tank sha vuthen they with (thelr) poles up thogame-atring. Having caught (it) they throw tû̀dshna, tchúi sha tínshna hátoktala, shû́dshnuk tchímma-ash shútualsha. (ittoothers), then they over there, whllechusing cach thegamo-string they throw.

12 shû'dshna y yî'ashtala sha tchúi.
chase each other to the bases they then.

## NOTES.

I. The game described in this paragraph is played with four shúlshesh-sticks. l'rom this term is formed a denominative verb, shulshéshla: to play the stick.game. It is a guessing game, and the guesses are made known by putting fingers forwarl, a gesture which is called spélshna. Hence spélshna, sometimes corrupted into spéldshna, is used as a term equivalent to shulshéshla, to play the stick-game; and a third verb for this pastime is shákalsha. More minute descriptions of the three games will follow elsewhere.

79, 1. shin-ì $\chi$ aga is the reciprocal form of $\hat{1}^{\prime} \not \chi a g a ~ t o ~ w i n, ~ g a i n, ~ o c e u r r i n g ~ b e l o w . ~$ These terms mainly refer to gains made in gambling.

79, 2. shulsheshlank stands here for the periphrastic shulshéshlank gi, or the simple shulshéshla. Derived from shílshesh, and this from shíla, to hand orer, to pass to another.

79, 2. 8\%î'tash, not to be confonnded with skútash, blanket, forms apposition to lápi ndshekáne. The two slender gane-sticks are wrapped in narrow strips of huekskin leather (skita, to wrap in).

79, 3. szétcha, to extend two fingers, viz. the index and the middle finger; the instrumental case of the verbal substantive, šćtchashtka: by extending these two fingers.

70, 3. shlin, to shoot, to shoot forward, to hit; figuratively used for the rapid motion of the hand in guessing at the location of the sticks lying under the tray or páhla. yû'shakna, yúshkěna, or yû's $\chi a$, to put forward, to use the index finger. In this game that finger is ealled yúshzish, and not by its usual name, spelnish.

70,4 . vû'ish is the loeation of the thicker sticks coupled on one side, and of the thinner ones on the other; the gesture for guessing at it is to make a side motion with the hand, thumb included. In the text, the sense would beeome clearer by wording it thus: vî̀ish sha népatka ťopowátka teh lénank shlín, "they guess at the vaish, whirling around with the hand, thumb included." Léna is to perform a cireular motion; klatehua, a side motion.

79, 5. sұétchashtka sha láp wí-uka. Šêtehashtka collides here apparently with yu'sh $\chi$ ish spelshisht; it seems to stand for: "they win two cheeks, if they have guessed right at the slender sticks".

79, 5. wi-uka. They win one (nā'shak) of the six eheeks or counting-stieks, if the party opposite did not guess correetly.
II. To play at dropping beavers' teeth (shkn'sha) is the subjeet of this paragraph; the game itself is skúshash. The four teeth of the beaver are marked for this game by the incision of parallel lines or crosses on one side, and a small piece of woolen or other cloth is inserted into the hollow to prevent breaks in falling. The two longer or npper teeth of the beaver are called the male (laki), the pair of lower and shorter the female teeth (gílo, kúlu; distributive form: kíkalu). The tecth are dropped on a hard, level substance, as a metate or grinding stone, to make them lie flat. The marked side of the teeth wins, if it is turned up after dropping. The teeth of the woodchuck (míli, mói) serve for the same purpose.

80, 2. Shíshmalua=kîpksh stands for shúshmaluash=gípshtka or =gípkashtka, the instrumental ease of the participle gitko, possessed of: "(if they fall down) ou that side, where cach is possessed of marks" (shúmaluash).

80, 2-4. kshê'sh. In this game of beavers' teeth (pímam tút), or woodchucks' teeth (míyan tút) they use twelve cheek-sticks to count their gains with. The game is played by two persons, or by two partners on each side.

80,5 . Kslawínasht tûksh. Kshawína means several teeth to fall down, but, as the prefix ksh- indieates, only one tooth with the marked or winning side up.
III. The tchinmá-ash game is played almost cxclusively by females. The tehim-má-aslı is a string about $2-3$ feet long, to the ends of which stieks or pieces of cloth are tied; it is taken up and thrown forward by two flexible willow rods (shuékûsh, wáhlkish) to playmates, who divide themselves into two parties. Before the eommencement of the game, two limits (yúash) are meted out on the ground, whieh serve as bases. Both of them are located between the lines of starting (shalquétgîsh).

80, 7. shuekûsh : two poles; players hold one of them in each hand.
80, 9. Karu'tank refers to the playmates of the opposite party, who are bound to eateh the flying tchimmá-ash.

80, 11. shiwákuash seems to be a dissimilation of shiwáka-ash.
80, 11. Kíudshna léna, or better: Kíudshnank léna.

## SWEAT'-LODGES.

## Given in the Klamati Lake Dialect by Minnie Froben.

 pank källa; stutílantko spû́klish, käila waltchátko. Spû́klish a sha shû'ta ging up the ground; are roofed (chece)sweat- wlth covererl. (Another) eweat- they luild
lodgea, loige 3 kué-utch, kítchikan'sh stinégas slítko; skû́tash a wáldsha spî̂'klishtat tataof willows, alittle cahln lookinglike; blankete they spread over thesweating. when
 snáwedsh wénuitk, kû́ki kělekátko, spî'klitcha túmi shashámoks-lólatko; (or) tho wife (is) wldowed, they for canse of death, mooweating many relatires wholiave




 i-akéwa kápka, skû́tawia sha wéwakag knû́kstga. Ndshiétchatka knû́ks they bond yonngpine- (they) tietogether they sinall hrueh- with ropes. Of (willow-)bark the ropes
down
trees,



## notes.

No Klamath or Modoc sweat-lodge can be properly called a sweat-house, is is the custom throughont the West. One kind of these lodges, intended for the use of inourners only, are solid structures, almost underground; three of thein are now in existence, all believed to be the gift of the principal national deity. Sindatores of the other. kiad are found near erery Indian loige, and consist of a few wilow-rods stuck into
the ground, both ends being bent over. The proeess gone through while sweating is the same in both kinds of lodges, with the only difference as to time. The eeremonies mentioned $82,4-13$., all refer to sweating in the monrners' sweat-lodges. The sudatories of the Oregomans have no analogy with the estufas of the Pneblo Indians of New Mexieo, as far as their eonstruetion is concerned. Cf. Notes to 70, 1. 75, 11.

82, 1. lápa spî̂lklish, two sweat-lodges, stands for two kinds of sweat-lodges.
82, 5. shashámoks-lólatko forms one eompound word: one who, or: those who have lost relatives by death; ef. ptísh=lûlsh, pgísh:lûlsh; hishuákga ptísh-lílatk, male orphan whose father has died. In the same manner, kělekátko stands here as a participle referring simultaneously to híshuaksh and to snáwedsh wénuitk, and can be rendered by "bereared". Shashámoks, distr. form of shá-amoks, is often pronounced sheshámaks. Trimi etc. means, that many others aeeompany to the sweat-lodge, into which about six persons ean crowd themselves, bereaved husbands, wives or pareuts, beeause the deceased were related to them. Cf. léplkle $\chi a$, lép $1 \underline{k}^{\prime} l$ lekatko.

82, 6. Shiúlakiank ete. For developing steam the natives eolleet only sueh stones for heating as are neither too large nor too small; a medium size seeming most appropriate for eoneentrating the largest amount of heat. The old sweat-lodges are surrounded with large aecumulations of stones which, to judge from their blackened exterior, have served the purpose of generating steam; they weigh not over 3 to 5 pounds in the average, and in the vieinity travelers diseover many small cairns, not over four feet high, and others lying in ruins. The shrubbery around the sudatory is in many loealities tied up with willow wisps and ropes.

82, 10. Spukli-uápka mā'utch means that the sweating-proeess is repeated many times during the five days of observanee; they sweat at least twiee a day.

Luâtpíshla snéwedsh m'Na. LAMENT OVER A WIFE'S LOSS.

Obtained from Dave: Hill in thee Klamath Lake Dialect.

mákual, sta-ótank kaitua pát; tsúi tôtî̀ $\chi$ yaínatat tû̀ tshna. Tsúi shlaá campa ont, famished bothing eate; then (he) dreams, on the monnt- he dozes. and) Then hosees




 3 m'na. has

## NOTES.

The ascetic performances and ceremonics here described are going into disuse at the present time. When they were fully observed, the bercaved husband wandered alone through the woods and wilds (spótu) for five days, bnt to the widow these observances extended over a shorter time. For this purpose both sexes wore warm clothing, but took to worn-ont blankets or old articles of raiment, and used wisps of the serviceberry-bush as belts.

83,1. shpótú: strong and unusual bodily exercise, ruming up lill, plunging etc. was and is still considcred beneficial to the body, and is much in favor with the Indians. Cf. 82, 10. 11.

83, 1. hissuáksûk for híshuaksh ak; the husband alone, not in company of others; pä’nĕ for pä'и a, peèn a, cf. átěnen for át a nen; and sč for sha, they, 82, 4.

83, 2. ka-itua pát or p'at: he cats nothing at the time while wandering; páuk, p'ank might stand here instcad of pát; tû'tshna: for dozing they did not lie down, but tried to catch a little slecp while walking and wandering.

83, 2. shláa, and tchákèle 83,5 , forms sometimes used in conversation instead of shläá, shleá; tchä’kěle, tchékěli. Of. yáka for yä'ka, yẻ̛ka: Note to 16, 10.

83, 3. hûshtî'ktamna; the suffix -tamna shows that pshín stands for nánuk pshîn gi'sh: "nightly, every night."

83, 4. siunō'tish and shuī'sh are both tamánuash-songs, but of a different claracter. See Dictionary. Shlä'popka: lie sces in his dreams what he has heard mentioned in the songs. To sing or repeat songs started by the conjurer devolves almost exclusively on the women present at the cercmony.

83, 5 . sńmat: into the mouth; their blood, disturbed by the constant excitement produced by the night rambles, ascends to the throat, and is sometimes spit out by them.

84, 2. shuashuáktchîsh. By their loud and noisy lamentations (shuáktcha, to cry, to weep) they expect to avert from the bereaved husband the efficets of the tamanuashspell (shui'sh) which he has seen in his dreams.

84, 2. matchattgîsh: those listening to the words uttered by the conjurer and his repeater or expounder; they are of both sexcs and also act as bewailers.

## CREMATION OF THE DEAD.

## Obtained from J. C. D. Riddle in the Modoc Dialect.



## NOTES.

Cremating the dead is a practice which was abolished by the chiefs on the territory of the reservation in or about 1868. At the Indian graveyard north of the Williamson River a hill of 12 feet altitnde, where the corpses of Indians of the Klamath Lake (not Modoe) ehieftaney were burnt, is still visible and nutouched since then. With the exeeption of the sentence from Skentanapkash to itpa, the first paragraph refers to the present as well as to the former mode of fumeral, while the second describes the ancient molle of eremation. Cremation prevaiied also among the Suake and Pai-Uta Indians, living in the vicinity of the Maklaks; ct. Dr. W. T. Hoffinan, Palnute Cremation; Cremation among the Digger Indians, in Proceedings of the Am. Philosophical Soc., Pliladelphia; vol. XIV, p. 297 sq., 414 sq., (1876). According to Stcphen Powers, cremation prevailed among the Ponos of Northem Califomia, west of the Saeranento River, and the Erio, a tribe living at the mouth of Russian River, believe that all deceased Indians will become grizzly bears if not disposed of in this manner. The Indians inhabiting the shores of Middle and Lower Colmmbia River placed their dead on platforms ereeted on hills, or into the canoes of which they had been the owners; the Kalapnyas on both sides of the Willamet River buried their dead by inhumation.

Our notice makes no mention of the monrning ceremony anong the Modoes, by which widows had their long hair cut off at the funeral of their husbands, then dripped the resin from the pyre, liquefied by the heat, upon their bared heads, vowing not to marry again before this ghastly head-cover had worn oft by length of time. The Modoes cremated their dead on any day from the first to the fifth day after decease, aceording to choice.

85, 1. tutenépui. Here we have again the sacred number five oecurring so often in the traditions, myths and customs of the Oregonian tribes. Cf. 70, 1. 3. 82, 6. 88, 4.

85, 1. Instead of ídsha may be used Klamath Lake íľa (or éna) lulnksháldshuk, to bring out for eremation. The northern dialect uses vumi only in the sense of putting dried provisions into the ground. A funeral is ilktcha in the Morloc dialect.

85, 2. shutedshna: they remove obstacles upon the road or trail, such as fallen trees or $\log s$; they clear the passage. kaílatat means here the same as telpinnítat, 85, 4.

85, 2. wawaiha. Another form of the verb waina is said to exist in the Modoc dialect: wawaíha; its distributive form: wawawaíha.

85, 3. itpanō'pkaslıt is the syuizesis of itpanuápkasht.
85, 6. Tánkni; the term $u$ ū'utchni is often used instead.
85, 7. anko for ánkuam kedshlákstat.
85, 10. pítchash for Klamath Lake pitchkash, "until it has gone ont".
85, 11. Modoe hibéna or ipéna for the Klamath Lake yépa, yépona: to dig a hole.
85,11 . néwisht. Of this term the original meaning seems to be "thrown by hand into the air", a manipulation resorted to by some Indians, though not here, with the burnt ashes of the deceased.

85, 12. lkfupa. These piles of stones evidently were, as well as the piles erected ou the spot of the bunt lodge, intended as momments of the decoased. These cairns arc of considcrable size, and can be seen in the old Modoc country at the present time.

85, 16. pēn húnkĕlam ete. Pēn introduces the verb vûmî', and ǩ’éka is a verb coordinate to vamî: "his children die, right there again they bury them."

# PRESEN'T MODE OF INHUMATION. 

## Given by Minnie Froben in the Klamath Lake Diadect.


 box, shnutchlû’ktagiank káyak tadsh tálakank Bóshtinam=shítko. Pú- 3 2 coffln, planing (it).
not howover they ure palnt-
in the American shape. Small ing (it)
pakuak gî́ntak a sha nánuktua îlðóta, shulótish gintak, knǎ tchí'sh, arinking.eups iborenpon they of every kind bury wlth clothing hercupon, eknl-caps too, yámnash tchîsh, tálatoks $\frac{\mathrm{k} a ́-i}{}$. Hä' nen wä'g'n käa'git, wátchatka sha hî́nk beads too, bitmoney not. If awagon ls not on on horses they them
 tchî'sh, hihassuáksh tchî'sh, ká-i tatáksni, gasháktsîıa shash îlks é ${ }^{\prime}$ ni. too, mon also, (hant) no childron, follow them to grave.



 a hû́nk luátpishluk shúina. Gakiámnank tû́k sha tzálamtana gî́'hliank 12 over bim for monrning thes sing. Forming a circelo trom it they throggh tho middle paselng



'Iítatnatoks flags máklaks kî́utchna ílks $\chi$ ēni wä'ginat; shashámoksh Sometlmes flage an Indian sticks up at tbe grave on the wagon; the relatives
 intwo files tollow, the women in one file, the mates too






NOTES.
This short notice deseribes a fumeral (isha) of the Klamath Lake tribe in the mode as adopted from the Amerieans not long after the treaty of 1864, when cremation of bodies was abolished. Whatsoever of the ancient customs in clisposing of the dead is still observed, the reader will easily gather from the present sketeh.

87, 3. tálaka means to go forth and back with the hand; hence to rub with the palm of the hand, to rub paint on, to paint.

87, 5. Н⿰氵̈̉' nen wä'g'n. In this conneetion they can also say: hä' nem wä'g'n; and for wátchatka: wátchetka.

87, 11. tánktak, in this connection, is a compound of tínkt and ak, not of táuk aud tak: "just at that time."

87, 17. láp kímbal:s gashákteha: they follow the corpse, which is placed on the wagon, in two files on horseback; kímbaks is apposition to shashámoks.

88, 1 . Nā'sh ete. The appearance of their graveyard (tehpínâ) near the Williamson River does not differ mueh from that of our eemeteries; it lies in the nidst of the woods. For titads $\chi$ átko see Dictionary.

## FUNERAL OF WARRIORS.

Given in the Klamath Lake Dialect by "Sergeant" Morgan, an Indian from Koiíshti.






 tû́kanksh. Stútxishla sha yutátkug; k’1éksht shtútzishla. At hû́k nánuk 3 quiver. Sorrowfruly went they in moorning; at his death they wept. Xow that whole




T'úuîpni spíkěli, k’la'wi at; at gai'mbĕle, kiä'm pán. At gia'tak.
Fire (days) the swented, stopped then; and returned home, (and)fish ate. That's the end.

## NOTES.

The style of this little picce is far from what we would eall accomplished, and of ineongruencies and unneeessary repetitions there are a score. The fight in which the five warriors were killed is imputed to the presaging, night-long cry of an ear-owl, and in ancient times Indians seem to liave been justified by universal custom in attacking and killing their neighbors if an owl or raven was vociferating at night in close proximity to the lodge or lodges of these unfortunate people.

88, 7. hushtsózok for lushtsóza hûk.
88, 9. 10. hushtsóga is used here in an active sense, but is better translated by the passive form.

89, 1. kshúiwala has for direct object tsózapksh, the dead body. For the same operation the verb ksháwala, ksháwal is also frequently used: 85, 6. From here the informant begins to speak of one body only, as if only one warrior, not many, had been killed in this battle. Cf. Note to 80, 5.

89, 2. húnkělan stands in this line for hunkělámsham or p’nálam: "their, theirs".

- 89, 5. lák. After their return they cut off the hair of the widow and then she put pitch or resin on the head. In most tribes they did it at the time of cremation, while they witnessed the aetion of the flames upon the body.

89, 5. hûk snáwedsh: one widowed wife only is mentioned here instead of many: "pars pro toto"-construetion. This sentence, if bnilt regularly, would run as follows: shisháshka sha lák hû’nkělam snawétshaslı, kát hîk wenóya; hissuákshash m’na k’léksht wenóya.

89, 7. spû'kěli, to sweat in the sweat-lodge, viz. in one of the three sweat-lodges given by K'míkamtch to the Klamath Lake people: spû́klitcha, spû'klidsha, to start out for sweating there. Cf. lumkoka and wála. To eat fish only, and no meat, means to fast on fish.

## VARIOUS ETHNOGRAPHIC NOTICES.

## I.



 $\underset{\text { whill ho eleceved }}{\text { s.a }}$ a

 snáwedslash hishuáteľzaslı mbû'shni, hûnk ktû̀tchka ; hishuákslıash wátch sqókta: tû'm wâtch wuxó-we.
they fine: many horses ho has to give up.



 shinish; átěni keelééwi shuī'sh." -"Slámuapk î nánuk! shúktchuapk î nánul! of soogs ; now - 1 qoit stiging," "Stop singing so ant cry nad woep yo every one !

15 k'leḱápksh!"

## II.

 lantchámpkash ka-ilalápshhkitko, víň̌m mbá-ush tchutchi-esháltko.
18 Shelóluka shtétnashtka ngê'slitka shenótanka; tchiktchikáshtka sna(Wher) fghtug with poteoned arrows they fonght for for hacthets a wor
 sheshalólesh kêléxa.

- warrior he beonma

 tánkni at wäitólan shulótish p’álăm nánuk púedsha.
 3




 (them).
 horued beetles withfangs also on the abe on the also.


## NOTES.

With the exeeption of the first, these ethnographie notices concern the people composing the southern ehieftainey as much as those of the northern.
I. The four items of section I are worded in the Klamath Lake dialeet, and were obfained from Frank, a young Indian settled at Kuyamskä'iksi, "the Crab's RiverTrail," on the Williamson River.

90,1 ete. The census figures given in the first paragraph refer to one of the latest counts made of the individuals in the tribe, probably to that of 1876.

90,1 . vunépni laláki gítko. Correetly worded, this phrase would read vunepä'nash lalákiash, or vunépnish, or at least vunépui lalákiash gítko.

90,2 pe-ulatko oughf to be used only when units are mentioned after the decads of figures. If the relator wanted to say, 180 men were counted, the rerb shä'tui, shétni would be the proper ferm. Of. Note to 70, 8.9.

90, 3. Tumantka, "by the many", by fhe crowd: by the majority of the men in the fribe.

90, 7. hishuatchyaslı is a form for the word man, male, common to Klamath Lakes and Modoes, but more frequently used anong the latter. The reverse is true of the form híshuaksh.

90, 10-13. Part first of the fourth notice refers to dances at the communal dancelodge, organized and direeted ly chiefs. The chief starts the songs; sometimes the men, sometimes the women sing in chorus; or a song may be sung by all present. When the chief sees one, who does not sing, he eries out: "î tehuín; trila shuín î!" All dances are accompanied by songs or other music.

90,10 ul probably stands for ûn, û'n, â'na, a conjuuetion more frequently used in the Modoe than in the Klamath Lake dialect.

90, 11. tchä'lyct for tchä'lyat! sit ye down!
90,11.14. Wéwalyat, wawalyat. Walya means: to look out for, to be expeetant; the daneers are commanded to make ready for the next song, which implies that they have to rise mpon their feet.

90, 12. tcliúinnapk. See Note to 70, 3.
$90,13-15$. The words from Slámuapk to k’lekfyksh are commands of the ehiefs or subchiefs heard at the solemn ceremonies held in or around the lodge of a deceased person the day before the funeral. Chiefs are eutrusted with the leadership of choruses sung by those who monrn over the defunct, and in presence of the corpse.

90, 13. 14. shlámuápk for shlámi-uapkat, or shlámi-uapk' ì! See Dietionary.
II. The items contained in section II were obtained from J. C. D. Riddle, and are worled ins the Modce dialect.

90, 17. The Klanath Lakes wore a kind of elk-skin hat, wide brimmed, high and painted in eolors, which they ealled púkalsh tchuyésh. Leggings were ealled kailálapsh, beeause they reaehed to the ground (kaiila).

90, 18. 19. Shelóluka and sheshalólish; botlı derived from the verb shéllual, to make war, to figlt.

90, 18. shtettmashtka. All Indian tribes of the border region between California and Oregon are reported to have fought with poisoned arrows in early times.

91, 1. Nka'kgiuga, literally: on account of a elildbirth. That the father denies to himself the use of meat during ten days is a ellstom not unlike the world-renowned couvade; the sweating has the effect of keeping lim at home in such a time when his fanily stands most in need of his protection.

91, 2. shápěle is flour of any kind of grains and the bread inade from sueh; máklaksam pásh, Indian food: edible roots, berries, wókash ete.; lomkóka for the Klamath Lake: spíkli: to sweat in a sweat-house. Cf. Note to 89, 7.

91, 3. p'nalam slmultish, the dress whieh they wore at the time of the childbirth.
91, 4. Tishiwapkash. The Modoc tishíwatko, erooked, stands for Klamath Lake tishilatko, to whieh eompare tikíwatko and tís $\neq$ antko.

91, 5. kalkálish. This adjective is variously pronouneed kálkali and kólkoli.
91, 6. In its signifieation lúlpût approaches very near to lúlpat, as the Klamaths would say; lulput, however, involves the idea: she raises her hand up to the eyes. This manipulation probably contributes to some extent to the oblique conrergeney of both eyes towards the nose or mouth and approaehes the Oregonians to the Mongolian type of mankind. All the manipulations deseribed are frequently repeated by mothers and other females inhabiting a lodge, and they often do it without any necessity.

91, 8. nánukî stands for nánuk gî. suéntchăm: in the Modoc dialect suentch means a baby, infant, while carried on the baby-board; the Klamatl Lakes, however, use this word in its original sense of baby-board, eradle-board, to which the infant is strapped or ticd.

91, 10. ktcháyash. The applieation of insects etc., is certainly done for the purpose of rendering ehildren fearless against danger and unmoved by sudden fright in after-life.

# ÁmpみÄnkni mâklaks. <br> AN OPINION ABOUT THE WACO INDIANS. 

Obtained in the Klamath Lake Dialect from Charles Preston.









 I hear (them) shall go $\underset{\text { (there) }}{\text { I }}$

## NOTES.

The Waseo Indians form a portion of the Upper Chinook Indians of Columbia River. Their ancient homes were around and at the Dalles, and a few of them still live there, while others now inhabit a section of the Warm Spring Indian reservation on Des Chutes River, Oregon. The Dalles formerly were, and are still to a certain extent, the locality, where all the tribes of the Columbia River Basin sold and bartered their products and commodities. The Warm Spring Indians call the Waseoes: Waskopam, " men of the grass region"; the Klákamas-Chinooks call them Guithlasko. The Klamath Lake and Mode Indians also were among the frequenters of the intertribal market, exchanging there the slaves caught on their raids for ponies, provisions etc., when they went down to the Dalles on their ammal trips. My Indian informant, Charles Preston, had lived long at the Dalles, and also gave me a list of Waste words and sentences.

93, 1. kíi spûni rushúk: the subject of spuní, E-ukskni maklaks, is left ont by inadvertence. Some Wascoes wanted to marry into another tribe; for "one Wasco man" stands here for "some men of the Wasco people."

93, 3. 4. Amp;i'ni, contraction of ambuyéni "thither, where the water is", where the waters rush down in a eataract, or in rapids. The rapids of the Columbia River at the Dalles impede navigation.

93, 7. sasságank î gî! ye are in peril, when going to the Dalles and being Indians, tlierefore take care of yourselves! î stands for āt; cf. 64, 10 and Note; 90, 13. 14.

93, 7. 9. Instead of kiti nû shtínta may be said also, in this connection, kái nû shanáhole; instead of tánkt nî gēnt: gē'ntěni, gē'nt a nî; instead of Tidshi hähk: tídshäk, tídshi hä gî.

K'mukámtcham Aíshisham tchîsh shashapkĕléash.
K'MÚKAMTCH ATTIEMPTS THE DESTRUCTION OF HIS SON AÍSHISH.

Obtaned in the Klamatif Lake Dialect from Minnie Froben.





 pálshtat pátki ĝ́.
on the bottom shonid feed
left dry upon.

9 shash shtílta p’laíwasham shnû́lash, shléank kěnáwatat shkúlelanı wewéka sentafter an eagle's perceiving uponakonawat of als ork the jonng


## KMUKAMTCH ATTEMPTS THE DESTRUCTION OF AISHISH.

 kank hû'n tchûlísh, kaílish tchîsh shûkatonolō'tch. T'chúi Aíshîsh gû̀ka



 gừttrapělìsl; hî'-îtak tchíi tchi'-uapk. to climb hnok; there then hewas going to

K'mû'kamtch toksh hû́nk nánuk Aíshisham shûlótish shnúka; shû'K'mukaratch bowever the wbofe of Aishish's ciothing tuok nwsy; drcssing
luatchnank gä'mběle k'léwidshnank m’na únaka. Snéwedsh páldshapěluk himself in it be returneif relinguisiling his sol. (His) wifo to aldicice



ká-i shanahō'li.
not wanted (him).
Át toks hûk Aíshísh shû̀isha, nánuk káko pîl ǩle̛ká tiä'nuk kaítua But now Aishish hecamelean, ali over hones nothinghe hocame for starving (and) nething

 i'kugank, tchíi sha Aíshishash shéwana pásh, ámbu tclî'sh sha tchíya.

 (bim)


 tchiksh!" hû'nk na-à'sht gî Aíslish.
amteh!" the aid Alshbsh.
Tchúi yapalpûléash mû́lua skatxipěli-nápkuk Aíshishash käílant;
 wéwanuish toks hû̀k Aíshisham méya là $\mathrm{a}^{\prime} \mathrm{pi}$, Klétiamtch tchi'sh Tchî'cgash (and) wives of Aiahish ding loots twi, (called) old Rlótish nian Tohika
tî̀la. Wä'kaltk hû́kt ki. Tchái Aíshîsh géna me-ishxéni, tapítankni withal. Child-having this was Then Aishish wont to the digging. keoping bolind gáldshuy̌ Tchíkash; Tchíkalam wä̀ka shléa máhiash Aíshisham, tchúi he waikednp to Tchika; : of Tchika the child perceivel the ehadow of Aishieh, and
 "wák if ûn giúgo ktû̀pka?" Shatalkíamima 'Tchi'ka, shlaá Aíshishash "why you (ii) slap!" Looked arcund Tchika, Eaw elio Ashbilh


 I'tpampělaukk yámnash shéwana, tchélîish liû̀nk líelank yámnashla; ndan-

three (of his) wires neck-wear hegave.

hátaktala. Tchúi Aíshîsh unakáka m’na slıtûlí pā'ks nutolalolátkiuk lî̀-
12 lukshtat K'mukámtcham. Tchúi K'mûkámtch gátpanank tchél $\chi$ a; Aíshisham




 rnniing up to thim jerking off the pipe throw it into the fro; then Aethish
 18 hư'masht gînk, tchíi medshá.
hy mod ding, then he moved away.


21 hû'mashit giúlank. Hî́'nkanti Aíshish tía kínyäga; häméxe: "ḱái- nû́sli
 nánukash kizíla, Aíshishamksh píl pahá. Tchúi Tĥ’ĥsh talpatkola, stí ya


# K'MOKKAMTCH ATTEMPTS THE DESTRUCTION OF ATSHISH. 


$\underset{\text { genty }}{\text { gétak }}$ liû'nk shkálkela.

## NOTES.

This is one of the most popular myths earrent among the E-ukishikni, and we shall find it partially repeated in another myth, recounted by Dare Hill. Aíshislı and his father K'mukámtehiksh represent powers of nature engaged in everlasting strife for mutual extermination. In this myth K'múkamtch resorts to the following trick to destroy his offspring. Seeing young larks in a nest on the top of a sorrel-stalk, he informs him, that if he climbs up there, he can obtain a nest of eagles witl all its immates. Gladdened with the prospect of this capture, Aishish climbs up, but the insidious father causes the plant to grow miraculously fast nuder him, so that descent bec mes impossible, and Aíshish comes near perishing by hunger and exposure.

In the recollection and wording of some portions of the myth my informant was assisted by "Captain Jin."

94, 1-7. The short fragment of a creation myth preceding the Aishish tale stands in $n o$ causal connection with it, and could as well be inserted elsewhere. Myths entering upon the details of the creation of the world loy K'mukámtehiksh do not, as far as ascertained, exist among this people, but in their stead we have many myths for special creations (of man, animals, islauds, mountains etc.). A grammatic analysis of the terms occurring in this fragmeut (from Lípí nä’Ish to pátki gî) was inserted by me in the American Antiquarian, Vol. I, No. 3, pages 161-166, under the heading: "Mythologic Text in the Klamath Language of Southern Oregon."

94, 1. Lúpí shutaiyéga is not to be considered as a repetition, for it means: when K'múkantclı began to create the world he made $u 8$ bcfore he made the fish, othcr animals, and the dam at Linkville. This is, of comrse, only a small fragment of all the creation myths of this people.

94, 2. shashapkělía: to tell or count stories, myths or fables in the interest or for the pleasure of somebody; the i is here doubled to obtain a rhetorical effect.

94, 3. K'mû'kamtchish is a contraction of K'mû'kamtch tehîsh; Aíshish, K'makamtch also. The longer form of the name of the deity occurs $95,20$.

94, 3. ká-akt, metathetically for kákat; kát is pron. relat. whieh, what, the thing which. nánuktua ké-akt gäg comprehends all animate and inanimate creation.

94, 4. wá, uá, to stay, exist, live in; is always connected with an indirect olject indicating the place, spot, locality or medium where the subject lives or exists.

94, 4-6. The coustruction of the sentence runs as follows: Tchíyunk (K'mukámtch) nć-ulya gî̀tki gíug páplishash I-ulalónan, páltkî tî’wîsh gint ndûlshámpkash mấ nkillipkash, mû'ash shlé-uyuk; "when a south wind blows, it will stop the waters from rushing down rapidly over the cataract." The outlet of Upper Klamath Lake, called Link River, runs from north to south, over the falls at Linkville; hence a powerful south wind will stem the current of Link River above the falls, leave its bottom dry or almost dry, and enable the Iudians to catch the fish swimming in the shallow water or wriggling in the mud. The rocky ledge under the cataract is supposed to be the gift of K'mákamtch.

04, 4. I-ulalonam or Tulalona is the Tudian name of the cascade of Link Rives aloce the town of Link ville, and for that fown itself. The origin of this name is exphained in 94, 5 . 6 , for the remb intalona means to move forth amd baek, referring here fo the waters of the river recoding under the pressure of the sonth wind.

94, 6. itklank, partic. pues. of ítkal, means here: obtaining by basketfuls.
94, 9. The kenáwat is a plant growing high in the wam climate of Northem Califormia, especially in the ancient habitat of the Shasti Indians, and in this myth it suggrested itself to the Indians on accome of its property of growing very fast.

95, 5. gethlapka: lee swmg himself into the nest by climbing ofer the rim. Cf. Note to 66, 13.

95, 10. kaízena K'mukántehish for the regular form K'mukámtchash. Of. 91, s.
$95,15$. skáyantch ette. More plainly expressed this sentenee runs as follows: sha skáyanna pásh tehîsh ámbn tehîsh; the first tehîsh being placed before pâsh and appended to the apocopated skaiyamua.

95, 16. shéwana her" used differently from tehíya, whieh applies to liquids only.
95, 17. plin' itchank seems to be a quite modern interpolation, for it smells of pomade and hair-oil; but it is as ancient as the myth itself.
$95,23.96,2.3 .4$. Tehíka. I have rendered this bird-name elsewhere bs "Chaffinel,", aud Klétish by "Sandhill Crane".

96, 3. shlamia, to feel insulted. She resented it as an insult that the ehild called her leceased hnsband by name; for it was a capital erime among the ancestors of the present Klamaths to call a dead person's name for many years after his demise.

86, ל. hî̀tna is changed to liátan on aceount of being followed by a word commeneing with $k$.

96, 6. stiya. The eustom of widors's to put pitch or resin on their heads at the death of their husbands was abolished only at the time when eremation beeame a thing of the past.

96, 6. galdsha-ńyank is a more explieit form of the participle; the verb galdshi being the contracted form of galdsháwi.

96, 8. Jámuashla. He used the bristles of porenpines to make neeklaces of.
96, 11. unakáka m'na was the son of Aíshish and of the above inentioned Tehika.
96, 11. 12. K'mukámtchanr qualifies pā̊ks, not lúlukshtat.
96, 14. pakakóleshtka, verbal desiderative of pakakóla, to jerk away from. The suffir -ola indicates that K'míkantch wore his tobacco-pipe tied to his body; he wore it on his neek.

96, 15. tchítchiks is used when speaking to children. It signifies 80 , so! and means: be quiet, slut up, stop!

96, 17. tehē'k kecléwi. In similar eomneetions this phrase very frequently ends a whole narrative in Modoe and Klamath. Here it means that Aíshish eeased to poke the pipe into the fire. Cf. 85, 10. 89, 7.

96, 18. medshí: lie removed from that spot with all his wives and children. Ancient customs forbid the offispring to stay where the father had breathed his last.

96,20 . Gén hânk námuk ete. This portion of the myth deseribes the destrinetion of all the living organisms on earth by a general eonflagration eaused by K'míkamtel. Myths of this kind are suggested by intense heat experieneed in summer. This mode of destroving life on earth is less frequently met with in myths than the drowning in a general Hood.

96, 21. kínyäga. Aíshish held the tray over himself, his whole family, and his lodge. The same prefix ki- reappears in a nasalized form in $n \chi^{1}{ }^{1}$-uliga: 97 , 1 . It is nasalized there on aecount of the preceding -k in hû́nk.

96, 23. käíla. Where I have rendered this term by "world", as here and elsewhere in creation myths and myths of a similar character, it does not signify the whole surfaee of the earth as known to us, but only that section of country which is known to that tribe of Indians. Thus aneient creation myths only describe the creation of that part of eountry where these inyths originated; the creation myths of coast tribes will include the ocean in their term for "world".

96, 23. Túhush talpatkóla. Mud Hen, one of Aíshish's five wives, looked out from under the roof of Aishish's lodge or shed to see what was going on. This fiction explains the round dark spot visible on the mud-hen's head; its round form is indieated by the prefix la- in laligga.

## Aíshisham shashapkĕléash.

## A MYTHIC 'TALE ABOUT AISHISH.

Given by Dave Hill in the Klamath Lake Dialect.
Shashapkēle-úpkan Aíshishash:


 the fire of K mikumtch (it wat) smokeonly. Then they shotat the Asshlsh hit (it) siraight,
(was),
Wanáka yû̀tlansna. K'mukámts tû̀ hak yûtlka, nánka toks tû' hak a-áti


 $\underset{\text { slince }}{\text { tsússak }} \underset{\text { he won }}{\text { í' }} \underset{\text { wak }}{\text { ak }}$ nánuk sas.



| TSull | I'múkamts | nä'-ulakta | $2 t$ | unak | n®̈д'-ulakta | Aisisas. | Tsưl |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Then | K'mákamech | plotted secretly ; |  | nfter day. break | he plotted against | Aishish. | Then |


3 luélks. At sapî'ya Aishishash K'mukámts: "at tû̀ luélkish p’lafwash Whetehad Jow declared to Alahish K'makamtch: "faraway thekilling. of (Jonng)
killed. yayákia nû'; $\underline{k} a ́-i$ lúela yáyakiuk", snáwedsas kû'ktakiuk K’mákamts

Aísisam, Stokuā̀ks hû̀nk. At géna lápuk: Aísis K'muḱámts tehish géna. of Asshish, Little Squirrel.

## Then set out hoth: Aishish K'makamtch also $\begin{gathered}\text { went } \\ \text { (there). }\end{gathered}$

6 Tchúi släá p’laíwash, tsúi aláhia K'mukámts kokantki gíǵg; tsúi
 kald kapáta at kípka. Tsúi hûnk gî́knank slä́ tchíliliks skếlelam, 9 slmúlas toks hû́k p’laíwasham. Átûnk at suáktcha Aíshish shnûlástat the ostro thongh the (was) of the engle. Theie now wept Aishish in the eytrie tchî'klank; K'mû'kamts gä'mpěle at, sûlû́tantsa Aíshish-shittk sià's. Gát-
 pampěle tû́ tchīs slitat; tchúi shpónäk, tchúi shä'tûpk Stû'kuaksh; tchúi came hack far to divelliog; then it was hate, and lun mept with Little squirrol; then
 "K'mukámts a hō't ki!" tsí sa hû̀n ki hû̂́ksa Aísisam wéwanuish.


15 Aíshish túla shuetsantáměna. At sha shnéna lûloks suétsnuk sas. Tsúi with Almhish were in the halit of And they hult fres whiloonthelr fal
 to K'makamtch suried tip, nowly they suspected, and they (said): (ls) this Aísis!" hû'ksa ná-ast sa-ulankánkatk. "K'múkamts a kē̄k gî̀"; nā’sht sa


 Those afar thus maid seelnghlns comlng: "yo this aftor he has shot at wan will find ont then;


21 K'múkaunts; Wanák tads yû́tlansna. Tsúi sha súkaliäg, tsúi sa K'múkamK'makamteh; Silver Fox mlsod alltha. Then thay fommencen and they over K'mr.
tsas î'kak; waítash a tấm î́kak, tsúi sa gä'mběle, tsúi sa gátpampěle kamtch won: all day long mang they won, then they retnrned, and they wentback
látsastat. At sa tsúi gä'tak sákla salákiuk Aísisas.
to the lodges. Then thes qnit gamhling, for they Aishish.

látchash stä-fldshuk. Shtî'a sa nû'shtat shîdsho wenépî wéwanuish; násh lodges to dig roots. Pitch they on heads pat fonr wives; one

 and Atshish wept hearing (them). Now Aishish far away sky olose to, then he was moril
kakó běla ; at shî'tsa lápi wékwak tû' kálo wikáta; at shliaí Aísisas. Tsúi






ámbûts î'yamnatk. Tsúi Aísisas lîwátkal shnû'lashtat hû'nkant, tsúi wû́la water also carrying. Then Asshish they raised in eyrie that, then ingnired



 sä'gsuk hû́nkies.
giving er- to them.
$\underset{\text { planations }}{\text { pitan }}$
At sa hứnk slánkok shlóa tchakělátat ksékoga sha Aíshishas shewanóNow they spreading awild. in thewillow. placedinto they Aishish after giving

mānts, at wii'mpěle.

## NOTES.

Portions of the same myth, though differently conneeted, will be found in the mythie tale: K'múkamtch attempts the destruction of his son Aíshish. Both narratives are complementary to each other in some important details.

99,3 . shmena. It is the custom of gamblers to build fires at every place where they stop on their road or trail. Any party of travelling Indians will do so when stopping on their way. Cf. 23, 15.

99, 3. Yámuashptehi. Screral adjectives designating colors are taken trom artieles of dress in both dialects: tolalúptehi, green; tch $\neq$ e-ntchze-ushptehi, a shade of blne; and spálptchi, light-yellow, is called atter a face-paint made of a kind of clay.

99, 3. Wanakalam láloks. The fire of Young Silver Fox was jellow or yellowish, not only because the fur of this fox-species turns from silvery white into yellowish by the change of scasons, but also, because this animal represents in mythic stories the halo around the sun. Cf. shakatchalish in Dietionary. Wanáka always figures as the companion of the principal national deity, K'míkamtch.

99, 7. wátehpka: to stake everything in one's possession and then lose it all; wíuka, to win all the stakes lost by the others.

99, 10.100,5. Stókua or Stúkuaga was, according to another of my informants, a fish of this name, and not a squirrel. The other wires of Aishish all have names of hirds.

100, 3. lnélks: K'míkamtch had iwherited a locality where his father was in the habit of hunting and killing the giant-eagle (p'laíwash). Thinking of this place, K'mukámech went there with his son Aishish, after scheming a stratagem to let him perish there. To kill the eagles, it was necessary to clinb a pine-tree; this K'múkamteh was afraid of doing, and wanted to send up there his sou instead.

100,9 . shnúlas toks ete. The lark had her young in the nest of an eagle.
100, 10. sûlî'tantsa. He dressed himself in Aíshish's garments, as appears from the foregoing mythic tale.

100, 15. sas. Dave Hill often uses shash, sas in an almost reciprocal sense: while (or: for) going to gamble among themselves. This pronoun does not depend here on shnéna, as we might assume. Cf. Note to 58,10 . It refers to the playmates of Aishsh, who set ont with K'mikamteh, whom they thonght to be their beloved Aishish on account of the dress he had abstracted from him. In 100,14 shash was explained to me by "from them", viz. from the wives of Aíshish, in whose lodge K'múkamteh had passed the night.

100, 18. gä'pkat for gépka at: did not come now, or: has not come yet.
101, 2. gä'tak. This adverb gives to understand, that they were loth or too tired to play any longer for stakes, becanse their belored Aishish was not present. "To cease or stop gambling" simply, would be expressed by saklóla.

101, 4. shtí'a etc. Cf. Notes to 89, 5; 96, 6; and general Note, on page 86.
101, 4. shî'dsho wenépi, rather unsual forms for shî'dsha hîn vunépni. Hû, "np, above, on head," has coalesced with shî'dsha into one word.

101, 5. Klitit'sam. Aíshish heard the crics of Klétish only, because of all the birds which are believed to be his wives, the long-necked sandhill erane is the loudest and noisiest.

101, 8. gatpampêlíssa for gatpámpěli sha, as tchíssa for tchí sa.

ORIGIN OF HUMAN, RACES. DURATION OF HUMAN LIFE. 103
101, 8. p’tisá m'na for p'tísha m’nálam.
101, 10. kakó bělat for: kakó pîl at.
101, 11. p'tissap sam. Sham, sam "their", is found standing instead of m'nallan, p'nálam, or húnkělamslıam in the conversational form of language. Cf. 107, 13. 108, 4.

101, 13. liwatkal. They lifted up the famished Aishish, almost reduced to a skeleton, and seated him upright in the nest; they imparted new strength and life to him by feeding him.

101, 16. kédsha, to grow, forms kédshua, kedshnúta; n's is: nû'sh, to me, with me, under me; a sort of dativus commodi.

## Origin of human races. Duration of human life.

Given by "Captaln Jim" Ľ the Klamath lake Dialect.

K'mûkamtch hû'nk at né-ulqa ná-asht gén: Hûnk Ei-ukshikíshash K'mokamtch
as follows: 'Tho Klamath Lake
 herry buslı

 people however aftercreating in the shade laid down; therefore
makmûkli, Bóslitin toksh papálpali. É-ush gunî́gshta käilalî́a.
dark, the white race but light-com- the sea heyond plesioned. worli for them.
 wishī'nk tchîsh. Mû'nk häméze: "Nû a gû'ggamtchîshash máklakshash garterenalke alko. Molo said: "I of old age tho Guman bellugs


the men to heconsorder!" Thus garter-snake whlle shedding its skin: "this way




 utívash gíug kî'shtclikank hiétalt nûsh". being nectug, wheo atepring (wrill cruah me".

 tchăm shutólash. . had finished creating.

## NOTES.

103, 3. tehâk. There is evidently a jeu de mots intended between tehák and tchálish. Whieh northern tribe thc Käkakilsh were, my informant and other Indians were unable to say; it is a nickname, derived from $k i{ }^{\prime} \underline{k}$, of some Oregonian tribe held in contcmpt by the Maklaks, and any reference to it causes great merriment to the Klamath Lake Indians. Máklaks is in botlı places scparated from the tribal name by inversion; tclıák and tchágsh form apposition to these tribal names aud to maklaks, aud for tchagsh we would expect tchashish, which is the usual form of the word.

103, 5. E-ush. The sea or ocean, which is meant herc, is múni é-ush, while é-nslı means a lake, lagoon or large pond.

103, 6. ne-ulakiega. Three of the lower animals are here brought together to confer with K'uúkamtch to determine the duration of man's life, and every one voted according to its own expericuce. Stephen Powers mentions a mythic story comparable to this, heard by him among the Pit River Indians (Contrib. to North Amer. Ethnology, vol. III, p. 273): "The coyote and the fox partieipated in the creation of men and animals, the first being an evil spirit, the other good. They quarreled as to vhether they should. let men live always or not. The coyote said: "if they want to die, let them die"; but the fox said: "if they want to come back, let tliem come baek." Bnt nobody cver came back, for the coyote prevailed."

103, 9. 10. After shkîntchishzagóta supply heméze, and after k'léltgî: gî.
103, 10. tî'dsok, or tít'shok, distributive form of t'shók, of the verb t'shín to grow. Cf. tit'sha, 107, 12.

103, 12. pshe-utíwash, abbreviated pshe-utuash, an archaic word uscd ouly in the collectice sense of people, human beings. It oecurs only in mythic stories. Cf. 105, 8 .

104,4 . sht $\hat{u}$ 'ya. This fiction was suggested by the manner in which moles throw up mole-hills and shows that the ancient myth-makers were not withont a homoristic vein.

104, 4. pìpîl. Every mountaiu was thrown up by the molc alone, cach oue separately. The special creation of K'míkamtch was man, and whatsoever' stands in dircet connection with his existence, welfare and cnstoms, as fishiug-places, islands, funercal sweat-lodges etc.

104,4 . húnta, abbreviation of húntala: by procecdiug in this nanner, in the same manner.

## Hómashit shápash lứpi shuteyegate.

## CREATION OF THE MOONS.

Given in the Klamati Lake Dialect by Minnie Froben.


 shas: "tát' né gémpka?" "Gē't a genû'la!" K'mû'kamtch heméze: "tû'sh


Pä'n shash vû'la: "wákaitch hû́n gíug nä'g tû'm haktch shápěsh shusháta? Again of them he inquired: "why then ine absent too many altogether ruoons dirl make?
wákak hûnk psé-utiwash tchí-uapk lû́ldam? tchókat ak huk lû́ldam hak;


"wakaí lálap a hûn shnekû'pkashtkak î?" Tchúi K'múkamtch heméze: "why rot two at a time sbluing np there do yon need?" Hereupon E'radkamtch said:

 Startednp, took down onehslf (of the) thon smashed (then) K'makamtch,

,' "Ka. $\mathrm{K}^{\prime}$ kamtch a patpanû́la rî'ta" Wásh vî̀la: "tô'sh haítch
 tchä'lza?" "Hīt a tchïi'l $\chi a$ ", shapíya m'na p'gì'sha. Tchúi hátokt tchél- 15 zank tî'lankanka tálke-ug K'mûkámtchiksh. Kítî́ta pîták nkásh.
down she rolled forth aud joking sbont K'makamteh. (Then) burst her own howels.
hack

## NOTES.

In preference to any other beast, the prairic-wolf, small wolf, or coyote (as he is called in the West after an Aztee term meaning "digger, burrower") became conneeted in the mind of the Indian with the ereation of the moon and the origin of the months or moons, becanse in moonlit mights he is hearl howling from uightfall to dawn; sometimes alone, sometines in paeks of sereral dozen at a time. His querulous, whining liowl is likened by the Indians with a "speaking to the moon". Onr tale above is based upon the donble sense of moon and month, in whieh the term shapash (the "indieator," from shapa to tell, indicate) is used. The idea of the creation of twice twelve moons originated in the delnsion that in every period called nero moon, moons were really made or mannfactured new by the creator. The number twenty-four was perhaps snggested by the observation of lunat eclipses, or mock moons appearing in hazy weather. The eoyote as the ereator of the moons (and the ereator of the universe among the Central Californians) naturally desired to lave as many moons as possible, while K'mukantch, as the wolf's antagonist, thonght it better for the benefit of lis own ereation, the hmman beings, not to make the year too long. If the winter had to last twelve months instead of six, how could they eolleet roots, bulbs, seed, fish, and game enonglı to live through sueh a length of time?

105, 2. shipatyokanka. Two moons being on the sky simnltaneonsly wonld necessarily often eover and thereby eelipse or lurt each other.

105, 2. igga-idshnank. The mother-eoyote had hing up the twenty-four moons made by herself aronnd the walls and ceiling of lier winter-lodge, which in this myth signifies the sliy. The suffix -idshna points to her walking from one spot of the lodge to another while bnsy in suspending the moons.

105,3 . gn̂'hlì'. A great deal of shrewdness is aseribed to the prineipal deity of the Klamath Lake people as well as to those of other hunting tribes. He manifests his astnteness in entering the coyote's lodge in lier absence only, and to prepare a triek for her there.

105, 4. tát' né for táta nen.
105, 5. Hitá tchía! is pronounced as if it was gue word only: hitátehia.
105, 6. shî'shamka, distributive form of sh'ı̂'mka, to hum, grunt, to make hä hä. He grunted every time he planted another awl, sometimes in an interrogative tone of voiee, and did it to disgnise their seeret planting into the gromnd.

105, 7. wákaiteh composed of wál haiteh; wásha=wéka composed of wásham wéaga; tyéwag or t\%éwaga, dimimitive of tyéu first, first in order; eldest; ef. lin'ktag.

105, 7. tû'm haktch. This language has at term corresponding to onr too much (tû'm tehátehni), bnt none which renders onr too with aecuracy. Adjeetives or adverbs qualilied by too are therefore prononneed with a higher pitel of roice and the quantity of their main vowel is inereased when the Indian intends to express this adrerb.

105,10 . wakaí, "why not," a combination of wák and ká-i.
105, 14. gatpanû'la gî'ta: he lias come here and has left again.
105, 16. Kîtìta. The coyote-wolf, while rolling forth and back on the ground, as these aninals are in the habit of loing, ran her belly into the bone-awls insidiously planted there by K'múkantch, so that the eutrails shed their contents on the lodgefloor.

# Skélamtcham Tchashgayáralam Shasitaphěléash. <br> <br> MYTH OF THE MARTEN AND THE WEASLET 

 <br> <br> MYTH OF THE MARTEN AND THE WEASLET}

Grven in the Klamati Lake Dialect by Dave Hill.


máklaks tánkt. Tchúi sgáyue Skä̀lamts Tssásgayaks î'ktchatkî snáweds: 3 Indians then. And dispached old Marten Litele Weneel to fatch a woman:

 alons to fatch women, and far off dieging (roots) bemes (them). On the prairio many

wéwanuish îkáyula tî́tatsa pî̀la, káái hû'shkank K'mukámtsàn stû́leōls: womon bs pickeod out prstuy ones only, not minding of $\mathrm{K}^{\prime}$ makiamtoh the orider:

Tsáskai: "gén m's nî spûnshipkía." At häméze K’nukámts: "kaní ná-asht? 9





K'mukámts stûlî́sht pî́ts. K'mukámts stâlî' wä'ka m’ná: "shlîi'sht m'nálsh 15




## NOTES.

Compare with this myth the first part of the "Mythic Tale of Old Marten" (Skelamteham shashapkeleash), which contains the same subject-matter.

107, 1. Yámsî, contraetion of Yamashî. This is the name given at present to a monntain North of Klamath Marsh; from this direction the eold winds (yámash) blow over the highlands on Upper Klamath Lake.

107, 1.3. 9. Tcháshgai sometimes occurs iu the diminutive form Tehashgáyak, because the Weasel is regarded as the younger brother of the Marten.

107, 2. saikiän, a contraction of saiga $\bar{e}^{\prime}$ 'ni: they went to the prairie, where the women were digging the edible roots.

107, 3. Skä'lamts. I have given this myth elsewhere in a longer relation, where the part played here by K'múkamtch is played by' Skélamteh. Even in Dave Hill's relation the Marten is called, but once only, by its real name Skélamtch; K'mákanteh and Skelantch are mentioned here as identical. The term skēll, when uot employed in its inythologic sense, means a long piece or strip of tanned otter or marten skin, used for tying the hair, or for other purposes.

107, 3. 4. îktehatki snáweds etc. One woman only is mentioned here, instead of the two, whom Weaslet was ordcred to bring home as wives for his brother K'múkamteh and himself.

107, 5. wéwans a very comınon elisiou for wéwanuish.
107, 9. kaní ná-aslit? ellipse for kaní ná-asht gî?
107, 10. uû ä'plkolatkik. Instead of this may be said also, ä'pkatki gíula nû: "I strietly told (you) to bring iu."

107, 13. sa waslalá. The two boys went together hunting elipmunks.
107, 14. sháwala to adjust stone-heads; shawalia, sa-ulía to adjust stone-heads for or in the intercst of somebody. Flint-, obsidiau- or irou heads are placed only on wararrows or on arrows used iu killing large game (ngé-ish, ngï'-ish); but the táldshi or lighter arrow, used iu hunting birds, and the taldshiága, arrow used as boy's plaything, are.usually provided with wooden poiuts only.

107, 15. K'mukámts stûlî sht pî̀'ts stands for K'nukántchash stulìsht pìsh, the pronoun referring to the little son of K'múkantch.

107, 15. shli'sht. In this sentence m'uálsh is the subject of shlî'sht, and the direet object of shlín is not expressed.

107, 16. lii -udsha: they went out to play, from léwa, $1 i^{\prime}$ wa to play.

## Skelamtcham shashapkéléash.

## MYTHIC TALE OF OLD MARTEN.

Obtained in the Klamati Lake Dialect from Minnte Fboben.

Shkä'lamtch mat tchía shetxé-unaltz 'Tchashýáyaks. Shkä'lamtch shtûlí Old Inrten, cothey lived as the older brother of Little Weasel. Old Marten gent


 Weaslet ooming there, hetook from thom all sknil-capa, (hat) not away of the one-
zapksham tchi'sh, ítpampěli Tchashgáyak, shéwaua Skélamtchash kmă'.
osed (women) also, Litrought Little Weasel (andl) gave to lid Marton the oaps.

 nánuk gátpa Skélamtchamkshi shkashkétkaltk kä'sh. Skélamtch shewanápêle kmǎ' wéwan'shash, puäkámpěle ladshéshtat, hä'měta Tchashgáyaksh: 9 turreed the caps to the women, ithere (them) back out of has bolge, (nand) emid to Weadet:


Tchúi hûk shtchû'shtchðatk wéwanuish wewä'kala. Shû́hank=shítk 12
Then the women borochildrem. At the same time when

 lé-utcha; hî'shla nté-ishtka tatáldshiak. Léwatkuk tátakshnî gatpámpčli; 15 went to play; they shot with their bows littearrowe. From the play the boys neturnod;



Tchákiak heméze: "lhîshûtúnkapksh pû'sh nûsh hû̂́n gî" (msháshaltchatk
 they, discovering osqulirel tiey almost ahot



 hî'nksh."
himu."
Tchíi mbî́shan päíu géna wáshlaltchuk; shlía sha wáshla, gánta sba Then next dsy again thoy to hunt chopmunks; saw thoy a chipmunk, crept they




12 géna sha, slláa sha wáshla. Lápuk pî́pělantana gánta shawaltánkank travelled they, sam thes achipunuk. Both from oppasito sides ecrept ap moving aloog the gronnd
 shot; Jarren's littleson almoset hit Weasel's litto son. Weaseelis litulo son


 n̂'shîtal ; lípuk tehúi k’léklzatk ípka.
18 tû̀sh ak nen lî̂̀k wák kieàlnq?" Skélamtch kíai-i kéktchank hû'nksh, shkō'l-



 he carrioul them With monraing eries
home;
to cremate (them)
 i-ámnash éna. Tchúi sha lû’luksla, tû'těnipnî' sha lápuk îwálpěle. Skäa’lam of beads brought. And they burnt (them), ench five (bugs) they both emptied on To Marten
 finnlly beads wero left over. Then they retnrned to their lodge $\begin{gathered}\text { after perferm. } \\ \text { ance. }\end{gathered}$

Skélamtch hém'ta T'chashgáyash géntkî gíug Mû'shankslıi, pî géold Marten said to Wensel,

gíug. Ske’l heméze: "ká-i î génuapk Yámshamkshî, nû'tak gésh shaná- $¢$ ulî Yánıshamksh'; mî'sh nû̀ géntki Múshamkshî." "Ká-i an Mû'shamkshî to the North Wind; yon I (want) to go to South Wind's "Fet I to Sonth Wind
gē'sh shaná-ul' ", at pî hém’ta ná-asht. Tchúi géna Tcháshgai Yámıshamksh; gátpa hátokt eíqa Múash; eízishtok Mưshash k’léka Tchásh- 9 North Wind's
lolge $\quad$ he cane $\begin{gathered}\text { there, } \\ \text { (when) }\end{gathered}$
gayak. T'chúi Skélamtch Mû'sham nû'sh lalkádsha; pä'u Yámshamkshi Weasel. And old Marten of the South the head cut off; $\begin{gathered}\text { Wind } \\ \text { aggain, } \\ \text { to the North Wind's } \\ \text { lorgs }\end{gathered}$ géna Skélamtch, lalkédsha Yámshamtcham nû'sh.
went Old Marten, (and) ent off the Nortb Wind's hend.

haksháktchuitk. Lĕmé-ish hushtánka Skélamtchash, sméwedsh tî́tash carrying in his dress. One Thinder fell in with Oll Marten, $a$ woman longs shells haháshtamuipksh shî́litanka. Snáwedslı hém’ta Skélamtchish: "wák îsh having as earorinauconts he pursned. The woman cried to oll Mgrten: "somehow no shû'tï, gé-u shá-anoksh!" Tchúi Skélamtch heméze: "wák hai tchî' m's 15 nû slıuté-ıapk?"" pniudaktín tcha kátchannat, tchúi guhuáshktcha. Tapítak I shall protect?" blew (ber) inotantly into a pitch.pine and continued his way. $\begin{gathered}\text { Risht after } \\ \text { limim) }\end{gathered}$
Lěmé-ish petégank hî́mboks kshatgatnû́lank shíuga snáwedsh. the Thuuder tearing up the log (and) extracting (her) killed the woman. Skélamtchı tî̀ at gátpa Lemé-isham ládshashtat. Lápi títsga-ak Lěmé- 18 ish tchía shukîkash hû'nkimsham. Skélamtch wā'shî gulî tchuyétk Yám-
 sham núsh; wayálpa nánuk wā'shîn, wákish tchîsh lákělaka. Kä'-utchish
 gánkanktka, Skä’lam shá-amoksh, wawä'kalam pî'l hû’k tchī'sh ká-i wétk. 21 returned from the Marten's kinsman, of his children alons
hult huut,
Lěmé-ish gatpámpêle, máklaks tû́m I'tpa. 'Titská-ak Lěmé-ish stî'llidanka The Thnnders returneed homec Indians many they Ths old Thunders reported

Tұé-u Lĕmé-ish heméqo: "ró tuáta shkaínihaktch gátpa, nû' ak ya lıûn The ollest Thander said: "Whosoover strouger (man) lias come, I (can) cer-



6 shănank tû́ gá-ulapgapěle pä'patchle lápok wakî́slı; pétchtnank lúizipěle. ont $\begin{gathered}\text { orer ho went on op (of pat his feet } \\ \text { thero } \\ \text { winter lodge), }\end{gathered} \begin{gathered}\text { on two of insilde laddor ; } \\ \text { steps ouly }\end{gathered}$ stepping on he ran ont again.
 gátpa." Tatұ̌̌lamnî' tclıkash heméqe: "ká tuák shkaíneakslı tchîwíqa q" $\underset{\text { baid: }}{\text { bas cowe." }}$ "whe one intermediate bas come." The one intermediate too said: "what sort of a stronger (man) is insidel"
9 gekanshěnû́nk tû́ ga-ulapgápěle pépatchle; tátyělam=páni gût tô̂tkt lûlula (and) ranning out he went on lodge-top fand stepped down; half-ways having climhed he rattloil
 giá-ulapgapěli, gulípěle, gélzalgitk hî́kknshampěle tútutu-û́ta. "Ya! ati" mounted np the ítder, wont in, bavigg cimbed behurried out again whilotatntn-cerying. "Tobe by far

 hû́kampěle. mu ont again.
 I'tpa. Lemé-ish hém'ta Kä-utchíshasl: "atî' a nā’lsh tuá winnî́zitk gátpa". he The Thunders said to Gray Wolf: "hy far than wo some stronger (one) has come".
hronght.
 18 vấlì tchíyesh!" Tchúi Skélantch shanatchvî́lank nén nélqa m'ua tchúyesh;
 again. Ontered (u)
lodge)


shláltpa táluodsh máklaks. Tchúi sha ktái kélpokshtak íkagank i'wa gavofor nes, to stew, the poople. And they the stones si suon as hested took ont (and) dipped
(them)
kálatî ámbo tchî'pgank; I'wa sha tchúi Nókshtak sha ktái i' $\mathrm{I}^{\prime}$ akpélc, into a kaia water coutaining: pntin they then. As soon as stowed they the stones took ont again,

lash. Skélantch gáptchatka shîtchálshue máklaks kálati. Tchúi Skélamtch


 tchámpka Tchatchớyash; "undshé'k mîsh nî tchulē'ksh lîlhankshti tchē'k whispered to Littio Wezeel; "by and hy to yon I meat of renison at hast

shash kâla, Ké-udshiámtchkash nûkaltámpka tchulē’ks. Tchúi nû́kst 9 to them the hncket, old Wolt also hegan roasting meat. When it was done,

tchulé’ksh Tchashgáyaksh. Tchúi sha lû̀lal xa pá-ulank; Skélamtch ktánmeat to Little Woasel. And thes went to bed haring dinge eat. Otid Marten fell


tám'na sha. Tchékag píl télshampka Lěmé-ishash kéyak ktánshna. Pén conitiuned thers. Blacklird tuly looked towardis the Thnnders (aud) not was alleep. And




Lěmé-ishamksh, hihashlûtchtánka lák Lemé-isham, tékish shash huhashlî'to Thunders' place, tied together $_{\text {the halr of the Thnnders, }}$
amna; heshamkankō'ta: "Skélam tápia gēn lúelat". Tchúi Skélamtch





kshōlí Leméish. Huhashtétpka tekíshtka; "Sikéldin tópia gen lúalat"!
the Thunders.
They stabbed each with thelong
other






9 wálza; Wékweks shû'waltktcha Tchä'kaksh tû́la, shlû'shlakshga shual $\chi$ Sta.

 $\underset{\text { people }}{\substack{\text { utuíshash } \\ \text { phnulû́kuapkak." } \\ \text { will fribten only:" }}}$
12


## notes.

This relation of the myths is more circumstantial than the corresponding one obtained from Dave Hill, whielı onits some of their charaeteristic features. We have here an interesting and probably the most popular part of the whole cycle of martenmyths known to the Klamath Lake people; the above is not a single myth, but a series of myths, some of them thrown together in a rather loose connection. What comects then all is the faet that Weaslet is the constant eompanion of his older and more sagaeious brother Old Marten, who combines the qualities of Reineke Fox with that of an elementary power of irresistible foree (shkaini). The Skélantch myths present themselves in the following order:

1. Seleetion of the one-eyed females as wives.
2. The children of the two brothers destroy eaeh other.
3. The fathers cremate their children's bodies.
4. The Winds are exterminated by Skélanteh.
5. Skélamteh hides a woman before one of the five Thunders.
6. Skélamteh enters the lodge of the Thunders; the hat on his head aets as a spell und prevents them from entering it.
7. Old Gray Wolf, Marten, Weasel and the five 'Thunders are feasting on human Hesh in the lodge of the Thunders.
S. Skélamtel sets the lodges of the five Thmuders and of the two Old Thmnders on fire and kills the inmates.

109, 1. shkä'shgatkaltk. A verbal adjective of shtkatkecla, to earry on back; kä, ka is the radieal syllable, found also in kä'mat, buck. This distributive form is apparently due to voealie dissimilation. Women carry eonieal baskets (yáki) on their baeks when digging ruots or bulbs, and throw them over their shonlders into these receptacles.

109, 2. 6. 8. Skelainteh. Sce Dave Hill's relation of the same myth; Note to 107, 3. In speaking of somebody who aets on the sly, and differently from what he professes and means to do, the Klamath Lake people will say: "He aets like Skélamteh." This is one of the few proverbial loentions, or at least figurative modes of speech that ean be traced in this tribe.
$109,3 . \mathrm{kma}{ }^{\prime}$ is the rounded light eap nsually worn by females, fitting tight to the skull. It is made of the stalks of aquatic plants, several species of them entering into the manufacture of each eap. The taking away of the sknll-eaps was intended as a signal for the women to go to their new homes.

109, 6. táta. The words of reprehensiou addressed by Old Marteu to Weaslet are: "Did I ever order you to bring the eaps of any other than of both the one-eyed women? I told you to get the eaps of both one-e yed women only." Lápuk belongs to slitehinsh-


109, 6. shtehâsh $\not$ apkam. The distributive form of shteh $\hat{u}^{\prime} \nless a$ is so diffient to articulate, that abbreviations of it like the above and others, have resulted. Shtehíza is evidently the medial form of tehóza, and its meaning is therefore "to suffer destrnetion on oneself." Cf. shtchíyampka.

109, 10. hî ä'plkatki. After í'pkatki supply gî: "said, told."
109, 11. The text forgets to mention the ealling in of the two one-eyed women.
$109,1 \%$. Shî'lank=shîtk. In many mythic stories the newly-born children are made to grow miraenlously fast, so that when a few days old they handle bow and arrows, and after a month or two they are adult people.

109,13 . ntéyăla, to make a bow or bows (nté-ish), nteyákăla, to make little bows (uteyága), nteyakalía or nteyakalíya, to make little bows for somebody.

109, 13 . ńnak, son, is varionsly prononneed $\hat{n}^{\prime}$ nak, vúnaka, wúnak; and so is its diminutive ímakag, únakaga, vúnakak, little son, "sonny".

109, 15. híshla has two meanings, both reciprocal: to slioot at each other, and to shoot at the mark, rivalling to outdo each other in markmanslip. Of. 24, 17.

109, 15 . Léwatkuls for léwatko hîk: they, after having plased; partieiple of léwa to play.

110, 1. hîshútánkapksh ete. "This was an approaehing himself on the sly towards me" is the literal rendering of this sentenee, in which the first term is a nomen actionis, a verbal indefinite. The two pronouns are governed by it.

110,3 . mîsh shli'shtka gî'uapk, if he should want to shoot you; if he should shoot at you purposely.

110,4 . Shayuakta, "he knew." Omniseience and preseience are among the charaeteristie featmres of Old Marten, who is the personifieation of K'múkamtch. Of. 107, 1. 3. 14. 103, 5. and Note to 107, 3 .

110, (6. hútkalpéli, to rise up suddenly, to jump up again (thongh killed beforehand). Cf. 108, 2.

110, 11. "shuî'ulatchgankan hừu gî." Marten's son said, that his arrow, when
dispatched after a chipmunk, struck a log or tree, glauced off from it aud came very near killing Weasel's little son.

110, 11. 21. guháshktcha instead of guhuáshktcha, ef. Dietionary.
110, 17. vû'sho, breast, chest, is also pronounced wúshu, $\hat{u}^{\prime}$ shu; $\hat{u}^{\prime}$ shutala, in the chest. k'lekizatko is the distributive plural of klekatko ; k'leka, to dic.

110, 18. má'ıshaktch, so long; stauds for māntchak tehí. The terminal ak has to be taken here and in 110, 14. in the seuse of the diminutive sutix: "a little long".

110, 19. $\underline{k} \ddot{z}^{\prime}$ la to do ar act in the wense of amusing oueself, playing, gesticulating, or acting iu a loud, noisy, or grotesque manner.

111, 1. túnepauti. The partitive case in -ti, if it stands for tumepanta, is used here, because the bagg of neckwear bronght by Skelamtch were comited on the digits of one hand, while those of Weasel were counted ou the fingers of the other.

111,3. wewilína. Beads were left over to Old Marteu, because he had brought more than five sacks full to the tchpínut or family burying ground, cmptying only five sacks on the child's pyre. This was a fabulously extravagaut expenditure, the beads stauding high in price and the sacks or willishik being rated at more than one bushel each.

111, 4. Mû'sh and Yámsh, syncopated fron Mû’ash aud Yámash.
111, 9. eizishtok Mn'shash. The South Wind had put his head out; that is, a south wind had been blowing when Little Weasel died and hence was supposed to be the real cause of his death.

111, 12. Lěmé-ishash. From the followiug it appears, that the five 'Thunders represent more the flash of the lightning (lúepalsh) than the roll of the thuuder. There are many of them, because the thunder, wheu rolling over mountains and valleys, often increases again iu loudness after haviug almost died out, and five is the often recurring "sacred" uumber of the Oregonian aud other Northwesteru Indiaus. The radix of lemé-ish is lam, which indicates a circular, whirling motiou. The five Thunders are brothers, liviug in a winter-lodge or earth-house: Lěmé-isham tchi'sh, thought to be a dark cave; their parents, the two Old Thunders, live in a káyata or low, small hut covered with bulrush mats. The short episode 111, 12-17 does not refer to all the five Thunders, but only to one of their number.

111, 13. tû'tash is the long white marine shell, knowu as dentalium; it is one of the most common Indian body-ornaments. The white resin flowing out of pine-trees seems to be symbolized in this myth by the dentalium-shell.

111, 14. wák ish shû'tia, for wák sháta î nîsh : "somehow do (something) for me."
111, 20. In wā'shîu are combined two locative particles: $i$ aud $n$ (for na).
111, 22. máklaks tû'm (for tû'ma). The Thunders brought home as food many humau beings struck by lightning.

112, 1. wanúnga, the distributive plural of $\hat{u}^{\prime} u a k$; explained iu the Dietionary.
112, 1. wenuíni a tuá gátpa etc. Here and throughout this paragraph tuá means "some kind of."

112,2.3. shkaini combines the meaning of strong with that of bad or mischievous, and answers to our demoniac ; shkaíniak or shkaínihak stauds for our comparative: stronger. The -tch, -S, -sh appended is an abbreviation of tela, nor, and shkiyent stands for shkaini at.

112, 3. Gelkangha. Old Marteu han entered the solin "earth-honse" of the Thun-
ders, while the Thunders stopped in the small kayata which was the abode of their parents. To enter such an earth-lodge a high lalder called ga-ulálkish must be climbed on the outside, and another ladder, as long or longer than the other (wakish) leads into the interior Pätchō'le nā’shak, pépätchle (for pépätchōle) lápok wakísh: "he had stcpped once", "twice" down on the iuside ladder; that is, he had made one step, two steps on it commencing from the top. Each one of the Thuuders, when trying to penctrate into their own lodge, gets a little further down than the previous one, but all are driven out by the chilling, powerful spell of Skélamtch's headdress.

112, 7. gúlipèlánk. The second of the Thunders, frightened at the ill-success of his experiment, retired again to the low hut or kayáta, where the other Thunders were and where their parcuts dwelt. This word has two accents on account of shash being enclitic ; cf. 111, 2. 112, 13. 113, 9.

112, 8. Táťĕlamni refers in this connection to the relative age of the brothers: "the third in age of the five Thunders."

112,9 . gekanslěnû'nk: for gékanshna hû̀nk. Cf. 113, 12. ktánshan nánui $\% \%$ olдótak, for: ktánshna nánui sh $\neq 0$ oloóta ak.

112, 9 . gû'tzitkt, a contraction of gû tkitko at.
112, 11. 12. "Ya! atî' a nā 1 lsh winnî' $\chi$ itk tuâ'ki." This was said by all the five Thnnders simultancously and unisono. In tuâ' ki, á is altered into $\hat{a}^{\prime}$, almost $\delta$. The inserted particle hû, $\hat{\mathrm{u}}$ "in the distance, out there, over there" seems to have produced this change.

112, 15. li'lhankshti i'tpa "he brought some venison," a phrase corresponding exactly to the French: "il apporta du gibier"; both nouns standing in the partitive case. These partitives are governed by another noun in 113, 6 (máklakstì) and 113, 7.

112, 21. pûelhî': they threw the dead Indians down into the lodge from its roof. The snffix-l-indicates a downward direction, like -ila, -kuéla etc., and occurs also in 112,17 , hä'měle, to speak in a downward direction, to shout to somebody standing below. The suffix hii means down to the ground, or on the ground, carth, soil, and since the lodge-floor is the soil itself, it also means "into, or in the lodge or wigwam".

113, 2. íwa sha tchai. They put into the bucket the bodies of the dead Indians to stew or boil them up.

113, 2. Nókshtak etc. The gray wolf, the marten and the weasel all being carnivores, there is nothing extraordinary in the fact that mythic fiction lets them participate in a meal consisting of human flesh.

113, 3. háshpa shash. Shash stands for máklaksash, the dead Indians.
113, 8. nánnk wâ'ta. Marten ate up all the human flesh which he had taken out of the kála.

113, 8. shéwanank. The verb shérana refers to a plurality of objects, the objects being sometimes expressed by a collcctive noun, as here (tchaléksh).

113, 9 . Ké-udshiámtchkash stauds for Kéndshiamtch tchkash; nû'kla is to roast on coals; tchule ${ }^{\prime} \mathrm{ks}$ is here reuison meat.

113, 13. ka-uloktantktám'na. The verbal suffix -tám'na, which marks an action often repeated, or continucd for a long time, is not here, as usually, appended to the simple form of the verb, but to its derivative in -tka.

113, 14. Tchékag. The blackbird has yellow eyes shining bright in the darkness,
and on that aecomt the myth makes it watelful at night. This is another birdspecies than the Merula, known in Great Britain as blackbird.

114, 3. huhashtapkuak. They suspected cach other of the trick, by which they hat been tied together by the hair when in danger of being consmmed by the raging flames, and in revenge stabbed each other. Huhashtípknak is rocalic dissimilation for luhashtápka ak; cf. shiwálıash, 80, 11.

114,8 . kathhian. Weaslet missed the heart in the fire when striking at it.
114, 10. shíyuaksh: "Yon will not be able, or not be powerful enongl, to do inischief." The last heart that flew up is a meteor going through the skies, while the four other hearts indicate successive thundereclaps. When a metcor is seen flying west, the tribes of the Columbia River will say: "That's a deceased big man's heart going to the Great Sea." Cf. Note to 41, 7.

# Sháshapamtcham Tchéwamtcham tchîsi shashapkĕléash. 

## 'I'HE MYTH OF THE BEAR AND THE ANTELOPE.

Given by Minnte Froben in the Klamatil Lake Dialect.

Sháshapamtch Tchéwamtch tûla tchía. Sháshapamtch lápa wewéash old Grizzly Old, Antelope wlth lived. oldshe.Grizzly two childreu


 mé-ishıt. Sháshapamtch hû'nk slıpé-ukitchna; tchíi sha gḗmběle tchî'shtal. bad dug. Old Grizzly (them) kept on eating np; then they returned homewards. 6 wamtch yǎki shtági, Lốkamtclı gî̀nka méya; pä'n sha gä'mpěle. GátAntelope (her) basket filled, Old Grizzly little dug: again they returnen (limmo. After


 ye slanl skip down from the lolgo: the hearts to se wonld get loose! not yo

12 ámbutat: pû́tank $\bar{a}^{\prime} t k^{\prime}{ }^{\prime} a^{\prime} k u a p k$."
nader the smothering ye milght dle."
water:

Tchúii pä'n Sháshapamtch mbû'shant Tchéwaintchash tû̀la géna méidshuk. Tchéwamtch lû'piak shtági, Sháshapamtchash gî'nk mé-îshî kii'sh;

 nǔ'sh; kuatcháki wē îsh!" Tchéwamtch heméze: "t̂ntchék nû mî́sh


 tchága Sháshapamtchash. Pä'n pí tchkash kuatchágash háměni Tchéthe firr old She Grizzly. Theu she alpo to bite the balr wanted to old wamtchash. Tchéwamtch heméze: "kä̈'gi nûsh gútash." 'Tchúi SháshapAntelope. Oid Antelope said: "none are to me lice." And old Grizzis amtch $\underline{k} a^{\prime}$ sh tchákiank kuátchaguk pū ${ }^{\prime} k p u k a$, tchñi kowíktcha nīsh, 'Tché- 9 wash shíuga humasht=gî́nk, tchúi ktetéga nánuk. T’chúi hûnk nánuk Antelope klilied in this mennor, then cut (ber) np wholly. And all the

Hû́nk toksh nánuk iggá-idsha, tchû́lēksh gî̀lît tchîsh laggá-idsha, kínkag 12 Those but all she stuck on a pole, the meat the anus too sha hung ou a atick, a fmanl
tchûlēks émpěle tchī'shtal, tchúyunk m’na wewékash shewána. Tchéwam of the meat ehe took home, snitit to her chlldren gave. Antelope's tchîsh wewékash tchiléya tcĥ̂'lēks. Tapínkani heméze: "pgî'sham=shítko also to the chilitren she gave ment. The sonnger snid: "to mother allhe toksh nálam mā'sha"; t\%éwag hûk ktí-udshna: "tchî'tchiks! kí-i ná-asht 15 hut onr it tastos"; the elder (it) pnshed: "be slients not no

 tchû́lēks shéwana, nū'sh toks sha gî'nkak shéwana. Mbû'shant pén nû 18 meat gare, tome but they alititeonly gave. To-morrow agaln I



- shû'dshash hûnkiámsham, p'gísha;" gîshápa, pän û̀nak guhuáshktcha 21
while had a camp. these (Indiann), mother;" aald eo, (and) agaln early sho started ont fir
íktchuk tchû̀lēks.
to fetell the moat.
Tchúi wíwalag vữla shasháshapkash: "shuthûlułéna nāt?" Shashá-








not ns (aboont this); prosently bere wo will play thas "
shapka vutátchkia. Wíwalag ná-asht gî: "pálakag $\overline{\text { ant }}$, hutátchkiuluapk!" onhs put the corere ou. The roung so said: "proty ssoon you must open againt" antelopes
" 1 '", a lû́lxag; tchíi wíwalag "lepleputéa, lepleputtéa, lepleputéa.......



 15

 alao ran into: "tro emoke in, tro smoke in ..... smothar, smother." The yong yante not
 wonld nucovor for tho onbes; ufter their death thon thoy uncoverece. Then taking ont
18 lûlkégsh $\underline{k}^{\prime} 1 a \neq p k i ̂$ î'pxa télishtat; txéwaksh ánkutka shû'm tákuank slnát-
 kual látchashtat, tapinikáyentch tchîsh ánkutka tákuank shû'm ga-ulû̀l(it) ap on the lodgetor. the younger too with a prop gapging the mouth on lodgo. kishtalà slınátkual. Tchúi sha shné-ilakshtala gutéktcha, nanuktuálash 21 sha shtulî́dsha ká-i sháptki giug Lúkash gátpampělisht; wákash pîl sha
 yámtki ággaipksh.

$$
\begin{aligned}
& \text { forgot an it atuck in the } \\
& \text { celling. }
\end{aligned}
$$




wiank shléa lû̀lzag tchû́kapksh léggūta häméze: "at nî'sh tátaksni Tchéing sho sniv the cubs to bedead (and) eabbing she asid: "now me the childron of old
wamtcham ne-ulaktámpka!" Tchúi wiwál’aāksh hamóasha: "tát $\bar{a}^{\prime} t$
 wawatáwa ktchályishtat." Sháshapamtch hokánsha tû'sh hai at tátaksni are sitting in tho sunshine." old Grizzly ran ont to where now tho children


wálya Sháshapamtchash: "gî́n at a nát kátnî léwa; léshma ai í nálsh." replicd to old Grizzly: "here we outdoore play; not find you ns."
Pēn Sháshapamtch hókansha.
Again old Grizzly ran out tof the

tátakshni, kákiash lî'sh î ká-iga." Trehúi Sháshapamtc̣ vûla: "tû'shtal the children, whom you look out for." - And Old Grlzzly askod: "which way
haítch sha géna?"
then
they travelled?" Tchúi $\underset{\text { And }}{\text { shákta }}$ the awl $\underset{\text { told }}{\text { shapíya }}$ Shashapámtchash: " "qítal a
 pamtch hátaktal kūtéguk tchukťakánka; késhguk gutéksh. Tchúi gutéGrizzls throngh it to crawl In attompted; conld not she crawl in. Finally getting
 genúta shuáktcha ná-asht hû'k Sháshapamtch; pén heméxe: "tûsh gînt 18 walkiug wept so old Grizzly; then she sald: "where málash nû géntak shléta tatákiashe?" hémkankatchna génuk.
ye I am golng to find the children ${ }^{\text {y }}$ she sald repeatedly whill walking.
 Then tho yonng antelopes she orertook while they coamped in a cave: hnllding a large fire
skû'lұa. At tátaksni shémtchalqua Sháshapamtchash pinodshasht m’nálsh; 21 she lay down. Now the children became aware, (that) Old Grizzly had overtaken them; théwag tapî'nkayentch wil'hágsh skishû'la; "at a nā'lsh hû'ktakag pinū'dsha; the elder the jounger antelope woke ap; "now ns 'she' caught np with;

ktána kshéluyauk lû＇lukshtat．＂Mbî＇shaut tchēk málsh nût tatákiash shákě－ went to lying aear the fres atilast with ye I chllifren whll play
elenp

3 ktándsha．Tchíi wíwal’hag ktánhniss 1 shîtîyakiéa ánkutka；tamếdsh shogot asleep．Then the young antelopos the sleepingone bonbarded with etirke；whether
 she was asiecp trying，theythrow（them）．And bhoy not shemoving about ran out of kî́thětat，tû＇shltchná sha palakınálank；vî́shnk Sháshapauntchash m’nálsh 6 pînódshuapkslıt Shî́kamtcluash sha haměkúpka，kî́tarsh stû̀kapksh galali－ nóta：＂nkî̀llauk nálsh，kúkui，skō＇tki，hû＇ktakag nálsh kpî̀＇dshapka pî＇nod－ water：＂Very fast nas，nucle，erose over，＇stlc＇ne is chasing（anal）will

9 Shî́kshash．Tchúi Shû＇kamtch pníntakta shash shlólushtat，ka－ukawá to old craae．Thon Old Craae Hew them into a whirtle stcick，（anad）ratiled
 washash shiúgslit Sháslapamtchash，Shî̂kamtch ndshenshkáni tclîsh Antelopo was billed by oft Grizaly，Old Craike the soung onee too
12 shuashuéktcha．＇Shốkamtch shuáktcha：＂é－ush tchiwá，é－ush tchiwá！＂ Ndslıenshkáni tchîsh sluashuáktch：＂é－ush telû́t clı̂̂ tehî＇tchû．＂
The soung（eranes）allo wept：＂lako wat－wit．water＂

15 ＂gaa tuí nink tatákiash shakemíyuapk pshépsha lû́lpatka；̂̂＇nagîn shash， génuish tû̀toks hû̀ksha gátpa Shî̀kamutchamksll．＂Tchúi pén guluá－ leff the caree，out thero they reasbed to lla Crinos＇s lame．＂Then blarted sliktcha Sháshapantch haítchnnk wíwalagsh；kueísh sham laítchna． out Old crizaly to follow the soung autelelpes；the tracks of them sbe folluwed．
 Shû́kamtch häméze：＂ká－i nû shlèá tátakiash．＂Gé a kuéntzapsha tátakiam Old Crane eaid：＂not I eaw tho children．＂Ircre（rerc）the out－going of therhildren tracke
gátzapshuish；hä＇mtchna ná－aslit Sháshapamtch：＂aishíng tā̀dsh î shásh barilag reached（liere）；ballooed eo old Grrzily：＂to conicenP then yon them
 （waal）；qulekly mo eot orer！＂old Crane aald：＂Xone io to me canoe＂；nezain
 Shû́kamtch spû́kua m＇na tchû́ksh，máksha néklank（kiíliak hû́nk vû＇nsh Old Crane apread ont luls legs，a skull－cap carrsing（onleg）（wlthont（he）canoe

# gíng) tchû’kslitka shzû̀tka. <br>  





 sha shiúga.
they killed (lier).

## NOTES.

The myth of the Bear and the Antelope is one of the most attractive and best stylieized of this colleetion. It forms a whole mythic story by itself, and not a series of myths like the preeeding article. The Grizzly Bear's figure is drawn in very natural and characteristie ontlines, and the same may be said of the other animals of the story. Some arehaic words seem to prove that the myth has been handed down for many eenturies to the present generation, which repeats it to the offspring with the same expressions as used by the parents. The arehaic terms alluded to are Sháshap-


118, 1. 7. Sháshapamteh alternates in this tale with Lit'kantch, the "Grizzly Bear of the Ancients," and so does lî́kaga with shashápka. -ámteh, -ámtehiksh is the usual attribute "old" appended to mythologie charaeters. In the mythologic stories of the Indians bear-cubs always appear two in mumber, the older and the younger one. The same may be said of the majority of the other quadrupeds; cf. the two young of Old Antelope, in this story, and tyewag, 105, 9, as well as of many of the personified powers of nature. Cf. the term lepleputéa.

118, 7. 119, 2. gì’k or kínka: a little, uot much; mé-ishî contains the partiele î or hí: "on the gromed".

119, 9. $p^{\bar{n}}$ 'kpuka: she eracked hard ipo-roots, feiguing to crack lice whieh she pretended to have fonnd on the antelone's body. Pickiug lice from each others' heads (gítash kshíkla) and eating them is a disgusting practiee which travellers have observed among all Indiaus of North aud Sonth Ameriea.

119, 10. nánuk: the whole of her body.
119, 11. ipěnē'zi: to place something into az basket or reeeptacle which is already filled to the brim.

119,20 . 21. hî $t$ málam etce. The construction is as follows: "málam p'gíshap hû't máklě̌̆ulk shû'dsha, p'gi'sha laggayápkash hû'uk killi't, hûukiámsham shî̂’dshash": your mother made a fire out there because she must have passed the night there, and beeause she hung up this anus on a stick, while the Indians (who gave meat to both of us) had a camp-fire.

120, 2. telíshknapsht instead of tehishkuápkasht.
120, 10. vntátchkia is also pronouneed utátcllkia, hutátchkia. Earth-lodges whieh open on the top can be closed by means of a large corer placed over the smoke-hole.

120, 11. lepleputéa or properly: leplep=putéa, "to play the smoke ont gane with two on eaclı side," is a componnd of lápěni tero in the slorter form láp, aud púta to be smothering. Láp las changed its vowel into a shorter vowel, $c$, on account of removal of accent, and is here redoubled hy iterative, unt by distributive reduplication. Cf. lepzleks from láp and k'leka. A series of points after lepleputéa indieates that the animals repeated this word an indefinite number of times, while the others were inside the lodge, and while pronomeing putis', they opened again to let them ont.

120, 17. tchízasht tchē $\bar{k}$ kaislmî'la. Litcrally rendered, this means: having perished finally, they uneovercd. The sulbjeet of telnyasht, lû'lyagsh, has to be sup)plied from what precedes. The smoke of the burning rotten wood killed the cubs.

120, 19. ga-nlî'lkish, from ga-nlóla to go out, is the outside ladder of the Iudian " mud-house" or winter-lodge, averaging in length from 10 to 15 feet; the inside ladder, wakish, is somewhat longer to reach the exeavated floor.

120, 21. The complete wording of this scutence, in which sháptki stands for slápatki, would be: kíti sháptki ging Lúkash, gátpampělisht lû̂'nksh (hîı'ukiash).

120, 22. ággaiplish, contraction of aggayápkash: aggáya to be linng up, or to be stuek into; said of long-shaped articles only.

121, 3. auulipka to take away something from another's lodge or louse withont asking for it; the suffix -ipka expressing the idea of "towards oneself." Anulipkuish, "what was onee abstracted from others" appears here in the contraeted form amili'pkīteh; gé-n "by me, through me."

121, 9. tátatataksui shows repetition of the tro first syllables of tatáksui children, but at the same time means "where are the children?"

121, 15. shalgidsha; the antelopes placed the coals there to secure their flight from the Bear; had the coals been put there by somebody else, lakidsha would be nsed.

121, 22. 122, 7. hû́ktakag: familiar diminutive nane given to the Grizzly Bear; hî̀ktag, 121, 23., stands for one of the yonng autelopes.

122,1.2. Mbíshant the ${ }^{-} k$ etc. The seuse of this exelamatory sentence is as follows: "To-morrow at last I will play a sharp game with ye children, when in the day-time I eau nse my eycs to advantage." Lúlpatka is: linlpatko a; "possessing eyes" is the primary significatiou of lúlpatko, but here it means "enabled to make use of the eycs". Cf. múkasham nû lílpatko: I see as sharp as a horncd owl. The distribntive form pshépsha, of pshé, "during day-time" means "any time when the sun shines bright." Cf. pshéksh, noou-time.

122, 9. This blowing of personified objects of nature into stieks cte., is a fictiou of which we have another instance in 111, 16.

122, 11. udshenshkáni. See Note to 71, 6. 7.
122, 12. 13. tchiwá, tchi'tchu: tchi is a syllable found in many words referring to water and liquids, as tehíya to give water; tehiega to overflow. This radical is no doubt an obsolete Klamath word for water and reealls the term tcha'k "water" in Chinook jargon: tltsuk in Lower Chinook, tl'tchuku in Clatsop; tchaúk in Nútka. It also oecurs under various forms in the Sahaptin dialeets. By this lake undoubtedly Upler Klamath Lake is meant. Of. tehiwa in Dictionary.

122, 15. ga tuá niuk for kíå tuá ni gíank; ká-a means here "vehemently, cruelly, sharply", tuá: "in some way or other".

122,16 . shash gémuish : after they had left the cave.
122, 20. "aishíng tā'dsh î shásh nen". Here uen stauds for some finite verb; either shauá-uli î: you want to conceal them; or for ná-asht î shapíya: "you speak so, in order to conceal them".

122, 23. spûkua. The spread ont legs of the Crane had to serve as a bridge to the Grizzly Bear, for there was no dug-out canoe at their disposal to cross the river.

122, 23. mákshá néklank. Old Crane carried ou his leg a vase or skulleap that belongel to a dug-out canoe, but did not possess a canoe himself.

123, 3. u'hlítcha. Grizzly shook out the remainder of the water to let the skull-cap become dry. Skull-caps are used throughout as drinking vases.

123, 6. táldshitko. This seuteuee has to be construel: wíwalay, shō’ksham wewíkalam táldshitko, ugé-ishan, and táldshitko stauds for táldshi gítko: "the young antelopes, armed with the arrows of the Cranc's children, shot" etc.

K'muKámtchikshãm shashapkěléash.

## THE MYTH OF K'MÚKAMTCH, 'THE FIVE LYNXES AND THE AN'TELOPE.

Obtained from J. C. D. Riddle in the Modoc Dialect.










#  

hûhátchna. K'mukóntchiksh shuakteltámpka:
rmnway. K'makamteh crying commenced:
3
"ló-i lóyan lóyak, ló-i lóyan lóyak,"

skûtan kûháshgdsha.
patting it starterl off.
aronnd himgelf
(i








## NOTES.

125, 1. kailash is one of the few instances where inanimate noms assume the ending -sh in the objeetive case. This is, however, no instance of personification. Of. paplishash 94, 5. Coneerning the signifieation of kiála, ct. Note to $96,23$.

125, … kailio, kailiu, rabbit skins sewed together to form a garment, mantle or blanket. As the name indicates, it was originally made from the fur of the kai-rabbit. Skútash may be rendered here by different terms, sinee many Indiaus used their skin robes, in which they slept at night, as garments or cloaks during the day.

125,3 . luelóka. The pluality of the lynxes is indieated by the verb luela, which can be nsed only when many are killed; its singular form is shiúga. A similar remark applies to pe-uyégan and to wawaggáya. Lynxes are usually spoken of in the West as willd cats.

126, 3. l6-i loyan lóyak is probably an interjectional and satiric variation of the verb lualuiza: "they make fun of me", the distributive form of luaiza.

126, 6. Wigá hak: only a little way. Subjeet of génan is K'múkantehiksh.
126, 11, 12. Pshe-utíwash etc. This sentenee shows the following structure: The lmman beings will langh at yon, dressed (as you are) in my miserable, good-for-nothing rabbit-fur robe. ántchiksh here means worn out, old, good for nothing. This word is phonetically transposed from ámteh gish: "old being", "long existing". As such it appears also in K'múkantehiksh, a Moloc 'or'm for K'múkantch.

# Ktchídshuam, Tсhísham, Gúshuam, Wásham shashapkěléash. <br> THE STORIES OF THE BAT, THE SKUNK, THE HOG AND 'THE PRAIRIE-WOLF. 

Obtainfi fiom J. C. D. Riddle in tie Modoc Dialect.

## I.






Ktchì'dsho hûnk ánko tûm shiû̀lagian, tchéi wā'shtat yankápshtian wí-nka. 6 The bat wool munch gathered, therectpon the den pittlog (1) beforo blew on the Mî̂'-ûe pû̀tan hûkánsha, pēn náyanta wā̀shtat hû̀lhe. Ktchídsho tchúi The mole smonthering ran ont, and anather into a hole ran. Tho bat then késhga hushákìsh.

## II.

Tcháshăsh tû̀ma watcháltko nā'sh waíta nánuk wátch ktchínkshtat 9 A sknk many bores.owring one day , all horses into an inclosure ní-ûle. Nāsh tchā'shăsh tchókăsh nkéwatko gátpa. Teháshăsh láki nánuk drove. Another eikunk (with) a leg cut off arrived. The eknk.0.0.wer :ill
 Nánuk wátch tehlālya, pitakmaní.

All lorses were drowned, liself too.
III.

wénkogsht. Tatátaks gû'shu nánuk mîni évishtat gé-upgran wéngyar, to rerifle. That tlmo $0_{0}$ when boga all into the son running perizhod,

#   ž lúela. <br> kin. 

## IV.




Conld not noybody (this) brown bear
Nánka gakankánkîsh shíshala.



wásh máklăks=shítko shlésh gî, tapî'tni tchû'kash nûsh pâ'ni. coyotes - men-alike to look at aro, from hehind the hip the head up to.

## NOTES.

I. In mythology the bat is sometimes regarded as a symbol of watehtulness at night, and this is expressed here by the adverb únāk.

127, 2. 3. 4. shlé-i-ek for: shléa î gî, " you cause to see;" shlé-etki for shléatki in a passive signification: "to be scen, in order to be seen"; sllée-ek for shléa gî: "make it to be scen, let it see."

127, 2. skálaps, a Modoe tern for a hat of some kind. The verb lúťa, used in comection with it, indicates its ronnded shape.

127, 4. ká-i tche nô mîsh ncn. Tche ìà abbreviated from tchēk, particle pointing to the future, or to the termination of au action or state; the verb gì to do or shléa to see or to be seen is omitted : "I will not at all show (it), as you say."

127, 6. yaukápshtia, to place into the entrance in order to impede or prevent egress. The radieal in this term is tháp, stalk, straw, little stick; yána, "down, down into", serves as a prefix.
II. This story of the skunk is manifestly a merc fragment of a longer one, for the omission of motises renders it as silly as can be. I have inserted it here to show the various verbs formed from niwa, "to drive into the water, or upon a level ground". This is a verb applying to many objects ouly; speaking of one objcet, shúwa is in use. For all the derivatives of both verbs, see Dictionary.

127, 12. pitakmaní stands for pi tak m'ua hî'.
III. This hog story is evidently the result of the consolidation of aboriginal superstitions with the evangelist's relation of the Gergescue swine throwing themselves into the Lake of Galilee from the headlands of Gadara. In Chapter X VII of his "Winemu",

Meacham has given several of these coneretionary products of the uncultivated Modoc mind. In making a study of aboriginal mythology and folklore sueh fietions must be disregarded, though' they may be of interest to psychologists.
IV. Races in an undeveloped, primitive state of mind are prone to regard living animals as the abodes of spirits, and most frequently the wild and carnivorous quadrupeds are believed to harbor wicked spirits. These are either elementary spirits, or the ghosts of deeeased persons. To see a spirit means death, and in their terrified state they often behold, as here, the spirit in a half human, half beastly appearance, when coyote-wolves, gray wolves, bears, congars ete. come in sight. Such a sight can cause the instant death of the hunter, or deprive him of his reason, or make lim sick for months. In Greek and Roman mythology, Pan, the Satyrs and the Fauns retain something of these primitive notions (in the panic terror ete.), though these genii were largely idealized in the later periods of national development. In every nation a relatively large amount of superstitions refers to hunting and the chase of wild beasts.

128, 9 . Tanktchî'kni is in fact an adjective, not an adverb; literally, it means "those who existed, or hunted since that time", and is composed of tánk, a while or time ago, tchēk, finally, and the suffix -ni. Cf. 13, 2. 128, 1.

## Sкū́ Ks=Kiä'm.

## HUMAN SOULS METEMPSYCHOSED INTO FISH.

Given in the Klamati Lake Dialect by Dave Hill.

## I.





 (the dead),
 the dsad person the spirit also, msy die $I_{1}$ him for having seen; or perhaps if song-medicins

 skókshash.
the dead man's spirit.

## II.





## NOTES.

My efforts towards obtaining exhaustive texts from the natives concerning their belicf in the transmigration of human souls were not crowned with entire success. Of the two items obtained, No. II is intended as a commentary of No. I, both treating of the presence of human souls in fish. The eause why so many Indian tribes shun the flesh of certain fish lies in the fact that these species were seen feeding upon the bolies of drowned men and swimming around them. This induced the belief that man's soul will pass into the organisms of these finny inhabitants of the wave, cven when death has resulted from other canses than from drowning. According to Hill, the Maklaks believe that the souls or spirits of the deeeased pass into the bodies of living fish; they become inseparably connected with the fish's body and thercfore cannot be perceived by Indiaus under usual cirenmstances. But in one status only they become visible to them; when Indians are bewitched by the irresistible, nagic spell of a conjurer or of a wicked genius. Then they enter into a tamánuash-dream, and when they see a dead person's spirit in such a dream, they are almost certain to die from it. Only the intervention of the eonjurer and of his song-medicinc can save them from perishing; rigorous fasting and ascetic performances cannot be then dispensed with, and with all that no certitude of his final rescue is to be had.

Here as elsewhere the pronouns hûk, húnkiash ete., are inscrted instead of the unpronounceable name of the deceased, and mean: dead person, spirit.

129, 2. pîl máklaks; only dead Indians, not dead whito men, because during their life-time these did not believe in the skáks; this belief is a privilege of the Indians.

129, 2. Hushti' $\chi a k$ etc. This sentence runs as follows: Tchḗ $k$ koks hushti' $\chi^{a}$ ak nisll, hûk tehē’k nîsh síuksh shanahō ${ }^{\prime} l i$, wakiánhua tehēk p’násh (or pû'sh) nư'sh shuíshaltki gíug shanahōlli: "if he (the bad genius) makes me only dream in that manner, then he inteuds either to kill me, or perhaps he wants me to keep the song-medicine for myself." To keep the song-medieine, shuíshla, is to undergo fasts aud ascetic performanecs under the supervision of some conjurer for an almost unlimited time, five years at least.

129, 3. 4. Hä'toks uì' shläát etc.: if I should see (the dead) while I am awuke.
129, 4. Skū'ks-kiäm, a compound word, may be rendered by spirit-fish, letiferous fisill.

130, 1. Kiä'n k'leka etc. The rather obseure sense of this statement may be marle comprehensible by the following: "When fish are dead, they are dead forcrer; hence
the souls of all dead Indians continue to exist in the living fish, in all kinds of living fish only."
$130,2$. tsóatk. 'This refers to Indians who have perished by a violent death, as well as to those who died in the natural way.

## THE SPELL OF THE LAUGHING RAVEN.

## Gifen by "Captain Jm" in the Kuamith Lake Durect.

## I.

Shúyuxalkshi tchúyunk E-ukshikni máklaks hátokt shuyúxěla, túmi

 shúyukaltk hátokt.
danoling there.

## II.

 shkû́ľa káyak tchî'sh gátpěnunk, nánuk shûlừtamantk hátkok yámnash 6 (emad) hay down not yot homo havlning racebod, In full droas a at that spot boado (to sleep).
wáwakshnatk tchish; túla tchish hû́k gákatpantk í'uag sha hû'nk tû'kèlza. with mocasins ou two togethor with (blim) those comivg stopped thoy (and) reseted.
Tchúi Sháshapamtch hû́nk gâldsha-uyank Ké-utchiamtchash skû́lpkank
 sallep. Anpd Old Girizly etolo from Cray Wolf the moceasing beals


 tchúi E-ukshikni máklaks shellualtámpka Yámakishash, Sháshapamtchash where. the Klanath Takeo pooplo comnienced Aghting the Nortbornerm (becaneo) Old Grizally where-
hûnk Kä'-utchishash shíugsht. Tchái Kááakamtch wétanta shash shélby Gray Woir lind been kllled. Thon Old Raven laughed nt thon milen
lualpksh, ktá-i sha k $\underline{k}^{\prime}$ léka.

## III.

## 





6 nákushxenkni shlámiuk shtit'ya shishh'dsha shấktaldshank lák. Tchái

 shna-ulámna taplálash.
spit over the loon.

## NOTES.

I. This myth intends to explain the existence of the large number of roeks found at the loeality called Shinyualkshi.

131, 2. K $\{$-akamtch. The adjeetives -amteh, -ámtchîksh appended to animal names designate mythologic characters. Adjeetives of an equal meaning occur in all the western languages, as far as these have been studied. Cf. Note to 126, 11. 12.
II. In this myth, as' well as in other grizzly bear stories recorded in this volume, this bear is always killed, conquered or cheated by his quicker and more cunning adversaries. Nevertheless his clumsy form and narrow, feroeious iutelleet are very popular among the tribes, who have invented and still invent numerous stories to illustrate his habits and disposition.

131, 5. Kíuti is the name of au Indian eamping-place situated a short distance north of Modoc Point, on eastern shore of Upper Klamath Lake.

131, 6. hátkok qualifies shkûlza and yámnash is the iudirect object of shûlû'tamantk. Shkû́lya, uánuk yámnash shôlû'tamantko, wawakshnátko tchîsh: "he lay down to sleep, kecping all his neckwear on himself, and not taking off his moccasins." Shinlûtamma can in other connections refer to the elothing, but here it has special reference to the beads.

131, 11. kti'ukuela. Tradition reports, that Old Grizzly was pushed over some of the high roeks at Modoc Point.

131, 13. Yamakishash ete. In these words may be recorded the reminiscence of an ancient fight between the Klamath people and some Northern tribe which had come Sontli on a hunting expedition. A Klamath song-line given in this volume also recalls an ancient inroad made by the "Northerners". The grizzly bear represented the Klanatl tribe, the wolf the Northern Oregonians, perhaps as ancient totem signs; tie bear having been killed by an intruder, the Klamatlis had to take revenge for the insnlt.
111. The objeet of this myth is to explaiu, among other things, the origin of the white spots on the head and back of the loon (t́plal). But the myth as given in the
text is far from being eomplete. It refers to a loeality above the confluenee of Sprague and Willianson Rivers, called Ktaítini, or "Standing liock". A high rock stands there at the edge of a steep hill, and, according to the legend, the Indians who put pitch on their head were changed into that rock. Near by, a lumber-dan looking like a beaver-dam, across the Willianson River, partly resting on rocks projecting from the bottom of the river. K'múkantel longed for the destruction of this dam, muddied the water to prevent the Indians from fishing and hired the loon to destroy the objectionable structure. The loon dived into the waters and forecd its way through the dam by main strength. The Indians dwelling on the shore depended for their living on the fisheries, and secing their cxistcuce at stakc tried to gig the loon, but succeeded only in hitting its tail-feathers. When the loon had accomplished his task K'mákamtch offered to reward him in any manner wished for. The loon then wished to have white spots on its back, "and K'múkantch satisfied the request by spitting chalk upon the downy surfaee of its body.

132, 3. lúeluak; formed by vocalic dissimilation; cf. Note to 114, 3.

## BELIEFS AND SUPERSTITIONS.

## I.



 $\underset{\text { taging }}{\text { ťuk }}$ pákluipka.

tchîkî'n tchish hä'masht 1 í-unégshtka gû́lu, txû̀tzuk tchēk hä'ma. Wátchag tho chickon alao when crows jnst aftor sunset the female, for preampling then it crows. The dop
tchî'sh wawí-a î-unégshtka, kú-i tchämlûk.
aliso (wben) whines right after sanseat, tho signa are bad.
Watság tchî'shtat txóťa $\hat{1}$-unä'gshtka; tsúi gátpa máklaks, gû̀lki ngéA dog at a lodgo prophitically jnat aftror sunset; then conies an Indion, attacke, wonnds
isha at hustsō' $\chi$ a. Sa-ámoks hátokt tehía tû'sht hushtchō' $\chi a$, káái hûnk and kilis stibe owner). $\Delta$ relative, (whol there liveal right where the murder wae, . didid not bim



In demented

Kák tyầťatkish; tsúi sa lúluk sa kákam• txû't xatkash, tsúi sa
Araven inasoothsayor; and they belloving the raven's reponterf prophecy, they


3
 $\underset{\text { for thls }}{\text { húmasht sháhunk gifereang }} \underset{\text { sfaka }}{\text { they stick ont }}$ flags.

6 sháyuaks; shakálshtat lakí, tíds sualaliámpkatko.
of mrich acconnt; in the game (it is) wril managing (it).
Tcháslash mû́na lushántsnank mbâwa skî's; tsúi máklaks nánuk The sknnk deop down whilescratching a hole omictod ablast; npon this peoplo all




12 m'na énank. bis talogwith

## II.

 If a gambler of hnmming. tho nest finds, (snd) the gambler well hides (it)
 15 tapî'dshnîsh vumî'; húmashtak shû'ta shaklō'tkîsh, kaítoks kaní vuinî $\chi \hat{1}$.
 Hä kaní tchatchlá́ptcha shhä'-a (kinḱáni tût wá), tídsh tî̀n廿a. Hä kaní If any one a kitnd of freabug finds (searco there thes nre), good fink fit If any one

18 tchi'sh, hû́kt humáshtak tídsh tî'n $\chi a$ tchî'sh.
ambo , ho in thio ameme mas woll acceceded alios.
 kam shkō'kshash. ceased the epritita.




 Indians,
lúela skó; Mōdokni tchî'sh 16la shuátash kiäm tchûká shátma, luumásht=

 ot they kill
(them).

## NOTES.

I. What is contained in these short items refers equally to tho Klamath Lake and to the Modoc people, although those contained under I. were obtained from various informants belonging to the former chieftaincy.

133, 2. páka to howl, bark; pák’la to howl repeatedly, to howl for a while; pákluipka to howl for a while in the distance towards somebody.

133, 4. 5. The cat and the chicken being but recently introduced among these tribes, this superstition must have been transferred to them from other animals. By inversion, the words tchíkin gû'lu, the hen, appear here widely separated from each other.

133, 6. Kúi tchämlûk has to be resolved into: kíi-i tchē mál (for málash) hu'k: "bad then for you this is!" Oruel fights will follow.

133, 7-11. This story is not clearly worded, but we are taught by it how these Indians are conversing among each other with laconic breviloquencc. An Indian living in the vicinity has heard the whining of the dog which means dcath to his owner. He goes there, shoots the man and takes to his heels. A relativo of the murdercd man comes up and is mistaken by others for the murderer. They deprive him of his wife, his property and his liberty; he becomes a madman on account of the injustice done to him.

134, 1.2. The raven ( $k$ ak) is supposed to be a bird of fatal augury, because he was seen devouring the flesh of dead Indians. Compare: Gcneral Note on page 130.

134, 4. kíukayunk. They adjust a rag or piece of skin to a polo and stick out that improvised flag on the top of the lodge to notify neighbors that they had a dream last night and desiro an interprcter for it.

134, 5. One of the legs of a dcad black tmélhak-squirrel is cut off and laid under the gaming-disk or the pa'hla to insure luck to the player.

134, 7-12. Tcháshăsh etc. This is a fragmentary extract of a scurrilous skunkmyth, which I have not been able to obtain in full from my informant, the Modoc chief Johnson, who speaks the Klamath dialect. This myth is well known through tho whole of Oregon, for parts of it are embodied in a popular and melodious song of the Molale tribe, whose ancient home is the country east and southeast of Oregon City and Portland.

134, 7. 8. máklaks nánuk is the direct object of hushtsoga; the skunk killed them by his stench.

134, 9. tápaks stands for tû'pakshash; túpakship, abbreviated túpaksh, is properly the younger sister, as called by or with reference to an elder brother, while pa-ánip
is the elder sister, called so by or with referenee to a younger brother. Two other terms exist for the relative age of sisters among themselves.

134, 11. patkalp'le. The myth adds, that the eagle got up again at dimer-tine and that after washing the face he took a nap before taking his sister home.
II. These items were all obtained in the Motoe dialeet froul J. C. D. Riddle. Many of the articles mentioned as gamblers' amnlets are supposed to bring good luck to the gambler on account of their scarcity, which must have made them more interesting to the aboriginal mind than other objects of a brighter extcrior.

134, 13. ntággal, udakal: to find accidentally; shléa: to fiul, geucrally, after a searel. vumi' is to liide away either on onc's own person or in the ground.

134, 16. 18. tidsh timga is to sueceed, to be lucky; without tidsh in: hútoks tínzantko gî, that man is lucky.

134, 17. slitap is a black arrow-lead made of obsidian, a volcanic rock fonnd in several places in these highlands.

135, 1. hä'-atoks is formed from hä toks with intercalation of the deelarative partiele a.

135, 3. k'le-ugtki-nápkasht is a periphrastic conjngational form composed of giuapkasht, of the verb gi, aud of k'le-utka, the usitative of $k^{2} l e$ ewi, to cease, stop, terminate; -ntka has turned into -ugt- by metathesis. Literalls: "would habitually cease to be in the Pit River." mli $\hat{u}^{\prime}$, the grouse, is called by the Klamath Lakes tm $\hat{n}^{\prime}$.

## REFLECTIONS OF EVERY-DAY LIFE

Monologurs in the Khamath Lake Dhalect by Johnson, Chief of the Modocs
 ndekti'shtka. Tidssii'wa kín-i mîsh úya, tû génuapka úyamnank nté-ish




 snéwedsh; onī'sh kイiäm shéwant î; tû'm nû'sh shewantamnuápka sáwalktko. woman; to ber fish yonmaygivo; plenty to ine she will oontinue togive having recelved
presents.


#    pakólank szólakuapka. <br> (and) after smok- go to bed. <br> \section*{NOTES.} 

Of the two paragraphs of "Reflections" submitted, the first refers to the loss of some hunter's arrows, which had been loancel to somebody together with the bow. The second speaks in a rather egotistical sense of the pleasure which is afforded by succoring helpless aud indigent people.

136, 3. kä'gi. This refers to some arrows, which cannot be found at the spot, to which they scemed to fly.

136, 4. 5. Untchēk, abbreviated undsē, ū'ntch, únds, ûns, points to some undetermined epoch in the future: by and by, after a lapse of time, some tine from now; undsēt, 136, 8., through apoeope and synizesis, stands for untsé'k at; undsē'ks for untchêk tchîsl.

136, 5. Slikútchipk tchiká kěmntsátk, grammatically incomplete forms standing for skikutchípka t'shíka kèmutsitko. The word stick is not expressed in the text, but the suffix ipka, united to shikítcha, expresses the idea of "walking while leaning oneself upon something or someboly". Cf. layipka, to point the gan at the one speaking; tilōdshipka, to see somebody coming towards oneself.

136, 6. kí'slitchipka, to step towards the one speaking; cf. Note to 136, 5.
136, 7. oni'sh for hínîsh, cf. ô'skank for hû'shkanka, 65, 1. Hínish is the objective case of hứ'n; but this pronoun is not regularly nsed when speaking of animate bcings; hû'nkiash would be grammatically eorrect.

136, 7. shéwant î. The words onī'sh kiäm shéwant î are supposed to be directed to one belonging to the speaker's houschold.

136, 8. The term katchkal, tobacco, expresses the idea of an intermixture of several kinds of weeds or leaves for the purpose of smoking them.

136, 8. pa-uápk. A more appropriate term than this for masticating tobaceo is : kátclıkal kpû'yumna.

137, 1. titchéwank. This is in fact the participle of a verb: "I like tobaceo, being fond of it."

137, 2. stoyuápka: I shall cut off a picce from a stick of pressed tobacco and give it to him. Cf. stuyákishka, to clip the hair.

137, 3. kinkani katchgal. If this and the following were not worded in the conversational slang, it would read: kinkánish kátchgal; kinkánish, káa-i túma, tchē̌k pền tríma (or tû'm) etc.

137, 3. kax-i tami. Iudians are not often scen to smoke continuonsly as we do; those inhabiting the Klamath Reserve take a few whiffs from their small, often lome-made pipe, then pass it to the neighbor and emit the smoke through the nose. Sometimes they swallow the smoke for the purpose of intoxication, and the cllder women smoke just like the men. Cigars offered to them are cut small and scrve to fill up their tobacco-pipe.

# WALLINGS AT THE APPROACH OF THE FATAL HOUR. 

Given by Doctor John, ol Ķkasif, in the Klamath Lake Diadect.


 B másha n'sh, shlín îsh nư'sh, káa n's mā'sh', guhuá nîsh, a nîsh káa mā'sha! it pains ino, they shot the lntho lntensely me lt pains, amswolles $I$, unw mo hard it jains!
 tiä'matk lát-a, pálak shä'wan î.", At shéwana nû, at pán; shnulk' át mîídsî. (I am) hungry very, yuiekly give yon." And give (him) I, and he eats; he takes now the apponn.
 A ni k'léka, ā'těni k'lekála." At k’leká. Shû'dsha lúluksla sa lû'lokshtat

hû'nk k'lékapkslı.
NOTES.
This slort incident of war is full of the most dramatic interest, and gives some idea of the oratorial powers of the average Indian. It was obtained from a man who undoubtedly lad witnessed more than one similar scene during the numerous raiding expeditions made by lis tribe before the conclusion of the treaty in 1864.

138, 1. ngï'-ish a ni tä'lyapksh shlin antsa, forms of the conversational language stinding for ng̈̈'-ish a nîsh tälzápkash shlín a sha. gé-u tä’lak "my arrow," a proctic symbolism for the arrow that canses my death.

138, 1. shlkék antsa for shlkéka a sha, but nasalized like shlín antsa. Shkéka properly means to pierce, but is used in a medial sense.

138, 2. mpata properly means to dry up by heat. The cap or hat is said here to kill the man by exciting an intolerable ferer heat within him.

138, 3. mā'sla n'sh. Some impersonal verbs can also assume the personal form of intransitive verbs: mà'sha nû and mā'sha nîsh: "it pains me"; kédshika nû and nîsh: "I feel tired". The Modoc dialect prefers the personal form.

138, 6. 7. atěni for at a nî. Cf. sé, 82, 4. telä́'lyet 90, 11. átěnish, atěni 90, 12. 13. gē'ulěni, Note to 93, 7. 9.

## THE LORD'S PRAYER.

## I.










## II.





 steínash litchlítchli tchússak, mûni lákiam steínash. Húmasht toks tídsh. heart strong (in) perpetually, great of the Lord the heart. Thus $\underset{\substack{\text { (it will } \\ \text { te) }}}{\text { well. }}$

## NOTES.

These versions of the Lord's Praver are.good instances of what can be attained, without using too many circumlocutions, in rendering religious, moral and other abstract ideas in a language deficient in many of them.

For reign and kingdom no words exist, and they had to be rendered by hû'sh-

rendered by "something wieked" and "not to mind"; for "thy will be done" stands "achieve thon". Power and glory become "foree, impetuosity" and "radiance", and daily bread: "flour on every day". In the Modoc version, the wording of which is inferior to that of version $I$, the use of similar expedients will be obscrved.
I. In the Klamath Lake dialeet; by Minnie Froben.

139, 6. inńhuashkpak, phonctic inversion for inulıuashkáplk' î; sce Dictionary.
139, 7. ktchálshkash, from the word ktcláliza, to shine, to be radiant, resplendent.
139, 8. gitk, in an lû́n gitk gi, is the verbal intentional gitki.
II. In the Modoc dialect; by the Riddle family.

139, 10. Gitá käíla is equivalent to gē'nta kiaílatat; in humashták gî the verb gî has to be taken in the passive sensc.

139, 11. Kó-i shûtï: "do not render us wicked." For shátii compare 111, 15. and Note.

139, 12. húmasht nálam. Between these words and the preceding ones there is a lacune in the text. maklaks-shitko, "our kindred": those who look like ourselves.

139, 13. 14. In mî tála litchlitchli the adjective strong stands for "strength, power", while in mî steinash litchlitehli it is used in its adjeetivesignification. In this language abstract ideas are sometimes rendered by adjectives and by verbal adjectives in tko.

## DIALOGUES

## I.

Tsématk. Taté lîsh sha ksíulakuapk?

3

Kápuak. Tátai tchīk sha kshíulakuapk? Plōnnkamkshî áq tám hak

 mbû'shant pîl, mat pá-ula: gät tóks nû wátch káyaktgûk, kúinag morolug only, (chat)hewas eating: out I of my while retnrning awny frow $\underset{1}{\text { gépgapētle. }}$



 tamnû́tka?"
come from?"

Captain. Tháta haí tchî'k sha kshí'ulaktchuapk?
 wáshknî, ák
shak-Shiwast, prob
ably
tol
to
all
all
will come.


## II.

Hlékosh. Tát lìsh mî û'nak?
 $\underset{\text { chilidren }}{\text { tat }} \underset{\text { withi }}{ }$
HLékosh. Wakaítch gé-uga $\frac{\text { kaí }}{\text { not }}$ gépgaple?
 pampěli-uápka.

## NOTES.

I. Dialogue about a dance to be held on the Williamson River; in the Klamath Lake dialeet, by Minnie Froben.

140, 2. Pá-ak ké-i an sháyuakta! is interpreted by "what do I know!"
140, 9. nä'gsh shíwaksh gemplktch stands for négsh shiwákash geuápkash. It is very rare that diminutive nouns, like shíwak, shíwaga, assume the cuding -ash iu the objeetive case; ef. 23, 10. Buti shíwak means not only a little girl; it ineans an adult girl also, and is therefore inflected like snáwedsh.

140, 9. Kúyants $\chi$ ēksh. For this local name ef. Page 91, first Note. Frank aud Allen David live both at that place, elose to the steep western bauk of the Williamson River, while the communal dance-house, a spacious, solid earth-lodge, lies further to the northeast.

141, 5. Mbû'shak=Shiwáshkni, term corrupted from Mbâ'shaks-Shawálshkni: "the one who lives, or those who live at the loeality of the obsidian arrowheards." Moû'shaks=Sháwalsh lies on the eastern shore of the Williamsou River. Cf. Note to 134, 17.
II. Dialogue in the Modoc dialect; by Toby Riddle.

141, 9. Léwa, to play, forms the derivates lé-utcha to go to play; le-utchna to play while going, to play on the way, cf. shuedshna 99, 2.; le-ntchóla to go to play in the distance.

141, 11. gé-uga for the more common ginga, gíug.
141, 12. léwapka to play in the distance, out of sight, or unseen by us; but here this term is more probably a synizesis of lewnapka, the future tense of lewa.

NAMES BESTOWED ON UPPER KLAMATH LAKE LOCALITIES.

Given by Dave Hill in the Klamath Lake Dialect.

K'mukámtch mat käíla shû'ta. Tsúyunks ä'-alk käíla shutólan: K'makamtch, sothey the made. The following ramesgave tho after creatiag: 'Tuli'sh käíla E-ukskíshash shúta K'mukámts kiäm=luelkslía; Tulì'sh tsí"Tulish" place for tho Lakepeoplo made K'makamteb to be their fish-killing placo; Tulish,




 there Dirtharling boI give there. AtWaka inthesweat-honee there youl nhall aweat
 git í spî̂kle-luapk túnepui gitt́; túnepni spû́kle-uapk suawédsh, hä' mî
 $\underset{\text { beecome, }}{\text { uapk, }}$, ká-i pát pálak î

12 Koháshti níast nî elka gî'ta. E-ukalkshi nā'sni élqa gíta; gítats spû̀kle-


 lumeilys. a humband also; bot not, your relatives haring died,
15 hä’ mì sat-ámoks uánuktua tsókuapk. Ká-i î gîtá spî̀kle-uapk ndānnántak: if sour kinemen of all degreea sball have dind.

## Not you theri mill awat <br> lint for throe:

 snawédshtat, hishuákshtat, wéashtat."for wlfe, for hubland, for chlld."
"Nakótk Wi'tlas

 $\underset{\text { ghere }}{\text { gita }}$ ita máklaks."

## NOTES.

All Maklaks admit that K'múkamtch created their country, the earth and the universe, but as to the special process by which he created them they secm to havo no definite idea, though they possess a multitude of myths for special creations.

Most of the places mentioned in this item are situated arowd Upper Klamath Lakc. That they are localities inhabited for centuries past, and identificd with the history of the tribe is proved by the fact that their naming is ascribed to K'makamtel. The most noticcable of them are no doubt the three sweat-houses, all of which are of remote antiquity, and were put to use only when families were mourning the loss of onc of their menbers. Two of them are quoted here: Wakaksi or Kailalkshíni spúklish on west side of Lake and E-ukalksi, a short distance south of Fort Klanath. The third lies about three milos south of Modoc Point; it is called K\{-ashkshi spúklish.

142, 1. käila. Abont the meaning of this term in creation myths, cf. Note 96, 23. In other connections, in the present text, käíla or kä'la means spot, locality.

142, 2. 3. Tulísh. To cnable the Indians to catch fish at that place, K'mílantch built for them, as tradition has it, an obstruction resembling a beaver-dam. Cf. nakótk, 143, 1.; gítì for gíta hî.

142, 3. 5. Trikna and Koháshti are camping- and fishing-places on the castern shore of tho Lake. At Shuyakékish the Indians leap ovor rocks for amusement.

142, 5. ná-asni, nā'sni stands for ná-asht nî: "thus I".
142, 5. 11. Gímbat is called Rocky Point by the white population, aind lies on the western shore of Upper Klamath Lako. A-usmi is an island of the Lake.

142, 6. Wakáksi or Wáka is named after the tuákish-fowl whose cry is wáka wáka.
142, 6-10. 12-16. These mourning customs are gradually disappearing at the present time. One reason for this is the progressive assimilation of tho tribes to Amcrican customs, another is the circumstance, that all of tho three ancicut sweat-houses aro situater ontside of the rescrvation limits.

142,15 . ndānnántak is composed of ndannanti or ndánnantat ak: "only for three (kinds of relatives)".

143, 1. Nakotk is the instrumental case of nákōsl, lumber-dam: "ou account of its dam Witlas will be a fish-killing locality." A loon destroyed that dam by forcing its way under it; one of our texts gives this myth. Cf. 132, 1-8 and Note to 74, 2.

143, 2. 3. Mbû'saks, Smã'k and Kia'katils are names given in contempt or derision of the respective tribes; the latter to Indians living at the Dalles of Columbia River, Smā'k to a tribe living south of that locality. Cf. 103, 2. 3. Mbu'saks is a nano for the Snake Indians.

## MISCELLANEOUS NO'TES ON ANIMALS.

Given by Johnson, Chef at Yáneks, in the Klamath Lake Dialect.
$\mathrm{Ni}^{\prime} 1$ wéksa púthka máklaks shûlhashluk sqólhok; ktánuapkuk
Tha of mallard- pnil ont
down duck

3
Mbû́shant nilaksht wísxak hä́ma.
In the morning at dawn thewisxak- rings.
Wátsak wáwa a gulindshishan ; le oenug wawa.
Doge
howl
Dogs howl hecanseleft behind; for not polng
(with them).
 6 uapk, tó-ugshtant húndsanuaplк $A^{\prime}-u s h t a t$. fy off, to the opposite bewill fly - of Upper Kla-

「ché-ı gankánkatchuapk; títnāk maklakuapk, wakianua lapeni;
Antelopes (people) are going to hunt; once only tbey will campont, orbapg shlíuk géporapluapka palak. Jиdsh mbúshant pä-uapk syolakok. after shoot- Some they will retarn at once. next day they will take to indnce sloop. ing (antelopes)
 gítko, tidsá né g gítko wásh. Kinkéni wánh Éushtat. (he) has, delicute far has prairie- $\begin{gathered}\text { Searco prairie at Upper Khs } \\ \text { wolf. }\end{gathered}$

16) ke-udshish.
gray wolf.

## NOTES.

144, 1. nīll wéksa stands for nīl $\quad$ éksam ; pûl’hka for púlqa or púlka: ‘b-, "by hand."

144; 9. 10. These characteristics of the prairie- or cojote-wolf, which is so highly reverenced by the California tribes, place him between the wolf and the fox. Nél stands for nīll and múatch for múnîsh. Tidsá is tídsha a.

144, 11. tslatskágantko; the verbal adjective of tchlakaga stands here in the distributive form: "each time when he sees me, he jumps on my throat." The $l$ of the second syllable is suppressed.

## CLASSES OF ANIMALS AND PLANTS.

## Given in the Klamati Iake Dialect by Dave Hill.

Quadrupeds: hohánkankatk lílhanks; nánuktua hohánkankatk; wunípa tsōks gî'tk käílatat tchía nánuktua lílhanks wíkts nákanti.
Birds: lásaltk nánuktua.
Forest birds of small size: tchíkass.
Forest birds of smallest size: tchíliliks, tchililika.
Ducks and geese: mä'mäkli.
6
Night birds: psín húntchna.
Water biräs: nánuktua huhánkankatk é-ushtat, ámbutat tchía.
Swimming animals: nánuktua udúdamkanksh sáyuaks; nánuktua udó- 9 damkankatk.
Fish: kiä'm.
Jumping amphibians, toads and frogs: skáskatkankatk. 12
Snakes: wíshink; wáměnigsh.
Lizards; lit. "walking straight out": uli-ulátchkankatk.
Reptiles and worms: skískankankatk.
Flying insects: mánk.
Creeping insects, snails, some mollusks etc.: mû'lk, mû'lkaga.
Grass, seed-grass: kshún.
Berries: íwam.
Edible roots, bulbs and seeds: máklaksam pásh; lutísh.
Trees: ánku; kō'sh.

## NOTES.

Thése generic terms are quite charaeteristie, but by no means systematic. These Indians classify animals otherwise than we do, for they regard the mode of locomotion as a criterion for their subdivisions of the animal kingdom, thus sometimes placing in the same elass animals which widely differ in their bodily structure. The Indian mind likes to specify and is averse to generalizations; there are a ferv Indian languages only that contain comprehensive generic terms for "animal," "carnirors,"
"reptile," "amphibian" or "plant." Eren the English language lad to borrow these terms from Latin. The Klamatl Lakes often use kósh (pine) generically for "tree," and wishink, "qarter snake" for "snake" the Modoes wamènigsly (black snake) for the same order of reptiles, these speeies being the most frequent of their kind in their respective comitries. Birds are hohámkankatk as well as quadrupeds, beeause they fly "in a strangt line".

## ALIMEN'TARY SUBSTANCES.

Last obtained in the Rlanath Lake Dialect from "Sergeant" Morgan and Minvie Frobeno



Wéwanuish hûnk shtizí ila wékank yákitka páta=gíílshēēmi. PékThe women gather (jt) by beating (it) into seed. at atmmer's end. By
slank sha hị̂̂nk gápiunks shúta; tchilála sha títatna. Wû́kash= grinding they ${ }_{\text {kapitiuks }}$ prepare; boll (t) they sometimeen wokahl. shitk máshetk kápiunks.
like tastes kápiunks.



tchúi ishkûlank, îľa slıa shpáhank î'lksslı̂̂k lúldam, tchilálank then after rathering. keep they (it) by drying to preserve (t) for winter, boiling (tt) tchēk slıa pán.
 $\underset{\substack{\text { tidsh } \\ \text { grool }}}{\text { piluítko. }}$ smoling?


Klápa kálkali, pakî'sh; ka tánni $3^{\prime \prime}$; taktákli pû’dshak, tápax kitchkúni. is cylindric, eatabie; solong: throe ficheres: red (Is) the páidahak. (Its) leaves small.
Klû́ kalkali lutî'sh; kedshá Móatok; pakísh.
is a ronnded root; growsin Modoocountry; (it is) estahle.
 pakî'sh. is eatahie.

 payam.




 lû'k hû'nksh shtî'kok vû'shat.
$\underset{\substack{\text { a grizziy } \\ \text { Lear }}}{ }$ bim smeiling will fee.
L'bá. Lupî́ sha'hlmalzō'tchtat shápashtat l'bá 1 nóka; wéwanuish stä'-ila
 sha gáma; skátka gáma gā’mkislıtat. Wíllishikat sha îkûga they pound (it); with a peetle (they) in a montar. Into aacks they fill (it) in
pā'sht, tchưi sa vûmí vumíshtat willishikat îkúgank.
aiter dryiDg, and they bory (it) in caches, in ateks aftur putting it.





Má-i. E-ukshîkni máyalshuk vī́nshatka syéna shléank é-ushtat. TchéThe Lakepeople for tilegatheriog incanoes row ont finding (it) in lakes. The




$$
\begin{gathered}
\text { tule; as soon as dried they cast (it) had havingle. } \\
\text { away. }
\end{gathered}
$$


6 Kápiunkssshítko stä'-ila nû́tak wéwanuish wékank yákitka.
 toks kpápshash. Y.aínakshi pîl sha túm shléa. 'Tchélaslı pá-usham bnt to tasto. st Yáueks only they nurly fini. Stalk of pawash
9 wí-ukani, mû'kmukapsh pálpalsh shlápsh gî'tk. Pû'ka sha hû́nk is low, festhered (and) white fiowers bnving. Bake they páwash, tchúi sha gáma, shpáhank sha ílya lû’ldam páshluk. párasb, then thes poind (it), afterdrying (it) they freereve for winter gathering in.
Pû́ks nánukaslıkěiíla kédsha tû'm, títatna kéái tû́mi. Pû’ks kédsha

12 Oregon saígatat, tchékĕnish metsmétslish lelé-usam gî'tk tchélash; morego prairias, binnte flue fowe having (its) stalk; pûks tchék'ni ónions=shîtko shléash pálpali shánkitk gíug, pukátk tchēk luíluyatk mā'sha nózuk. Pahátko māntch gíntak i'pakt then sweetly tastes when it is When dried, along time afterwarde it mayy

 ktáyatat kélpokshtat kshī̀n puetílank, wáldslıa tchík sha kshún, 18 kné-udshî lokáptchıza, tchúi sha käíla kä̉̉lua pû’kûg púlquantch. rough bark pilonp on top. then they with fill np for rossting the chrysalids.
Stópalsh. Máklaks kiannä'mi gruizakshia'migshta stópalsha pûkshämí tch. KaThe peoplo fu Ashinn.season, at homedenving timo peell trees, in camssss.seanoon also.
 alsh; shámks hak sha pán. Kánt î hûu shleiáá shtopalhuísh kî'sh the bark; Jnat raw they eat it. So many yon (of them) find preled off piue-rreen

 píluitko. has smell.
Tók pä'lpali kshū̀n, kédsha é-ushtat.
is a whitish grass, grows iu Lake.
$T s \imath^{\prime \prime} k a l$ atíni kshū̀n, kédsha é-ushtat. (is a) high grass, grows in Lake.
 shtä'ila, wéwanuish wéka ulà' $\chi$ uga yákitat. Lúlukshtka tü'ksh at 6 gather, be women beat (it) haul (it) in seed-haskets. In the bot conls in a fire tchípash shnū' $\neq a$, tchúi tchīk sha humashtgíulank péksha lemthe toitipash thes parch, and after they barlig thius done grinu (t) on the atchátka shilaklgî'shtka yî-ulalónank; a tchî'ksh hû́uk pekslólank metate with tho rubbing-stone now then having done pän éwa pálatka ́́mbu kîtuínank, tchúi sha hûmasht-gî ulank 9 again thoy upon a water pouring into (it), then they nfter thos doing
patámpka wawálqank népatka hlópa. Gî'ta tchípash ká-i tû̀m uegin to eat (it) witting around with hands sopithp. Right hore tohipash not in quan

T'chuá kálkali: txopós=sĥtko, gét pi tchuá; kédsha ámbutat; ntcheudshlkáni 12 cylindrio: thnmblike, so it (is) wapatu; grows in wnters; rather amall tchuá, tchúyunk máklaks íslıka tchúi tchilálank pán; kúkanka sha (is) wapatm, and it tho Indians palling and hoiling eat; marticato ticy tútatka. Taktä̌kli tchuálam shlápsh; kinkáni tchuá. With (their) Pnrple (is) of wild-potato the flower; searco $\begin{aligned} & \text { wápata } \\ & \text { teeth }\end{aligned}$ (here).
Tsuák käílatat lû'sha, pakî'sh; ka tánni tsélas: láp pê'tch; kakálkalish shláps 15 ongronnd extends, (is) eatrale; 80 long istho two fcet; ronnd fowers p’lái gítko. on top having.
Tsunî ka kédsha käílant, é-ushtat, walî'dshat; pakî'sh. Shllápslı 2" lawálatk, tídsh piluítko, mû lbû'ka gítk ; kä'latat lû'sha.
wide, nleely smelling, a largo bulb linving; on gronnd it lies.
Wátksăm mû'na û'sha kä'latat, pakî'sh ; kédsa walídsat, pä’lpali shlápsh.
Wivwî atínî, kédsha táletat; pakì'sl shlḱpsh; $\underset{\text { kétsa }}{\text { kitwa }}$ pápali.
is tall, grows onstraight eatahle (is) thohud; browe white.
To the above are added a fee non-almentary substances:
Kû'lxamsh tû'sh a tû́pka käílatat, ㅈ́á-i pakî'sh, ptclî̂'nk: kia'm=luelō'tksh 21 npwards stauds from gronnd, uot entable, thns looking: as a fisk-killing article witsólslank vû'nsat tamádsank téwas¡ kitchkáni shláps. While net-fishing is the canoe they fasten (it) the forked amall (is) the forrer. net ;


#  eatsble. The limbs of the young (and) wili pars (aro) bad poisoners. 

 shtil $1 /$ a.
they put it
Tĩ îhhash k'lûtsuō teh=ánku vû́nshtat shtákla.
ss a "swiunming-sucker". on canoe they stlck up.
6 Wâkinsh a kédsha pánût. Máklaks íshka pánût lultámpkash shutelomá-
 With, roast (is) on flre-place. Tben they after bat
titka vukútank shushatelóma télish, p'nā'sh ktchálxishtka shkukknives scraping (it), smearit on faces, tbrmeelves from snu-bnras to preo


## NOTES.

Several plants in this list appear, aecording to grammatie rule, in the possessive case -am, while their fruits or edible portion are introdueed in the subjective case. To the former the substantive ánku or tsélaslı has to be supplied. Small grasses are alimentary plants on aceomit of their seeds only, while the larger aquatic grasses contain nutritive matter in their stalks. Of these notices the shortest and most laconie were obtained from Morgan, who did not enter into particulars cencerning the preparation of aliments. By this list the articles on which these Indians feod are by $n 0$ moans exhausted; they eat almost everything found in nature which is not positively obnoxions to healtl and which contains a particle of nutritive matter, and henee a full list of their kitchen répertoire would be at least three times as long as the one obtained.

146, 1. kak tán for ká ak tánni"so long only"; the length being shown by gesture of hand. Also expressed by ka taniáni, 149, 1. and Note. The yántch-plant grows to a leugth of 18 to 20 inches, the height of the camass- or pûks-plant.

146, 3. Kápiunksăm. The kápiunks-seed grows on a prairie-grass, like the tchí-pash- and nû'tak-seed.

146, 7. 14. pálpal stands for pálpali (originally pálpal-li), having lost its terminal -i by apocope; pálpalish shlapshálko incorporates the adjective white into the verbal adjective "having flowers". This phrase may be cireumscribed by pálpalish shlápsh gitko. Cf. 123, 6. and Note, and 150, 1.

146, S. wíukayant kěládshamat. Here the adjective in its locative case, used attributively, is mited with the partitive ease of the substantive, the original form of botl being wi-ukáyantat kęládshamti; the subjective case: wi-uláni kěládsham.

146, 12. Keráwat or horse sorrel is mentioned in an Aishish-myth and does not
grow so tall in the cold Klamath highlauds as in the Californian and Oregonian valleys adjoiniug them to the sonthwest and west, where its height attains sometimes three feet. Cf. Note to 94, 9 .

146, 14. Klána, au aquatic or tule-grass, of which they eat a portion of the young stalk. The term "tule," from Aztec tolin, serves in the West to designate all kinds of rushes, stalks, and grass-like plants growing in the water and wet grounds. By kókětat are meant the Williamsou and the Sprague Rivers.

147, 1. Klápa is the name of the catable bulb or root growing on the pádshakplant. The púdshak-grass becomes red in the autumn, when dry.

147, 3. Ktî'ks is the eatable root of a speeies of the cat-tail plant; taletat, locative case of tálish (or tálesh ?), straight stem, from táltali "forming a straight, unbroken linc." The ktôlks grows in the watcr, like the wild parsnip (skáwanks); the uatives dry the tender roots of the ktû'ks and bake them into a sort of bread. The epithet: "like wókash" probably refers to the taste of this kind of food.

147, 5. Kûktu. This plant attains a length of abont 6 inches.
147, 6. 7. Káls is the globular bulb of the wítchpai water-plant.
147, 8. Kä's, 트i'sh. This plaut prodnces al hard, whitish, farinaceous bulb, which is commouly spoken of as ípo, a Shasti term, and is one of the most important foodartieles of the Oregonian Indians. To dig or collcet kä'sh: kä'shala, kä'shla.

147, 9-13. K $\bar{o}^{\prime} l$, also pronounced $\underline{k} \bar{u}^{\prime} l$, gîl 1 , gúl, is a kind of Aralit. The root is caten ouly when roasted, and is then very intritious, thongh spreading an abominable smell. This odor is so penetrating that, as alleged, the grizzly bear will attack nobody who smells after roasted kōl; to this we may add the restriction: "if he is not very hungry." Johu D. Hunter mentious in his "Manuers and Customs of Indians," cte. (Phila. 1823, page 370) that the Osages ascribe to the plant washoba-pesha the power of scaring a way the black bear. This plant is an anunal growtl posscssing sudorific and cathartic propertics. Washobe is the black bear, mitelin the grizzly bear in that Southern Dakota dialcet.
147.9. hû'ntcha gû'l: "the kōl in this condition," viz: in the ripe state. The kol-plant is ripe when the stalk becomes red or reddish.

147, 10. méya. Speaking of many womeu digging bulbs or roots, stá-ila, stä'-ila is the regular form; its proper signification is: "to fill up" "to fill" (the conical rootbasket worn on back, yáki).

147, 10. 11. pûkguishamtat: "to their old roasting place"; púknishamat might stand instead. The loeative suffix -tat, -at is here appended to a verbal substantive of púka, to roast, standing in the possessive case - dm , and -u-is the infix marking past tense. The guttural k has become distended into kg.

147, 12. é'nt or énd for enat, conditional of éna. Instead of é'ut, ídshant (for idshnat) may stand in the Klamath Lake dialcet.

147, 14. Lupì' ete. The import of this sentence is: "L'bá ripens in the month when autumn begins."

148, 1. Má-i is the common reed or tule grass growing sometimes to the height of 8 to 10 feet. The shallow borders of the lakes in the headlands of Klamath liver are full of this growth, which is one of the most important economical plants for the Indian. Women manufacture from it mats, dishes, baskets, lodge covers, ncts, sacks, bags, and the young stalk yiclds in its lower part a palatable marrow.

148, 2-4. Yánakianin for yanakỉn!ui ; ef. snffix -ni, -nini in Dietionary. mānsh for mā'nteh. pā'shtak for páliaslit ak, cf. pā'sht, 147, 17. for páhasht.

148,5 . Ní'tak. This grass belongs to the genus Glyeerium, as identified by Dr. E. Foreman, and prodnees a tiny, grayish bright seed of tehipash size. The flowers are of a light red eolor. The grass is found around the ageney bnildings and grows about one toot high.

148, 7. Pawash properly means tongue.
148,11 . Pn'ks or camass. Its bulb is one of the prineipal food-artieles of all the northwestern Iudians, bnt does not grow in profusion in the warmer portions of California. It is of the magnitude of the walnut, very saceharine and nutritions, ripens in May and June, and by the roasting or baking proeess described in the text becomes as hard as stone. The Maklaks eall it after p $\hat{u}^{\prime k} \mathrm{ka}$ to roast, the Shasti name is sok, the Pit River name ahuale, while the name kamas, "sweet" is of Nutka origin. The botanists eall the plant Seilla or Camnassia eseulenta. Cf. Note to 146, 1.

148,14 . ipakt, metathesis of ípkat, the conditional of ípka to lie there, to remain.
148, 16. pinlzuantel. The gathering of this pupa or chrysalid and of its eaterpillar, the sqeshi'sh, is ehiefly done by the women of the tribes, who find them imberded at no great depth in the sandy gronud around pine trees. Another ehrysalid, the kûli'gs, is colleeted and roasted by them in the same way and tastes like eggs. kshū'n puetílank: putting grass noder the ehrysalids, not under the heated stones. The stones are replaeed by other lieated ones, as soon as they have cooled off; the larva assumes a black color after roasting and tastes like eggs. See púlquanteh in Dietionary.

148, 19. guizakshä'migshta. The season of the year, when the exodus of the whole tribe to Klamath Marsh takes plaee, where pond-lily seed is colleeted for the winter, is abont the middle of Jnne. The ending ta is an abbreviation of the ease suffix tat. Three seasons are stated in the text, when the peeling of the inner or fibre bark of small pine trees is performed; of these the eamass season precedes the oxodus to Klamath Marsh by a few weeks only, and the fishing season lasts from February to the end of the summer. Of eourse, the peeling of the kapka-pine coincides with the season when the sap ascends through the young tree. The bark is removed from about five feet to fifteen or twenty feet above the ground, and most of the beautiful pines treated in this inanner are doomed to premature deeay, thongh many survive the operation. The aspeet of a forest with some of the pine trees peeled is rather singular.

148, 21. shánks hak, contraetion of shánkish hak or ak.
149,1 . ka tánian for ka taniáni "so mueh in width or extent." The bud of the táksish has a width of about half an ineh. Cf. Note to $146,1$.

149, 3. 4. tok. This aquatic grass grows about two feet high; by e-ushtat is meant, here and in tsî'kal: Upper Klamath Lake.

149, 3. pä'lpali, vocalie dissimilation of pálpali or pä'lpäli; ef. takta/kli 149, 14.
149, 5. Tehî'psam is a prairie grass on which the brown tehipash-seed grows. This seed is extremely small, and it takes a long time before a sufficient quantity of it is gathered to afford a meal for a family. Still smaller is the nutak-seed, and both are striking instanees of the persistenee of the Indians in keeping up their old mode of living, when by agrieulture and stoek-raising they could procure provisions with infinitely less trouble and in mueh shorter time.

149, 6. tü'ksh is probably the adessive ease of toke (б) fire-place, hearth: tok-kshi.
149, 12. Tehut is the long, eylinulric root of the Sagittaria sagittifolia, an aquatie plant common in'the West and East of the United States. In Oregon the term potato or wápatu (Chinook jargon) is most eommonly heard for it. The name of Chewaukan Marsh, a sink and low ground situated east of Upper Klamath Lake, is a corruption of Tehna\%éni: "where the arrow-leaf is found." The flower of the wapatu" varies between red, reddish and whitish.

149, 17. Tsunitka. The flower has a diameter from two to three inehes.
149, 21. Kûl ${ }^{\prime}$ amsh is put on strings by the women and thus serves to attraet the fish.
149, 21. ptehi'nk: after this word ought to be seen the pieture of a tiny vegetal cylinder, about one ineh long and slightly eurved.

150, 1. Skáwanks or wild parsuip, a poisonous plant growing in wet places to the height of three feet.

150, 8. p'nā'sh, eontraeted from p'nalash, is the direet objeet (refleetive) of shkukluápkasht: to guard themselves against becoming ehapped by sun-burns. The wákinsh seems to be a kind of resin and furnishes a red paint, as does also the klepki.

E-UKSHikísham kíuksham shuì'sh shuinō trish tchish.

## INCANTATION SONGS OF THE KLAMATH LAKE PEOPLE.

## 1. Introductory song:

Yä'ka ní, yä'ka ní, yä'ka ní etc. $\quad-\frac{1}{}|\cdots-\cdots|$ I sing, I sing, I sing (in chorus).
2. Song, reference unknown:

Wiwiwá! nî sháwalsh wítnank! - - | $-\cdots-1-$
Blown off! the plume-crest has disappeared from me!
3. Song of the wind:
 népaksh a-i nî'sh shlewitaknûla. $\quad-\frac{1}{\prime}--\left\lvert\,-\frac{1}{-}\right.$

Who, I wonder, is blowing out of my month ? The disease is emanating from my month.

## 4. The conjurer's song:

Tuá kî nû shatashtaknû́la?
nä'paks nû shatashtaknû́la.

$$
\text { tuá kî́n nû shatashtat } 1 \hat{1}^{\prime} \mathrm{sh} \text { ? } \quad-\leq\left|--|--|-\frac{1}{\prime}\right.
$$ nä'paks nû shatashtatxî'sh.

What do I remove from my mouth ?
The disease I extract from my month.
What is the thing I take out?
It is the disease I am taking out.
5. Song of the woodehuek:

Kä́la nû gutîla nû $-\sim \mid\llcorner-\mid\llcorner-\mid-$
I am descending into tho ground.
6. Little girl's song:

Shmashmáyalti, shmashmáyalti $\quad \cdots-1-\simeq \div$
In quill-fringed buckskin dressed, In poreupine-fringed buckskin dressed.
7. Sony of the washpálaks-fox:

Ä'kalä'kěla nû, ä'kalä'kěla nû $-1--1 \div-\| \leq-|--|-\sim$
Long and slim I am, long and slim I am.
8. Song of the firc-mantle:
 In fire-flames I am enveloped.
9. Song of the tuakish-crane:

Nî shnû'lashtat nû tgelî'wa $-\sim-1-\dot{1} \mid-\div$ I stand upon the rim of my nest.
10. Song of the bliud medicinc-girl:

Tchatchělushkánka nû tchíutchiûsh shnoxītko

$$
--1 \mid-\cdots-1--1-
$$

I search the ground with my hands, find there the feathers of the yellow hammer and devour them.
11. Another song of the same:

Palák! îsh hû lûlpalpalíat! - $|-\sim-1-\sim|-$
Quick! make ye eyes for me!
12. Bird's song:

Nû'sh pî'lau tiláluanslıa $\llcorner-\mid\llcorner-\mid \cup ー-$
As a head only, I roll aromed.
13. Song, reference unknown:

What am I? what an I?
14. Song, reference unknown:

Há lúyam'na, nû lúyam'nı $-⿰|\simeq \backsim|-\sim$
This round thing I hold in my hand.
15. Song of the long-tailed black marten:

I the black marten, I travel amund this land.

16．Song of the slunt：
Yámáshtka nû tuituigídsha $--\mid \div-1 \div-1 \div-$
In tho north wind I dance around，tail spread，festive and gay．
17．Chorus song：
Tuá kî nû kóga？－｜ーー－｜－ー
nä＇paks ai nû kóga．$-\sim-\sim$－
What do I suek ont ${ }^{\text {i }}$ Tho disease I am sucking out．
18．Song of the boards：
Pápkash huálta $-\sim-1-$
Lumbor－boards aro rattling．
19．Song of the lizard：
Kì！kíya nû aíkana $--\mid \div-1 \div-$
Lo！thus I tho lizard stick my head out．
20．Song，referencc unknown：
Yámash ai nû＇sh wílamnapka $\llcorner-1 \perp-\mid-1 \cup \smile$ Tho north wind has followed mo．

21．Song of the black mousc：
Tuá kî nû tashulóla？－－｜ー－｜－ーナ｜－
nä＇poks ai nû tashulûla． $\left.-\frac{1}{-1} \right\rvert\,-\cdots$
Through what do I pass with my paws： My paws glide over the hair of tho disease．
22．Song of the washpalaks－fox：
L＇ékîsh，l＇ékîsh gená $--\mid \div-1-\perp$
Crazed I am wandering．
23．Song of the weasel：
Shä＇ka nû，shéka nû - － $1-$－ I am squealing，I am squalling．

24．Song of the dog：
Wátchag ai nû nû́kanka，$\llcorner-|\therefore-|-\simeq$
yámashtka nû nû＇kanka．$\quad-\mid\llcorner-\mid \ddots ー$
I tho dog am straying，
In tho north wind I am straying．
25．Song，reference unknown：
Shlä＇wish á－i nîsh wílhua $-1 \div--\mid \div$ The storm gust dashes right on me．
26. Song, reference unknown:

Múměni gé-u stû́kish gî $---|\div-|\div-| \div$
Hoavy hailstones I possess.
27. Song, reference unknown:

Naínaya! nîsh shléwish wítnank! $-\cdots|-\div|-\perp$
I am shivering! the wind blows down on mo!
28. Song of the bug:
 I the bag, I bito and suck.
29. Song of the mink:

Mî́ashtka nû udumulípka $-\sim \mid \sim-1 \div-1 \div$
I am swimming ont while the sonth wind blows.
30. Song of the young silver-fox:

Wánam wéash nû wilamnápka $-\cup|--| \div-1-\sim$ The yonng red fox I follow up.
31. The incantation sings:

Shuî'sh lıátak nû géna nû I the song I am walking here.
32. Fox's song:

Lalálashtalà wiká nû - - |- - - |-
I am blowing air from my flanks.
33. Song of the tuákish-crane:

34. Songs, forming refrains to song No. 33.
a-ahahíya, a-aha-a-ahíya $---\mid-1-\cdots-1-\div$
a nû hé-e-i, a nû hé-e-i $-\stackrel{1}{1}--\|-1 \mid-\cdots$
35. Song of the disease:

Tuá nû shlewilam'na? $-\frac{1--1}{-}$
népaks an shlewf́lam'na. $\quad 1-\ldots-1-$
What thing do I blow around ?
The disease I am blowing around in the air.
36. Song of the grizzly bear's cub:

Yaínatat nû eitaktnúla, $----1 \div-1 \div$
lấkam nû wéash gî. - - - 1 -~一
On tho mountain top I am peeping out, Of the griazly bear I am the child.
37. Song of the female wolf:

Kä'-utchish gû̀lû h'lilantana $-\sim-1 \div-1--1 \div$
I, the she-welf, am rolling against (a tree?)
38. Spoken by the conjurer while manipulating:

Netá, netá . . . . . . . . hahayí-ía
Nen $\hat{u}^{\prime}$, nenû' . . . . . . hahayí-ía
39. Song of the tchiwititikaga-bird:

Kúti witila, kú-i witíla $---|\div-\| \bullet--|-\sim$
Fearfully the wind blews underneath here.
40. Song of the blind girl:

Lúashtka nû lû'tchipka, $\quad-\cdots-1 \perp$
käila nákant nî lúyapka. - - | - - - $1-\smile$
In the fog I am straying blind, All over the earth I am wandering.
41. Song of the water-bug:

Ádshi ádshi tcháya, ádshi ádshi tcháya $-1-1 \div-1 \mid-1--1 \div-$
42. Song of the grizzly bear:

Käíla nû hî shlû'tila $-\sim-1-\cdots$
I am seratching up the ground.
43. Song of the little gray tchikass-bird:

Yaínash a-i nû shlulola $--|\div-\cdots| \div$
I ann wafted eff from the mountain.
44. Song of the stiō'ks or spirit:

Kakó pîla nû la-uláwa Reduced to mere benes, I rattle threugh the air.
45. Sung by the disease, found to live in water:

Shléwishash nû tilutaknû'la
Breath I am emitting.
46. Song of the grizzly bear:

Tunépni gé-u wélwash gî, $-\perp|-\cdots|-\cdots \mid-1$ páltko gé-u wélwash gi. $\quad-\mid-\lrcorner|-\perp|-\frac{1}{\prime}$

I have five water springs and (all) my springs are dry.
47. Sony of the black snake:

Wámnaksh ai î́nû tûnûlúla $--|-\perp|-\cdots \mid \dot{-}$
I the black-spetted snake am hangiug here.

48．Conjurer＇s own song：
Käílanti nû shîlshîla $\quad-\cdots-\bullet_{-}$
I，the earth，am resounding like the roll of thunder．
49．Bird＇s song：
Nená nû，nená nû $-\frac{1}{-1}$
I flutter along the ground（while walking）．
50．Song of the grizzly bear：
Yaínalam shulúyualsh $-\cdots-\cdots$
51．Woman＇s song：
Shutpashuítk gûn snewédshash gî，$-\sim-1--|--|--$
shutpashuítk a nî snewédshash gî．$\llcorner--1 \div-1-1 \div-$ Painted I am on the body， I，a woman，am painted black．
52．Song of the weasel：
Gaíkash，gaikash nuyámna $--|\perp-| \perp \sim$ Fooling，fooling I run around．
53．Song of the gray fox：
Nánuktua nû papî＇sh gî－－｜－－｜ーニー
Everything I can devour．
54．The conjurer speaks as follows：
 Therefore this（paitent）first was hurt，that（his）mother afier dreaming

55．Conjurer speaks：
 kîsh？ patient）
56．Conjurer＇s song：
Tuátala nîsh hû lzetknúla $9^{\circ}-\dot{-1}-\cdots|-\cdots|-$
gûpal a－í nîsh lqetknúla．$\quad \div|-\cdots \nmid-\div|-$
What is coming out of my mouth ？
Black substance is hanging down from my mouth．
57．Song，reference unknown：

Fog followed drifting after me．

58. Song of the turtle:<br>Tuá kî nîsh lé-ula? - - | $-\cdots$<br>Which game did you play with me?

## NOTES.

This long series of shannanic songs in use on the Williamson River was obtained from Mary, a young pupil of the boarding sehool of Indian ehildren at the Klamath ageney. When living among the Indians on the Willianson River she had heard all these songs very frequently, and in an interesting ereuing eutertainment she faitlofuly reprodnced the manipmlations of the male and female conjurers upon a little rag baby lying on the floor on a bed made up of old blankets, the figure representing some poor suffering Indian patient. The other Indian girls of the sehool joined in a lively ehorus every time when she had fairly started any of these ineantations, and given the signal by clapping hands.

On the day following these incantations were dictated, translated and explained to me by Mimic Froben, assisted by Mary, and thongh both persisted in the statement that the order in whiel the songs are sung was quite immaterial, I present then here in the orter in whieh I obtained them.

Fach of these song-lines is sung many times by the conjurer, then repeated by the chorns a dozen times or more. The chorus varies the melody sonewhat each time, but this musieal rariation is so slight and insignifieant that the general impression of monotony is not dispelled by it. Quite a number of these songs have very pretty melodies, but by long repetition even these must of conrse produco tediousness and disgust; other songs have weird and strange tunes, others are quaint, but almost repulsive by their shrill aceents; these may be said to form the transition to the mere howls and initations of animal roices, which are fiequent also in doctoring ceremonies, but more frequent in the war-shouts and funereal cries and wailings.

The aninal or object of nature to which the conjurer attributes each of the songlines was not remembered in every instance. Where this reference was obtained, it was added at the head of the song or song.line. The animals mentioned in these songs are all supposed to have been sent out by the conjurer to look out for the whereabouts of the personified disease, from whiel the patient is snffering, and whaterer the conjurer sings abont the animals refers to what he sees them doing while on their orrand. On the distinetion made between shmi'sh and shuino'tkish ef. Note to song 9 .

Kinksan shui'sh is not merely a conjurer's song, but a mysterions ageney connected with a spell of preternatural power. This spell is not exelusively attached to a song sung by a conjurer, but it may be borne also by a dream, disease, by some drug, or by that kind of witeheraft whieh is ealled elsewhere the evil cye. Kiuksam shui'sh is therefore a benefieial or destrnctive tamámash ageney, which when applied to a patient ean cure him or make him worse; when appearing moder the slape of a dream, it is a dream of good or one of bad angury.

The conjurer sometimes dirersifies his songs, all of which are sung in the minor keys, by inserting spoken words relating to the condition of the patient and the effeets of his treatments; specimens of this are given in 35.54.55. Parts of them are also repeated by the chorus.

Many Iudians do not understand all these songs, which eontain many arehaic forms and words, and the conjurers themselves are generally loth to give their meaning, even if they should understand them. Some songs are of a stereotypic application in the treatment of all or the majority of the maladies. A close familiarity with the habits of animals of the forest manifests itself throughout, as well as in the mythic tales.

The translations added by me are not literal; they render the meaning of the songs in a free and parapirastic manncr. In the metrics the accentuated syllables designate a ligher pitch of the singing voice.

153; 2. Literally: "I blew off the feather-crest."
153; 3. To read: shléwi wit\%nûllank, seems prcferable in this connection. Of. 35.
$154 ; 6$. On grand oceasious young women were in the habit of dressing in buckskin rokes, fringed with poreupine quills (shmáyalsh). In a myth the bull-frog was reported to wear constantly this kind of dress, and hence originated a sort of proverbial locution: kó-e shmashnáyalti: "the bull-frog in the shmáyalsh-dress." Cf. shmáyam. Zoologists call this frog: Rana pipiens.

154 ; 7. This is called washpaláksam shuî'sh, the medicine-song of the washpalaksfox species, Vulpes velox. The exterior of this fox may be sketched by the words: $\ddot{i}^{\prime}$ lkclia'kěla wátchag hûtchnuk, a long-bodied dog is running or trotting. Cf. song 22.

154; 9. This is called the tuáksham shninō'tkish or incantation sung by the crane itself through the mouth of the conjurer. Nobody could hear the bird's voice if the conjurer did not sing its song. A song, which the conjurer sings for himself and by which he does not interpret any animal or other object of nature, is called kiúksam shui'sh and is cndowed with magie powers. In the West of the United States the tuakish is popularly known as shitepoke, in the East as fly-up-the-creek.
$154 ; 10$. The feathers of the yellow hammer are woru on neek as an ornament.
154; 12. This refers to a certain large bird not specified, which contracts its body, so that the head seems to be its largest part. When walking, the bird seems to roll around on the prairie. Pílan for pila nû.
$154 ; 14$. The object to which song 14 refers is not known.
154 ; 15. Walzátchaga is very probably, though not certainly, a kind of marten. Mantles were madc of its fur. This rimed incantation is called walzatchkalam shuinō'tkish.

155; 16. Called: tcháshisham shuinō'tkish; melody very pretty. The diphthong ui is pronounced here as one syllable. Skunks, while runing around, are in the habit of holding straight up their bushy tails, which are alnost as long as their bodies.
$155 ; 17$. This pretty song is chanted by the choristers while the kíuks feigus to suck out of the body the tiny object which is supposed to have caused the disease, and before he gets it out. kóga, koka means originally to bite; bite first, then suck the disease out.

155; 18. Pápkash is pronounced almost like párkash; 144, 11. kópka like kóvka.
155; 19. Alludes to a peculiar nodding observed in lizards when ruming out of their holes and stopping at the issue.

155; 20. The animal to which this song refers is not known. Compare No. 10. 24. The literal meaning is: "The north wind blows around me from the distance."
$155 ; 21$. This song, with a beautiful melody, is the shuinō'tkish of a mouse species with pig-like proboscis.

155; 22. l'éksh, léksh, distr. Iélaksh crazy, maddened, intoxicatcd. This soug is


155; 23. The weascl is squealing, because hunters have caught or trapped it.
156; 26. Probably refers to one of those birds to whom the power is attributed to bring about storms, fog, snow, or any change of the weather.

156 ; 27. Complare songs 2 and 3.
156; 28. This bug, perhaps a scarabee, bites the skin to suck out the disease from the womd.

156; 30. This is probably a song of the wind, not of the young silver-fox (as I was told), and I have translated it as such. The song No. 20 is analogous to it in erery respect; Hhe winds, which the Indians coustantly compare with the spread of the discase, are frequently mentioned in these songs as blowing upon some animal or other olyject sent out liy the conjurer to discover the whercabonts of the disease. Cf. No. $\mathbf{1 6}$. 20. $\because 4.25 .29 .39 .43$. and 57 .

156 ; 3‥ This song is said to allnde to the circumstance that one fox's howl seems to somul like the cries of many foxes howling together. Lalálash are both sides of one and the same beast.

156 ; 33. With these monotonous sounds the tnákash or tuákish calls itself by its own crọ: thak, wák, tuák. Tuánұ̊i is: tuák nî gi "tuák I am crying." Cf. 154; 9. Two retimins to this liue are formed by the two lines of No. 34 .

150 ; 3j. The personified disease spreads the germs of sickness through the atmosphre. 'This song is complarable to songs 3 and 45.

157 ; 37. The signification of lililautana could not be disclosed, but it seems to be similar to that of tilantana.

157 ; 39. This small bird is dark, and has a red or yellow neck.
157 ; 43. Speaks of a fog drifting away from the monntains and turning into a cloud, which is drifting also.

157 ; 44. The bones of a dead person's skeleton are supposed to rattle against each other, the spirit being here identified with the skeleton.

157; 46. Often sung wélwashi gî; epentlectic syllables are frequent in these songs, e. g. walzátchika in song 15.

157 ; 47. The wáměnigsh or wámu'aks, a species of Pityophis, has large black spots and frequently occurs in the Klamath country. Tunulúla means to hang down over something as over a rock.
$158 ; 48$. This is sung when water is poured over the patient. A more literal translatiou would be: "I am resounding within the ground."

158; 50. Yaínalam shuláyualsh means round, cylindric or globiform objects standing in a row on a mountain. The den of the grizzly bear is supposed to be in the mountains or on a mountain top. Cf. song 36. My informants did not know what the objects were which stood in a series, but if any religious notions were connected with them, we may compare the three sacred rocks standing on a mountain top in Peruvian mythology. These rocks were fetishes indicative of stone worship, representing a mother with two sons. Another myth mentions four of them, representing Catequil (the god of thunder), Viracocha, a sun god and a fire god. The song No. 50 is snug by the chorus while the kíuks is daucing.

158; 51. The paint was put on expressly for the dance and smeared across her breast or anywhere on body; gîn for kē nû, gē nû, vowel n̂ inverted.

158; 54. These spoken words are also repeated by the choristers. The repetition is very long and noisy aud winds up in a howling. tutizolatko, after having ceased to dream. This would imply, that after dreans fasting most bo observed as a religious custom. k'lekshashtala for the correct form k'lekápkashtala. This phrase occurs in 68, S., and is explained in Note.

158 ; 55. The meaning is rather obscure, probably owing to omissions.

## Kifrsham shoísh.

 CONJURER'S INCAN'IATIONS.Obtained from Chief Johnson and Sub-chey Dave Hili.

1. Song of the disease:

Nä'pakshtka hínui nû; kaluáshtat nû
By siokness I am prostrate; I am (now) up in the clear sky.
2. Song of the woodpecker:

I am picking hard at the bark of a pine trec.
3. Song of the túktukuash-hawk:

Kuáta nû tchiliká nû $\left.-\frac{1}{}|-\cdots|-\sim \right\rvert\,-$
I am pinching hard.
4. Song of the white-headed eagle:

Kaluáshtat nâ tchutchúa $\sim-1 \sim-1 \sim-1 \sim$
I am croaking high up in the skies.
5. Song of the weasel:

Käílash nû shuína a ni yána $-\perp \mid \sim 1-\cdots+1 \sim 1$ lirom under the ground I am singing.
6. Song of the mink:

Atín tchelä'wash géna $\sim-1 \sim-1 \sim-1$
Ripples in the water-sheet I am spreading far and wide.
7. Sony of the slounk:

$$
\begin{aligned}
& \text { Té-i, té-i, ksiúl } \chi a<-\mid \div-1-- \\
& \text { With shortened steps I am dinciug. }
\end{aligned}
$$

8. Song of the quiver:

Yáhiash nû tadsí tadsí $---1 \div-1--1-$
9. Song by a companion of the old frog:

Kú-e welékash nû wél wash tchalekíya
An old frog-woman I sit down at the spring.
10. Song of the gáwi-bird:

Sháwalîsh haí nû shlataníya $-\sim-1 \div-\cdots \mid \div-$ A flint-headed arrow I am ready to dispatch.
11. Song of the eagle-feather:

Mû'kash a gî nû, gená nû, hō $--\mid$ - $|-\cdots|-1$
I am the eagle-feather, I am going down, hot
12. Song, reference unknown:

Kú-i hai nen ksíul'ka
I feel too bad for dancing.
13. Song of the dwarf:

Na'hnías naní naní naní-a a a nanía . . . . . . nanī, nanî-î-ā
14. Song, reference unknown:

Kǘla nû spíamna - - - - -
I am dragging ont dirt.
15. Song, reference unknown:

Sháppashti nû lakí gî
I am the lord of the sun.
16. Song of the shaixish-bird:

I the little black female bird am lost and strayed.

## NOTES.

162; 1. By others this song was given as follows: Nä'paks kinuina kalowát nû: "I the discase am meandering through the skies." This variant is evidently preferable to the one above.

162; 2. In the Sahaptin language of the Yákima, Washington Territory, a certain bird is called piúpiu; the Klamath Lakes call a spotted kind of woodpecker shpín’hpush. Both terms are derived from an onomatopoetic radix piu, imitating the picking at the bark by the woodpecker.

162; 3. The taktukuash or tish-hawk, Pandion carolinensis, occurs in large numbers on the lakes of the Klamath highlands. Like that of many other birds, its Indian name is derived onomatopoctically from its cry.

162; 4. Of the yaúzal, white-headed or bald eagle, Haliaetus leucocephalus, another conjurer's song was obtained. Cf. 165 ; 5.

162; 5. The wording of this song eould not be obtained with certainty.
162; 6. Stands for: atí telelä'uash nû génal.
162; 7. te-i, te-i has no meaning, but simply scrves to beat the measure when daneing with short steps.
$163 ; 8$. This song is said to be that of the quiver (tókanksh) and its purport the same as that of No. 7. Yahiasla is a kind of aquatic himb.

163; 9. A similar! worded song is in the Modoc collection, given by Toby Riddle.
163; 10. Sháwalsh is lere lengthened into sháwalîsh for metrieal reasons.
163; 11. This is a favorite song of a kíuks on the Williamson River, ealled Skíkmn Doctor (stout doetor). Given by Dave Hill, also 12 and 13.

163; 13. Foot-prints not larger than those of a baby are sometimes discovered in the higher mountains of the Cascade Rimge. The lndians refer them to a dwarf called na'hnías, whose body ean be seen by the eonjurers of the tribe only. The dwarf gives them his adviee for curing the sieknesses of others and inspires then with a superior lind of knowledge.

163; 14-16 were dietated by an Indian whom I found at Linkville.
163; 15. The name of the animal, probably a bird, to which this conjurers song refers was not obtained. Cf. shápsam ptchíwip in Dictionary.

## E-ukshikísham kíuksam shuísh.

INCANTATIONS OF THE KLAMATH LAKE CONJURERS.

> Obrained rrom "Sergeant" Morgan.

1. Song of the Lake:

Ktsálui gé-u é-ush
My lake is glittering in azure colors.
2. Song of the rain-storm:

Gé-u a-i népaks népka,
gûlkásh gé-u hû shuísh.
Tho disease produced by me has arrived, I am the storm and wind and this is my song.
3. Song of the conjurer's arrow:

Gé-u a hû't hänä'sish
This here is my long magic anrow.
4. Song of the North wind:

Yámsam gé-u gè'ish kápa $\quad \ldots-\ldots-\ldots$
I im the North wind, and in my path I an irresistible.

> 5. Song of the yaúkal-eagle:
> P'laina nû kshakî'dsha $--|--|--$
> High up in the skies I deseribe my magie circles.
6. Song of the little sucker:

Yénash ai nîsh sléwish wíta $-1-1 \perp-1 \div$
Now the wind-gust sings about me, the yẽn-fieh.
7. Words sung by the East wind:

Yéwa, yéwa, yéwa, yéwa $-1-1-1 \therefore-$ Easter, easter, eastern, eastern.
8. Song of a black snake:

Kámtilagam gé-u génhuîsh $--1 \div-1 \div-1 \div-$ This is mine, the black snake's, gait.
9. Conjurer's kat'hiáwash-incantation:

Gé-u hût ké-ish kat'hiáwasam
Thus I walk when I tie up tho hair.
10. Song of the black ground-mouse or kèlayua:

Munána nû shuiná
Down in tho dark ground I am singing iny strain.
11. Conjurer's song of the rope:

Kěnúks a-i nû stû'n犭î-uapk $-\dot{\prime} \mid \sim-1-1-\cdots$
I will pull a rope from my entrails.
12. Gray wolf's song:
 I am the gray wolf magic song.
13. Song of the female lizard, kî a kúlu:

Skû'lala gé-u kä'la kíalam ké-ish
The land on which $I$, the female lizard, am treading, belongs to the lark.
14. Song of the male lizard, kî a laki:

Ktsálui kî'alam gé-u ké-ish
When I the lizard am walking, ms body is resplendent with colors.
15. Song of the kilidshiksh-duck:

Tsoléwa gé-u é-us $-\perp \left\lvert\,-\frac{1}{-}\right.$ In my lako ripples I am spreading.
16. Song of the yellow jacket or kînsh:
$\mathrm{Nu}^{\prime}$ ai nen nûtứyamna
Here I am buzzing around.
17. Song of the young deer's claws:

Kodsîngs a gé-u wálta
My deer-claws are rattling.
18. Song of the kshi'kshnish-hawk:

Wéash á-i nû kshûkátkal - - - |- - |- - I carry my offepring with me.
19. Song of the pelican or kúmal:

Há wíshtkak nû núyamna -~-1-ーン~ Noisily I am blowing around.
20. Song of the swan:

Kúsham gé-u witchtaks
By me, by the swan, this storm has been produced.
21. Woman's song:

Kutchíngshka hấ mû́luesh
The feet of a young decr are my medicine-tools.
$2 \%$. Song of the male káls or kálxalsh-bird:
Kā̄lsam gé-u lúmalaks
This is my song, the kālsh-bird's, who made the fog.
23. Song of the female kalls-bird:

Kálsam kû́lo gé-u lu'malaks
Like my consort, tho kãlsh-bird, I produce fog at will.
24. Song of the otter or kolta:

Conjurer: Gútkaks gé-u népk
The small-pox bronght by me, the otter, is apon ye.

## Chorus: Killi'lga koltam génuish

The otter's tread has whirled up the dust.
25. Conjurer's song:

K 6-idsi ai nû shuí'sl gî I am a conjurer's fatal song.
26. Funeral song:

Láluksam nû skû́tchaltko I am now wrapped in the garments of fire-flame.
27. Song of the mámaktsu-duck:

Belly-ache is the disease which I carry along with me.

28．Song of mpámpaktish－duck：
Gutî＇tkuls gé－u nä＇paks
Belly－ache is tho diseaso I am bringing on．
29．Song of the South wind：
Mûash ai nâ＇shuî＇sh gî，$---|--| \div-$
käíla nû wikánsha．- －｜ームー
I am the South wind＇s magic song and sweep over the earth．
30．Song of the conjurer＇s implements：
Tchí hû tché－us mûluash；
kóltam gé－u hû mûluash， s $\chi^{-1} l$ gé－u hû mî́luash．

So looks the medicine－tool taken from the yellow hammer ； This is my curing－tool，that of the otter；
This is my curing－tool，that of the otter－skin belt．
31．Song of the black náta－duck：
Nû ai náta shuî＇sh
Tho nata－duck is now singing about itself．
32．Song of the núsh＝tilansnéash－bird：
 White chalk is my medicine－tool．

33．Song of the pipe：
Kátchkalam mûluash， pā＇ks gé－u mûluash．

The smoking pipe is my medicine－tool，the implement for the tobacco．
34．Song of the scoop：
E－usam mûluash， pála hû gé－u mâ＇luash hû．

This scooping－paddle is my ouring－instrument，that tool used on the lake．
35．Song of the póp－tchikas bird：

I am the incantation of the little pop－tsikas bird．
36．Song of the shk $\ddot{a}^{\prime}$－bird：
Nû ai nen nû shuî＇sh gî，$--1--1 \div-$
p＇laína nû kakî＇dsa．$\quad--|--|-\cup$
I am a magio song and cirole high above the earth．
37. Song of Old Marten or Skelamtch:

Nû ai nen aggídsha $-1--1-$
I go np and stick fast to the tree.
38. Song of spirits' walling-stick, or skî̀lksam hä'kskish:

Skû'ks ai nû sîlkamba \{
Leaning on antaff, I tho dead man's spirit am traveling.
39. Song of the large black woodpecker:

Skûkáshak nû nä’pka
I the young woodpecker have brought on sickness.
40. Song of the strap made of otter skin ( $s \not \varlimsup^{-i} l$ ):

Sxî̀l ai nû mû́luash, ㄴ--|-ー

I the skin-strap am a conjurer's tool, I am a magio song.
41. Song of the $s \chi \hat{\imath}^{\prime \prime} b$-bird:

Sæî̀pa nû shuî'sh
Of the sxib-bird I am the song.
Or, in other voords:
I the sxib-bird am singing about myself.
42. Song of the storm-blast:

Sléwish ai nû wuyámna
I the storm-wind I wind around.
43. Song of the lark:

Nánukash gé-u nä'paksh, Skólälam gé-u nä'paksh.

The disease brought on by me, the lark, spreads everywhere.
44. Song of the spú'm or female shkia'-bird:

Käílash nû shnolóka
I am snapping at the gronnd.
45. Song of the sweat-lodge stick-hole:

Stsaúsawalks gé-u shuísh gî - - - - - - $1-\sim$ This is my song, that of the stick-hole.
46. Song of the loon or táplal:

Tseléwash nîsh shiálamnû taplálas
I am the lon and my waves follow me.
47. Song of the bodily pains:

Tatktî'sh ai nû nä'pka
I the painfulness have come upon ye.
48. Song of famine or hunger:

Tiä'mish ai gé-u nä'pka
The pangs of hunger I carry about.
49. Song of the West wind:

T $\chi$ alamtálkni kú-idsi nû sléwish hû widsápka.

I the West wind, high above tho earth I blow as a pernicions wind-gust.
50. Song of the túktukuash fish-hawk:

P'laína nu kshakédsha, kaló nî kshékansha.

High up in the skies I soar and turn my circles.
Through tho clear skies I am carrying my prey.
51. Song of the tsákënush, an aquatic bird:

Kälash ak nû wúya tsákěnûsh
I the tsakernush would liko to fly over the country.
52. Song of a gray aquatic fowl, called tchákiuks:

Shaikish ai nû yûta - - 1- 1-
I the shafkish I walk with ponderous steps.
53. The little boy's song:

Tsákiag a-i nû shuî'sh gî,
lěmé-ish a-i nû shuî'sh gî.
This is my own, tho littlo boy's, song;
About the thunder I am singing now.
54. Song of the tsántsan-hawk or kingfisher:

Tsála-esh nû kóka tsántsan _- - - | し - - I the tsantsan-lird am eating up tho salınon.
55. Song of the weasel or tsásgai:

Ktsálui nû génhuish
While walking I shine in my multiplo colors.
56. Weasel's magic song:

Tsaskáyam gé-u kä’la,
guyúma ké-u kä’la.
Mino is this ground, the weasel's,
Muddy is my ground, the weasel's.
57. Song of the tcháwash-fish:

Tsáwas ai nû shuî'sh gî
I the tadwas-fish am singing my owu song.
58. Song of the tsîktu-hawk:

Yámash a nû shuî'sh;
yámash a gé-u shuî'sh.
About the north wind I am singing,
Abont the cold winds I am singing.
59. Tsisxixi-bird's song:

Nû ai nen nû́ shuí'sh gî
I am singing ahout myself.
60. Song of the tsiutsiwäsh-bird:

Tsiutsiwä'sam kē'sh múlua
The snow made by me, the taiutsiwaish-bird, is ready to arrive.
61. Song of the blue jay, or ts $\not \ddot{a}-u t s \chi \ddot{a}-u s h:$

Sankáwaltk ai nû shuî'sh
High-crestod I sing uy song.
62. Song of the large black vulture:

Tchuaísh ai nû naggì dsa
I the vulture describe my eireles in the air.
63. Song of the wákash-crane:

Wákas nî tchekléla
I the wakash-crane crouch on the water's edge.
64. Song of the young wákash-crane:

Wakáshak nû nä'pka
The disease bronght on comes from me, the young wakash-bird.
65. Woodpecker's song:

Wákwakins winta wálashtat
I, the woodpecker, am holding fast the tree-stem.
66. Song of the wa'hlas-tree:

Walásh ai nû wawikanka $--|\sim-1 \sim \perp|-\circlearrowright$
I the pole-tree am shaking my crown.
67. Song of the wá-u'htuash-duck:

Wa-u'htû'ssam gé-u nä'pka $-\perp-\cdots 11$
A sickness has come, and I the wa-n'htuash-duck have proluced it.
68. Song of the mallard-duck:

Wä'-aks ai nî tchéwa $-1 \dot{-}-1-$
I the mallard float on the water's bosom.
69. Song of the weiwash-goose:

Ge-n ai hu't wítchtaks
This tempest is my work.

# 70. Song of the little wipeltr wash forest-bird: Wipělî'wash nû shuî'sh gî, wuipléwěsh nû shuísh. 

My own song I sing, I the wipeliwash-bird. I the wuiplewash am singing about myself.

## 71. Song of the witkatkish-hawk:

Gé-u aí hû tû' sáwals, $\quad \cup-|\div--|-\sim$ witkatkísam gé-u sáwals. $-\cup|-\cup|-\cup \mid-\succ$

My head-crest this is, it is that of tho witkatkish-hawk.

## NOTES.

The incantations obtained from Morgan are mostly of the killd called shaino ${ }^{\prime}$ tkish, and a large number of them are attributed to birds. Some of them probably exist in a more explicit form, which was not remembered, and the rhythmic or musical form was obtained of a part of them only. A literal translation of these song-lines is an impossibility in most instances, if their sense has to be reudered in full; I have thercfore furnished only paraphrastic interpretations. The list is alphabetic, and was arranged after the names of the animals, or other personified objects, to which the incantations are attributed. Many of thesesongs are referred to in the "Subject List of Incantations" given by Morgan.

164 ; 1. Ktsallui, to be resplendent with colors, is mainly said of objects showing a blue or purple tinge: pûksam shláps ktsáluitko, the camass-plant has a bluish color. This verb is also used when speaking of the rainbow; of the lizard: 165 ; 14., also of the weasel's fur-skin: 169; 55.
$164 ; 3$. The use of these conjurer's arrows is mentioned 73, 5.
164; 4. Yámsam for Yámasham; cf. Note to 111, 4. Of the personificd North wind the Indians say "he lives up in the mountains". On the north side the basin of the Williamson River is closed up ly high mountains. Gé-ish and genuish, génhuish means the action of going and that of having gone, or the present and the past going; both were translated by "gait", "tread", a term which does not differ much from the real meaning. Both terms also occur in the songs obtained from "Doctor" John, and are mainly used of quadrupeds, amphibians, and reptiles.

164 ; 4. kápa probably for gátpa (nû), "I have come".
165; 6. The yé'n sucker-fish is quite abundant in the lakes of the Klamath highlands and has been identified by Prof. E. D. Cope as the Oatostomus labiatus.

165; 7. yéwa. In Morgan's series of incantations there are song-lines on windgusts, tempests, rain-storms and on the winds blowing from each of the four cardinal points of the compass. These latter are not positively stated to be producers of disease, though they are dreaded on account of their force and violence. The East wind (yéwash) blowing over the alkaline or volcanic, arid lands of Southern Oregon sings: yéwa, yéwa (nû) which does not only signify "I blow from the East", but also "I am howling".

165; 11. Feigning to draw a rope or string from their own posteriors is a trick sometimes resorted to by doctoring practitioners to make a discase disappear.

165 ; 13. It is by no means certain whether the above is the full wording of this song or not.

165; 16. nen involves the idea: "you hear it yourselves." Cf. 167; 36. 170; 59.
166; 17. kódsinksh was in this comeetion explained by líhanksam stē $k s h$. Conjurers' rattles are made of deer's elaws.
$166 ; 18$. This hawk is a kind of sparrow-hawk, Falco sparverins.
166; 20. Compare the song of the weiwash-goose: $170 ; 69$.
$166 ; 21$. This song of a female ennjurer or "doctress" is quite analogous to the song 166; 17 .

166 ; 22. The káls flies around in eold nights followed often by foggy mornings, henee the belief that it makes the fog.

166; 25. Compare the gray wolf's song, 165; 12., whieh forms alliteration to this.
166; 26. Refers very probably to the eremation of the dead.
167; 30. In line 2 the same object is alluded to as in line 3, koltam s\%i'l. This is a broad strip of dressed otter skin, ornamented in various ways with shells, feathers, bird-sealps, etc. To all these objects a magie power is attributed severally, and as they are now all united on one strip of skin, this strip must unite the magic powers of them all. The conjurer suspends the syill on his neek and lets it dangle over his ehest or baek, aceording to the mauipulations in whieh he is engaged at the time. It is eonsidered as one of the most powerful of all the euring tools or míluash.

167 ; 32. Alludes to the grayish-white color of this bird, which burrows underground. This bird is also mentioned in 154 ; 12. and Note; ef. also 132, 7. 8.

168; 41. Sxî'pa is the abbreviated form of the possessive ease in -am, as in wásha wéka 105, 9. and Note to 105, 7.; in: nîl wéksa, 144, 1. ef. 165; 13.

168; 44. Interpreted by others: "I am seolding and threatening the earth".
169 ; 50. Another túktukuash-song is contained in 162;3. ef. Note.
169; 52 . Shaikish is another name given to the tehákiuks.
169 ; 54. The kingfisher or Ceryle aleyon is ealled in Klamath Lake tehántehan, tsántsan, tehánshan after its ery: tchătehătehă, and chiefly feeds on salmon.

169; 56. The seeond line was referred by "Sergeant" Morgan to the otter. Cf. 177; 13.
$170 ; 58$. This alludes to the name of the bird, whieh imitates its twittering.
$170 ; 62$. This bird eireles in the air to disenver fish on the lake's surface and to pounee upon them. The tehuaish is the red headed vulture or black buzzard: Cathartes aura. The Indian name is an imitation of the bird's ery.
$170 ; 63.64$. The wákash-erane is identieal with the tuákish, the name being derived from its ery. These birds ereep along the edge of the water in seareh of small fish. Compare the tuákish-songs $154 ; 9.156 ; 33.34$.

170; 65. This song is much better expressed in the series of Modoc ineantations: $174 ; 13$. Here as well as there alliteration is pereeptible.

170; 67. After gé-u, the subjeet of the sentenee, $1 \mathrm{ia}^{\prime}$ paks or the disease, is omitted. In the name of the duek the final $-s$, -sh is geminated liere in the possessive case, to stand for wa-u'htúasam.

170; 68. In the onomatopoetic word wä'ks the dissimilation of the vowel into wä'-aks is frequently observed. Also pronouneed wékash.

170; 69. The weíwash or waíwash-goose is a long-neeked white bird, commonly known as snow-goose: Anser hyperborens.

# Monorísham kíuksam shuísh. <br> INCANTATIONS OF MODOC CONJURERS. 

```
Obrained from Toby Riddle in the Modoc Dialeot.
```

1. Shkō'ks or spirit's incantation:

P’laitalántnîsh nû shuína $-\cdots \mid-\cup 1 \sim-$
I am singing to the heavens above.
2. Another of the same:

Nulidshá nulidshá nulidshá - - - | - - | $-\perp$ ko-idshántala käilátala kailpákshtala,—tchiá.

$$
-\sim 1---1 \mid-\cdots+1-\cdots-1
$$

I am sliding, slipping, sliding,
Towards that wretched land, towards that buraing region, to romain there.
3. Another of the same:

Tuá hak tála? tuá hak tála?
hû'-ûtak tála, hî'-ûtak tála!
What was it what was it. It was he, it was himself!
4. Song of the dry water-spring:

Wélwash kaí nîsh palálla $--|\div-|\div-| \div$ Indeed my spring has dried up.
5. Song of the old frog:

welwáshtat nû tchalika. $-\div \mid ー-1 \sim-$
I, the deerepit she-frog, sit down here by the water spring.
6. Song of the wind:

Shléwish nû vuyámna, $-1-1-$
nánukashı nû vuyámna, $-\sim-1-1-\sim$
p'laína nû vuyámna. $\quad-1-1-1$
I the wind am blowing, Everywhere I am blowing, In the skies I am hlowing.
7. Song of the five female elks:

Wáti lelíwa, lelíwa; wáti lelíwa, lelíwa

$$
\because--|\div--|\div-\| \div--|--\cdots| \div \sim
$$

The knife lying at the end of the knife range.
8. Song of the fisher, a species of otter:

Tuátala nîsh î shudshîpka? niniá, niniá

$$
-\sim \cdot|\sim--1| \sim-||-\sim+| \sim-1
$$

tuátalá nîsh î shudshîpk îq neineyá, neneá

Why then do you pursue me so You futter and beat your winge.
9. Young otter's song:

Kóltalam nû wéash géna ámputka;
at ké-u guíxish käíla nilíwa,
at kaí lemléma käíla.
The otter's offispring, I plunged into the water, When I emerged from it, the ground blazed $n p$,
The earth was shaken to its foundations.
10. Weasel's song:

Tcháshgai nû géna, - - - 1 -
käíla nû gakála, $\quad \div-$ - 1 -
tcháshgai nû gakála. $-\cdots--1 \div$ I the weasel am starting; On the soil I draw my circlea; I the weasel I travel in circles.
11. Song of the weaset:

E-eni nû wítka shkōksam steínash $-\cup--|\div-| \div-1 \div-$
In the spirit-land I blew out from me tho heart of the skō'ksh.
12. Mink's song:

Klî́pa nû genálla $--1 \div-1 \div$
I the mink am starting off.
13. Song of the woodpecker:

Wákwakinsh nû wínta, $\quad \therefore-1 \perp-\mid-\sim$
p’laí télshnan wapálatat; $--|\div-|--1-$
wákwakinsh nû wínta, $\quad \therefore-1--1 \div$
nû yána télshnan winta. $--1 \div-1 \div-1-$
The woodpeckcr, I am sticking fast,
Upwards lookiug I stick to the trec-stump;
The woodpecker, I am sticking fast,
Downwards I look, and hold myself:
14. Horned owl's song:
Mû'kisham nû lû́lpatko, $\quad \therefore---1-\sim$
I possess the horned owl's sharp vision; my roof-ladder is of speckled wood.
15. Spider's incantation:
Káltchitchiks nû luy̌ámna, $-\sim-1 \div-1 \div$
p’laína nû luyámna. $\quad \therefore-1 \div-1 \div$I the spider am going up; upwarls I travel.
16. Patient's song:
Käía nt̂ shuinálla $\llcorner-1-\cup \cup$I am singing iny Earth song.
17. Another of the same:
At gé-u steínash wakídsha!
Now my heart has returned.
18. Another of the same:
Átûtû huggî'dsha!
Now it has turned!
19. Another of the same:
Gé-u hû gépkash käíla shuáktcha
After I had arrived (in the spirit land) the Earth wept and cried.

## NOTES.

The Modoc series of conjurer's songs obtained from Mrs. Riddle is one of the most valuable of the collection of songs, because it gives them all in their full length and original shape. The majority are in use among the Klanath Lake conjurers also.

The songs 3. 9.17. 18. 19. are delivered rather in a speaking than in a singing modulation of the voice.

173; 1. Sung by a "doctress" who has sent out into the air a deceased persou's spirit to search after the disease of her patient.

173; 2. Rime, alliteration and assonance are combined iu this interesting song, which is said to be sung by female conjurers. A spirit is sent uuderground to prospect for the disease. A tripartite divisiou of the song-line is found in none of the other incantations obtained. Kailpakshtala is a dialectic form for kelpōkshtala; after this word a short pause is made in singing.

173; 3. The conjurer asks the returning spirit: "what did you fiud to be the cause of the disease, when going below the ground ?" The answer is: "he was the cause of it"; he is some subterranean deitr, or geuius, probably Múnatalkni.

173; 4. Probably attributed to a grizzly bear; cf. 157; 46.
173; Th. The frog is prospecting for the disease arount and within the water. Cf. 163; !.

173; 6. The wind, while entrusted with the search for the disease, is blowing through the skies and sweeping over the earth.

174; 7. The mythie elks who sang this were said to be endowed with human faculties. Allusions not traceable.

174; 8. This is an incantation which would seem to proceed rather from a duek or goose beating its wings while chasing another, than from a fisher. First line Modoe, second, Klamath Lake.

174; 9. The animal had found the disease in the water and chased it out to the shore; when there it set the shore on fire and the ground was shaken up under its destructive, ravaging steps.

174; 11. The weasel, returning from its errand, reports to the conjurer, that having found the cause of the patient's disease to be a wicked skî'ks's heart, this was brought by the weasel to the spirit land and breathed out, to be left there. This is the most probable interpretation of all those suggested, for soug 11. is said to form a sequel to the weasel's soug 10.

174; 13. The kíuks had sent the red headed woodpecker to prospeet for his patient's disease in the atmosphere. Alliteration and assonance in profusion.

175; 14. Meaning: My eyes are well fitted for the discovery of the patient's disease, hovering in the air, for they are acute, being those of the owl; I am just stepping up my lodge-ladder, the speekled bark of a tree, ou the seareh for the disease. Alliteration is a prominent feature in this incantation. Cf. Note to 122, 1. 2.

175; 15. Sent by the conjurer, the spider goes up in the web to prospeet for the disease. The verb shows the prefix 1 -, because the body of the spider is round-shaped.

175; 16. On falling siek, a spirit orders the patient to sing and repeat this Earthsong line for hours.
$175 ; 17$. "I have recovered the use of my senses."

## Kikasifam kíuksam shuísh.

INCANTATIONS.

Given by Kakash or "Doctor Join" in the Klamath lake Dialect.

Kálo. Kálo nû na shä'shatk, slä'wish nû na shä'shatk, nû kálo p’lái nû wítsa.
3 Käila. Käíla ai nû shui'sh gî; käíla ai nî wálta, käíla nû ai shawálta.
$L u^{\prime} k$. Sháshapsh na shä'shatk; sháshapsham génuish, gé-u génhuish nû géna.
6 Witä'm. Nû ai witä'm gî, nû ai shúina witä'm; nû ai na shä'shatk an, at an géna: géua an atí, gémpøle an.

Witämága. Nû a wî'tämak, hótchna n wî'tümak; witämák a n; lápi ai nû́ witia'mak.
Wátsag. Nû ai hû wâtsag; shuî'shank, nû ai shuîná u wátsag.
Wìhlág. Nû ai wil'hág, hótchna $n$ wîl'hag; géna an wîl'hag, atí' ni géna nû; ná-asht shä'shatk wilhága n.
Waľátchka. Nû ai walðátchka, walxátchka n géna; käíla nî géna, nû-walkátchka.
Kû́lta. Nû a kû̀lt gî; kû́lta i ni géna, kûltam at hûk génuish.
$P_{-\bar{\prime}} \quad$ p. Pä'p a nû gî; pä'p an a nû shéshatk; nû a gátpa pä'p, atí nî hû'dshna, nû a hûdslına.
TCháshgai. Tcháshgai nû ká-ika, tcháshgai nû géna.
$K l \imath \imath p a$. Klípa nû ai shuísh; koyóma klî'pam génuish.
Gî'wash. Nû ai gǐ̀wash, p’laína nû ai hō'tsna; là'pi ai nî gîwash, shéshatk nû gíwash.
$\underline{K} d \underline{k}$. Nû ai $\underline{k} \bar{a}^{\prime} \underline{k}$ gî; sáwals gé-u yá-uya.
Wêhwekiash. Wékwekash ai nî shahuáltampk; nû wékwekash slû’ka, sháwaltchnîsh slû́'ka wékwekash.
Tsántsan. Nû ai tsántsan shuî́sh gî; nû na shä'shatk tsantsaná-ag, nû ai tsántsan shä'wa $n$.
Shké. Nû ai shgé gî, hû'ntsna a nû, tiä'muk a hû'ntsna, nû a hû́ntsna, mï'- 21 makla nû shnû́kuapk, huntsámpéluapk a nû; nû a ke̊lä'wi, tchaggáya nû.
Nanîlash. Kálowat shidshî́ yamna nanílash.
Pû'shash. Nû ai pi'shash, píshash ná-asht shä'shatk; hât nā'sht shä'shatk pi'shash; guyántsa pìishash, nû guyántsa.
Slné-ish. Shné-îsh an nā'sht shä'shatk.
Táplal. Nû a-i taplál gî, nû'sh a-i shläwî'ta, kä'mat a-i shläwíta.
Mpámpaktish. Mpámpaktîsh an shiunóta nû, k'lekátk an shnayä'na.
Káwiaga. Nû a-i káwiag, skî̀ntsn an káwiag.
Tsiālsh. Tsiālsh nû a hû'tsna; gé-u nû káluish.
Tseléyash. Nû a tseléyash shuî'sh gî; tselä'yash mîsh k $\underline{k}$ ka.
Tchû́plssh. Ná-asht tchkásh tsû́pkish, nû a na shä'shatk, nû ai mû́ni kiä'n gî. 33 Nuáka. Nû kitchkán nû an nđáka géna.

Kû́tcha-aga. Wínua nû a kû̀tsag, shéshatk kû́tsag; pákish wák kû'tsag.
Weliétush. Nû ai weketásh gì; wéketa nû shahualtámpka, nî shahualtámpka, nit wekétash shéwa.
Mánkugu. Ná-asht shä'shatk, mánkag shia'shatk.
Kaknólsh. Gä' a gé-u káknûlsh, gé-u hût káknûlsh; uû shlä-ípĕle kíknulsh, p’laíwash káknulsh.
Pápkash. Pápkash wấlta gé-u a gé-ish; wálta gé-ı gé-ish pápksham lû̀lp; kia'gi gé-u pápkash gé-ish.
9 Spû́klish. Nû ai spû'klish, ná-asht shai'slatk.
Shläkótlish. Gé-u a shlikī̄̄'tksh, gä' kì hû shlakō'tkîsh; wudsì'tsî ánkn, túm udsî́tsî; túm îllxî, túmi ánku, túmi gée-u ánku gî.

Welékag. Nû ai welia'kag; nû a tchía welä'xatkank; gé'k a lû'lp, gé k a múmuatch.

## NOTES.

The majority of these songs are destitute of any interesting and eharaeteristic features, and being of easy interpretation I gave them withont translation, adding, howerer, the necessary remarks in the Dietionary. These phrases are common-place repetitions of some shamanic ideas curvent in the tribe, and are given in a low jargon or teelmical slang redundant in elisions and contractions. Only a few of their number are rhythmical. The pronomn nî, $I$, is often repeated three times in one sentenee, in the form of nî, nû, an (anû), ank (a nû gî), nil (nû al).

Of the thirty-seven objects which have given origin to these songs sixteen do not ocem in the shamanic songs given by other informants and two are given here under other lieadings: the $8 k y$, paishash (muler kílo), and the marten, Skélamteh (nuder pép). I have armaged all the songs in eategories of natural objeets.

Kíkash also furnished a series of limbs and organs of eertain mimals whieh were supposed to exercise supernatural powers, and therefore were mate the subjeet of a shuî'sh, shuinotkish, or ineantation. They are as follows: of the black bear, the head, snont, paws, fur and heart; of the dog, the head, hair, fur, cans, tail and paws; of the weasel (tchishgai), the heal, eyes, snont, nose, chin, long hair, paws and tail; of the mink, the paws, suont, fur, tail and heart; of the shne-ish-fuch, the head and legs; of the salmon, the head and fins; of the fly, the wings (las, blaek or white) and legs. About the young antclope and old woman's spirit (wil'hag and welekigat) see below.

176 ; 2. wítsa. When the clear sky is said to blow with a shrill soumd (witsa), and thes "to sing its own song", this means that the winds are blowing fiereely throngh the air, high above the ground.

176; 3. This song on the grumbling or rattling earth (wála, lmálta) was marle by Doctor John on the subject of his own imprisonment, the eause of which I have related elsewhere.

176; 4. Shashapsh, Shashapanteh is the mythologe nane of the grizzly bear: $\mathbf{1 1 8 , 1}$.

177; 2. "There are two of ns blaek bear eubs" refers to the eirenmstance that in mythologic tales two eubs only are found to belong to one bear family. Compare what is said of the gíwash, 177 ; 14. and Note to 118, 1. 7.

177; 5. The name of the young antelope is very differently pronounced. Its ears (mumûateh wil'hágam) form the subject of a shuî'slı.

177; 13. Koyóma. The same idea is met with in 169; 56. 166; 24.
177; 14. gíwash (the $i$ pronounced short) is the long, gray-colored squirrel.
178; 7. Pápkash. This song of the lumber-boards was more eompletely remembered than the one quoted $155 ; 18$.

178; 12. Pāksh. A similar tobateo-pipe song is to be found 167; 33.
178; 13. welékag. Here as well as in all other portions of the globe the idea of sorcery and witchery is associated with that of old women (welékash, old woman; welekága old woman's spirit). Weli'̌atka, to travel around or appear as an old woman's spirit.

## Nánuktua kiúksam shuî́sh.

## subject list of various Kinds of incantations in USE AMONG THE KLAMATH LAKE PEOPLE.

```
Obtained from "Sergeant" Morgan.
```

 paíshash, lĕmé-ish, lúepalsh, któdshash, gulkásh. cloud, thnnder, lightning, rain, rain mixed with
 smaluatk, hä'nuash, yatî'sh, sámya-ush, é-ush, wélwash, káwam, wäyáapotted, opright rocks, upright rocke, roeks in river, lake, water.spring, eel.spring, floating lapsh.


 takna, tiä'mîsh.
of sickness, honger.

gíwash, tsásgai, tsáskaya wéash, kolta wéas, Skélauntch, wálzatska, kútchingsh, wán, ké-utchish, witi $i^{\prime} m, l^{\prime} k$.
clani, filver. gras moif, black benr, grtazly.
3
Yaúkal kiúksam shuí'sh, tchuaísh, tsášīibs, skolos, plaíwash.

Ndukísh kiúksann shuísh, wítkatkish, tsíktu, tssintsan, túktukuash, Pigeonhawk hasaninesntation, srall lawk, mice.hawk, ittile fishing. fish hawk.
shkii', spúm.
gray havt species.
6 Wákwakinsh kiúksam shui'sh, shpiu'hpush, skaúkush.
Red.headed wood- has an incantation, spotted woolpeoker, large hlack
pecker
Kákan kiúksam shui'sh, tsoks, tchiutchíwäsh, nii'-ulinsl, shuā̄'t.
Crow is a medicine-song, hiackhird, "snow-prodncer," black forest hlrd, sedge-cock.

9 kálzals (káls), tchíkass kshíkshnîsh, wuiplé-ush, skúlä, tsísqî̌î, tchä'-ush,
 núsh=tilansnéash, tsxä-utzxä̀'-ush, póp=tsikas.

Kûlla kiúksam shuî́sh, wéaks, náta, mpámpaktish', tsáolaks, mámak-
Red-headed has an lucantation, mallard, little blackdook, small daok, red-ejed dnck, lack and
duck
12 tsu, kílidshiksh, wá-u’htush, túiti, múläläk, $p$ óp=wäks.
Fhite largo dack, longlegged dack, young shoveler.duok, pop-waks.
duck,

Méhiäs kiúksam shuî'sh, yä'n, tsuám, tsû'lpas, tcháwash, kû'tagsh, Trout is conjnrer's medicias. small large sticker, tsilpash. alitio sucker, minnow-ish,
song
sncker,
15 tsálayash. salmon.

Wáměnags kiúksam shuî'sh, kámtilag, wíssink, ké-ish.
Black gnake 18 a mong.melicicine, a blhack saake, garter sanako, rattlessakko.

18 shuísham k 6 -ii. Kínsh kiúksam shuísh, ámpuam lák.
(ls) of songs toad. Fellow is s conjurer's medioine, horse-halr.
Wâ'kash kiúksam shui'sh, wássuass, ktséämu, sā̊l, waktia'lash, wá'hlas.
Pond-lily seed la n medicine-song, lacustrine grass, aruatic grass, arrow, slaft-wood, pole-tree.
Wû'ns kiúksam shui'sh, ktsík, sákuas, ki'sh; sxīll, k'nû'ks, ndû́ks, Dng-out is an incoutatlon, oar, fish-spear, larpoon; otter-sklu rope, pestlo,
oanoe
atrlags,
21 pála, kátchgal, sáwals.
scoop, Indlan tobacoco, arrom.baad.
Tínt wakî'sh kiúksam shuî'sh, shashtanû̀lōls, wásh, shánhish, pápkas,
Of sweat- insldo iadder is n copjurer's song, outaldeladder of aweat- excavation, rafter, house, inmber,
honse floor ststi-usa wálks, lû̀loks, slû'kops, slu'mdamd=wash.
atick-hole, fro, carity, rensains of old sveat-honee.

Lábaks, klépki kiúksam shuî'sh, tsé-usam skû'tatk, tsé-usam tsúyätk, white chalk, red paint are docotors' songn, tob 6 -ngb-dreaseen, tchb-nsb-bead-covererd. tsé-usam lā'sh, witkakísham lā's.

## tehe-rab.feather, hawk's feather.

 Snow- Aake witchcraft is a doctor'sskû'ksam hä'kskîsh, hä'näsish.
spirit's walking.staff, conjarer's arrow.

## NOTES.

All these subjeets of tamánuash songs were obtained pell-mell and jotted down in a confusion. A elear insight into the quality of the songs known to this Indian eonld be attained only by elassifying them into eategories, as those of natural agencies, the winds, rocks, genera of animals, plants, tools and articles of native dress. Morgan had heard all these songs snng in former sears, but when I met him he could remember the texts of those 71 songs only, whieh are to be found from page 164 to page 171. Many songs of this subjeet list are sung by the Modoe conjurers also.

Certain names of uncommon species of animals could not be rendered in English for want of information; to others the Dictionary will afford the best clue.

179; 4. káwam or káwam is a possessive casc, requiring as its complement ámp̂̂ or kóke, kokeága. To bathe in eel-springs is deemed to be of great influence on character and personal courage, for the constant peril of being bitten by crabs, snakes and other reptiles must neeessarily make the bathers scornfnl against sudden pains.
 tively wwith the foregoing word: tsákiag tsû' $\chi$ at $\chi$ antko "a restless boy, a littlo boy unable to keep quict on his seat."

180; 1. tsaskáya wéash, kólta wéas show the apoeopated form of the possessive before a vocalie sound. This is another example of the rule that Klamath seeks rather than avoids hiutus. Cf stsá usa=wálks $168 ; 45 ; 180 ; 23$, and Note to $168 ; 41$.

180; 5. spû'm; said to be the female of the fat shkä'-bird. There exist conjurers' ${ }^{\prime}$ songs about loth, which I have given in this volume, page 167; 36. 168; 44.

180; 10. póp=telíkash seems to mean the "drinking or sipping bird" (ef. pópo-i).
180; 17. Lä=a-\{mbotkish, "the one which refuses to drink" seems to be a newt, Amblystoma, according to the description given of it by the Indians.

180; 17. koä. The toad or bull-frog tamánuash song is reputed to be the most efficient of all these ineantations.

180; 18. Ámpuam lák is a film-like organism moving rapidly in spirals or meanders through the water, and supposed by rusties to originate from the long hair of horses. The primary signifieation of ámbutka, to be thirsts, is "to returu to the water", and the distributive form a-ámbutka here indieates repetition.

180; 19. The list of plants is very small when compared to that of the animals, and cmborlies ceonomieal plants only.

180; 22. wásh means place of residence in general ; but since all the objeets in this category refer to the sweat-house, it may be referred to a removal of earth in the floor of this strueture; laloks is the fire burning in the centre of it.

181; 1. tsé-usam skû'tatk: "dressed with feathers of the yellow hammer or red sliafted flicker."

## COOING AND WOOING.

## I.

1. Yuyulinnē, yuyulinnē, yuyulinnē

I have passed into womauhood.
2. I-unēks $\chi$ éni a yulína $\because--|\div-|\div-|-\sim$

After sunset I got unwoll.
3. Gä' lîsh kaní lıudshótchipka? - - | - - | - - | ~

Who comes thore riding towards me?

My little pigeon, 1 ry right into the dovecot?

This way follow me, before it is full daylight !
6. At mîsh mbushii'aluapka lákiam wéashash gî'shit

I want to wed you, for you aro tho chief's son.

hûmámasht túma tuá gî'tkuapka. $\sim-1-\cdots \mid-\cdots-$
Very much I covet you for a husband,
For in times to come you will live in affluence.
8. She: Tatá î n'sh tuá wo ówe, wo ówe, wo ówe?

He: É-ukīk pîla éwank, éwank, éwank!

$$
\begin{aligned}
& \therefore--1 \div-1 \div-1 \div-
\end{aligned}
$$

She: And when will you pay for me a wedding gift?
He: A canoe I'll givo for you half filled with water.

He spends nuch money on women thinking to obtain them easily.
10. Múshmush shûdshipka káwantk tchilloyága $--|\div ー-|--|-\simeq ー$

The poor youngster, ho is driving one cow only.
11. Géntala ká-i gaíkanka púshpushlish hishuákshash!

$$
\therefore \mid---1 \div--1 \div--1-\div
$$

It is not that black follow that.I am striving to secure!

12．Í－u nénak yan＇wán î，$--\mid \div-1 \leq$

They say，that you aro abandoned，
They say，that you are homoless．
13．Nánuk kalî̀napka wéwan＇sh，nā＇dshek＇mutchéwatk tut＇hiéna All women are dead；only an old man is tottering nlunt．
14．Kí－a tídshi snawédshash nî＇sh shû＇－uashipk！

$$
--1 v-1-\cdots \mid \cdots+
$$

That is a pretty female that follows me up！

Why do yon send me to sleep under the shadow of the cottonwood－tree ！
16．Nû＇sh ak gìntak i wítchnoka $-\sim|-\cdots|-\cup$
lílula wítchnoka

That＇s becanso you love me that you rattle around the lodge．
17．Tcháki mîsh gunî＇ta，
$\therefore--1 \div$ tcháki mîsh gunî＇ta，
$\rightarrow--1 \div$

lulń－uash skútatk huwaliéga．$-\sim-1--\mid \div--1--$
A youngster heyond your home，a young man beyond your lodge Ran up the hill，wrapped in fogs，rau up tho mount while robed in mists．
18．Kayáta hû’lhe，hû́lhekanka tcháki，（bis）$\ldots-\cdots|-1-\ldots|-$
kayáta lû＇li，lû＇likanka tcháki．（bis）$\sim \ldots-1 \mid-\sim-$
Into many of the littlo houses ran the boy， Ronghly he tonched many of tho littlo houses，the boy．
19 Gé－u lakí wayō＇sham stî＇ťantk hû＇t
My hushand has the voice of the white goose．
20．Gé－u lakí yókikam shkutántki
My hushand is dressed in tho feathers of the jay－lirirl．

My husband has the voico of tho moeking－bird．
22．Pálpali watsátka hushólalza
He is honneing aronnd on a white horse．
23．＇Tatsā’lka wáts snukátkank－－｜ー・｜ーー～
Ho pets tho horso hofore he grasps him．
24．＇I＇áplal wó－a hû＇nûank mû stî̀＇txantko
Loudly cries tho spotted loon while skimming the waters．

The lark fies towards me grazing the gronnd and stopping every little while．
26. Wâk î nûsh gíug wetû́, wetấ, $\ldots-|\cdots-\cdots|-\frac{1}{-}$
 Why did you become estranged, estranged,
By running in neighbors' houses estranged, estranged $\boldsymbol{q}$
27. Wák wennfluta nûsh gítk?
wâk î nûsh gítk wennilota?
Why have you become so estranged to mel
28. K $\delta$-idsi máklaks hō'lalk tchawík sanáholiug A wicked man approaches fast, desirons of $\Omega$ fight.
29. Shenúyatko nî wáti luyä'nitki

I flee before the man who tramps around in tho lodge, knife in hand.
30. K $\underline{\text { b }}$-idshi wátsag shkanákapka $\underline{\mathrm{k}}$ buuapkug,


That vicions dog assails me and will bite, But I prefer not to scold him for it.
31. Kä'-udshîsh topínkan wókanka, $-\sim-|-\perp-|-\simeq$ yámat téluitgank wókanka. $\quad-1 \div-1<-0$

The younger brother of tho gray wolf is howling, After having gone North he is howling.
32. Wásh a léka gî'tk gâ' n'sh húyaha $\div-|\div-|\div-|\div-| \div$ Tho prairie-wolf full of anger runs away from me.
33. Wásh leká gîtk washolal $\chi$ tchíkělank wátsat

$$
-\cdots-\infty|-\cdots|-\cdots \mid-
$$

The maddened prairie-wolf gets away riding on his horse.
34. Wásh léggať nî'sh húyaha, wásh í léggatk' kú nîsh húyaha! hu-i-yăhǎ!

Crazy-minded the prairie-wolf flees me; Maddened in his senses he runs away to a far-off distauce.
35. K -idshi wátch genuála, $-\sim-1 \div-1 \div$ hai yóshinko, yóosink! - - - - |- -

A vicions steed has gone out; he is lost, he is strayed!
36. .Tatá mîsh kaní lápukni gěnálla?

Who has touched you at both places !
37. Á nû toks shiwága shéwa, - - - 1 - - - 1 káyutch mîsh pátchnam palaléant. $--|\div-|\div--| \div$

I hold you to be an innocent girl, though I have not lived with you yet.
38. Táunûdsh pásh nû túmĕna,

$$
\div-1--1 \div-
$$



Over and over they tell me, That this scoundrel has insulted me.
39. Gétala stâ' newálya!

$$
\therefore-1 \div-1 \div-
$$



Right ahead I follow the uphill path! Why then do you swing the body around $!$
40. Waíwash gandíla shiwákshash, shíwamptchash waíwash gandíla.

White geese saw a woman hiding,
Saw an old maid hidiug in the grass.
41. Túhush ō wílaslīna,

$$
\begin{aligned}
& \therefore--\mid 1--- \\
& \therefore---11--- \\
& \therefore--\mid 1--- \\
& \therefore---1 \div--
\end{aligned}
$$

wíhaslasna, wíllaslina.
túhush $\bar{o}$ wíllaslā,
wílhaslasna, wíllaslā.
The mud-hen sprawls on the top ; On the top it rests, it slides from the top.
42. Wī-iltí nû shotelōla, $\quad-|\div-|\div-|-$ púmam nû u-ásh goyéna. $--1 \div-1 \div-1 \div 2$

I am rolling up the wi'l, and shall walk around in the beavers' den.



The badger entering his den makes uak, nak, nak, The fat (badger) entering makes nak, nak, nak.
 wéwanuish gíntak shéwal, shéwal. $\quad \therefore-\dot{C l}$

Just now you affirmed that hairless you were, But the women say, that hairy you are.

Wo are throwing eggs at each other.
46. E antléya máyas à

## II


48. Yunigsh $\not \overline{e ́}^{\prime} n i$ yulína
49. Wénni taína, wénni teína, ---ー-ーwénni taína . . . . . ihisi'-11- i- i- $\overline{-}-\bar{n}$ ! A different young woman I an bow; ihfon!
50. Tát î wáktch hûk a télak shayantildsha? - - | - - | - - |- - | - - Whence have yen carried oft that (man's) waistcoat?
51. Uná mîsh sha luelóla tchaggígatat netílapkish

$$
-\therefore|-\therefore|-\therefore-|--\therefore|-\div-1-\therefore-
$$

Long ago they killed you when yen lay under the serviceberry lmsh.
52. Tchítchahnish kintála, $\therefore--|--|-$ wéwanuish ka-igóga. $<--|\div--| \div-$

Young chaps tramp around; They are on the lookont for women.
53. Hinawála! hinawála!

-     -         -             - 11 - - -


Shake your hean! yon son of a bitch, and gn South.

54. Girls to boys:

Káái mîsh nû wítchta tchillnyágash
hû́kank kaailéak skútash;
$\underline{k}$ á-i nû shanáhuli hû̂'mtcha hishuátchzash.
Boys to girls:
$\underline{K}$ Ká-i nû shanáhuli kó-eptcha snawédshash, kókuapkash lû́lp gípkash.
Girls: Young man, I will not love you, fer yeu ron aronnd with ne blanket ou; I de not desire such a husband.
Boys: And I do uot like a frog-shaper woman with swollon cres.

You say yeu are rich! and you don't even spread a wild-cat's skin!
56. Kō'pe bunû'tchatko stû́pat wintila; nû'sh shana-úlitko nû́toks mísh kía-i shamá-uli.

Lying near the stove you are geing to driuk coffeo; altheugh you wanted me for a wifo, I de not want yeu for a husband.
57. Shínuitko húyaha, $\leq-|\therefore-| \div-1-$
wénuitko húyaha. $--1 \div-1 \div-1-$
After c-she went te hide; the widow: sho hid herself.
58. Mū'ni wenuitko gélash shipalkánka $-\cup|\div--|\div-|\div-|\llcorner-$

The stout widow is stalkiug around intent upon the business.

## NOTES.

I. Erotic songs obtained from Chief Johnson, Minnie Froben, and others, in the Klamath Lake dialeet. The twelve songs obtained from Minnie Froben are among the prettiest and most melodions, as for instance 9.16.17.18. $2 \mathrm{~J}, 26$., and the eiglateen songs lictated by Johnson are of importance for the study of manners and eustoms, viz: 6. T. 8. 10. 11. 19. 20. 2S. 29. 41. 42. 43 ctc.

With the Indians all of these and many other erotie songs pass under the name of pilpil or puberty songs. They include lines on signs of womanhood, courting, love sentiments, flisappointments in love, marriage fees paid to parents, on marrying aud on ennjugal life. Some love songs have quite pretty melodies. A few songs of the present interesting series of song-lines seem to treat of commonplace subjects only, as 22. to 24.; 28 . to 31 ., while others apparently contain nothing but heartless mockeries and satiric strietures, like 9.28. 40. 44. But they all refer in fact to love-making and kindred seutiments, the satirie lines confirming the proverbial inelination of lovers to fight among themselves. I have deemed appropriate to gather all these songs under a lieading which ummistakably expresses their real purport.

182; 1. The aecent is laid sometimes on first, sometimes on seeond syllable. This worl is abbreviated from yuyulinépka, as it oceurs in the Modoc pilpil song. The event mentioned here is followed by a dance-feast; ef. shúyuzalsh, and 134, 21.

182; 4. ginhiéna "inside" means into ar secluded spot, lodge or enclosure. O-ólka, $\bar{o}$ 'laka is the diminutive of $\bar{\prime}$ lsh, the grayish pigeon with the plaintive voiee.

182; 7. gítkuapka, a eontraction of gítko gi-uápka î.
182; 8. Pay a wedling gift is equivalent to purchasing a girl from her parents for a handsome consideration.

182; 11. Sung by women. The original as given to me does not contain the negative particle: Géntala nu haikanka púshpuslılish hishuákshash.

183 ; 12. yan'wán î stands for yanhuáui î.
183 ; 13. kalínapka : they are not only "dead but out of sight", as the suffix -apkib indieates. This being an erotie song-line, kalinapka simply means that the females looked for are either asleep or absent, and not deceased, as kalína would scem to indieate. 'mutchéwatk for liĕmutchérratko; cf. 136, 5.

183; 14. 15. These two songs follow il purely anaprestie metre, No. 15 adding two aeataleetie syllables to its threc anaprests. Compare also the first line of 182 ; 7. with one supernumerary syllable. As for the contents of $183 ; 15$. compare the analogous Modoc song 186; 51.

183; 17. Melody very engaging. In lúluash the second $u$ is redoubled for metrieal reasons. Dactylic rhythm prevails here, in 16 , and in $182 ; 11$.
$183 ; 18$. That is, while he was seeking yomg girls insicle the kayátas. Melody very beautiful.
$183 ; 19$. wayósham, possessive ease of waíwash, q. $v$.
183; 20. shkutántki stands for skútatko gî ol slikutanátko gî: "he is wrapped in."
$183 ; 21$. The much more so, beeause he is in lis festive garb, the pátash and las stmek on his headdress.

184; 26. Melody very pretty. A young womau addresses these words to a lover.
184; 27. Sung by young women who have fallen out with their beaus.

184; 28. Said to be an erotic song.
184 ; 29. luÿä'nitki contracted from luyä'nitko gî. Of. Note to 183; 20.
184; 30. koktkinshkiuk. The proper meaning of this verb is "to set upon like a dragon-fly". Shanahual is an uncommon form for shanahöli, the long ō being resolved into its component sonuds. Cf. náwal, and 184 ; 35. : genuála for genō’a.
$184 ; 31$. Why did the wolf howl? The reason given is that he could not ineet anybody. This wolf is a loving young man who was looking out for women.

184; 32. Sung by one woman and repeated by a female chorus. This song-line treats of the abandonment of a female by her husband or lover for some reason.

184; 33. Pretty nelody. The song refers to a lover disappointed in his affections.
184 ; 33. tchíkla wátsatka is preferable to and more fiequent than wátsat, wátehtat, ef. 183; 22. Alliteration is perceptible in this song-line.
$184 ; 34$. The wash is the lover of the girl who sings this song; the lover is eompared to a prairie-molf on account of his importunity and lack of moderation. Comparisons of lovers with quadrupeds and birds are frequently met with.

184; 35. Jóshinko for yó-ishiank $\overline{0}$, yó-ishink hû : he is running astray.
184; 37. shiwága. In the objective case sometimes inflected like snáwedsh woman 80, 11. sometimes as a diminutive noun, as here, and 33,10 . In 185; 40. shiwákshash stands incorrectly for shiwágash, through phonetic analogy witlı shíwamptehash in the same song.
$185 ; 39$ to 44 , perhaps including 45 , have a literal and direet meaning, and besides this are intended to convey an indirect meaning, which is of an obscene character. The same may be said of songs 15 and 51 .

185; 41. This melodious song alludes to the habit of mud-hens to rest and spuwl on the top of the waves; wílhaslasna depicts their motions while on the wave-top, willaslina the sprawling observed while they sail down from it. Witli slight phonetic variatious, this same melody is also sung as follows: Tóhosh ō wíllaslīn; wíllaslasna, wíllaslīna; wíllaslī īn.

185 ; 42. wīl scems connected with the diminutive word wilhaga, youry deer.
185 ; 43. kî' nak ĕn gî', stands for gî' nak, nen gî: "he cries nak, so he cries"; assuming that enn is abbreviated from nen.

185; 45. This is a "drean""song.
185; 46. Pilpil song worded in another than the Máklaks language.
II. Erotic songs obtained from Toby Riddle and J. C. D. liiddle in the Modoe dialect. The Modoe pilpil songs obtained are all of a satiric eharacter.

185; 47. Sce Klamath Lake pilpil sougs 182; 1.
185; 48. Sce Klamath Lake collection of pilpil songs 182; 2.
186; 49. Pilpil tune sung by girls. Taina is equivalent to t'ena, teiniwáash etc.
186; 50. A song repeated for hours by young Modocs; it is of the true pilpil kind.
186; 51. Originally a pilpil song, but sung now by children playing hide and seek.
186; 52. This is a very popnlar and prettily tuned Modoe song.
186; 53. Sung by Modoe girls who feel themselves importuned by their lovers. Often the boys join them by singing it in chorus. This well-meant advice of sending the boys to the South, no doubt to the Pit River country, is to keep them at a distance, for the song refers to the appearance of the first signs of puberty. Watchagalam is full form of watchagam, for which wátcham is sometimes incorrectly substituted.

186 ； 54 ．This satirie carmen amoboum is one of the longest pieces in the collec－ tion and contains words of reprobation addressed by disappointed girls to their ad－ mirers．Sung in chorus by both sexes，with frequent dacapos after different tunes． The suffix－ash repeats itself at the end of every line aud in kokuapkash．

186；55．This little iambic improvisation is rery aphoristically and indistinetly worded，but is eudowed with perliaps the prettiest tune of all songs in this collection． It is an apostrophe of a newly marricd wife to her husband，secing herself deprived even of the most common comfort，a small tanned fur－skin，to repose on and to avoid the dampness of the bare soil．

186；56．A lover is taunted on account of his predilection for the white man＇s habits．The Modocs say this is a song of the Klamath Lakes．

186；58．Admits of no literal translation．

## SONGS OF SATIRE．

## I．

1．Kátchkal ô＇yank amníyamna $--|\div-|\llcorner-\mid \dot{-}$
He goes around giving away sticks of tobaceo，and is very noisy about it．
2．Gēt genō ${ }^{\prime} l a$ tsiálash patsō ${ }^{\prime} k$ Yamakî＇shamkshi

$$
--1|-- \pm|\sim-1|-1|-\sim
$$

This man has started out to feed on salmon among the northern Indians．
3．＇Tû̀sh hu wiká nénu shésha waíwash tchílamnu？

$$
\therefore--1 \div--1 \div-1 \div--1 \div
$$

Where is it，that close by on a hill waiwash－geese are crowding together？
4．Gé－u káni vû＇lkashti wátch hushótchipka？․－｜
Who rides up to me on my horse，borrowed of we ？
5．＇Tidshá kókatk î shéwa，hashuátan＇ì！ $\left.--\frac{1}{-1} \right\rvert\,-\cdots$ You think you are finely dressed；then mind your own dress！
6．Vấľashti kîhíwash shkútatk u＇hlutuína
He dresses in a borrowed woodpecker－blanket and trails it along on the ground．
7．Ká tal hû́k mû shétaluatk？$\quad--|\div-| \perp-$
K $\bar{e}^{\prime}$ lish tok walzátchkatko gûlí $\quad \therefore-|\div-|\therefore--|-\cup$
Who is he，the alleged wealthy man ？
She has entered the house of a poorly dressed husband．
8．Lelahówitko wátch wa\％oyi $--|\div ー-|-ー| ン ー$
Slow－running horses he paid for his wife．
9. Ámĕta téwank vû́ya té́niwash $-\cdots|\div-|\div-| \div-$ The young girl slakes ber lody when planting the canass-stick into the ground.

Shakiug lier body she liroke the eamass-spade.
11. Lákiam pé-ia mat sha kiúla kîwalapaita

$$
\therefore--1 \div-1 \div-1 \div-1 \div-1--
$$

The chief's daughter, they saty, was dragyell along the groumd.
12. I laktchámpesh wénni tehikúlalža, $--|\div-|\div--|--$ klítisham wéash wénni tehikolál\%' î. $\quad-|--|--|<--|--$

You always strangely stride on on your houg trexs.
The crane's progeny, you walk strangely long-legyed.
 A young woman fron Klauath Marsh is swallowing, swallowing.
 Short-faed like a purenpine that fellow is catiug.
15. Lúelat hî̂'nksh hî't; yánta, yánta $-\sim-|--|--|-$
kill ye that fellow on the spot! down with him, down, down!
16. Kä'utchîsh gû́lo sáměnaki' wō'n lakí $\quad-\frac{1}{\mid}-\frac{1}{\mid} \ldots$ When the female wolf has devoured the rlk-lonck she eries for more.
17. Shunuí-uya shuáktcha $-\sim \mid-\cdots-$

Ifeel unwell aud hence an sobbing.

## II.


They whipped a telltale; he is now sobbing.
 The root-basket, they say, is swinging to and fio on Bi'ns lack.
20. Ló-i lóyan lóyak, ló-i lóyan lóyak
 A maiden of the Klamath Lakes is swallowing, devming.
22. Níggă heúĕ héyo, nî́ggă héyo héwe $--\left|-\cdots-\|_{-}\right|-\ldots$ túmi níggă, túmi níggă $\quad--|--\|--|-$

## NOTES.

The feelings whieh dictated these sarcastie song-lines are those of derision, satire and eritieism. The majority are of a drastic, some even of a crude and very offensive charaeter; seourging mereilessly the infirmities observed on fellow-men. Many of them
also pass as puberty songs, but I have preferred to class these under the heading of songs of satire. Some are sung with melodies, others are spoken and recited only.
I. Satiric songs obtained in the Klanath Lake dialeet from Chief Johnson, Minnie Froben and others.

189; 1. n'yank. In this term the prefix u-gives the shape in which the tobaceo was given a way.

189; 2. Refers to somebody going to the Dalles or other place along the Columbia River. Cf. page 93, Note.

189; 3. In this verse there are four partieles pointing either to distance or to elevattion (altitude): tî'slh, hu, the -u suffixed to nen (nen hu) and to tehilamna. This song is sung by a woman, who hears (nen) for the first time of this assembling of geese; shésha waíwash stands for slıéslash waíwash, or shéshatko waíwash: birds called waíwasl=geese.

189; 5. A young woman is the object of this song-line.
189; 6. Woodpeeker-sealps of shining colors are still in use for ornamenting various articles of dress, implements, \&c. nhlutuina: he flannts it and parades in it.

189; 7. Ká tal? who then? who after all? abbreviated from kaní tala. Dresses made of walzátchka-skins passed for the poorest and meanest of all garments.

190; 9. This is sung by men ouly.
190; 13. A satire on feminine roraeity. Sming by Klamath women from Klamath Marsh. Cf. below, 190; 21.

190; 12. Laktehámpesh; -pesh is the suffix putchi phonetically altered, the word introlncing a comparison of the "striding one" with the young klitish=crane in the same song. A sareasin on a long-legged person with swingiug gait.

190; 16. Regnlarly worded, this proverb-like verse woald read as follows: Kä'utehìsh gî̀lu wṑn-lákiash shaměnakía.
II. Satiric songs obtained in the Modoc dialeet from Toby Riddle and J. C. D. Riddle.

190; 18. A tatler has received the deserved bodily punishment for his gossip-tales. Of the first word no grammatic analysis cond be obtained in either tribe.

190; 19. The business of gathering edible roots devolves exelusively on women, but here an old man, Bin, who still lives among the Modoc at Yáneks, is indulging in this usefnl pastime. That's where the point of the satire lies. Hlívash is a worl maknown to the Klamath Lake people in the signification of "basket".

190; 20. Sming by the national deity when foiled in the attempt of killing five lynces by throwing stones at them; repeated from the shashapkéléaslr, page 126, 3 . Cf. Note.

190; 21. To be found in another version among the Klamath Lake songs; there it refers to a female living on Klamath Marsh, not on Klanath Lake.

190; 22. This tume was with many similar ones improvised by the Modoes, who visited the East a short time after the Muloc war, on seeing erowds of blaeks filling the streets. All Indians feel at first a peculiar very strong aversion against the Ethiopian race, though subsequently they often beeome friends and intermarry.

## MISCELLANEOUS SONGS

Obtanned in the Khamath Lake and Modoc Dialects．

1．K $\underline{K}_{\text {ói }}$ ak a nä’pka Yámatkni gatpam＇nóka

$$
--1-1-1+-1--1-
$$

Disastrous times we had when the Northern Indians arrived．

I hear the owl＇s cry and very near it seems to be．
3．Mbû＇shant käíla hämō＇la，$\div-\mid \div-1 \div$
shitchákta nā＇ts källa，$\quad-\frac{-1-}{}-$ shiukuapkúka nā＇ts kä’la．－－$|--\quad|-$

In the morning the Earth resonnded， Incensed at us was the Earth， For to kill us wanted the Earth．
4．Wákaptch nen hî＇tksh E－ukshi nēpka， nî＇ ＇kam hî＇tksh telâ＇lit．

To see how Klamath Marsh appears from there，
I wish to look down on it froms that height．
5．Kúfidshi nâ kif＇pash nû lulína
Dressed in poor garments I stray around．
6．Tutíxash nû lulína－－｜ー－｜ー－ノ
I am going astray while dreaming．
7．Kapkáblandaks！o＇kst a tkaléga ndéwa－！－－！－－－｜－～ Bo silent！her body arises from the dead to scream！
8．Mấni nû lakí gî，ké－i kánam shlékîsh；$\quad\llcorner-|\div-|\div-\| \div-|\div-| \div$ k $\delta$－idsha ne－ulxóga käfla tilangédsha．$\quad \therefore--|\div-|\div-||\div-|\div-| \div-$

I am a potent chief，nolody controls me；
The inischief－doing world I upset．
9．＂Käila nû shulěmokē＇dsha＂，$-\cdots-1 \div$ kénta källatat tgíkělan shuína．－－－｜－－－
＂I take tho Earth up in my arms and with it whirl aromul in a dance＂； On this soil I am standing and singing［the above words］．

## MISCELLANEOUS SONGS.

10. Aíshish kaí nû sha-ûlōla, $\quad \therefore-|\div---| \div$ yuhanéásh kaí nû sha- ̂̂lōla. $--|\stackrel{-}{1-\sim}--|-\sim$

I Aishish I shall brandish, I shall brandish my huge sword.
11. Aíshishash hûn gáldshui, $-\cup-1-\cup$

Go to meet Aishish; he will save you.

# 12. Tídsh hûn liulekán tchiálash shakatchóāla! <br> Halloo! let ns form a circle and screen the salmon against sun-heat ! 

13. Kilidshî'ga shépolamna - - - | - - -

They carry long-necked ducks on their backo.
14. Kaukátsi Yaína wō'n a shû-ûdshant î! $---|\div-|\div-|--| \div-$

Follow up the elk and chase him npon Kaukatsi Mountain !

## NOTES.

The first eight songs are worded in the Klamath Lake dialect, the third is of a mythic character. Songs 7-12 are worded in Modoc; 8 and 9 are K'mukánutchiksh songs. A few songs or fragments of such, which wonld come nearest to what we call nursery or Mother Goose's songs, will be found in the Myth of the Bear and the Antelope: 120, 11. 12. 13. 121, 9. 17. 122, 12.13.

192; 1. This song is sung by women only, aud seems to point to an ancient invasion of the country by tribes from the North or from Columbia River.

192; 2. The owl's cry is of fatal augury.
192; 3. Girls' song. When at sunrise a haze or fog extends over the country, this is supposed to be a sign of the Earth's wrath against men.

192; 5. kî'pash is no word at all, but seems to stand for gitko=ptchi.
192; 7. The Indians were reticent about the meaning of this song, and hence I presumed that $\bar{\prime} / \mathrm{k}$ was intended to mean some deceased person, since these are spoken of as $\mathrm{l} \mathrm{t}_{\mathrm{\prime}} \mathrm{k}$, he, she. Then the sense would be: "Be silent! that dead squaw is arising to sirg a loud soug." One Indian iuformed me that $\bar{o}^{\prime} k s t a$ meant a squaw. and pronounced it $\bar{\sigma}^{\prime} \mathrm{ks}$ lit (húnkisht 9 ). Cf. Note to 35, 8 and page 130, second Note.

192; 8. These trochaic verses are called the K'mukámtchiksh-song, and a variant, tuálam, exists for kánam. The alliteration of the k's and n's is very conspicuous. The meaning was given as follows: "I the omnipotent and unsceu ruler of the universe will chastise and turn it over for the manifold crimes committed in it by Indians and men of other races."

192; 9. This is another K'múkamtch-song, in which he menaces to destroy the world for its misdoings. I lave put the first line in quotation marks, because it forms the words or text of the song. The first line is sung abont a dozen times before the second is sung once.

193; 10. Christian song, referring to the day of last judgment. Aíshish, who is a deity representing the powers of nature with animal attributes, has been in the mind of some Modocs identified with Jesus.

193; 11. Song of Christian origin, in which Aishish is also identified with Jesus for no other reason than a fancied similarity of names.

193; 12. When of a party of fishing girls one catches a sahnon or other large fish, all the others quit their lines, arrive on the spot, roast the fish white singing these words and eat it up.

193; 13. This song is common to Modocs and Klamath Lakes and is descriptive of children anusing themselves with ducks. Pretty melorly.

## TUNES AND SONGS WITHOUT WORDS.

## WAR WHOOPS.

wéaha wea wéyaha, kawē’ha kaweíha, kawē'lıa
kä' kä' kä', wéha wea wéyaha
3 nóke nóke nóke . . . . . .
howienāa howienā', tchálam tchálam wiéna wiená
howiena $\bar{a}^{\prime}$ howien $\bar{a}^{\prime}$, tchálam etc.
6 hí ellová hí ellová hí ellová nkeíha nđeíha nđeíya, nkeíya. . . . . . nұé-u.
ä'-oho ä'-ohō e-ohb́ . ... . . . í-ihi, i-ihi-ī, í-uhu
HUMMING TUNES.
9 diainaíni diananána, diatánia diatanána
tánanani naınanani, taninananí tanni naminananí tainánni taninánna, tainaína taninaíni, túnanana
12 täni tayanáni tani nä'něnani
nanaté téannana namaté nanatéana natéana
kanenaténa nenankanéna tenanénate
15 nianainán kianainán, kianainía mainan nainían kalena tená, kalena tená, kalena tená nawetana nawetíya, nawetana nawetía
18 liggaiha liggaiha, hā’hai liggaiha, è bi tchúima, liggaiha liggaiha. wídshiggaya hía, wídshiggaya hía
21 hä' hō wídshiggaya hō; hä' hō hä' hō, wídshiggaya hō. yuhili' yuhalí' gáya, yuhillí yuhalî' gáya

> tä'-inánnăn nä'-innánnăn, tä'-innánnăn nä'-innánnăn tá naniánai nániana, tá naniánai nániāna walwiléga palpiléga, walwiléga palpiléga pálpilēga pálpilēga, pálpilēga etc.

## DANOING TUNES.

## A. Tunes heard during Puberty-Dances.

| 'na tchálam tchálam wéna |  |
| :---: | :---: |
| úha u-ai hai hai héve̛lălî, 6 |  |
| háhai u-ai hehai hévělălî. |  |
| witcha kenná, wítcha kéna keno ${ }^{\prime}$, witcha kenna kenó |  |
| nû kěno kěno kéno, n'ō kěno n'o kěno kénō | 9 |

B. Tunes adopted from Shasti Indians.
huî'no hō hotino hû-ư huino hû́tnino kû'ino hō-o wínna hádina háwina, há-ina ā-ā, háwina ná-ina tóyo wínno hoyo wínna nó, weyawinna nó, heyowinná 12 ho owínno heyä'nlia kina ho-owínna heyä́nlia kena he-ännowinná, innatá lowinna, he-eänno wínna hewia' iwinnaná ō wínna óhō häna wínna óhō
hännanáwiya ná-uya náyua hännaná-uya ō-uya héwa enna hé-au wennéā hé-aunné heyawenné ha wennō hahiý́ wennó wennó ha wenna, awenó hewō18hó nìnu henú henó înư ho-înú hóninō-u henu ${ }^{\prime}$
C. Dance and war tunes adopted from Snake Indians.
háwinna haú-inna $n \bar{o}^{\prime}$, î'nna lhawínna háwinna $n \overline{n o}^{\prime}$ hé-a wennē, a héa, heahē, héa wennē ..... 21
haweä̀ wennā, hau-á, hawenná énna, hawá

## D. Dancing tune heard from Warm Spring Indians.

kaní lnya . . . . . uya tasí wene nāsi

## E. Modoc dancing tunes.

héo héo héo héo, héo heo héo heo
haúdidusiä haudidúsä haudídusia laúdidusä
3 stán stán stáni assi stáni assi
hoyo-inna hoyó-inna, hoyó winua hoyó winna, hoyó wiunā'- $\bar{a}^{\prime}$.
6 laáwěnĕn-í' hawěnıěnáha, hawěnněnáha háwwĕnčn-í
íwop teharlē kómtuho ${ }^{\prime}$

## tunes heard at funerals.

kélakennu kélakennu kélakennu kélakenu . . . . . . kēlayí-a
9 láhaha láhaha láhaha láhaha
hihilii . . . . . yuyaya yuyaya lihihi ......
héya heúa héya heúa héya heúa

## NOTES.

194; 1-8. These whoops and tunes were sung by Modoe warriors when on the war-path, or after their return in remembrance of their exploits. The whoops were chanted and howled while going rond in a cincle for one to two hours; even now they are leard on solemn oecasions. This uniform performance was, howerer, interrupted sometimes by feigned attacks on a supposed hostile foree lying in ambush or narehing past. A scalp.dance tune, begimning with nkeíha, is added, also battle cries.

194; 2. The kii' kii' kii' refrain serves as an ineidental interruption of the wéahaand other whoops. They pronome it almost voicelessly by tapping their hands upon the blown-uj) mouth or cheeks in a quick measure.

194; 3. The noke noke is sung either as an introduction to the howienā'-whoop, or as a conclusion to it. It is prononneed in a similar mamer as the kä' $k \ddot{a}^{\prime}$, and often aecentuated nok ${ }^{\prime}$.

194; 7. This scalp-dance tune is one of the many heard at these dances dnring the earlier Modoc wars. A peeled tree, sometimes twenty feet high, was planted into the ground, otter and rabbit skins fastened on or near the top, and below them the sealps of the enemies killed in battle. Forming a wide ling arount this pole (walash) the tribe daneed, stood or sat on the ground, looking sometimes at solitary dancers, moving and yelling (ya'ka) around the pole, or at others, who tried to shake it, or at fleet horses introdneed to run inside of the ring. Circular dances are of course performed by joining hands.

194; 8. These are the war-whoops alluded to in 23, 15. Cf. ii uho: ̂t'tchna in Dictionary.

194; 9 etc. I include under the heading "Immming tumes" lively tuues of short, ever returning periods of words whose signification is gencrally obliterated. Some of them may include archaic words and forms no longer meterstood by the present.
generation, while others contain words of the language aetually in use but gromnd down or defaced in such manner as to make them unintelligible. The variations in which these songs are sung are infinite in number, since they are fancifully produced at the will of the singer. I thought it sufficient to give a few of these variations only, and took eare to mark the higher pitch of the roice, a sort of musical arsis, by the accentuation. The majority of them form an accompaniment to the motions made while gambling.

194; 9-17 were obtaiued from a young Indian, Frank, living on the Williamson River. Cf. page 91, seeond Note.

194; 16. kalena tená is rendered by: "ye are all dead at once"; which means: all of you have lost in the game.

194; 18-195; 4. Playing tunes sung by Modoc and Klamath Lake Iudians when sitting at a spélshna or other game, also while uusing, travelling or working; given by Jeff. C. D. Riddle. The person who deals the stieks in the spelshua.game is the one who sings the tune.

194; 18 and 19. 20 and 21. 22. Melodious tnnes sung by Modocs and reeently introduced among these Indians.

195; 2. 3. These are among the most frequent tumes hmmed while playing the spélshna-game. Like 3 and 4, 1 and 2 are ofteu sung alternately.
$195 ; 3.4$. These words are made up from the terms by which butterflies are called: walwilégash, yapalpuléash.
A. These danee-tunes, $195 ; \check{j}_{-}-9$, are in use among the Klamath Lake people and were obtained from Minnie Froben. The first of them sounds almost like 194; 4.5. Little bells are often rung while dances are performed and dance-tunes are sung. Women and girls of the Modoc tribe end their sougs with a protracted i.ni, while the men habitually eonclude them with a loud u-0.'lm.

B and D. Obtained from Dave Hill; sulug among the Klamath Lake people.
C. Given by Long John's Ben. They begin with the sound h-, like the majority of the Shasti tunes.
E. All obtained from Jeff. C. D. Riddle.

196: 1. Repeated indefinitely, as soou as dancing assumes a quicker measure. Compare with it the song of the sknnk 162; 7 , that of the quiver, $163 ; 8$, and Notes.

196 ; 3. stani, full, seems to allude to the formation of a ring for dancing. Of. st́́ lashámpka 23, 12. and what is said of 196; 7.

196; 4. i. The last group in this tune, hoyó winnā'- $\bar{a}^{\prime}$, serves sometimes as a refrain, sometimes as a stop.

196; 7. Of foreigu introduction, as shown by the sound r. Sung in alternation with stán, stán 196; 3 and said to come from Warm Spring Indians. 196; 2 sounds very much like: "how do you do, sir?"

196; 8. Probably contains the words: k'leká a lû, "he, she is dead"; kēlayá-a serves as a refrain, sometimes as a stop.

196 ; 9. The day before the funeral of Pukish, mentioned in Doctor John's trial, I heard his aged mother sing this tune. Other mouruers in the funeral tent sang what is contained in $196 ; 8.10$.

196; 10. Funeral tune heard from Snake Indians at Yáneks, on Klamath reservation. They join hauds and sing this melancholy tune for hours; the higher the deceased stood in his tribe, the longer lasts the wailing.

## gRaMMAR 0F THE KLAMATH LANGUAGE.

## GRAMMAR OF THE KLAMATH LANGUAGE.

## INTRODUCTION.

A few remarks on the structure of American languages, and on the difficulties encountered in their study, will, I presume, be acceptable to the studious at a time when the first grammar of the Klamath language ever composed is presented to them.

Students entering into the vast domain of American languages find themselves puzzled and bewildered by many facts and peculiarities which never occurred to them during their study of the classic tongues in which Demosthenes and Cicero delivered their orations. Like other illiterate languages, those of America bear within themselves phenomena which appear to us as strange peculiarities and mysterious fancies, but also present a grand and fascinating aspect like any product of nature undefiled and unaltered by the artifice of man.

Superficial minds are easily repelled by the oddities of Indian sounds, some of which are croaking or strongly nasalizing, partly faucal or otherwise unpronounceable, and disagreeing in their phonetic rules and peculiarities from all their former notions of language. But the educated, who at once perceive that they have to deal with a problem of natural science, readily comprehend that these freaks of human speech are worth a penetrating study. The phonetic side of an Indian language, in fact of any language whatever, can be but very imperfectly acquired from books, and what I offer below under "Pronunciation", "Mode of utterance", in the phonologic section of the Grammar, should be considered as only an attempt to do justice to the real utterance of this upland language.

More diversity may be discovered in the morphologic structure than in the phonetics of the languages of America. This variety is so bewildering, so disagreeing with our old-time notions of language, that the classifying tendency of our age has endeavored to simplify this apparent chaos by imagining a general category under which all American languages could be classed. Fr. Lieber styled them holophrastic; Dú Ponceau called them incorporating, but applied this characteristic only to those languages of America the verbal inflection of which he was able to investigate. The truth is, that no general characteristic can be applied to them that would clearly distinguish them from many other tongues spoken in both hemispheres; like these, they are all agglutinative, many of them polysynthetic, though in very different degrees; their transitive verb is governed by its object, the intransitive by its subject; the distinction between noun and verb is morphologically but an imperfect one, though this imperfect distinction varies in degrees between the various linguistic families. Many American tongues do not possess any form for the plural in nouns, while others have one regular plural ending or a variety of such, or a distributive form answering to some extent to a plural. Some languages have no adjectives, strictly considered, but use participial forms instead; others possess real adjectives, and to form their plural reduplicate the latter part of the term. Synthesis is carried to an extreme wherever the verbal inflection is no longer the vehicle of purely relational categories, but associates with them material ideas as those of beginning, continuation, distance and proximity of the object spoken of, negation, desire, approximation, and others which do not properly belong to the sphere of verbal inflection. The verb with its incorporated subject- and object-pronoun then becomes a whole sentence, and its derivational affixes often accumulate in a degree which is quite perplexing. Other languages run exactly in the opposite direction, that of analytic development. They separate the pronouns from the verb governing them, possess only two tenses, but very few modes and voices, express by separate terms what other languages indicate by derivation, and reject the apparent luxury of nominal cases, of the dual and of the various forms for the plural.

The diversity of American languages shows itself in their syntax not
less than in their morphology. Generally the structure of a sentence is simple, being based only on the coordinative and adversative principle. But where there is a lack of the relative pronoun, or an inadequate supply of conjunctions, as in the dialects of the Maskoki family, verbals are necessary to supplant them. This produces encapsulated sentences, which, by the frequent repetition of the verbal, soon become tiresome through monotony, and diminish the perspicuity and comprehensibility of the spoken word.

A continued study of the Klamath language has convinced me that it occupies a middle position between the extremes of synthetic and analytic structure just referred to, but that, nevertheless, it shows very plainly all the characteristics of agglutinative tongues. The distinction between the noun and the verb is made pretty clear, although most substantives can be considered as nomina verbalia; the verb is not overloaded with forms pointing to material ideas, neither with tenses, modes, nor voices, and possesses no real personal conjugation. As to derivation, Klamath is undoubtedly polysynthetic in its affixes, the suffixes preponderating largely over the prefixes, and differing from them in their functions. Outside of Klamath and the dialects of the Dakota stock, but few languages have been discovered in which the prefix indicates the exterior form of the verbal subject or object, or even the quality of the verbal action. Reduplication for inflectional purposes is as well developed here as it is in Pima and Selish and forms one of the characteristic features of the language. As to its syntax, Klamath may be called analytic; a profusion of conjunctions relieve it of the too frequent use of participial and similar constructions, as does also the relative pronoun kat, and the use of the substantive verb $g \hat{\imath}$ simplifies the verbal inflection to a great extent.

These and other claracteristics impart to the language of the Máklaks a well-defined type, and approach it to some of the tongues of modern Europe, in which analysis has not preponderated over synthesis. An attentive study of the numerous texts obtained from the Indians, paired with constant comparison of Klamath structure with the structure of many foreign and American languages, could alone furnish a solid basis for establishing the grammatic rules of this upland tongue. The rhythmic, stately, and energetic tenor of its periods, especially those of the larger
mythologic pieces, will please every student who has ever lent his attentive ear to the well-poised periods of Roman historians, and will even evoke comparison with them, not as to their contents, but as to the flow of the well-constructed sentences, which appear in these narratives.

Oral language is formed of voiced and audible units of thought, called words, which consist of sounds grouped together and possess definite and conventional meanings. To be understood by the tribe, people, or race which converses in it, a language must necessarily follow certain laws, which are partly of a logical, partly of a conventional nature.

The scope of a scientific grammar therefore consists in presenting these laws: (1) as they manifest themselves in the present status, or some given historic stage of the language, in a systematic form; (2) to deduce these laws from the previous historic status of that language, and from its cognate dialects, as well as frou the comparative study of other tongues, viz., from the science of linguistics.

Not only does every langıage possess a stock of words and idioms peculiar to itself, but also a peculiar character in its phonetic rules, pronunciation, and mode of thought, which impresses itself upon the senses and memory even of persons who have never hecome familiar with the language, and prompts them to distinguish it readily from other tongues. The causes to which every language owes its peculiar stamp are the omnipotent climatic influences of the country which the forefathers of the people have inhabited, and also, wherever migrations have occurred, of the country presently occupied by it.

Grammars are usually made up of a large number of laws or rules, restrained by an equally large array of exceptions. Many of the latter are only apparent and not real exceptions; when they are real, they generally show that conflicting phonetic laws have been at work, or that the principle of granmatic analogy or some other conventional element has prevailed over the logical formative principle of language. Had all languages been evolved through the logical principle alone, grammar would contain rules only and no exceptions. More real and perspicunus regu-
larity can however be claimed for the large majority of Anerican languages than for those of the Indo-European family, for the simple reason that the former are of the agglutinative type, while the latter are built up after the principles of the inflective tongues. This distinction is founded upon the difference in degree, by which the fusion of the affixes to the radix has taken place in the earlier stages of linguistic evolution; a fusion which has been nuch less energetic in agglutinative languages, as the name itself of these latter purports.

A "Grammar of the Klamath or Máklaks language of Southwestern Oregon" must hence be defined as a scientific or systematic exposition of the natural laws which have been active in forming and evolving the above Western American language, in its whole as well as in its two dialects, that of the Klamath Lake and that of the Modoc people.

The subject matter I divide as follows:
The first and fundamental part treats of the Phonology; it enumerates the sounds composing its phonetic material and expounds the laws presiding over the coniposition and alteration of the sounds.

The second part treats of the Morphology; it enters into a statement of the laws, logical and conventional, observed in the inflection and derivation of words, and of the application of the phonetic laws to these elements of speech.

The third part deals with the Syntax; it defines the laws according to which words are arrayed into sentences or units of speecl; it also explains the relations of words among themselves and to the sentence, and of one sentence to another.

The abbreviations of the Grammar are those indicated on the first pages of both dictionaries.

## PHONOLOGY.

The sounds or phonetic elements of language are either vowels or consonants or clicks. The former two are uttered by expiration of air through the rocal tube. The vovels or voiced breaths are either simple or conpound. Compound vowels may either combine by passing into diphthougs or triphthongs, or when coalescing into one vocalic sound, become softened rowels, "Umlaute." Consonants are sounds uttered without voice; they are either checks, momentaneous sounds, or breaths, sounds of duration. Clicks, or sounds produced by inspiration of air, do not occur in the Klamath language as parts of words, though they are occasionally introduced in the form of interjections. Cf. $o, o^{\prime}$ in Dictionary and Note to 194; 2.

## vOWELS.

The five simple vowels of the Klamath language given in the order as they increase in pitch of voice, are: $\mathfrak{u}, \mathrm{o}, \mathrm{a}, \mathrm{e}, \mathrm{i}$; each of them can be pronounced short and long, and this makes up in all ten vowels. Only three of them, however, are primary vowels when pronounced short: the guttural vowel a, the palatal vowel i , and the labial vowel u . They are called primary vowels because the large majority of the radical syllables in Klamath contain one of them, which may also be said of a large number of affixes. When pronounced long, the five simple vowels are often the product of synizesis or other sort of vocalic coalescence. In pitcl, o stands between a and $u$, e between a and $i$; a rapid pronunciation of au and ai has produced o and e, as we observe it also in French.

The softened vowels or "Umlaute" are $\ddot{u}$, ö, ä. as in German, and can be pronounced short and long. They originated through a coalescence of different vocalic components into one sound, as can be shown in many, though not in all, instances. Only one of them, ä, is of frequent occurrence, and is observed to alternate constantly with e, both being a product
of $a+i: a-i, a i, z i$ or e. Concerning the occurrence of $\ddot{o}$ and $i i$, cf. below: Frequency of Sounds.

Nasalizing of the vowels, as in the French an, in, un, is unknown in pure Klamath speech, although consonants are frequently nasalized. At times it occurs, however, in the conversational forin of Klamath speech. Where words from other Indian languages are quoted for comparison in this volume, the nasal utterance of their vowels is indicated by n superior, as: $\mathbf{u}^{n} \ddot{u}^{n} o^{n} \ddot{o}^{n} a^{n} \ddot{a}^{n} e^{n} i^{n}$.

The deep, obscure, hollow pronunciation of the simple and softened vowels should be sharply distinguished in this and in other languages from the clear, high-pitched, or ringing utterance of the same sounds. It is produced by opening the glottis to a wider passage of the voice than for the clear pronunciation, and is as common in Klamath as it is in English unaccented syllables, or in syllables closing in consonants; compare: a in father (clear pron.) and in water (deep), i in marine and in fill, u in shoe and in lung. To call these deep vowels short will do for English only, where these sounds usually are met with in syllables brief in quantity. But it would be a misnomer in the terminology of other languages, for they can be protracted to any length as well as the clear-sounded vowels. With ii and $\ddot{0}$ this distinction cannot be made; a deep utterance of the other vowels was marked in this volume by circumflexing them. The vowel $\hat{\mathrm{a}}$ (in fall, tall) coincides with $\hat{o}$, and $\hat{o}$ was hence omitted. The spontaneous or primitive vowel, "Urvocal", was given the letter e instead of ê (the deep e). Thus I use the circumflex only on $\mathrm{a}, \mathrm{i}, \mathrm{u}$ ( $\mathrm{a}, \mathrm{i}, \hat{\mathrm{u}}$ ); it may be used also on the softened vowel ü. Examples:

> tâpíni second to, subsequent.
> shtílta to announce, report.
> bû́nûa, pû́nua to drink.

To obtain a full insight into the phonetic character of Indian languages, the difference between the clear and the deep pronunciation must never be lost sight of; i and $u$ are generally sounded deep in final syllables followed by one or more consonants. Cf. Alternation of Sounds, Quantity, and Introduction to Texts, p. 9.

The genesis and mutual relations of the vowels are set forth in the following table:


## DIPHTHONGS.

The vowels i and u placed before or after a vowel and pronounced in one and the same effort of the vocal organs, form diphthongs. In a true diphthong the position of the organ necessarily changes when passing from one component to the other, and when it stands at the commencement or in the midst of a word, the i - and u - component assumes the consonantic nature of $y$ and $w$. The word-accent may rest either on the first or second vocalic component, and when the two are pronounced separately the combination changes from a true to an adulterine diphthong.

Thus, Klamath possesses a series of diphthongs which can be uttered in two different ways:
(a) as dissyllables or adulterine diphthongs, with hiatus intervening. This pronunciation bears an archaic type and can be best observed in the Spanish language. Ex.: spá-utish poison
(b) as monosyllables or true diphthongs. Ex.: spaútish.

In a limited number of terms diphthongs always remain adulterine, and sometimes insert even an h between the two components: kné-udsli outside bark of tree; shauá-uli, slana-óli, and shanáhōli to desire; muimúya and muhimńya to shiver. A few other terms are constantly pronounced with the genuine or true diphthong, as stainaksh heel, while the large majority may be pronounced in both ways: ktá-i, ktaí stone, kú-idshi, kúidsli mischievous. The simple hyphen, e-i, a-u, etc., was used instead of the usual mark of diæresis (eï, aï) to mark the hiatus in adulterine diphthongs. In some grammatic forms of the language the two parts of a diphthong become separated from each other, a fact which will be observed - especially in the study of distribntive reduplication.

The series of diphthongs is as follows:
ui, oi, ai, ei ; in writing they often appear as uy, oy, ay, ey.
iu, io, ia, ie ; appear more frequently as yu, yo, ya, ye.
an or aw, eu or ew; ou coincides with au, aw.
uo, ui, ua, ue; appear more frequently as wo, wi, wa, we.
äi (in stä́la, stä'-ila to collect).
ui (in tchüitchúili sorrel).
Triphthongs are not frequent, since Klamatl lias a greater tendency to accumulate consonants than vowels. Ex.: shmíuqa to drive out of, shué nsh angling line, wewesháltko having offspring, géwa, ťéwaga, tchúyunk, aggíya, tchuaísh, wäíta, etc. Some of these terms contain adulterine groups which cannot properly be called triphthongs.

## CONSONANTS.

Consonants are divided in two classes: checks, or mute, explosive consonants ; and breaths, semivowels or fricative consonants.

## MUTE CONSONANTS.

Their full list is as follows:

$$
\begin{array}{ll}
\text { Gutturals: } \mathrm{k}, \mathrm{~g}, \chi & \text { Dentals: } \mathrm{t}, \mathrm{~d} \\
\text { Palatals: tch, dsl } & \text { Labials: p, b }
\end{array}
$$

Linguals: $\underline{\mathrm{k}}, \mathrm{g}$
Here the surd sounds are placed first; follow the sonant checks or "medice" mutes, then the aspirate class, represented by one sound only $(x)$. The surd checks or "tenues" are equal in number, though more nsed than the sonant checks. As for the series of the aspirates, the two dental aspirates of English (Anglo-Saxon $p$ and $d$ ) and the labial aspirate $f$ are wanting here, and are rather scarce also in the other American languages.*

The two lingual sounds are k and g . The former is produced by resting the tip of the tongue against the middle or fore palate, by bending it either back or forward when in that position and then trying to pronounce k ; g is bronght forth in the same manner, though the tongue has to be placed less firnly, against the palate in order to let pass more breath. Both sonnds

[^40]are intered with diticulty, the latter enpecially; by strangeers, and when first heard, seem to proceed from the lower throat. $A$ short stop of the voice always follows them, and they usually stand before vowels or the "Urvocal" ě. Modocs use them more frequently and pronounce them, like the Warm Spring Indians on Des Chutes River, more forcibly than Klamath Lake Indians. These sounds may be called just as well palatalized gutturals.

Nasalized mutes; see Seuivowels.
Of mute palatals there are two only, th (Eng. and Span. chi) and its sonant, dsh (Eug. j). They alternate in every instance with ts and ds. In some ternis they have originated from s, sh, and at times alternate with these spirant sounds.

## SEMIVOWELS.

The semivowels, breaths, or consonants of duration are, but for a few exceptions, identical to those found in English. While the trills are represented by one sound only, the nasal series is fully developed.

|  | Spirants. | Nas:als and masalized mutes. | Trills |
| :---: | :---: | :---: | :---: |
| Gutturals | h | ng, uk, $1 \%$ |  |
| Palatals | y | urlsh, nteh |  |
| Linguals | sh | nk | 1 |
| Dentals | s, z | H, M1, nt |  |
| Labials | v, w | m, mb, mp |  |

Among the spirents the laryngeal class is represented by h, which is often pronounced with great emphasis, like hlı. Scientific alphabets, like the one used by me, employ no silent letters, and hence I have placed an apostrophe before each h, when closing a syllable, to remind readers that it has to be sounded. V often passes by alternation into the consonantic w (in wire) and the more vocalic w (in water, wall); it sounds like our $\stackrel{\text {, }}{ }$, but has evidently a different origiu, for Klamath Indians pronounce David as Débid, and v is found only in the combination vu. Y is used by me ats a consonant only; zlh, the sonant of sh, does not ocenr. Ts and ds, which are compomid somuds, may be classified with the dentals.

Nasals. In many of the nasalized mutes mentioned in the table above, the nasalization is often scarcely audible; ef. Alternation of Sounds. The ny or Spanish $\bar{n}$ is so seldom heard, and only resulting from alternation with other sounds, that I have preferred not to burden the alphabet with a separate type $\overline{\mathrm{n}}$. With initial mutes nasalizing is observed extensively, but in certain words only; púka to roast may be pronounced mbúka, túlshna to run through, ntúlshna, tchétch bark, ndshídsh; páta cheek is also pronounced mpáta, but páta summer is always pronounced in the same manner, and ndáni three is never pronounced dáni, tánni. Vu- and the vowel u-can be supplanted in a few terms by a nasal, if standing before a nute: nbá-ush skin: mbá-ush; ndúyua, vudúyua to beat, ndúyua.

An instance of a medial nute becoming nasalized is sanká-a for saká-a to be raw.

## PHONETIC TABLE.

The following classification of the vocalic and consonantic sounds occurring in Klamath, tabulated after the quality of their tone and the organs producing them, will largely facilitate the comprehension of the numerous phonetic figures, contractions, and alternating processes to be described hereafter. For the classification of the vocalic sounds, see: Vowels and Diphthongs.

|  | consonants. |  |  |  |  |  |  |  | vowels. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Momentaneous or mute sounds. |  |  |  | Breaths or sounds of duration. |  |  |  |  |
|  | Not aspirated. |  | Aspirated. |  | Spirants. |  | Nasals. <br> Somant. | Trills. <br> Sonant. |  |
|  | Surd. | Sonant. | Suri. | Sonant. | Surd. | Sonant. |  |  |  |
| Gutturals <br> ralatals. | $\begin{array}{r} k \\ \text { telt } \end{array}$ | - $\begin{array}{r}\text { g } \\ \text { dsh }\end{array}$ | $\chi$ |  |  |  | $\mathrm{ng}, \mathrm{nk}, \mathrm{n} \chi$ <br> nteh, ndsh |  | $\left.\left.\begin{array}{ll}\bar{y} & a \\ i & i\end{array}\right\}\right)$ e $\begin{aligned} & \text { a } \\ & \text { it }\end{aligned}$ |
| Lingrals ... | k | \% |  |  | sh |  | nk | 1 | \% ō |
| Dentals .... |  | d |  |  | 8 | $z$ | n, nd, int |  |  |
| Labials .. .. | P | b |  |  | v | w | $\mathrm{m}, \mathrm{mb}, \mathrm{mp}$ |  | ī 11 |

## PRONUNOIATION OF THE: SOUNDS.

My scientific alphabet is based on the original pronunciation of the letters, which is still in use in some countries of the Enropean continent. The English pronunciation of the letters is entirely unfitted for transcribing unwritten languages, and readers of this volume will have to discard it and adopt the value of the alphabetic signs as given below. The consonant $y$ had to be placed after the vowel $i$, its usual position in the continental alphabets.
a $\bar{a}$
â as in fall, tall, taught.
ä as in chat, fat, slash; French pin, saint. French sage.
as in blab, bulk; German bald; French beau.
as in did, do : German dass; French dieu.
as in jealous, juulk, George.
as in met, sell, tell; German erst, es; French selle. French ce, que. French fielle, maire. sound of dsh.
pronunciation given on p. 209.
as in marine; French abri, ici; Italian lido; Spanish gridar. i in German ilin, Siegel.
as in ularm, wash; German Schwamm, Tatze; French flanc, sung. longer sound of a, as in smart, tart; German Kralm, Schwan;
as in last syllable of lodger, bungler; of German dieser, Männer;
longer sound of e, as in fade, main, trail; German Speer, Wehr;
as in gig, gore; German gelb; French gras; never has the palatal
as in house, lut; German hoffen; never used as a silent letter.
longer sound of e, as in fee, stream, sleep; German kriechen, siech. deep, as in fit, grit, milten; German rinnen, Sinn; when long, it is
as in yoke, beyond; German Jolr, jurken; French yeux; Spanish ayudar, yerno. Used as a consomant only.
k
nip as in inp, thumping; German Rumpf; Italian stampa.
n same in all languages.
$\mathrm{nk} \quad$ the lingual $\underline{\mathrm{k}}$ nasalized.
$\mathrm{n} \% \quad$ the aspirated guttural nasalized.
slı as in shell, shingle; German schichen, Schutz; French chercher, échoir.
as in kick, kettle, core; German kennen, Köter; French coque, soc; Spanish cavar, quedar, querir.
pronunciation given on p. 209.
not occurring in English, French, or Italian; German ch after a, in Dach, lachen, flach, Nacht; Scotch loch; Spanish brujo, dejar. This sound las nothing in common with the English x. same ịn all languages.
same in all languages
as in nimble, stumble; German Stammbaum.
as in stand, asunder, squander; German Runde; French amende. the palatal dsh nasalized.
as in cling, rang, singing, not as ng in finger; German hangen, springen.
as in prank, spunk; German tränken; French cinquante.
as in rent, want; German drunten, Lunte; French crainte, éreinter. short and clear, as in oracle, proxy; German Hopfen, Stoppel; French folle, sotte; Spanish pelota, rodilla.
longer sound of o, as in note, roast, rope; German Koth, Monr, roth; French eau, ôter, sauter.
as in bird, burn, surd; German lösen, strömen; Freuch fleur, seul.
same in all languages.
explosive p, described on p. 216.
as in seek, sore; German Sack; French salle. same in all languages.
alveolar and explosive t ; explained on p. 216. as in charred, chicken, catch; German hätscheln, Klatsch; Italian cicerone, cielo; Spanish hacha.
u as in forsooth, truth; German Gruss, nuss; French loup, sous, écrou; Spanish luna, uno.
$\overline{1} \quad$ longer sound of $u$, as in nudc, bloom, loom; German Uhr; French cour, sourd.
deep, as in pun, ruff; slum; German krumm, Schuft, Stunde; Italian lungo.
ii
not in English, Spanish, or Italian; German Dïne, sülmen; French lune, nu, sucre.
v as in velvet, vivid; German Wesen, wirken; French veau, vont.
$w$ is the $\hat{u}$ before the vowel a, as in vater, wall; watch; in German it corresponds to short u before vowels; nearly ou in French oui, ouate.
as in zinc, frozen; German Hase; French zero, zigzag.
The English $x$ is rendered by gs or ks, the German z by ds or ts; according to the nature of their components

More examples for the pronunciation of the above sounds will be found in Dictionary, pp. 6-8.

For the pronunciation of diphthongs see the statements made on p. 208, and the examples given in Dictionary, p. 8. The difference between ai and ei can be shown to best advantage by quoting German words:
ai as in Kaiser, Rain, Haiduck.
ei as in heiser, leise, reiten, schleichen.
The pronunciation of the other diphthongs not mentioned in Dictionary, p. 8, can be easily inferred from that of the vowels which compose them. Adulterine diphthongs are hyphenized, as in $\mathrm{a}-\mathrm{i}, \mathrm{i}-\mathrm{a}, \mathrm{i}-\mathrm{a}, \mathrm{i}-\mathrm{u}, \mathrm{u}-\mathrm{i}$.

## GRAPHIC SIGNS.

2 arrested sound, a pause brouglit about by the altered position of the vocal organs; t'épa species of fish, k-lewídsha to quit, depart. apostroplue marking elision of a vowel, of ě, or any other sound: k’léwi to cease, for kěléwi; 'mpetlalóna to float down strean, for' ampetlalóna; met'támsqa to excavate betwcen or near, etc. 'The apostrophe also stands before $h^{\circ}$, when not beginning a syllable.

- hiatus, separating two vowels as belonging to two different syllables: me-útkish digging tool, sha-apá-a to provokc.
$=$ separates compound words into their components: wika=télantko short-featured, lóloks-wii'gĕnam=stú railroad, lit. "fire-wagon's road."
acute accent; the only sign used for emphasizing syllables: télish face, tíla and tilí to roll, to flood.
- vowel pronounced long: tā'ztki to blush, tchlà'lxa to be drowned, wō'ksla, etc.
- vowel pronounced short: ma'sh species of plant, sálkăkǐsh necktic.


## LARYNGEAL MODE OF UTTERANCE.

The phonetics of the majority of American languages cannot be fully understood without taking in consideration their mode of pronunciation from the throat. It may be defined as an utterance produced by a powerful gush of breath emitted from the lungs and forming its sounds, through the glottis widely opened, in the rear portion of the mouth rather than in its fore parts. The war-whoops and dance-songs of the Dakota and other Mississippian tribes are but a series of vocal strains due alone to the action of the lungs and windpipe, and ejected through the open glottis. 'This gives a peculiar, weird character to their vocal nusic. Of the Cayapó Indians, who inhabit the Brazilian province of Goyaz, travelers report that their language sounds "as coming from the upper throat, and that they speak with the mouth closed."* The real cause of these peculiarities has to be songht for in the Indian mode of living, and may also in part be attributed to assumed labits of pronunciation.

The pectoral or laryngeal pronunciation of the Klamath Indian is attended by the following phonologic consequences:

1. Guttural and laryngeal (h, arrested sound) sounds preponderate in frequency over dentals and labials, being formed in the rear part of the vocal tube. 'The palatal and alvenlar sounds, which by the lifting of the tongue to the roof of the mouth tend to confine the sound to the rear, are not unfrequent in this and other languages, while in most of them $f$, th, $r$, and others, which are produced in its fore parts only, do not exist. The
[^41]Shasti, Snake, and Modoc tunes printed in Texts, pp. 195. 196, are fair specimens of a thoroughly laryngeal substratum to Indian song-nusic.
2. Interchangeability or alternation of the sounds pronounced with the same rocal organ is naturally favored by the pectoral-laryngeal pronunciation, and is observed as well among vowels as among consonants. C'f. Alternation of Sounds.
3. Dieresis of vocalic sounds into two vowels forming or being parts of different syltables; the frequent insertion of the laryngeal h, and of the "arrested sound," between these two vowels, and between a consonant and a vowel;* the prothetic l - figuring as initial in certain terms; the existence of the "explosive" mute consonants, as $p$, $t$. A curious parallel to this inserted $h$ is found in Pit River and Northern California generally; the natives often interrupt their speech by inserting, often in the midst of words, a sigh or melaucholic-sounding breathing, seemingly produced by inspiration of air. In Tuscarora I heard the inserted h distinctly accompanied by the same noise. Examples from Klaunath: yainága and yainaága; Sā’t and Shá-at; gúa, grí-ua, gúliha; shálam, shấllam; skō'sh, skō"lhsh; klála, klálha; léyash, léhiash; wálta, huálta; lá-a, hlá-a; ibéna, hipéna.
4. The arrested sound, or "sound-catching," consists in a sudden interruption of the voice while speaking, and leaves the impression of a momentaneous deficiency in breath. It is heard in the commencement, midst, and end of words, and after mute consonants only. It is always heard after the linguals (which in the Modoc dialect sometines disappear before it), and frequently after $t$ and $p$; it always follows the explosive t' and $p$ ', well known through grammars of Central Ainerican languages. Dr. Wash. Jatthews describes in lis manuscript Modoc vocabulary his "marked t" as being uttered like English $t$ with an extra pressure of the tip of the tongue against the gums or teeth, and mentions the following terms in which he distinguished it after the initial t: tápak, tolalui, tulísl, t'sín, tsúleks. This $t$ is therefore an alveolar sound. The Indians of many western tribes often apply the arrested sound when vocabularies are taken, and Aztec grammars describe it as the saltillo accent, marking the syllables, where it is heard, with the gravis accent: -. This curious peculiarity

[^42]has been noticed by travelers among the rude and hunting tribes of other parts of the globe; it seems to have a physiological cause, and not to be intended for rhetorical effect.

## FREQUENOY OF SOUNDS.

The frequency of each alphabetic sound or class of sounds in a given language largely depends on their mutual phonetic relations with neighboring sounds within the body of the word, and will be treated of elsewhere. A few hints on this subject are as follows:

The three primary vowels, short $\mathrm{u}, \mathrm{a}, \mathrm{i}$, are the most frequent of all vocalic sounds; then follow ä and e (both interchangeable), $ð, o$; the softened vowels ö and ü are rather scarce: tö'dshitödshi, and Modoc pö'sl, stelópgösh; utüssusá-ash, tü’ksha.

Of all rowels, $u$ commences most words, and a terminates a much larger number of them; it is the most frequent of all vocalic sounds in this upland tongue. Of the diphthongs ai, au, ua (wa), ui (wi), ia (ya) occur nuch oftener than ei, yi, yu, or wo, and oi may be called a rarity.

The most ubiquitous of all consonants is probably s, sh - then follow the gutturals, $g, k, \underline{k}, \chi$, the laryngeal $h$, the palatals tch, dsh, $y$, the surd mutes $\mathrm{p}, \mathrm{t}$, the nasals $\mathrm{m}, \mathrm{n}$, and the trilling sound l . Unfrequent are $\mathrm{g}, \mathrm{b}, \mathrm{d}, \mathrm{z}$; also v in the midst of words. None of the Klamath words end in $\mathrm{g}, \mathrm{y}$, ng , $\mathrm{nk}, \mathrm{v}, \mathrm{mb}, \mathrm{mp}, \mathrm{z}$, and a very restricted number in $\mathrm{b}, \mathrm{d}$, 'h; cf. sरī̀ ${ }^{-1} \mathrm{~b}$, énd (for énat), nād (or nāt). Every sound of the alphabet can begin words, but initial dsh, $\chi$, and z are rather exceptional. Over one fourth of the terms in our Dictionary begin with s, sh.

On the phonetic structure of the syllable, see below.

## GROUPING OF SOUNDS.

We are prompted to call a language harmonious when the quality and intonation of the sounds strikes our ear agreeably, and, when the grouping of the several sounds in the word-unit appears to be even, rhythmical, and musical. In due time ligh-pitched vowels have to follow those of a lower pitch, consonants produced with one vocal organ should vary at short
intervals with consonants pronounced with another. We also expect that consonants do not crowd upon each other in dense clusters, but that they be supported, upheld, and separated by the true vocal element of the human voice, the simple and compound vowels, and we deprecate the presence of croaking, clicking, or whirring sounds or somnd-clusters.

Americans may be prejudiced in calling such vocalic lauguages as Italian, Odshibwẹ, Tarasco, Arawak harmonious in preference to consonantic ones. For if a tongue replete with consonantic clusters groups its component sounds in such a manner as not to offend the ear by too abrupt transitions and freaks, and subordinates them closely to the vowels or diphthongs as is done in Russian, Creek, Aztec, Kechlua, and in numerous other languages, we have no palpable reason to deny to these the predicate harmonious. A large portion of the Indian languages spoken within the United States answers to this description, and one of their number is the Klamath of Southwestern Oregon.

Considering all the varions elisions, diereses, syucopes, and apocopes subsequently occurring, the syllables of this language were originally built up on the following fundamental types:

1. Vocalic sound only (vowel or diphthong).
2. Vocalic sound preceded by one or several consonants.
3. Vocalic sound preceded or not preceded by one or several consonauts, but followed by one consonant only.

These items typify only the present state of the language, and refer in no mamer to the structure of its radical syllables. Phonetic processes have altered the primitive aspect of this and all other tongues considerably, and many sound-groups now make up one syllable which previously formed two or three of them. In some words vowels largely preponderate, as in lewe-uóla, le-11-e-u-bla to cease to prohibit, yayayáas bewithing power; while in most others consonants exceed in number the vocalic elements, excessive groups occurring in ldiglza to lineel clown, shléshltcha to go visiting, slitchúshtchzapksh, d. obj. case of shtchî'katko one-eyed.

Gemination of simple vocalic or consonantic sounds frequently occurs, and with vowels it is produced through a sort of emphasis or the distributive reduplication (ánku tree, d. fa-anku), with consonants through the prece-
dence of a short vowel, as in genă'lla to start, kmă'kka to look about, udítta to whip. More about this under: Phonetic Figures.

The collision of sounds of a different character, produced by two different parts of the vocal tube, is a fruifful source of phonetic alterations, whenever the natives find it difficult or impossible to pronounce them in succession. No language, we may safely say, is exempt from phonetic changes produced by immediate collisions of this kind. Thus the Klamath suffixes -tka, -tki will frequently appear as -tga, -tgi, but never as -dga, -dgi or -dka, -dki.

In the following table I have disposed various clusters of sounds after their initial sounds, without taking notice of the fact whether the components belonged to one or more syllables; $y$ and $w$ being comted as vowels. Many of these clusters form parts of distributive reduplicated forms.

## CLUSTERS COMPOSED OF VOWEL SOUNDS.

1 clusters: wawákogsh, wawawaíha, telnaísh, luelualóya, wu-utchéwa, shué-usham, wäíta, wéwalēks, vuívui.
o chusters: kuloyä'na, ל́ya, o-óakgi.
a clusters: uұai-ǐ̌̂tko, skáwanksh, káwantko, ka-uká-uli.
ä clusters: :̈-izílza.
e clusters: wewilína, shewána, léyash.
i clusters: yúkiaka, shítiaika, tsliuyagótkish.
CLUSTERS COMPOSED OF CONSONANTS.
k clusters: slılepáktgi (or shlepáktki), shaktáktza, kmă'kka, kpákpa, tsä'ktsika, ktchídshû, tchligáktchktchka, ktcháktchak, ntíkslıktcha, bóxtka (for bókstka), pmíuksla, utchíklza, shektlälóna, hishtcháktna.
\% clusters: mpétlazsh.
g clusters: pipělángshta, lû̀gshla.
t clusters: tlózo, tyópo, tkáp,tgakiámna, Tmókila, tátktish, léshuatysh. tch and dsh clusters: litchlítchli, vulakátchktcha, tchvî̀ntka, kítitchna, tslats[1]kágantko 144, 11, tsqe-utšé-ush; ndshóndslıza, slúdshna, vuggídshlin.
p clusters: $\underline{k}^{`}$ lékapksh, gépktak, tápszoya, lapkshápta, nshíptclipa.
s and sh clusters: humáshtyi, läikáshtha, ga-ishtıúla, shtchiazíxa, shtchislitchák'lya, shnû'shnұa, shushpáshka, tgashii'shgish.
h clnsters: sha'hmóka, lilálila, tsu'lltsú’hli.
n clusters: shutánktgi, médshantko, nd'húltxaga, nténtiag, ndshíndshalo, nzinztcha.
m clusters: slınumpséla, wímla, lintámsza, udúmtc̣hna, ámtchiksh.
1 clusters: šúlpkạ, tmélhak, tálsخ̊a, yáshaltko, ndúltzaga, lkíppa, lslíklza, ltchamaī'shka.
The inspection of this list, which is by no means exhanstive, shows the great adaptability of sounds in this language, and the limit for the clustering of consonants is a very wide one. Some of the terms are real "jawbreakers", but none of the group is unpronounceable for us, for they are all subordinated to one vowel or diphthong and are not discordant among themselves, so as to offend our car. Some sounds appear more apt to begin clusters as initials, while others prefer to stame second or third in order The language shuns initial clusters of more than two consonants, three being a rarity; but it favors their clustering after the vowel to any pronounceable extent.

## FUREIGN TERMS AND THEIR PRONUNCIATION.

The pronunciation of words by the natives, from the investigator's own tongue, or from other foreign languages, gives a valuable clue to the physiology of their sounds. Many Klamath Lake and Modoc individuals converse with tolerable fluency in English, and a difference may be perceived between the English pronunciation of the pure-blood and that of the mixed-blood Indians.

The Máklaks learned a few French and English terms through the Chinook Jargon, a medley speech from the Northwest, in which these Indians are far better versed than in English They obtained the knowledge of this jargon from the Indian population on the Lower Columbia and Willamet Rivers and on the Pacific coast, where it had been in vogue for the last hundred years. According to G. Gibbs, who wrote a monograph of it*, two-fifths of its vocabulary was taken by the Indians from

[^43]Lower Chinook, one-fiftlı from English, less than one-fifth from the Canadian traders' French and the Missouri patois, and the rest from Chehali, K:alapuya, and other tongues. The sounds $\dot{z}$ and the palatalized 1 in Lower Chinook terms were the only ones materially altered by the Klamaths. In every section of territory where Chinook Jargon is spoken dialectic differences can be distinguished. Thus the French sauvage became salúvash on Columbia River, but changed to saivash in the sonthern parts of Oregon.

Distinetion must be made between the European terms introduced at an earlier date into Klamath, through the use of the Chinook Jargon, and the more recently (chiefly since 1864) adopted English terms, for they differ slightly in their phonetics. Of English and French words the language forms inflections, derivatives, and reduplications almost as ensily as from its own words, as will be seen from the lists following:
frencll terms obtained through chinook jargon.
kápo coat, dress; F. capot overcoat ; kapópěle to dress oneself, and other derivatives.
lilapai ribbon; F. le ruban; Ch. J. lilobe (G. Gibbs).
limin' mule; F. le mulet or la mule; limīlman mule-driver, packer.
mítash, niitas legging, d. míndash; F. mitasse.
slứggai sugur; F. le sucre; Clu. J. lisúk, shúga, shúkiva.
ENGLISH TERMS OBTAINED THROUGH CIINOOK JARGON.
Bóshtin (d. Bobóslıtin, rarely used) American, white person; E. Boston. Cf. Dictionary, p. 26.
King Dshúdsh, Mod. Sking Dshídsh, Englishman; E. King George. kópe, F. coffee.
pōt boat, vessel, ship; E. boat.
slin' ${ }^{-1}$ cloth, especially cotton cloth, calieo; G. Gibbs derives it from sail. sō lt, shō ${ }^{\prime} \mathrm{l}$ t, shūl, E. salt.
stick stick, wood, pole, tree; E. stick; stíckshui boot, stíckmän carpenter. stíndē teerl; Sunday; E. Sunday.
tála dollar, cash, eoin; E. dollar; tálaltko huving money, riech, wealthy

## FNGLISH TERMS OBTAINED DIRECTLY FROM AMERICANS.

a'plěsh, ä'puls, poss. ï'pulsham apple bī bce, bī'sam wax bceswax. box, instr. bóxtka box, coffin. Débid, E. David. Dö'tchman, Mod. Dötchmal, German; from vulgar E. "Dutchman". Dshiēp, nom. pr., Jefferson; E. Jeff. hä́ıkě̌rtchip, instr: hänkěrchípátka 87, 14., handleerchief; cf. kítchkam. huít whent, grain, cereals; E. wheat. yaúksmän physicion; a hybrid term. kápa cup, téacup, saucer, dim kapága; E. cup. kítti domestic cat; E. kitten, kitty; Mod. for púslish Kl. kuáta quarter of a dollar, 25 cents; E. quarter. lákish in lákishl=shúshatish locksmith nnay be as well the E. lock as the Kl. lákislı kinob on door-donbtful. lípin, E. ribbon; lílapai is also used. Lánktchān, nonı. pr., Long Jomn. our hour (of the day). pîinsh, E. beans pípa tobacco-pipe; from E. pipe, not from Ch. J. lapíp. plē'k, pli'g fle!, bamer; E. flag. Plēık, nom. pr., Frank. Pōt Klámat, nom. pr., Fort Klamath; for Kl. Í-ukak. púshish domestic cat, Kl ; E. puss, not from Ch. J. pússpuss. sháwĕl, E. shovel. shílba, E. silver: shō̄p, sōp, E. soap. Spaniṑlkui Mexican, obtained probably from California. stégiush, E. stocking; stéginshala to knit stockings. shūp, instr: shúpatka, E. soup shińldshash, poss. shúldsham, E. soldier. shúshap, E. jewsharp. tánapsh, E. turnip. tí-uni, E. town. taúsěn, E. thousand. tébul, loc. tébullat, E. tablc; not from Ch. J. latā'b. tú=pitch quarter of a dollar; E. "two bits". tchíkĕn, obj. tchíkinash, E. chicken.

It appears from this list that Klamath drops the final $r$ of foreign words, converts f into $\mathrm{p}, \mathrm{v}$ into $\mathrm{b}, \mathrm{r}$ into l , and sonant mutes generally into surd mutes.

## ALTERNATING UF SOUNDS.

Permutation of sounds of the same phonetic class has been observed to exist in the two classic languages, which belong to the same linguistic fanuily, several ceuturies ago. It was plainly seen that a connection existed, with mutation of certain sounds, between $\delta \dot{v} \omega$ and $d u o, \tau \varepsilon \tau \tau \alpha \rho \varepsilon ร$ and quatuor, $\dot{\varepsilon} \sigma \vartheta \eta^{\prime} 5$ and vestis, $\dot{\varepsilon} r v \rho o{ }^{\circ} s$ and socer, and some suspected even affinity with the corresponding terms in the Germanic and Slavic languages. After J. Grimm had formulated lis law of sound-shunting, the process of permutation became a matter of evidence for the Germanic and Indo-Enropean
languages, but only as far as the transition of words from one dialect to another is concerned. But in illiterate languages the same interchange, often " more extensive one, tellies place within one and the sume dialect.

So much did this fact contradict the time-horored, ancient ideas of grammar lodged in the heads of missionaries and school-teachers, and so little did it conform to Latin, Greek, and ITebrew models, that the puzzled grammatical writers on American, African, or Oceanic languages blintly denied the existence of certain somuds which they knew to be in the language, but found to alternate with others for no apparent causes. This relieved them from the necessity of accoming for this puzzling phonetic fact. The existence of the sonant untes was flatly denied to many American Indian tongues, and the Mohawk-Iroquois* alphabet was prochamed to possess sixteen sounds (or "letters", as they were called) only, while in reality it has over twenty-four, all of which are easily expressed by the Roman alplabet.

I have observed alternation of sounds in all the North American languages which I have studied personally with the aid of matives, and have also hinted at one of its hidden causes, viz. the laryngeal or pectoral pronunciation of the red man. Even those Indians whose languages have been reduced to writing for fifty or one hundred years back, and in whose books all traces of this interchangeability were suppressed by the missionaries, etc., as the Creeks, Cha'hta, and Iroquois, permute their consonants and rowels with the same liberty as if these books had never appeared in print. It would be exactly so with us if our ancestors had not had a literary training for the last thousand years at least.

I have recorded the alternations observed by me in the Kayowe (or Kinwa) langnage in a monograph published in the American Antiquarian, 1V, pp. 280-285, under the title: "Phonetics of the Káyowe Language", the results obtained there being almost identical to those to be given below:

This permutability of cognate sounds forms one of the prominent phonetic features of Klamath, and occurs in initial as well as in medial or final sounds. Still there are words in which certain sounds do not interchange with others. This is especially observed in lomonyms, where permutation

[^44]would cause confusion; sllkóks ghost is never pronounced shlkoks, which means tick; gíwash is kept distinct from gíwash, úsha from vúsha, shikantéla from shikantila. Cf. Homonymy.

## Vowels alternating:

u with wu , vu , hu: udúmtchna, vudúmtchna; u-ún, vún, wún; hitátclkia, vutátchkia, hutátchkia.
u with o: lúk, lók; lápuk, lápok; hútclna, hṑ dshna; púlzuantch, pólơkuantch; lúloks, lóloks; táměnu, tám’no, but not híyẽ̛a with hóyëza.
n with a : putpítli, patpátli; kû́lkûli, kálkali.
u with â: múkash, mâ'kash; cf. nāt, nût.
u with ï : udúyua, udü'yua (by dissimilation); shńyuzalsh, sü'yüzalsh.
ua with $\bar{o}, \bar{u}$ : genuála, genō'la, genū́la.
a with o : máklaks, mákloks (Modoc); kálkali, kólkoli and kû’lkûli; skáushna, skóntchna; hishplámıa, hishplómna; suffix -uápka, -úpka.
a with ä: taktákli, taktä'kli, and in many other adjectives of color (by dissimilation); yáka for yiàka, is considered vulgar slang; cf. shláank for shléank $66,13$.
 shlláyaks, shlá-ika, shl:ä'yaksh, shlä'-ika.
e with i and ä: élza, ílza, älıa; kétcha, kídsha, gä'dsa; shetchákta, shitchákta; Á-ushme, Á-ushmi. Cf. also: múkasham, múkisham 175; 14.

i with iy, y before vowels: shlanía, shlaníya; í-amnash, yámnash.
The circumstance that many of these alternations occur in accented syllables proves that they constitute a fundamental law of Indian articulation. In diphthongs very few, if any, changes of this kind are noticed, neither do long vowels alternate often. The most frequent alternating processes are observed between a and o , e and $\mathrm{a}, \mathrm{u}$ and $\mathrm{wu}, \mathrm{vu}, \mathrm{u}$, and o . In many words vowels can be attenuated into é.

## Consonants alternating:

k with g, gg: ké-u; gé-u; kitchkáni, kitchgáni, gitclggáni; wakáya, waggáya; lutatkátki, lutatgátki; kē'k, gē'g.
k with $\underline{\mathrm{k}}$ : kaítua, kaítua; máklaks, mákloks. This permutation is usually attended with a change in signification. Cf. Pronouns.

 omitted by aphæresis, is replaced in Modoc by the arrested sound: Koke, - 6 ke. A similar process is observed in some Polynesian languages when k is elided.
$\mathrm{k}, \mathrm{g}$ with l , hh: gaikanka, haikanka; taktá-ash, ta'htá-ash.
$\underline{\mathrm{k}}$ witlı g: $\underline{\mathrm{k}}^{-} \mathrm{l}$, gū̃ $\mathrm{u}^{\prime}$; kúlu, gúlû.
$\mathrm{k}, \underline{\mathrm{k}}$ with $\mathrm{nk}, \mathrm{nk}, \mathrm{n} \chi$ and other nasals: $\underline{k}$ fla, nkíla, nkila, nqilla; kéwa, nkéwa, nđä'wa; káta, ngáta.
tch with dsh, when not initial, and with ts, ds: títchi, tídslii, tídsi; tcháslish, tsásis; nútch (for nû tclıúi), núts. núds; geluántcha, géluandsha, géluandsa.
tch, dsh with slı: ntúltchna, ntúldshna with ntúlshna; tảdshui, táshui; nā'dsh, nā'sh; willatslína, willashlína. Wálidsh for wálish, and páwatch for páwash are considered vulgarisms. Tapinikáyentch for tapinikayénash $120,19.121,22$; kúshga tcha for kúshga sha $9^{\circ}, 17$. Changes from one dialect to the other: ská, Mod. tchgá; sligúmla, Mod. tchgúmla; shōksh, Mod. tsêó ${ }^{\prime} k s h$; spál, Mod. tchpál.
tch with ntch, ndsh: tchékani, ndshékani; tchétch, ndshě'dsh; tchíshlxa, ntchíslilxa, ndshíshlka.
ts witlı ds , in every instance except when beginning words: kétsa, kédsa.
t with t ', d : télish, t'élisl, délish; ént (for énat), énd; shataltíltamna, shataldíldamna; tánkatch, dánkatch.
t with nt, nd: túnshna, ntúnshna; nté-ish from téwi; téga, cf. ndéga, but not ndéwa and téwa ; ndópa, cf. túpesh.
p with p', b: páhalka, p'âhhalka, bahálka; púpanuish, búbanuish.
p with mp, mb: pákuish, mpáknish, mbákuish.
$p$ with m: suffix -ptchi, -mtehi, -tén; suffix -pĕna, -mua; pronouns p'ná, p' nálam, Kl. m'ná, m'nálam
11 with w: páklkish, wáklkist.
s with sh, in every instance: steinas, slıtaínash; stḕks, shtēékslı; nā's, nā'sh.
s with z, chiefly initial : saíga, zaíga.
s, sh with ss: sháshaplamtch, sássaplauntch; shishóka, sissóka.
m with u, before labials: mbá-ush, ubá-ush.
n with $u$, before a dental or palatal: ndúpka, udúpka; nuhka, vudúka, udúka; ntcháya, utcháya.
ndsh with nteh: ndshóka, ntchóka.
n with $t$ : natnípĕnapsh for nan'nápěnapssı; netuólzish for nen'mólzish.
1 with n: ntúlshna, túnshna; kíldshna, kíntehna, kínshna, Mod. kíllıat; ltchamā'shka, utchamā'slika; heshelióta, shenińta; tslípal, tchnípal; tchíkĕmain, Mod. tehíkĕmal; pnínkshla, puíuksna; but not tiunóla and tiulóla.
I with hl: lá-e, hlá-a; laklákli, hlakhlákli.
A few more of these alternating processes will be fom mentioned, with examples, in the Dictionary, pp. 9-11.

As to their frequacy, consonantic alternations differ very largely. is interchanges with sh in every instance, and the permmation of $k$ with other gutturals, especially $g$, gg, \%, and of teh with $t s, d s, d s h$ is extremely frequent. The substitution of $k$, $\mathrm{g}^{2}$ for other guttmrals, though firequent, is not exactly the rule, for these sounds are linguals while the rest of the k-series are pure gutturals. Abont the difference in signification produced by this clange, ef. Pronomus. H becomes frequently disconnected phonetically from vowels or consonants preceding it, by the arrested sound 2 , and when pronounced with entphasis, undergoes gemination: - 'hh; cf. hlílantana, sha'lımóka, kaíha unt kaíhlı. S and ts are heard much oftener than sh, teh int the conversational form of language, and before $\chi$ the assibilated sh scarcely ever occurs: szćna to row, lutáms\%a to rush between. Words with initial t and $p$ that can pass into $d$ and b, may also change these initials into explosive somds: p-, t-: The whole series of consonants through whelh aterul as tehálamma can pass is: teh, ts, t'sh; a word like patádshat
may also be pronounced patátcla, patátsa, patádsa, but padátcha or badátsa is scarcely ever heard from natives. Some terms, as pípa paper, ndáni three, undergo no vocalic or other changes whatever, while others camnot assume certain alternations without a change of signification. Cf. Homonymy.

All these conversions of cognate sounds often impart to certain words a quite different appearance, which renders them unrecognizable to the unexperienced. Still the interchange of sounds is more extensively developed in some dialects of the Carib or Galibi, as well as in Káyowē, Hidatsa, and other languages spoken on the Mississippi plains.

Like all plenomena in nature, this interchangeability is not produced by the fancy or option of the natives, but is based on natural laws, and as language is one of the effects of nature, we must look to physiology and not to p.ychology to discover its latent causes. One of these is the tendency of rendering pronunciation easier; this we perceive, e. g., in the dropping of the laryngeal sound $h_{1}$ in: mí-ut for mi lhît, átunk for át hûnk, n'unk for ni (or nû) liûnk, and also in ázut for a hû́t. It will be remembered that $\mathrm{l}_{1}$ can be dropped even when belonging to the body of the word. In 97, 1, lûnk kíuliga has probably been nasalized into hûnk nzúuliga to avoid the collision of two identical sounds. Another canse of these permutations is the laryngeal utterance of the Indians, which I have discussed under that heading (pp. 215-217); it also accounts for the circumstance that permutation among sounds originating in the rear mouth are much more frequent than those produced by the action of the lips and the fore part of the vocal tube.

## PHONETIC FIGURES.

Besides the phonetic changes spoken of in the foregoing section, there are other alterations in the sounds of words which generally affect the booly of the words more thoroughly, and occur in all the languages explored. These alterations are produced by various causes, as the shifting of the accent from one syllable or word to another, the attenuation or increase in quantity, the habit of fast speaking, ete., and clief of all, the desire of saving vocal exertion. The tendency for retrenclment is moro
energetic in this upland language than that for the increase of somds, and thus the chapters on elisions and contractions will be more extended than that on phonetic additions.

I have classed the phonetic figmes into the following distinct groups:

> A.-Addition of phonetic elements other than affixes, to the word.

1. Prothesis, or the addition of vowels or consonants at the commencement of the word: v in vuhupiéga, vudúka, ete., for u-upiéga, udúka; Sking Dshū'dsh, Mod. for King Dshū’dsl. Yíkashla for íkashla may be considered simply as alternation of sound.
2. Epithesis, or the addition of vowels or consonants at the end of the term: tú-uni, from English town.
3. Epenthesis, or the insertion of vowels or consonants in the midst of a word. Some of the inflectional affixes are epenthetic, and will be considered under the heading of affixes. The insertion of 11 in tuánkshi for tuákshi, kaiilántala for kailátala, tia'mantko (a verb tiä'mua does not exist) ${ }^{\text {a }}$ for tiä'matko lad better be considered a nasalizing than an epenthetic process. Epenthetic $v$ is observed in lěvúta for lě-úta, l'íta. Epenthetic h hats to be carrefully distinguished from the - 1 - of the verbal suffix -ha, as in skúlha to lie on something, compared to skúlya to lie, to sleep, and firm the 'h which indicates an act done by hand (see below). We find the epenthetic $h$ in:
tsialshai'mi in the salmon season, for tsialsä'mi, tsialsé'mi.
gáhipa to catch cir with a grunt, for gá-ipa.
shawalhinî'a to accompany somebody, for shawalinä'a.
muhimúya to shiver, tremble, for muimúya.
4. Nasalizing or masal pronunciation takes place in regard to certain consonants only, when initial or medial Nasalization of vowels in the manner as observed in Frencl and Dakota does not belong to the features of the Klamath language. The deep pronunciation of $\hat{\mathrm{a}}, \hat{i}, \hat{i}$ has nothing to do with nasalizing. The gutturals $\mathrm{g}, \mathrm{k}, \mathrm{k}, \chi$ are thereby transformed iuto ng , nk , $\mathrm{nk} \underline{\mathrm{k}}, \mathrm{n} \chi$; the dentals d, $t$ into nd, nt; the palatals dsh, tel into udsl, utel; the labials
$\mathrm{b}, \mathrm{p}$ into $\mathrm{mb}, \mathrm{mp}$. This process was discussed under the heading: "Alternation of Sounds," and examples from the Dictionary will be found there to illustrate it more fully. Instances where no alternation takes place are shempéta to argue, for slepéta; shikámba to walk on a stick, for shikípa (radix: kap in tkáp).

## B.-Dropping of phonetic elements from the word.

All the causes that are productive of decay will also operate in favor of sound-removals, as: fast and indistinct pronunciation, shifting of the accent, etc. Elisions of all sorts are especially frequent.

Elision, or removal of a phonetic element within the word, is frequent in all languages. In Klamath it is chiefly brought about by the tendency to bring vowels into close contact with vowels, even identical ones, and consonants with consonants, whether identical or not; a tendency which causes elimination of intervening sounds. Cf. Assimilation. The various kinds of elision make a subdivision desirable into syncope, ekthlipsis, and elision of a whole syllable.
5. Syncope, or elision of a vowel before a consonant. Ex.:
itkla to collect, gather up, for itkǎla.
lúlpaltko provided with eyes, for lulpálatko.
húnsak, nénsak to no purpose, for hunáshak, nénashak.
télshna to looo out, for télishna.
tchkásh also, too, for tchē'kash.
$k^{3} l e k a ́ p k s h$ dead, for $k^{\prime} l e k a ́ p k a s l$; $k^{\prime} l e^{\prime} k s h t$ for $\underline{k}^{\prime}$ lékasht.
E-ukslikni Klamath Lake Indian, for E-ukshikni.
tatámnish traveler, for tatámnuish.
6. Ekthlipsis, or dropping of a consonant from the midst of a word.
(a) When stauding before one or more consonants. Ex.:
shelluashémi in the war time, for shellualshé'mi, cf. 56, 1 and Note.
puekámpěle to throw out again, for puelzámpêle.
ktchák avlone shell, for ktchálk; basis, ktchál a.
shlátp:ụnpěli to return, bring back, for shláltpamporli.
shtchûshzipkam; cf. Note to 109, 6.
(b) Before vowels consonants are elided in the following terms: nté-ish bow with arrou's, for utéwish.
hushintanka to approuch on the sly, for hush'lintanka.
saměnakía to wish for oneself, for sh'haměnakía.
sákuash fisl-gig, spear, for shtchákuash.
múătch large, tull (obj. case), for múnish.
7. Elision of a syllable, accented or unaccented. Ex.:
pii'patchle to step down from, 112, 6. 9, for pepatchóle.
kshulō'tch mowing scythe, for kshulútkish.
shalállish Pan's flute, jeussharp, for shalalálish.
húnkimsham theirs, abbr. from húnkělamsham.
wéwanshash, wéwansh women, for wewanuíshash.
méssaim in the season of trout, for mehiashia'mi.
nákanti evcrywhere, for nánukanti.
vulkíshti borroued 189;4, for vulqúpkashti or -tat.
Cf. also púksla, wō'ksla with their longer forms, and stélapksh 87,13 , for stelápkishash.
8. Aphueresis, or the retrenchment of an initial sound. Ex.:
káp, Mod. for tkáp stalk of plant; dim. kápka, Kl. for tkapága.
mhú, Mod. for tmú K1., grouse.
'mutchága little old man, 'mutchéwatko old, for k'mutchága, k'mutchéwatko.
'mbuté $\chi \mathrm{e}$, for himbutē' $\chi e$ to jump over something.
-óke, Zólkoli, -ō'sh, Mod. forms for kóke river, kólkoli round, kō'sh pinetree This apheresis before the lingual $\underline{k}$, which substitutes - , is heard in the Modoc dialect only.
ûk, ûmk, pron. that, and adv., for lhîk, hûnk; ef. hū'kslıt and $\bar{o}^{\prime}$ ksht.
9. Apocope of sounds.-Nothing is more frequent than the retrenchment of single sounds at the end of words; the quality of the initial syllable of the word following is sometimes the cause of this, though more frequently it is brought about by the location of the accent upon a distant syllable:
shítk, sitk alike to, for shítko, sítko.
tchi'shtal towards home, for tchi'shtala.
ná-ash, nāsh, thus, so, for liá-asht, nā'sht.
n̄̄ we; $\overline{\mathrm{a}}$ ye, Mod. for nā't, nād; àt.
kílo clear skiy, for kálo-u, as seen by the inflection.
Cf im for i mi, 59, 9 ; tum before consonants, 13, 14. 19, 1. 20, 19.
10. Apoeope of syllables.-In the conversational form of language these
apocopes are frequent and often very puzzling, as lyályam lulínash instead of lqalzamnísliti lulínash in 74, 10. Ex.:
nákant cominy fiom everyubhere, for nákantkni.
gunigshta on opposite side of, for gunigslitana, with many other preand postpositions, as wigā't, etc.
pahá, uyitsá dried, purtic. pass. for paláátko, nyitsátko.
máklaks lakí tribal chief, for máklaksam lakí.
yúyaiks=shítk wretehect-looking, for yuyalkíshasilh=shítko.

## C.-Contraetion and dilatation of phonetic elements.

Here, as well as in other tongues, contraction is chiefly limited to vocalic sounds, and although Klamath seeks rather than avoids hiatus, there are instances enough of two vowels becoming contracted into one. A special sort of vocalic contraction is the weakening of a vowel into the primitive vowel ě, generally when unaccented. Instances of consonantic synæresis are Móatokish for Móatok=gish, tatátli for tat-tátli, kä'käkli for käk-kä́kli, shıluáktcha for shuluákt-tcha, etc.

Dilatation or expansion of the rowels of a word is called diæresis; that of consonants is usually gemination or redoubling.
11. Synacresis, or "gathering up," as the name has it, is a figure drawing together vowels into one sound (cventually into a diphthong) to avoid hiatus. 'This coalescence of distinct vocalic sounds is quite frequent and usually produces long vowels, whether accented or not. ga'shtish door of lorlge, for ké-ishtish.
tílāk, d. tatálāk struight out, for tálaak etc.
$\mathrm{k}^{-}$'sh rattlesnalie, for ké-ish, $\chi$ ć-ish.
ngésh arow, sliengésha to shoot at oneself: for ngé-ish, shengé-islia.
shenótatko confluence, for shenuátatko, shenewátatko.
panópka to desire to eat, for panuápka.
nákōsh stoppage of waters, for nákuash.
slīi'dslına to chase each other, for shú-udslma, slúlindshna.
wé-nlta to permit, for wéwalta.
gaiggūtko, 123, 2, crossed over, for gákuatko.
liukiámena to gather around, for liwakiámna.
12. Krasis or "intermixtare" is the union of vowels forming part of different syllables into one vowel sound (or diphthong) to avoid hiatus. The sound $h_{1}$ is easily dropped if it stands between the vowels.
sléa they of course, for sla i-a, sla ya, 93, 6.
tídshäk good if to be, for tídshi äk, tídshi liä gi, 93, 9. and Note. míut yours that, for mî hût.
13. Vocalic attenuation or shortening, weakening of unaccented syllables into the primitive vowel e forms the transitory stage to the figure called syncope. We find it in :
skátkěla to carry on back, for skátkala.
shulěmokédsha to swing around, for sluulamokédsha.
shúkpěli to withdraw, for shúkpali, cf. 68,8 and Dictionary.
Weakening of an accented syllable: tékish sword, for tékish.
Attenuation taking place between words is observed in: géntĕni $I$ would fain go, for gē'nt a nî; átěnen for at a nen; tatátěnat wherever we, for tatát a nāt; tatatáksě spûkliá when they sweat in it, $\$$ :2, 3. 4., for tatátak sha spûkliá. To this may be added the weak pronunciation of -ăn, lănn, the suffix of the possessive case, especially frequent in the Modoc dialect, and almost equivalent to -ěm: máklaksăm, suéntchăm, etc.
14. Diaeresis or vocalic diremption takes place when a vowel, which is generally a long one, is redoubled or even tripled, and when a diphthong is pronounced with hiatus, that is, as an adulterine diphthong.
a. Diaeresis of a vowel:
k!-intch wasp, for ki'ntch, kīnsh.
mo-6́we woodchuck, for mówe, múwe.
ná-as one, a single one, for nā's, nā'dsh.
sllée-eta to discover, find, for shléta.
ki-i-ía to tell lies, for kía, kiya 64, 4.

These examples involve simply rhetorical emphasis, but there are instances implying a change of signification as a consequence of the diæresis: sha-apá-a to dare, provoke, from shápa to tell, count; i-iulina, yiulina to send over the edge, compared to yulina to menstruate.
b. Diphthongic diaeresis, as in í-uta for yúta, né-i for néya, E-ukshi for Eúksi, las been fully discussed in the article on Diphthongs, p. 208.
15. Gemination or doubling of consonants occurs only after vowels short in quantity :
sessalólish warrior, for sheshalolish; vússa to fear, for vúslıa; genálla to start, for genála; nellína to scalp, for nelína; wétta to laugh, for wétı, cf. wétanta; udítia to whip, for udíta; limlínıma to be dark, for limlíma; tchímma-ash string-game, for tchíma-ash; kû'mme cave, for $\mathrm{k} \hat{u}^{\prime}$ me; súmmatka with the mouth, bill, for shúmatka; tchaggáya to sit upon, for tchakáya.

## D.-Phonetic changes through contiguity.

These changes mainly occur in unaccented syllables, and are produced by the influence of sounds either preceding or following immediately, or forming a part of the syllable preceding or following. It is generally the subsequent sound which tries to weaken and then to assimilate or dissimilate its predecessor. The altered position of the accent sometimes produces a similar result. In Latin we find similar changes accomplished in meridies for medidies, medius fidius for me Dius filius, occupare for obcapare, occiput for obcaput, exultare for exsaltare, appono for adpono, doceor, audior for doceo-se, audio-se.
16. Assimilation - Vowels and consonants of the same vocal class, either standing beside each other or belonging to adjoining syllables, assimilate more closely or become identical. This process forms just the opposite of the dissimilation to be described below, both of them being the result of pronounced tendencies of the language.
wayálapsh icicle, piece of ice, for wéalapsh.
Wäitä'ngish Warm Spring Inaian, for Waita'ngish.
yíyuzoga to shove into, for íyuxoga, í-uxoga.
shukatonolótkish stim-strup tiel into the huir, for shnkatanolótkish.
tálaat t\%alamtítala due west, 2!), 10, fur tálaak etc.
tsuitsinn láwish wine-bladder, for shuidsham láwalsh.
tillindshia to abandon, for tinlíndsha. -
ntulslámpkash flowiug down (obj. case), for ntulshántkasl, ntulshán-- pkash; cf. gémptelii for gén-ptelii.
hä̈ nem (for nen) wia' g'ı kii'git, 87, 5. and Note.
17. Dissimilation.-This phonetic law, which is directly opposite to that of assimilation, consists in avoiding the repetition of a vowel or consonant standing in contiguous syllables, and converts one of the two, generally the first one, into a cognate sound pronounced with the same organ of the vocal tube. Dissimilation is more frequent than assinilation, but applies only when the sounds referted to do not stand in the same syllable. It operates also from one word to the next one, as in:
huhashtápkuak they stabbed each other only, for hulashtápka ak, 114, 3.
Vocalic dissimilation is frequently observed in terms formed by iterative reduplication :
lámlemshı dizzinéss, inelıriution, for lámlamsh.
heílai red fox, silver fox, Mod. for lieílei.
kétclkatch littte gray fox, derived from ketchkétchli rough-furred.
kä’lkali round, for kálkali, kólkoli.
kia'kakli, kakä'kli yellow, for kaikai'kli, and all other adjectives of color, in the absolute as well as in the distributive form.

Instances of vocalic dissimilation in distributive reduplication: wewä'kala, for wewékala, d. of wékala to give birth. pepuélza, for pupuélya, $d$. of puélya to throw down. shkü'shkatkala, for shkáslıkatkala, d. of skátkala to carry on back. käkak:íkli yellow, for käkäk:i'kli, d. of kak:i'kli ; also all the other adjectives of color, and many of those descriptive of surface-quality.

Other instances, where vowels become dissimilated, are as follows:
wä'-aks, wé-aks mallard duck, for wé-eks; cf. wékash. yanak:iníni being at the lower end, for yanakaníni, 148, 2. kiam:ï'mi in the fishing senson, for kiämä'mi.
shiwákuash to the girls, for shiwága-ash, 80, 11. udiu'yua to beat, whip, for udúyua.

Consonantic dissimilation is ubserved in the following terms formed by iterative reduplication:
kedshamkedshalkéa to wheel around on one's feet.
palakmálank with rapid yait, for palakpálak; cf. pálak. tchíptchima, Mod. to drizzle down, for tchímtchima or telíptchipma.
18. Metathesis is an inversion or transposition by which a vowel or consonant mutually exchange the position which they normally occupy in the word. This may take place in one and the same, or in contiguous syllables, and is a figure of euphony, since it reuders the pronunciation easier in that comnection where the word is applied. Vowels can exchange their location with other vowels or with consonants, and consonants with consonants.
shiunótar to sing in chorus, for sliuinóta.
shuila, shuilla to shake oneself, for shiúla.
ínsh, însh me, to me, for me, for nîsl, nísh.
sluewádshka little girl, for sluawédshka.
kmókuuka to growl (dogs), for kmókmuka, d. of kmúka.
samtchákta to comprehend, for samtcláátka.
wál'lka to look out for, for wálhlka.
ámtchiksh old, former, for ántcl=gisll, this probably for mā'ntcl-gîsh.
shuipúklash small cushion, for shuipkúlash Mod.
shakptáksha to clucl with the tongue, for shakápslitaka; from kapáta.
ťû'tza to presage death or mischief, for tû̀kt\%a, from túka to frighten.
lésluatzash fun, sport, joking, for léwaslitzash.
ne-uzálpĕli to order again, for ne-ulzápečli.
líshgapěii to go and take off, for lúktchapěli.
There is another form of phonetic inversions taking place through the agency of verbal or nominal inflectiou and derivation; examples of it are as follows:
ká-akt for kákat, d. of kát who, which, pron. relat.
sháyuaksh for slayúkash lnowimg, slirewd.
wáltaksh promiscuous talling, for wáltkash Mod.
háshtaksh perforation of .eurlobe, for háshtkash .
ípakt it may stay, remain, for ipkat, 148, 14.
wiulálek! strike it! for wiulál' ' í!
hútan, ngé-ishan they ran, they shot, for hútna, ngé-ishna.
shulútamantk being dressed in, for slulutámmatko.
These inverted forms may be explained by metathesis, but it is probably more correct to derive them from supposed forms as ká-akat, sháyuakash or -kish, wáltakash, háshtakash, 亻pakat, wiulálak î! hútana, ngé-ishana, etc., which, under the weight of the receding accentuation or other influences, lost their second vowel (a). This explanation is sustained by forms like né-ulakuapka, fut. of né-ul\%a to order, which, compared to genuápka, fut. of géna to go, pekshuapka, fut. of péksha to grind, shows that the ending -a of the "infinitive" does not appear in the finture, but that the first -ain né-ulakuapka existed there previously, and induces us to presuppose an ancient form né-ulaka, né-ulăдa:
19. Anathesis is a new grammatic term, by which I call a sort of vocalic metathesis; almost entirely confined to derivative verbs and inflectional verbal forms with their derivatives. Numerous instances of it are found among the verbs beginning with the prefixes sh- and h-sh-. This subject will be developed in full in Morphology, Section: Radical Syllable.

## ACCENTUATION.

I.-LOCATION OF THE ACCENT.

The accented syllable of a word is uttered with a stronger effort of the voice, and frequently with a higher pitch than the syllables surrounding it.

Long words have a principal accent and a secondary accent. The only sign used in this volume for accenting syllables is the acute accent, ', as iu ibéna, túpka.

A curious difference is observed in American languages as we proceed from the South to the Nortlı. For in many parts of South America, especially the eastern and northern, the accent is placed towards the end of the
word and accentuation of the penult and final syllable must be considered as the rule. In Central America the emphasized syllable begins to shift towards the radix, and in most Nortl American languages, which are rather suffix- than prefix-languages, the accent has a tendency to rest on the root or at least on the first syllables of the word.

In Klamath the emplasizing of the radix is the natural and fundamental law of accentuation, but it is so often interfered with by other agencies that it seems rather to be the exception Many short particles have no accent of their own, and in terms formed by iterative reduplication each of the doubled radicals has an equal right to the accent; so the accentuation is here decided by rhetoric convenience.

To obtain an insight into the mutual conflict of the accenting principles and the variability of accentuation, distinction must be made between:
(1) accenting the radical syllable.
(2) accenting by means of the secondary accent.
(3) accenting through quantity.
(4) accenting through syntactic emphasis.

In polysyllabic terms the root or radical syllable alone is invested with an intrinsic notative signification, while the other syllables or sounds of the word, verb or noun, express only its relations to other parts of the sentence. Hence the root is the most appropriate place for the wordaccent; nevertheless we find it constantly shifting in American and other illiterate languages under the guidance of certain phonetic, logical, and rhetoric considerations. This establislies a great contrast with the accentuation of English, German, and the classic languages, but in French we see the accent shift to and fro with almost the same liberty as here 'Thus we find in Klamath, e. g.: túla, tulá in company of; táwipka, tawípka to bewitch; shnúka, slnuká to grasp; vúnepni, vnnépni four times; hénkanka, hemkánka to speak; ítpampěli, itpámpěli to carry home; ktáyalshtala, ktayálshtala, ktayalshtála into the rocks; shewánap'litki, shewanap’lítki in order to restore. In the readings placed first, the accent rests on the radix, and in the second readings slifts toward one of the formative syllables of relation. Very often a prefix is invested with the accent, as in hishmaksh husband, d. líhashuaksh.

In words of four syllables or more, our ear is not satisfied by the subordinating of so many maccented syllables under one syllable, but seeks relief by arcentuating another of their number by what is called the secondary accent. In the same way as the spoken sentence hurries towards its end, the main accent of long words will also follow this forward rush; thus the secondary accent increases in strengtlo and tends to bring down the main accent to the level of the other unaccented parts, unless its quantity offers resistance to this leveling process. Thus shlíutuapkuga in order to shoot with, with the secondary accent on -ug-, may muder the influence of the following words become shliutuapkúga, the vowel i of the radix being short. 'The same holds good of terms like shiniulatchganka to glance off from, lúlukshaluapkuga for the purpose of crematiny. Shifting of the accent caul also take place when proclitic and enclitic words crowd around accentuated words, especially verbs.

Long vowels are not always accented; that is, quantity exercises no decisive influence on accentuation. Cf. vúkslıeni torderd the angling place, where -u- is a contraction of -uya-; but in saigaqéni to the pruirie, the suffix las the accent. Níshtāk during the same niyht (from níshta ak) is just as possible as nishtā'k.
'The syntactic accent, as determined by the sense of the clause or sentence, constantly interferes with the other principles of accentuation and imposes its own laws There are two sorts of syntactic accentuation; one lays the stress of the voice on that term of the sentence which seems of paramount weight to the speaker, while the other lets it fall on certuin syllables of one, two, or several words of one sentence. This latter accent is the one to be studied more carefully, the other needing no commentary.

In using the terms friendly, plurality, selfishness we think of them as whole words only, and do not concern ourselves about the real meaning of their roots or suffixes. Indeed, very few of us know, that in friendly the radix fri- means to love, cherish, that -end- represents the old Saxon form of the present participle, and that -ly is our like, alike to, originally lie body, flesh, form. But in Klamath this is different, for these and many other Indians possess an intuitive if not a real knowledge of the functions of their affixes. A verb like gutilapkápěli to make turns while descending suggests at
once many ideas to the native. Gu- recalls the radix gat-, ge- to go, -tila a motion dormward, -apka an occurrence taking place in the distance, -pěli return, repetition, redoulding. Shnahualpakta to eunse eeho is composed of the medial sh- "for somebody, or for oneself, or by itself", -n- in shn- forms causatives, -a- is a vowel repeated from the syllable following, -hual- is the radical syllable to sound, resound, be noisy (luálta, wálta to sound, rattle) -pka, the simplex of -pákta, is a suffix of verbs indicating repetition, iteration.

Still better is the Indian acquainted with the meanings of inflectional endings, and though unable to give abstract names to the grammatic categories as we do, the correct use of innumerable simple and compound prefixes and suffixes is constantly present to his mind and guides him through this labyrinth of forms which can be joined to every radical syllable of his agglutinative language. Now he has it in lis power to accentuate every syllable or affix, which, as he thinks, exceeds in importance the other components of the word for expressing his idea. If in the first example given he lays stress on the distance from himself, then he accentuates gutilapkapěli; if desent is more important to lim, gutilapkapěli; in the second example shnáhualpakta would express strenyth of the effort to cause echo. Cf. heshszálpěli 61,8 with hıéshszalpěli 61,9 ; kínyäga 96,21 with kiuyéga; skuyû́i 29,11 with the usual sknyui.

Even monosyllabic particles can be lengthened into two syllables by dieresis, and either of them may receive the accent with a shade of difference on the meaning: ha-á, há-a; híi, hi-i-í; or pronouns: î, $\mathrm{i}-\mathrm{i}, \mathrm{i}^{\prime}-\hat{\mathrm{i}}$.

This feature adds largely to the natural expressiveness of the tongue, and saves many circumlocutions which the less pliant languages of modern Europe would lave to specify by words. It is the idea of actuality, of being done right then and there, that distinguishes shléa, shlí-a, and slla-í to sce, find, géwa and gewá to go into water, gíka and gukía to ctimb up, gúhlua, gníha, guhá to swoll up, etc. Verbs in which the last syllable usually bears the accent are : shió to bet, stulí to report, vumí to bury, vulá to inquire; gulí to go into, is always oxytonized, but its d. form kilhi is not.

In terms where no syntactic or rhetoric influences affect the location of the word-emphasis, a shifting of the accent is often canserl by the inerease of the word through inflectional or derivative aftixes. lin short
words the accent may then settle upon a prefix; when the term becomes lengthened by suffixation, the accent may slift towards its final syllables. Examples: -
héshla to show itself, from shléa to see.
hishlan to shoot at each other, from shlin to shoot.
lakiámkslii at the chief's house, from lakí chief.
shuktámpka to begin fighting, from slúka to fight.
yamatála eastward, from yámat east.
tataksníptchi childlike, from tatáksni children.
skukluápkasht from possible chapping, fromı skúkla to be chapped.
In the four last examples the secondary accent has entirely eclipsed the accent originally laid on the radical syllable.

Oxytonized terms, as guli and others given above, will not slift their accent unless increased by two or more syllables.

When a word of more than one syllable is increased by distributive reduplication, the accent will usually shift away from the initial syllable by the length of this increase:
híklqa to shatter, split, d. hiháklza.
ngúmshka to brcak, fracture, d. ngumgámshka.
lěmewíľa to drift away, d. lĕmēlĕmewíľa.
uláksha to lap, lick, d. ula-uláksla.
Instances where the accent gravitates back upon the beginning of the word, respectively upon the radical syllable through apocope, contraction, or elision :

> méssäm in the trout-season, for mehiashä'mi.
> pállapksh the stolen one, for pallápkash.
> ${\text { k'láa'ksh telshámpka to be moribund, for } \underline{k}^{\prime} l e k a ́ p k a s h t a l a ~ t e l s h a ́ m p k a . ~}_{\text {and }}$.

The appending of enclitic pronouns and particles, which form a plonetic whole with the term governing them, sometimes effects a slifting of the accent, but at other times has no effect whatever. Examples of shifting:
nä-ulapkuapká m's nî $I$ shall purish you, 59, 3.
sî̂ldsampexlok sats in orler to announce lo them, 22, 15.
ťopóshitko, ťopósitk like a thumb, 149, 12.
shliuapká m'sh sha they will shoot you, 30, 3 .
gepgapęlíssa they rcturned home, for gepgápěli sha.
Cf. ki-úks gî, 42, 12 ; kakó běla, 101, 7; humtchí kî, 126, 9 ; siunotíśl tclikash, 83, 4.

Instances where enclitic terms lave not affected the position of the accent are as follows:
slnä'-uldsha nat we galloped off, 29, 12.
tchî'-îshtat m'na to their camp, 2:, 16.
tsû'shnî m'slı nî $I$ forcver from you, 61, 2; but: tsûsliní m'sh ni, 69, 20.
In hä nî skuyû'shkuapka m'sh if I should separate (her) from you, 61, 1, the proclitic hä nî may have retained the verbal accent in its usual place.

```
II.-PROCLISIS AND ENCLISIS.
```

A number of particles, mostly conjunctions, some pronouns and adjectives, or rather adjectival suffixes, are liable to lose their accent if placed in certain positions, while others among them always appear unaccented. These are monosyllabic; those composed of two syllables are capable at any time of reassuming acceutuation, and lence can be classed liere only under restrictions.

These unaccented terms may be said to lean either forward on the coming accented word-to be proclitic; or to lean backward on the accented word just spoken-to be enclitic. Their influence on the accentuation of the main word is only a casual one; cf. Accentuation, pp. 237, 240.

Proclisis is less frequent than enclisis; all proclitic words are capable of assuming the accent. A list of them reads as follows:
at now, then; mu, mû greatly, largely (not when apocopated from múni large); hä if, when; tanı, interrogative particle; wak? how? how so ?. A few personal pronouns in their subjective cases, as nû, nî, î, pi, lû̂k, hû, etc., and the possessive pronoun mi thy, thine.

Enclisis is frequently observed and generally appears when a personal object-pronoun is connected with a transitive verb. Two enclitic monosyl-
lables can be placed after an accented word, and one of them frequently elides its vowel. Enclitic terms may be classed as follows:

Suffixed adjectives are unaccented terms of an adjectival function qualifying a noun attributively, not predicatively; two of them, gítkn and shítko, possess a non-enclitic distributive form and are inflected through all cases.
ámtchiksh ancient, old, used up, in its abbreviation: -antech.
=gîtko, =gitk, d. =giggátko possessed of.
=kani some one, any one; cf. (60, 13, and the Dictionary.
-ptchi, -mtchi, -tchi, -tch alike to, appearing like.
=shitko, =sîtk, d. =shishátko alike to, resembling.
=tkanii a little, somewhat.
More will be found concerning these forms under "Adjective," below.
Pronouns All the monosyllabic 1 :isonal pronouns, subjective and objective, are appended enclitically to the verb which they govern or upon which they depend. Subjective personal pronouns: nî, nû $I$; i, ik thou; luk, hun, hu, pi he, she, it; nad, nat, nā we; āt, $\bar{a}$ ye; sha, pat they. Objective personal pronouns: nîsh, nûsh, n'sh, n's me, to me; mîsh, m'sh, m's thee, to thee; hûn, hû, pish, pûsh him, her, it; to him, to her, to it; nálash in the form nash, nats, n's us, to us; málash in the form malsh ye, to ye; shash, sas them, to them; sham, sam of them. Enclitic possessive pronouns are mi thine, thy; p’na, Kl. m'na his, hers, its; sham, sam theirs. Demonstrative and relative pronouns generally preserve their accent, but among the indefinite pronouns, tuá some kind of, loses it in compounding words: nánuktua every kind of; cf. =kani any one.

Particles, when monosyllabic, are enclitic unless some particular emphasis is laid on them in connection with the whole sentence. The more frequent of them are: a; aka, ak, ka; at; ha; hak; ya, yu; -la, -lě; lish; nat; nen; pil; tak, tok, taksh, toks; tchä, tche, tsi; tchísh, abbr. -tch, -ts; tchkash; un, în. Their signification and use will be indicated below.

The verb gî, to be, do, say, has several monosyllabic inflected forms which may become enclitic, as gî, gínk, gish, gîsht, and the participle gîtko, which will then usually cast off the ending -o. The simple gî often abbreviates into -k , -g : nā'stg so he said; É-uksni toks lípik but of the Klamath Lake men there were two.

Instances of enclisis of various descriptions are as follows：
shnekělıapk 亿＇m＇sh ni I will remove you from your position．
túmi hûk hátokt máklaks gî many persons are there．
únaka tchkash m＇na slitílta he also informed his son．
pállank mish robbiny thee；vússok sas afraid of them．
wewéga pîl tchishi the childrcn only were in the lodgc．
kï＇ktsnash；linluagslash they fled；they enslaved（－sh for sha they）．
pí tchish he also ；nánqatch some also，16， 7.
K＇múk－amtch the Old Man of the Ancients；Shî＇k－amtch Old Crane．
kä＇käk＝tkani a little yellow，yellowish．
A term may become accented on two syllables，as in Greek，by en－ clisis；the first being the natural accent，the second the accent thrown upon the word by the existence of the enolitic term：tû́tĕnipuí＇sha，111，2； sháhiashtalá m＇na，112， 13.

## QUANTITY．

The language clearly distinguishes between long and short syllables or vowels．Two stages may be distinguished in short syllables：very short and short；two also in long ones：long and very long．The nsual sign of brevity，- ，and of length，－，was added to the vowels only when they were uttered very short or very long Thus monosyllabic nouns ending in a vowel pronounce this vowel very short in Kl．：kmă＇skullcap，tmŭ＇，nhuu＇ grouse，lbă＇secd species，kpěl tail，kpă＇poker，skă＇pestlc，skă＇to blow cold or strong；and also in yă＇ki sced－basket，kǔitsiă duck species，ndshě＇dsh shell， pod，gax＇t sage brush．Many of these are pronounced longer by Modocs． The vowel is still short，though longer than in the terms above，in l $\chi$ ásh billow，shlín to shoot，núsh head．As to long syllables，a difference may be observed between mántch long ago，múni great，large（radix long in both terms），and their emphatic pronunciation：mántel quite long ago，min＇ni， mū－úni verỳ largc，enormous．A difference exists also between tánk，tánkni， and tā̀nk，tā＇nkni，and between wáshla and wā＇shla．Cf．Homonymy．The quantity of words is often added in parenthesis：yutetámpka（－～ヘー）， tchmúksh（ - ），kä＇mat（ $\uparrow$ ）．

Almost any short syllable may be made long when a strong rhetoric emphasis is laid upon it：pă＇s and pā＇sh food，cf．101，20；gă＇ma and gã＇ma．
to crush with a stone. Words with long vowels are mi'l, ne'l fur, feathers, nílka to dawn, mà'sha to be siek, nā'dsh, nàdshak one, at one time.

For the quantity of eaclı word the Dictionary may be consulted.
The character of the language prompts the Indian to distinguish between long and short syllables, and no other phonetic figure is so productive of long vowels than vocalic contraction (synæresis, etc.). In nákōsh dam, the synæresis of na into $\bar{o}$ is remembered, and though the accent rests on the first syllable, the second is pronounced long. Many syllables with ē, $\bar{o}$, and other long vowels are not pronounced short, because the people use the uncontracted form besides the contracted one: genōla and genúala, hlékōsh and hlékuish, nō'kla (from nókala), shukatonolō'tch, tehī'sh and tchí-ish.

A vowel does not, as a general rule, alter its quantity through position, viz., through a cluster of consonants gathering after it. The short a in ktúpka remains short even in ktúpkantko and in ktupkápksh. But before -dsh a vowel generally sounds longer than before -tch: tamā́dsha and tamátcha, lakā'dsha and lakátcha.

Nor does a vowel, generally speaking, alter its quantity through becoming emphasized by accentuation : in hémkanka to speal, e is pronounced as short as in hemkánka, i in híta as short as in hitá at this spot; but becomes long through apocope: $h^{\prime}{ }^{\prime} d, h i n^{-1}$ t.

Syntactic or rhetoric emphasis sometimes modifies syllabic quantity: gēn him, 114, 2; na-ä'sht gî so said, 95, 21; sii'gs' îsh! tell me! (ii long), i8, 4; latā'ki chiefs, 65, 14.

Neither quantity nor emphasis by accent is necessarily associated with a higher pitch of the voice.

## HOMONYMY.

Homonyms are terms sounding exactly alike, but having a different signification; paronyms are terms which seem to sound alike to inexperienced ears, but in reality differ in accentuation, quantity, or pitch of voice when uttered by natives, and also differ in their meaning.

Some Klamath homonyms are the following :
kísh fish-spear, kísh sundown.
nā'sh, nā's speeies of bulrush, also: one, single; also: thus, so.

## PHONOLOGY.

skă' pestle, skă to blow cold or strong.
tchī'sh settlement, lodge, tchī'sh inhabitant.
wásh prairie-volf, wásh hole, den, excavation.
wíka near, wíka to blow.
líuna to stand, crowd inside, líuna to produce a noise.
Paronyms differing in quantity only:
kísh fish-spear, ki'sh, $\underline{\mathrm{k}}^{\mathbf{1}} \mathrm{sh}$ a lie.
shúina to run a race, shuī'na to sing.
tchîsl also, too, tchī'sh lodge, inhabitant. nî, ni $I$, myself, nī' snowshoe.

Paronyms differing in one or more sounds of the alphabet:
gíwash bluish squirrel, Gíwasl, nom. pr., Cratcr Mountain.
lakí chief, láki to be stolen, gone, láki forehead.
lû'k seed, kernel, lúk, lok grizzly bear.
p'húshka to tear off by hand, púshka to cut.
shikantéla to pile upon each other, shikantíla to show something on feet. yulina to menstruate, yiulina to send over the edge.
skútash mantle, skútash, sxútash bunch, string.
shúlqa to tie together, shúlě $\chi$ a to roar, growl.
shkō'ks ghost, spirit, shkóks sheep-tick.
$\underline{\mathrm{k}}{ }^{\prime}$ 'sh ipo-root, $\underline{\mathrm{k}} \mathrm{e}^{\prime}$ sh rattlesnake, kä'sh excrement.
kóka, kóke river, stream, koka to bite.
néwa to extend, v. intr., néwa to drive into the water.
géna to go away, walk, kéna it is snowing.
vudúka to strike with a stick, vutóka to swing around, v. trans.
Some of the above terms (yulina etc., skútash etc.) are etymologically identical, but, because differentiated in their meanings, they now differ in their pronunciation. This we observe also in English: to pat and to pet, securc and sure, loyal and legal, leal; disk, dish, desk; warrantec and guarantee; as well as in the French: naïf and natif, Noël and natal, entier and intègre.

## MORPHOLOGY.

Morphology is a part of grammar which gives a systematic account of the changes experienced by its material units or words through becoming parts of a sentence. Morphology in its descriptive portion has to present the word in its forms altered by inflection, as they occur in the langnage; in its systematic part it has to explain the origin and function of these forms. The phonetic changes considered under "Phonology" are largely brought abont by the changes which the words are undergoing through being placed into mutual relations to each other in forming parts of a sentence. Derivation, a process analogous to inflection in many respects, is another important part of linguistics to be dealt with systematically by morphology.

Languages greatly differ among themselves in the degree of the energy which unites or binds together its elementary parts. Where the parts do not unite, the position of the words in the sentence alone points out their mutual relation, and few or no phonetic changes occur. These are the monosyllabic languages. In the agglutinative tongues, certain syllables which indicate relation cluster around other syllables which retain the accent. After gathering up the other syllables to be their affixes, and uniting them into one body, the accented syllables gradually become radical syllables, and phonetic laws begin to manifest themselves in the alteration of colliding sounds, in the abbreviation of the affixes, etc. Here the original function of the relational or affix-syllables is still recognizable in the majority of instances, bnt in languages reaching a third stage, the inflective languages, the affixes become so intimately fused with the radix, that they serve as mere relational signs and may be considered as integral parts of the whole word. Through this accretion, or by other canses, the root itself becomes modified, chiefly in its vocalic part, for inflectional purposes.

The structure of Klamath is decidedly agglutinative; nevertheless, in some particulars, to be considered later, it approaches the tongues of the inflectional order. An important characteristic of it, syllabic duplication, is observed in the prefix- and radical syllables. Two other features pervading every part of Klamath speech are the pronominal syllables used as radicals and as affixes, and the figure called anathesis. ('ompound words are in fact the result of a syntactic process and will be discussed in the Syntax.

In subdividing the affixes into prefixes and suffixes according to their location before or after the radix, and into inflectional and derivational affixes according to their functions, we obtain the following general scheme for our morphology :

## I.-Radical syllable.

1. Its structure. 2. Its origin and classification. 3. Its phonetic alterations. 4. Its increase by the reduplicative process. 5. Anathesis.

## II.-Radical syllable connected with affixes.

1. Inflectional affixes; suffixation. 2. Derivational affixes: A. Prefixation; B. Suffixation. 3. List of prefixes. 4. List of infixes. 5. List of suffixes.

## III. -Inflection and derivation.

1. Verbal inflection; verbal derivation. 2. Nominal inflection; nominal derivation : $a$, of substantives; $b$, of adjectives and participles; $c$, of numerals; $d$, of pronouns; $e$, of postpositions.

## IV.-Particles or words without inflection.

## I.-THE RADICAL SYLLABLE.

A root, radix, or radical syllable is a sound or group of sounds possessed of an inherent signification. By the processes of inflection and derivation affixes cluster around the radix, which may undergo phonetic changes; the meaning of the radix then remains either unchanged or passes into another signification cognate and closely related to the original meaning. Languages have been studied in which the radix is composed of two
syllables; in Klamath monosyllabism is the only form in which radicals exist, just as in the literary languages of Europe, although some Klamath terms seemingly attest a dissyllabic origin.

With a few onomatopoetic exceptions, the roots are no longer traceable to their origin; lence we do not know why such or such sound-groups have been conventionally assigned certain functions in the different languages of the world. Grammatic affixes are roots also, whether they be still recognizable às such or be ground down from syllables to single sounds, mostly consonantic, and mere fragments of what they had been once. When used as signs of relation, they belong to the class of pronominal roots and are recognized as such with less difficulty in agglutinative than in inflectional languages.

The roots are the microcosmic cells from which the macrocosmos of language is built up; for it results from the above that all elements in language are either radical syllables or fragments of such. Formation and quality of sounds are no secrets to us, but how and why they came to be selected for their present functions in each linguistic family is beyond our conception. The cause why linguistic families differ among themselves in grammar and dictionary is the disagreeing of their pronominal and notative roots.

Root-inflection or regular alteration of the root-vowel to indicate change of. relation is most prominent in the Semitic languages and also in the Germanic branch of the Indo-European family. In America only traces of this "Ablaut" are discovered in a few languages, and what could be considered analogous to, or resembling it, will be discussed under "Phonetic alteration of the root." See pp. 253 et sqq.

1. Phonetic structure of the root.

Three fundamental forms are traceable in the elementary composition of the Klamath radix; it consists-
Of one vowel:
a in funa to carry off.
i in fika to extract, íta to put on, i' wa to be full.
u in úya to give, wá to be seated, wē̄'k arm, limb, útish long-shaped fruit (cf. lútislı round-shaped fruit).

Of a single or double consonant followed by a vowel:
lıä-, he- in hia'ma to emit voice; ka- in káta, ngáta to break, v. intr.; kuin kúka to bite; kta-in ktá-i stone, rock; mu- in múni great, múna deep down. A diphthong appears in tchuitchúili sorrel, kaukauli brown.

Of a vowel preceded by a consonant and followed by a consonant:
kal- in kálo sky, kálkali round; tak- in taktákli red, scarlet, tā'ytgi to blush; tip-in tiptípli dark-colored; yal- in yályali limpid.
It is appropriate to call this third category of roots ending in consonants thematic roots. The terminal consonants bear great analogy to some nominal and verbal affixes, and a number of words formed in a similar manner can be actually reduced to roots of the second class: vowel preceded by consonant, as laklákli slippery, not to lak-, but to la- in lála to be steep, to slope downwards, cf. lllá-a to foal, lelédshi brood; lushlúshli warm, hot, not to lush-, but to lu-in lúloks fire, lúkua to be warm, hot; pushpúshli black, not to push-, but to pu-, po-, in $\mathrm{po}^{-1} k s h$ mud In the terminal consonant of pal- in palla to steal, fla to lay down, the analogy with the suffix -la, -ala is obvious. It is therefore highly probable that all these roots of the third class are formed by accretion, and those containing diphthongs seem to have been formed by a similar process.

Some radical syllables commencing with mute consonants are nasalized occasionally, as káta: ngáta to break, pátaslı: mpátash milt, spleen.

There are radicals found in certain letters of the alphabet, as $k, t ; u$, which reduplicate the two initial syllables when placed in their distributive form, and thus may be suspected of being originally dissyllabic. But neither of the two kinds of reduplication proves anything for the condition of the radix, for all the prefixes invariably reduplicate with the root, althoighl they do in no manner belong to it. Compare, for instance :

Prefix k - in kmélqa to lay down, d. kékmelqa ànd kmékmal $\chi$ à, rad. e-.
Prefix l- in lawála to place upon, d. lalawála.
Prefix sh-in ská to blow strongly, d. shkáska, rad. ka.
Prefix u- in ulágsha to lap up, d. ula-ulágsha.
Some radical syllables, chiefly pronominal, are found to figure in two
capacities: as roots of predicative signification, and as roots of relation forming affixes. This is true, for instance, of i , hi on the ground, in íti to put on, íla to lay down into; of u , hu he, she, it and above, for, in hita to run at, húwa to jump up in the water, úya to give a long object.
2. ORIGIN AND CLASSIFICATION OF ROOTS.

Although we are precluded from unraveling the origin of the majority of radices it is preposterous in our present state of linguistic knowledge to derive all the radicals of a language from onomatopoetic attempts to imitate the sounds and noises heard in outloor life, like the note of birds, the rustling or blowing of the wind, or the roll of thunder. To ascribe a pronominal origin to all the roots which do not represent, or do not seem to represent, natural sounds has been a favorite theory of some scientists who have studied languages of the so-called savages. As to the Klamath language, the most appropriate classification of roots will distinguish four sources for their possible origin: onomatopoetic, interjectional, pronominal, predicative.

## RADICES OF ONOMATOPOETIC ORIGIN.

They have formed a large number of bird names, a few names of other animals and objects of nature. They also occur in verbs deneting sounds and disturbances.

Birds: ahá-ash, kák, túktukuash, tuákash or wákash, ōlash, takága, udékash.

Other objects: heíhai, mbaubáwash, bánıbam, tíntan, cf. udíntĕna.
Verbs: ka-ukáwa, kúshkusha, túshtusha, tödshitö́dsli, udíntěna.
RADICES OF INTERJECTIONAL ORIGIN.
ä'-oho, i-úhu, ä-ohútchna, i-uhéash; hä', hä'ma; kapkáblantaks, kémkem, kapkapagínk 1 !

## RADICES OF PRONOMINAL ORIGIN.

Pronominal ronts originally indicate location in space, proximity, distance or motion in space and subsequently in time, then relative location, and, finally, relation in general. They appear, therefore, as well in pre-
fixes and suffixes, pronouns and pronominal particles, as in predicative significations, which have gradually evolved from the pronominal ones and make up a large portion of the vocabulary. These roots, which are in fact demonstrative pronouns and demonstrative adverbs, have in the present stage of the language become devoid of any special significations, and this quality eminently fits them for expressing relations between the different parts of speecl. Whenever they form derivatives, the meaning of these radices becomes more specialized; thus $h u$-forms a large number of verbs with the signification of running, $t u$-, ti-verbs and nouns referring to motions of liquids, water, as spreading, dripping, soaking, $t i$-, tin- to motions performed by a plurality of subjects. All roots consisting of one vowel only belong here, and a number of lengthy words are entirely composed of pronominal roots.

On account of the importance of this class of radicals, I subjoin specimens of them and their derivatives, but do not claim any completeness for the list:

$h$ - connected with all the vowels forms reciprocal, reflective, causative verbs and their derivatives.
$h u, h u ́, u, \bar{o}$ in prefix u-, suffixes -u, -ui (-uya), -wa, -uish; in pron. and adv. lû̂, hût, hûn, hûnk, in pron. húnksht, húkag; in wá, $w \bar{e}^{\prime} k$, utísh or ōtísh; úna, unāk, húta, húdslına, lıúntchna, lhúwa.
$i, h i, h i ́ ~ i n ~ s u f f i x e s ~-i, ~-i ́ a ; ~ i n ~ f ́ w a, ~ i w i ́ x a, ~ i ́ t a, ~ i ́ d s h a, ~ i ́-a ~(y a), ~ y a ́ n a, ~ y a i ́ n a, ~$ i-u (yu), yúta.
$\dot{k}_{\text {- a }}$ appears in three forms: $\mathrm{ka}, \mathrm{k} \overline{\mathrm{e}}, \mathrm{ku}$; k $\overline{\mathrm{e}}$ being originally ki.
$k a, g a$ in suffixes -ka, -ga, -ľa, -támpka, etc., in demonst.-relat. pron kat who; interr. kaní whog in gät, ká-a, ká-ag, slıká, kátak, gáyue.
$k \bar{e}, g e, g e \bar{e}$, yonder, reduplicated in kēk, gēg, kéku, forms prefix ki-, k -, and the verb gî; géna to go away, and its numerous derivatives, as gékansha, génıěle, seem to point to the radix ga, for some of them begin with ga-, ka-: gáyaha, gakémi, gaúla, ka-uloktana; in kéka, tkéka.
$k u, g u$ in kú and kúi far off, kúinag, ko-i, ko-idshi, skúyui.
la, l- in suffixes -lě, -lam, -la, -ala, -ľa, -lámna.
ma in prefix m-, suffix -ma.
$n a, n$ - in the locative suffix -na; in nû, nî, nāt.
$p$-appears in several forms: p, pa, pi, etc.
$p a$, in prefix p - and suffixes -p, -pa, -ap; pron. pash; particles pa, pash, páni, -pěli, shepálua, p’laí, hishplámna, pána, pēntch, p’nána.
$p i$, demonstr. and reflect. pron.; in the prefixes pe-, $\mathrm{p}^{\prime}$-, sp-; in the suffixes -pěna, -tpna; in p'na, Kl. m'na.
sha, sh-, $s$ - in pron. sha they; also of reflective function; in medial prefix sh- (sha-, she-, etc.); in suffixes -sha, -asha, -ansha, etc., -sh, -ash, -tch; in shápa.
$t$ - appears in three forms: ta, ti, tu.
$t a$ in prefix ta-, t-; in suffixes -ta, -tala, -tana; in táwi, stáwa, stá, stáni; stú, sténa, stá-ila, tápka, tápak.
$t i$ in prefixes ti-, te-, t'- and suffix -ti; in tína, tíla, tilaluánsha, tilxa, shtílta.
tu in prefixes tu-, tush-, suffix -tu; in particles tu, túla; in ntúltpa.

## RADICES OF PREDICATIVE SIGNIFICATION.

This class comprehends all roots which cannot, from our present knowledge of the language, be referred to one of the three categories preceding. Their signification is more concrete and specific than that of the pronominal roots, and points to some action or quality. We include here, also, the thematic or secondary roots, as lak in laklákli, etc. Cf. p. 249.

Instances of predicative roots are as follows:
pat in patpátli, mpáta.
shu in shum.
litch in litchlítchli, lítchtakia.
ktá in ktá-i.
le in shléa, léltki, etc.
mets iu metsmétsli.

The adjectives formed by iterative reduplication and by the suffix -li probably all contain thematic roots, ultimately reducible to shorter forms; cf. "Phonetic structure", pp. 248 sqq , "Phonetic alteration of the root", pp. 253 sqq.

A remark upon the alleged priority of the verbal over the nominal roots may be appropriately inserted here. In many languages, especially the monosyllabic, noun and verb do not distinguish themselves from each other in their exterior form, and even in Klanath we find words like páta, petíla, ndshíshlıa, which are verbs and nouns at the same time, and verbal suffixes which are nominal suffixes also. In many other languages the distinction between the two categories is at least an inperfect one, and must have beeu more so in their earlier stages of development. When the sentence had reached a stage in which the predicative idea in the verb began to distinguish clearly between subject, object, and verb, noun and verb commenced to assume distinctive affixes, and the position of these parts in the sentence became more free. Noun and verb therefore originated simultaneously, not successively.

A single instance taken from the present status of the Klamath language may give us an idea how in its earlier stages the two categories could have differed. Ktchálqa means to shine and to emit heat, ktchák (for ktchálka) mother-of-pearl shell, ktchálui to be resplendent and to be hot, ktchálta to reverberate, ktchálua to shine and to reffect sunrays, ktchálxish sunshine and heat of sunrays, sunburn, ktchálshkash radiance, ktchō'l star, etc. Evidently the root, either simple or thematic, is ktchal (a short), and the idea of heat is secondary to that of light, radiance; but nobody is able to decide whether its original meaning was the nominal one of ray, rudiance, or the verbal one of to radiate, or of both at the same time, for both the derivatives are equally long or short in their affixes. If in the minds of the earliest people who formed this language a distinction has existed between the two as a vague feeling, we can no longer follow its traces. Ever nouns, to be considered as having been substantives from a very early epoch, as sun, moon, water, fire, were in some languages shown to be derivatives of radicals, but not of radicals of a distinct nominal or verbal signification.

## 3. PHONETIC ALTERATION OF THE ROOT.

Of some languages it has been said that their consonants were comparable to the skeleton and bones of the animal organisn, while their
vowels, as the fluid and variable element, were likened to its soul. This furnishes a graphic picture of the structure observed in the Semitic family of languages, and in a less degree applies also to the languages of the IndoEuropean family. The pernutability of consonants and vowels among themselves in unwritten languages las been described above ("Alternating of Sounds"), and does not, generally speaking, alter the signification of the terms in which it is observed. But the case is different with the radical vowels of Klamath under certain conditions, for here we observe something amalagous to Semitic vocalization, when vocalic changes occur.

A few similar instances from other American languages are as follows:
In the Nipissing-Algonkin, I love him is rendered by ni sākihat ; in four "modes" of the verb the long vowel at changes into -aya-, -aia-: sayakihak I who love him, sayahakiban I who did love him, sayakihak the one loved by me, sayakihakin when I just happen to love him. In the same manner verbs with the radical vowels $\mathrm{n}, \mathrm{e}, \mathrm{i}, \mathrm{i}$ will alter them respectively into e , aye, e, a. In Chálhta we meet with vocalic changes in radical syllables like the following: tcheto to be large, tchito to be quite large, tchieto to be decidedly large. In other instances of the kind the vowel becomes nasalized. In Creek some verbs lengthen their radical vowels almost imperceptibly to form a preterit from the present tense.

The study of alterations observed in the Klamath roots is highly important for illustrating the formation of the language, and also throws light upon the radical changes occurring in the inflectional languages of the eastern hemisphere. The vocalic changes are of greater importance than the consonantic, and are brought about in various ways.

## VOCALIC ALTERATION OF THE RADIX.

Vocalic changes occur only in certain words of the language and without any apparent regularity. They are produced either by the intrusion of another sound into the radix, or by an independent, as it were spontaneous change. Some of these changes appear only from one dialect to the other, while the majority occurs in words belonging to the same dialect, and then they are always attended by a change in the signification of the term.

## 1. Change by substitution.

The primitive vowels $\mathrm{a}, \mathrm{i}, \mathrm{u}$ are sometimes substituted to each other to indicate a change in the local or temporal relation of the words of which they form a component part. They represent the pronominal roots:
a, lá here, on haud, by hand; temporally: now, just now.
i , hí on the ground, at home, for somebody; temporally: at the time of.
u , hú up, above, far off, on the person, in the water; temporally: in the past, previously.

Thus the personal pronouns ni, nish, pash change to nû, nush, pish, push and in particles and suffixes the change through all the three vowels is sometimes observed:
-ksáksi, -kshákshi, a locative nominal suffix of the northern dialect, is altered to -ksíksi in Nakósksiks(i), nom. pr., "right where the piledam is"; to -ksû'ksi in Slankoshksî'ksi, nom. pr., "where the old bridge once was."
tchá now, presently, tchī'k (or tchē$\left.{ }^{-} \mathrm{k}\right)$ at last, finally, until; tchúk at last out there.
We may also compare the changes observed in the pronominal roots ka, ki (ke $)$, ku; ta, ti, tu.

Vocalic changes in predicative and pronominal roots are the following: kpádsha to extinguish by hand, kpítchtchna, Mod. to spit, kpútcha Kl. to squirt from the mouth.
spátcha to tear asunder, spítcha to pull to the ground, extinguish the fire, spútchta to cause somebody to part or lift the legs: to frighten. Cf. pádsha, pítclıa, púedsha.
spatádsha to stretch out, spitadsha to stretch out a part of the body. Cf. putóga, putóya, sputúya.
páha to be and to make dry; púka to roást, bake.
smā'k hair on belly, smō'k hair of beard, múkash down, downy feather.
litki evening, viz. "decline;" lútzi to come down to the ground.
ská cold, adv., sgû'mla hoar frost forms; cf. skúkła.
tchak- in tchaktchákli sharp, pointed; tchíztchiza to tickle; cf. tchákěla, shtchiyakéka, slitchî'ktzish.
wálqa to be sitting, wílxa to squat down.
tátkta to fecl pain, tíka to cause pain; cf. tékteka.
ika to remorc, trans.; eíxa (for é-ika) to put out the hcad, spúka to put out the feet; shnúka to take away. Cf. níka.
kídsla to dive, kídslash fin, kúdsha gudgcon.
shlín to shoot, shlo'kla to shoot at the mark.
kalkali round, ḳil又a to become humpbacked.
Cf. also líla with lúla, ptchákľa with Kl. ptchíklqa, shlátchka with shlitchka: Of vocalic changes observed in suffixes the following may be added for comparison:
hínua to fall on, upon, hinnui to fall to the ground.
tchálamna to sit on, or against, tchálamnu to sit high up, above, or at a distance.
tútash stump of trec; tutish stump of tail or limb.
sla kiukáyank they are sticking out, sha kiukáyunk they are sticking out above, 134, 4.

## 2. Change through addition of a vowel.

When the vowel of the radical syllable is joined by another vowel suffixed to it, the result of the combination may be either (1) vocalic synæresis or lengthening of the vowel, when both are coalescing; or (2) a softened vowel, Umlaut.

The intruding vowels, which become suffixed to the radical vowel, seem to be no other but $a, i, u$ mentioned in the preceding article; $i$ added to $a$ produces $e$.

Vocalic synæresis:
látclaa to build a lodge, viz., "to intertwine", létcha to knit.
ána to abstract, éna to bring, carry; cf. ánsha, anúlipka.
láma to be dizzy, lemléma to whirl about.
shátma to call to oneself;, Mod. shétma
náwal and néwal to lie upon.
Lengthening of the vowel:
pélpela to work, pē'lpela to work for (oneself or another).
kteléshka to push away, ktēleshkápka to push away forcibly.

Softening of the vowel:
yá-a to howl, yä'ka, yéka to howl while dancing.
stá to be full, stíni full, stä'-ila to fill down into, to gather (roots, etc.).

## 3. Change through accretion.

Accretion takes place when the radix or basic syllable is increased by prefixes, suffixes, through syllabic reduplication or through the formation of a compound word. The usual consequence of accretion is the removal of the emphasis from the radix to another syllable, the secondary accent becoming often preponderant over the primary one; another consequence is the weakening or shortening of the radical vowel. The frequent change of $u(0)$ to $a$ in the radical syllable has to be ascribed to this cause.
shnúka to seize, shnákptiga to seize with pincers.
tchúka to expire, tcháklěza to lose children by death.
kóka to bite, ka-úldsha to crode, gnow.
núta to burn, trans. and intr.; shnuitámpka to keep up the fire, nilíwa to
blaze up, nátkolua, Mod, to burn in the distance, slinatkálka to set on fire, nátspka to be charred, shnéka to burn, to shine.
núka, nóka to be, become ripe, shníkanua to let ripen.
shlin to shoot, shlataníya to make ready for shooting.
tchía to remain, sit, tchélqa to sit, tchekléla to sit on the side of, tcháwal, tchaggáya to be seated upon, tchawáya (from tchía and waíha), to wait, expect.
héma, hä'ma to emit voice, hamóasha to call to oneself.
tédsha to wash, shataslipapkía to make the gesture of washing (the face).
pélpela to work, lulpalpalía to make eyes for somebody.
This shortening or weakening also occurs in prefixes; cf. shálakla, Mod. shélakla; shnapémpema, Mod. shnepémpema; and in suffixes: yutetámpka for yutatámpka.

## 4. Elision of the radical vowel

Is brought about by the same causes as the change through accretion, and hence is but another form of No. 3:
núka to roast, bake, n xúta, nұútagia to burn at the bottom of the cooking utensil (for nukúta, nukútagia).
láma to reel, viz, "to move in a circular line"; lěména, l’ména, lména it thunders, lĕmátch, Imátch mealing stone, the motion made on it being circular.
hiä'ma to emit voiee, sla'hmúlgi to call together.
kél- in kélkali round, hislyělúľa, hishklúlqa "to measure all around," to make of the same length, width. Cf. skilulzotkisl.
5. The change of a radical vowel into a cognate vowel has been fully treated in the chapter on "Alternation of Sounds," and requires no further discussion. Examples: yéka, yä'ka; é-una, ä'-una; ólash, û'lslı; steínash, staínas,

## CONSONANTIC ALTERATION OF THE RADIX.

Changes occurring in the consonantic components of the radix are caused by the interchangeability of cognate consomants, cf. "Alternation of Sounds," and do not usually imply any change in the signification of the radix. Examples: búnua and púnua, délish and télish.

Instances of a radical consonant becoming nasalized are páta, mpáta; sakḱ-a, sanké-a.

A change in the signification is, however, produced by the changing of a guttural $\mathrm{k}, \mathrm{g}$ into k : kil $\neq$ ántko humpbaeked person, kilzántko humpbaeked person, when imitated by children, etc. (radix kal- in kálkali round).

## 4. REDUPLICATION.

The repetition of syllables in immediate succession within one and the same word is technically called reduplication, and forms one of the most effective means for emphasizing or otherwise individualizing ideas expressed in words, in the same manner as the orator repeats twice or three times in succession certain words to be emphasized above all others. Reduplication has been recognized as an efficient grammatic figure from the earliest times; in rude and illiterate tongues we see it more frequently applied than in the refined speech of cultured nations, and in the earlier periods of European languages much more than in their present stages of development-facts whicl point with certainty to a high antiquity of this special mode of grammatic synthesis. If we except the monosyllabic languages, reduplication is
a feature common to all languages of the globe, although they may greatly differ in the mode of applying it.

Thus, in the English terms gewgaw, riffraff, tiptop, syllables were doubled for some augmentative purpose; the Sahaptin family reduplicates for forming diminutives, as muxlimuzlí fly, kùssikússi dog. English and German show traces of syllabic duplication to designate a preterit tense, a feature once common to all the dialects of the Indo-European family: fell, held, slept, are forms of an imperfect tense which are the remnants of ancient forms parallel to the Gothic faifal, haihald, saislep.

Some languages reduplicate their radical syllables for the purpose of forming onomatopoetic, iterative, frequentative, or usitative verbs and nouns, indicating gradation in the adjective and adverb, or of forming certain derivatives; other tongues, again, indicate in this manner the ideas of severalty, plurality, totality, or collectivity, and purposely modify the reduplicated terms phonetically for each of the several morphologic functions to which they may be applied.

Syllabic duplication has cxercised a thorough-going influence on the development of the Klamath language of Oregon, giving origin to delicate and ingenious grammatic and lexical distinctions. Its workings can be studied to more advantage in a few languages only, although linguistic development has taken a similar turn in the Malay-Polynesian fanily and in the forms of speech disseminated along the western coast of North Amcrica, cspecially in the Nahuatl and Selish stocks of languages.

The reduplicative process has originated in the idea of repetition or iteration, applied to space, surface, intensity, time, and other categories. The stage immediately preceding syllabic reduplication was that of repeating the entire word, as we see it in the Hebrew tób tób, "griw gooll," for very good, and in Mohave, where the adverb accompanying the adjective is repeated to indicate gradation: váltaýe great, large; váltai tahána larger; váltai tahán tahán tahána the largest one. Although the latter is a triplication, a twofold mention of the adverb is just as frequent in Mohave, where the clements have not yet coalesced into a single word. All the different and most varied shapes of reduplication of the radix can be brought in two classes: iterative reduplication, when used for the derivation of words; distributive reduplication, when used for inflectional purposes.
a.- iterative reduplication.

In Klamath iterative reduplication redoubles the entire radical syllable withont any consonantic alterations, and serves in forming from simple or thematic roots various sorts of derivative terms, as onomatopoetic, iterative, and frequentative verbs and substantives, also adjectives descriptive of exterior form, surface-quality, color, intensity.

This sort of reduplication differs from the distributive (a) by being derivational and not inflectional ; (b) by duplicating the radix in its totality and not partially; (c) by duplicating always the radix and not the first syllable only, although the radix may become reduplicated with its prefix, when this prefix consists of a vowel or single consonant only. No word reduplicates more than two of its initial syllables; words which do so usually begin with the initials $k, 1, n, t$, and $n$ (or vu, w), and some contain an adulterine diphthong: te-ukté-uksh, kaukáuli.

Western languages offer sundry parallels to this sort of reduplication. It prevails in the adjectives of color in Pomo, Cal., in Olamentke and Chíměto, dialects of Mutsun, Cal., in Cayuse and several Oregonian languages. When applied to color, surface-quality, exterior shape, etc, this mode of synthesis is evidently equivalent to: "red here and red there," "prickly here and prickly there, and prickly all over."

Examples of derivatives formed in this manner conld be gathered in large numbers and from every language spoken by the Indians of the Union. We confine ourselves to the mention of a few terms of the Tonto dialect, Yuma family (Arizona), most of which show a dissyllabic radix or base:
toltol guitar, toltolia flute
solsoli to scratch
ogi-ogi to yawn
topitope circle, circuit
wiliwilíva pulse
tibitivi pregnant
midimidi straightways
dubbidubbi button
yudiyudi blanket
yudiediedui checkered

In Klamath several terms are met with which are compounded from two words, word-stems, or roots, and of which only the second is undergoing iterative reduplication. The first component is very frequently a prefix, as sli-, u-, etc., and vocalic dissimilation is often observed here. This class of
terms will be more properly spoken of under "Composition of Words"; it embraces terms like yapalpuléash, káltchitchiks, uláplpa, etc.

Words formed by iterative reduplication possess, just like other terms, a distributive form to mark severalty; they form it by undergoing another kind of reduplication to be described below. Thus, kálkali roundl, becomes kakálkali, tiptípli dusky: titaptípli.

Many terms formed by this means of synthesis have the power of dissimilating the vowel of one from that of the other syllable, as kü'kïkli yreen, yellow, which may be also pronounced kä'kakli and kákäkli, while the distributive form would be kakä'kakli or käkákäkli. The change from the normal vowel, which is $a$ in this example, is more frequently heard in the second part than in the first: taktákli red: taktä'kli; kétchkatch little gray fox, from ketchkétchli rough. Dissimilation is a figure which was spoken of at length on pages 234 and 235 .

The following list of terms is classified after categories of origin, and exhibits all the various forms of iterative reduplication :

1. Onomatopoetic terms produced by imitating peculiar noises perceived on objects of nature, or the cry of some bird or other animal: kaikaya to sob, snore, lálak brant, túktukuash fish-hawk, wawá-ush little bell, wekwékash magpie, yauyáwa to be noisy.
2. Iterative, frequentative, usitative terms, mostly verbs:
lemléna to reel, to be dizzy, drunk; dissimilated in lā'mlemsh.
muimúya, muhimíya to tremble, shiver.
pélpela to work, to busy oneself at.
pópo-i to drink, said of babies.
shíákshiaga to shake up, v. trans.
tuéktueka to stare at, from tuéka to pierce.
tushtúshla to shiver from cold; cf. Lat. titubare.
útk'utka and wankwánka to nod.
wítwita to writhe, struggle.
Dissyllabic reduplication occurs in:
kokalkokalltko weak in the joints.
lotelótash yreenish excretion of snakes.
nidshonídshua to make faces, to grimace.
ulagshulágsha to lap up, as water.
3. Adjectives of color. The original color adjectives terminating in -li are, for the largest part, formed by the reduplication of a radix terminating in a consonant (an exception is ka-uḱa-uli, Mod. ke-uké-uli brown). Thus we lave kükä̈'kli (for käk-kä'kli) green, yellow, pushpúshli black, metsmétsli sky-blue, purple.
4. Adjectives descriptive of surface-quality, with their adverbs:
kitchkítchli'rough to the touch, from kétcha a little.
láklakli, hláklılakli smooth, polished, even.
putpútli of level but coarse surfacc; adv. pútput.
tátatli (for tát-tatli) flat, level, planed off.
5. Adjectives describing external shape, form:
kâlkali spherical, circular, cylindric.
mukmúkli downy; cf. múkash down, plume.
wakwákli conical, high-pointed; cf. wakalwakálsh, wékwak
witchwítchli rigid, stiff.

## b.-Distributive reduplication.

## Characteristics and function.

The phonetic characteristics of the distributive reduplication are the following:

It redoubles the first or the two first syllables of a term. The vowel and all the sounds preceding it become reduplicated, but the reduplication does not extend beyond the vowel. In monosyllabic distributive reduplication the initial syllable only is redoubled, whether it represents or includes a prefix or not. In regular monosyllabic duplication the vowel of the second syllable is a, if the vowel of the initial syllable is a short one.

This grammatic form pervades all parts of the language, for it exists not in nouns and verbs only, but also in a large number of particles. Substantives not possessing this form are either collective terms or are prevented by phonetic laws from duplicating. This feature, so characteristic of the language of which we treat, expresses the idea of severalty or distribution, and not primarily that of plurality or collectivity; this accounts for its existence in all the abstract nouns. Wherever this form is indicating plurality
it does so only because the idea of severalty happens to coincide with that of plurality in the peculiar instances which will be specialized below.

Thus nép means hands as well as hand; the hand, a hand, but its distributive form nénap ineans each of the two hands or the hands of each person when considered as a separate individual. Ktchō'l signifies star, the star, a star, the stars, constellation or constcllations, but d. ktchóktchōl means cach star or every star or constellation considered separately. Shenólakuish is cnyagcment, compact, or compacts in general, d. sheshnolakuish the compacts made with each party. Ktékna means to cut a holc into one objcct and to cut holes into many articles by one cut or turn of the instrument; d. ktektákna points to cutting holes into different or separate objects by cuts repeated at differcnt times or for every object separately. Pádsha î: you became blind of one eye ; d. papádsha î: you are totally blind, you lost the use of each of your cyes. Lutátka means to interpret one sentence or to scrve as interpreter at one council or sitting; but d. lultátka to interpret repeatedly at councils or interviews, to scrve as a regular interpreter. This also applies to the nomen verbale: lutátkish, d. lultátkish. A regular interpreter, lultátkish, can be spoken of as lutátkish also, when he is referred to as having interpreted just at a certain day, or some special meeting. 'The sentence: kaní gé-u wátch pálla? means either who stolc my horse? or who stole my horses? and when used in the latter acceptation would imply that they were all stolen at once by one person; but kaní gé-u wátch papálla? implies that some person stole my horses severally or that thefts lad been committed on single horses at different times, or that the one and single horse which I possess was repeatedly abstracted. Shektákta is to cut in two, d. sheshaktákta to cut the two pieces in two again, or into smaller portions.

## Inflectional reduplication.

In order to give a full illustration of that kind of reduplication which serves for inflectional and not for derivational purposes we mention a few instances from other American languages. Phonetically they are parallel to the distributive form observed in Klamath, for the radical does not redonble beyond its vowel, but the grammars of these languages declare this form to be a plural and not a distributive form, as we have it here.

In the extensive Nahua family, which embraces Aztec, Tarahumara, Tepeguana, Cora, Cahita, Opata, Eudeve, and Pima, we can trace it through the nominal and verbal portions of every language, although other plural forms occur there also. When we ineet Aztec vocables like the following, we remark that the idea of severalty is the ruling idea in at least some of the Aztec reduplicated verbs:
intchan oyake they went into thcir house (all laving one house only); intchatchan oyayake they went into their several houses (every man entering his own).
kotōna to cut, kokotōna to cut in many pieces, ko'-kotōna to cut many articles in pieces.*

The dialect of Pima spoken on the Yaqui River, State of Sonora (Pima bajo), reduplicates in the same manner, as does also the Pima alto spoken on the Gila River, Arizona. The Nevome, a dialect of the Pima bajo, inflects, e. g, maina: mamaina palmleaf mat, bava: bavpa cliff, ligh rock, tucurhu: tutcurhu owl, stoa: stostoa white. $\dagger$

Plurals of nouns and verbs are formed by duplication of the radix in some, perhaps in all, the dialects of the Shoshoni or Numa family.

This holds good also for the dialects of the Santa Barbara family, whose tribes reside on the coast of the southern part of California. On Santa Cruz, e. g., substantives were forming their plurals as follows: pu: pupu arn, kand, alapami: alalapami body, tupau: tutupau bow. Duplication of the consonant after the vowel also occurs: ulam: ululam river, wutchu: wutchwutcho doy. $\ddagger$

In one of the dialects of the wide-stretching Selish family, that of the Flatheads of Idaho and Montana, we find that the reduplicated verb indicates severalty and not plurality. If our knowledge of the other numerous Selish dialects was more thorough, we would probably discover there the same fact. Rev. Gregory Mengarini gives the following instances in his "Grammatica Linguæ Selice:"
ieskòm I receive many things at once, ieskmkòm I receive many things at different times.

[^45]iès' à azgam I look at all (of them) at once, iès' az'azgam I look at each (of them) separately.

That Selish dialect is able to reduplicate its nouns and verbs in two different ways, thereby conveying different meanings.*

Similar forms appear in dialects of the Dakota family. In Omaha sábě is black, said of an object near by and seen distinctly, shábě of a distant object; sásabě, sháshabě when the black objects differ among themselves in size or other qualities; so also dshíde: dshidshíde red, dshinga: dshin dshin̄ga small, little, ģezé striped, ģezáza striped here and there or all over, ģezhé spotted, głeháha spotted all over.

There are examples of another sort of reduplication observed in the languages of North America, that of duplicating the last syllable of the word or its basis, either in part or in its whole length. In this manner are made distributive forms of the adjectives in the various dialects of the Sahaptin and Maskoki families. As this feature does not occur in the Klamath language, a simple mention of it will suffice.

Judging from the facts enumerated, it becomes quite probable that inflectional radical reduplication is in many other languages of the West a mark to indicate distribution or severalty, not plurality. Closer investigation alone can give an ultimate decision concerning this obscure point in Indian linguistics.

## Terms with twofold reduplication.

A closer study of the reduplicative process in Klamath reveals the fact that several terms, especially verbs, can reduplicate in a twofold manner. They have to be divided in two classes; the first embracing the terms of which the reduplicated forms are identical in their origin, and phonetically reducible upon each other; the second class embodying the terms of which the reduplicated forms differ in their function and point to a different phonetic origin.

[^46]Of the first class we give the following instances:
kmáka to look out, d. kák'mka and kmák'mka.
kmélxa to lay down, d. kélmelza and kmékmalza. ktána to sleep, d. kákta and ktákta. púedsha to throw away, d. pepúdshar and-puépudsha. tméshka to abstract, d. tetmáshka and tmetmáshka. tchlika to pinch with nails, d. tchítchľa, K1., and tehitchláka, Mod. wá-ish productive, d. wawá-ish, K1., and wawáwish, Mod.

No difference in signification is stated between the two reduplicated forms of the terms above given, except for kmáka and kméľa; lere kák'mka and kékmel $\chi$ a refers to a few objects only, from two to four, but the second, more complete forms refer to many objects. The same is stated of the verbs:
láktcha to cut, sever, d. lálaktcha and lalkítcha.
tékua to breal, d. tetákua and tetkéwa.
Here the second form is evidently derived from lakátcla and tekéwa, verbs which through the shifting of the accent gradually became láktcha, tékua. Hence the difference in the functions of the two reduplicated forms is a purely conventional one and not founded on etymology. Kéknelqa has originated from kmékmel $\not a$ a, kmékmalqa by the ektllipsis of the sound m from the first syllable.

Other verbal forms are as follows:
kawakága to rip up with the teeth, d. kakaukága and kawakaukága.
ulágsha to lap, d. ula-ulâksha and ulakshuláksha.
utcháya to split (as wood, etc.), d. u-utcháya and utcha-utcháya.
With these and others formed in the same manner it is evident that the first form alone is a distributive and the second an iterative verb, and therefore a derivative of the radix or stem and not an inflectional form of it. Numerous terms beginning with u-, vu-, exhibit both modes of duplication

The second class of terms showing a twofold reduplication are those which possess two distributive forms, of which the second is formed from the first one.
shiúkish fighter, d. shishókish, :'d d. shish'shókisl.
shálgia to put or place against, d. shaslállgia, 2 d d. shash'shálgia to quarrel, viz., to lay to the charge of.
hlá; d. hláhla, lála to slope downwards, 2 d d. lalā’la. The original meaning of hlá (see Dictionary) must lave been that of putting or placing on the flank of, to the side of, or intr. to be on the slope, flank. Cf. hlá-a, lállaks.
tína once, d. títna some time, 2d d. títatna a few times.
shétalkāsh one who stands on his head, d. shéshtalkāsh; 2d d. shesháslitalkāsh funny fellow, wag.
élza to lay down, é-alqa, ä'-alqa to read, d. $\mathrm{a}-\mathrm{a} \mathrm{a}^{\prime}-\mathrm{al} \chi \mathrm{a}$.
upiéga to sweep, vuhupiéga to stir up, said of winds; d. vuhuhapiéga
shina, d. slíshna to enter the fesh, 2d d. shisháshna.

The difference between the two distributive forms as to signification follows from the nature itself of these forms; shiukish is one who is or has been a fighter on one occasion, shishokish, on several occasions, or a habitual fighter, shish'shokish one who fought many times or habitually on many occasions. Instances like these show that the language has the power of forming two (or perhaps more) distributive forms, one from the other, for every term in the language, as it is done in Flathead-Selish. But experience shows that the second form occurs but in a few instances in the spoken language, and that wherever it could be formed it often becomes phonetically unwieldy, and is therefore replaced by some adjective, numeral, or pronoun; cf. sheshálkōsh spectacles, pl. túmi sheshálkōsh. This is not a distributive but simply a plural form. Cf. also shúshatish, shushutánkish.

There is a limited number of terms which reduplicate distributively only after the prefix, and therefore have to be considered as compound terms:
hiapátzokslı stocking, d. hiapaípatzoksh.
húmasht thus, so, d. humámasht, Kl.
naishlákgish beetle-species, d. naishlashlákgish.
shekáktcha to return blows; a term which is a d. form by itself, and assumed the above form instead of sheshkátcha to avoid being confounded with slieshkátcha, d. of shékatcha to become divorced.
u'hlátua to let reach the feet, d. u'hlúlatua.

## Different modes of reduplication.

Of all words of the language not debarred from distributive reduplication through phenetic or other canses perhaps not one-third shows this feature in its regular form. Phonologic causes will acconnt for the fact that so many terms have deviated from the regular standard form through elision, contraction, accent-slifting, and the like. As to the accent, it usually remains in the distributive form as many syllables remote from the word's end as it was in the absolute form.

There are but a limited number of terms in which the two dialects of Klamath differ as to their distributive form. But many terms of both dialects, owing to the fluctuating phonetics of the language, use an uncontracted and a contracted or apocopated form for it simultaneously and without any difference in their meaning or functions. Examples:
gúka to climb, d. gû̀kaka and gúg'ka.
kídsha to dive, crawl, d. kikídsha and kíktcha.

- néta to fix on, d. néněta and nénta.
shulótish garment, d. shushalótish and shushlótish.
t'shín to grow, d. t'shit'shan and tit'shan, tit'sha.
tú there, yonder, d. túta and tû't.
Compare also atíni long, tall, d. a-atíni and a-itíni, and its abbreviated form áti (in Dictionary).

It will be seen that many of these are formed from terms which even in their absolute forms are not always pronounced in the same manner. In the examples given below we will make it a rule to mention only the most frequently used distributive forms.

There are many terms of which the distributive form is but rarely used, being generally replaced by the absolute, accompanied by some term indicating plurality. Instances are the distributive forms of géna, lalágo, máklaks, nánka, tkáp, etc.

Two different modes of reduplication have to be distinguished througlout, the monosyllabic and the dissyllabic. The latter is less frequent than the former

Monosyllabic reduplication, on account of the intricate phonology
manifested by its forms, necessitates a careful and minute classification into several categories. Terms with prefixes alnost invariably belong to the classes No. 1 and No. 2 below.

## monosyllabic distributive reduplicatios.

## 1. Reduplication in a.

The regular and most frequent form of monosyllabic distributive duplieation takes place when the vowel of the first syllable is short (or was so originally), and is marked by $a$ slort in the second syllable of the reduplicated form. The vowel of the first syllable, provided it is short, is of no influence; the accent usually remains on the same syllable. In case the vowel is a diphthong, ef. Diphthongic reduplication.
háshitya to pierce the nose, d . halnaslitioa.
héshla to appear, d. helıáshla.
ílqa to lay down, d. i-álza, yál $\chi a$.
kpók gooseberry, d. kpókpak.
kúpkash torchlight, d. kukápkash.
ldíglza to kneel down, d. ldildáglza.
nép, nēp hand, d. nénap.
púnua to drink, d. pupánua.
tiptípli dusky, d titaptípli.
tchúnua to vomit, d . tchutchánua.

## 2. Reduplication with syncope of a.

When the short $a$ of the duplicated or second syllable, as described under No. 1 above, remains unaccented, and is left standing between two consonants, it becomes. easily elided. No syllabic increase taking place, the accent keeps the place it occupied in the absolute form.
lieslıémesh jewsharp, d. lıeh'shémesh, instead of hehashémesh.
hóyeka to leap, d. hóhieqa, instead of hóhayeqa.
kátak truly, d. káktak, instead of kákatak.
lalágo pine-gum, d. lal’lágo, instead of lalalágo.
mbû'ka to raise dust, d. mbû'mbxa, instead of mbû́mbaxa.
níto to suppose, d. nínto, instead of nínato.
shnikóa to hurl, d. shnishnkóa, instead of shnishnakóa.
stáwa to starve, d. shtáslitua, instead of shtíslitawa.
troke fire-place, d. to tx $\mathrm{t} e$, instead of tr'taze.
Shléa to see, find, forms shléshla and not shléshla-a, because the suffix -a , as a particle, does not really form a part of the verb. In shléshla the -a is therefore the product of the reduplicating process and not the final -a of shléa. It must be observed, however, that many verbs in á-a keep this suffix in their distributive forms, it being secured there by the accent resting on it.

## 3. Reduplication without vocalic change.

The vowel of the first syllable is long through synizesis or other canses, though it is not pronounced long in every instance. The vowel of the second or reduplicated syllable becomes long also, for it is the repetition of the preceding vowel. Many terms beginning with a vowel reduplicate in this manner, and I know of no instance of this sort of reduplication in which the first syllable is not the radical syllable.
ilina to take down, d. i-ilina.
ita to put on (long obj.), d. í-ita.
kédshna to sprinkle (for ké-idshna), d. kekédshna.
klípa mink, d. kliklípa.
kû'shka (for ku-íshka) to brush, d. kukû'shka.
kíwash whippoorwill, d. kikíwash.
lókanka to go astray, d. lolō’kanka.
lū'sh (for lúash, cf. lushlúshli) wild goose, d. lúlosh.
mhû', Kl. tmû' grouse, d. mhû́mhû, Kl. tmû'tmû.
nī'sh (from níwa) neck, d. nínīsh.
nō'kla to roast on coals, d. nónūkla.
shō'dshna (for shu-idslina) to carry in hand, d. shoshō'dshna.
shû́dsha to build a fire, d. shushû'dsha.
shútanka (for sh'hútanka) to come together, d. shushútanka.
t'épa sunfish, d. t'etépa.
túdshna to carry on head (for tú-idshna), d. tutúdshna.
wóa, vu-úa to howl, as wolves, d. wowóa, vu-u-úa.

## REDUPLICATION.

## 4. Reduplication of diphthongic syllables.

Several modes are observed in the reduplication of diphthongs which are very instructive for the study of the real nature and origin of diphthongs in this language. Diphthongs do not occur in prefixes, but when reduplicated they are so only because they stand in radical syllables.
$a$. The whole diphthong reappears in the second syllable, but the second component undergoes a change into a, as follows:
luelóya to stand around, d. luelualóya.
shuipkúlish head-flattcning cushion, d. shuishuapkúlish.
Compare: kuánka to limp, d. kuakuánka.
b. The whole diphthong reappears in the second syllable, but in an unchanged form:
hiuhíwa to be elastic, d. hiuhiuhíwa, abbr. hihiuhíwa
tuéktueka to stare at, d. tuetuéktueka.
Cf. shúi to give in a cup, d. shúshui for shúishui.
c. The whole diphthong reappears in the second syllable, but in a contracted form:
shuikína to drive away from watcr, d. shuishūkína.
tuágga to evaporate, d. tuátūga, instead of tuátuăga.
túeka to perforate, d. tuétō $\chi a$, instead of tuétuă $\chi a$.
d. In the distributive form the diphthong of the absolute form is separated into its two component parts, of which the first stands in the initial, the second in the following syllable:
yaúyawa to be noisy, d. yayóyawa, yayúyawa.
ká-i, kaí white rabbit, d. káki.
ktíukish latch, bolt, d. ktíktukish.
méwa to miaul, d. memúwa.
p'laíwash gray eagle, d. p'lap'líwash.
p'téwip nicce, aunt, d. p'tép'tuip.
té-ini, té́ni reccnt, d. tetíni.
tchúyesh hat, cap, d. tchótchiesh.
tchuyómash idler, d tchutchi-ómaslı.
waíwash snow-goose, d. wáwiwash (and waweíwash).
wiulála to strike, d. wiwulála.
e. A similar process is observed also in some distribntive forms, in which a diphthong beginning with a semi-vowel $(y, w)$ is reduplicated:
yálii beads, d. yáyahi, contr: into yá-ihi.
yáki seed-basket, d. yáyaki, contr. into yá-iki.
wákish inside ladder, d. wáwakish, contr. into wá-ukish.
wikáni short, d. wiwakáni, contr. into wi-ukáni.
This sort of reduplication properly belongs to No. 2 above.

## 5. Reduplication with vowel inverted.

This mode of reduplication is not frequent; it mainly occurs in terms containing a combination of vowels which are not real diphthongs.
kuatcháki to bite, itch, d. kakutcháki; cf. kuátcha mbuté ${ }^{-1}$ e to jump over, d. mbambutē $\chi$ e, for mbumbaté $\chi$ e.
priedsha to cast away, d. pepídsla and puépndsha.
puélza to throw down, d pepuélza, for puepuélza.
shewokága to wag, d. shashewokága, for sheslawokága.
tiä'ma to be hungry, d. tetiia'ma, for tiätiä'ma.
tchuaísh buzzard, d tchátchuish, for tchútcha-ish.
Cf. shashuakísh, 84, 1, and Dictionary.
It will be seen that this class is made up of several different modes of forming the distributive, and that púedsha, puél $\chi a$, tiä'ma properly belong to No. $4 b$.

## 6. Reduplication with elision of consonant.

Terms reduplicating in this mamer do not clange the position of their accent from the absolute to the distributive form ; it remains at the same distance from the end of the word. They drop in the first syllable their second initial consonant; in several of them the first consonant does not belong to the radix of the word, but is a prefix after which a vowel or é has once been standing.

I have found this sort of reduplication only in terms beginning with k -, p -, t -, and teh- ( $\mathrm{ts}-$ ), followed by consonants like $\mathrm{g}, \mathrm{l}, \mathrm{m}$. Many terms
beginning with the same groups of consonants reduplicate in other ways. Cf. List of Prefixes.
kmutchátko old, decrepit, d. kuk'mtchátko.
ktína to sleep, d. kákta and ktákta.
p'léntant on the top of, d. pepléntant. tlóxo, tělózo brain, d. tótľo. tmoyéga to begin, d. tot'myéga. tmókil green lizard, d. tót'mkil. tmólo, tẹmólo, tomólo wild plum, d. tot'mılo. tchgû́mla, shgû̀'mla to form koarfrost, d. tchutchgámla, shgushgámla tchmóya to taste sour, d. tehotchmóya. tchlóatko smooth, d. tclutchlózatko.

## 7. Reduplication with apocope of suffix.

In a limited number of terms the suffixes -na and -a after vowels are dropped in their distributive forms. The cause of this is the tendency of pronouncing words as short as possible and hence of dropping unaccented final vowels and syllables.
a. Verbs in -na, when this suffix is not abbreviated from -ěna, -ina, as in gasáktchna to follow, usually drop the -na; the suffixes -mna, -pna, being contractions firom -měna, -pěna, do not lose the -na in the duplicating process.
géna to go away, d. gáka, for géka, gégga.
kshéna to carry on the arms, d. kshéksha, for kshékshana.
ktána to sleep, d. ktákta and kákta.
léna to move in a circle, d. léla.
pána to dive, plunge, d. pápa.
To these may be added the verbs in -n, which drop the -n (originally -na) even in the absolute form: pán to eat, pát, pátko; shlín to shoot, shlā't, shlitko, etc. Cf. Verbal inflection.
b. Verbs in -a preceded by a vowel.
méva to camp out, d. mémû, ménnû; cf. méwa to mew, d. memúwa.
néya, né-i to hand over, d. néni.
shléa to sec, find, d. shléshla.

DISSYLLABIC DISTRIBUTIVE REDUPLICATION.
The terms which duplicate two initial syllables to form a distributive are composed with prefixes, as i- (yi-), and chiefly with u- (vi-). These prefixes have coalesced with the radix so firmly as to become inseparable, and are now reduplicated with it without any alteration in sound.

There are as many phonetic modes of reduplicating dissyllabically as there are of monosyllabic reduplication; to be brief, we will treat of them as belonging to two classes only, as follows:

## 1. Reduplication in a.

Instances of it are :
udélgatko cheekered, d. ude-událgatko.
udita to ehastise, d. udi-udáta.
udshíklqa to fall while stumbling, d udsli-udshákľa.
udúpka, vudúpka to whip, beat, udūdápka.
udúmtchna to swim on surface, udūdámtchna.
úlal, vúlal cottonwood tree, d. úla-ulal.
uláplpa to ficker about, d. ula-uláplpa.
utchín to fish with net, d. utchi-utchán.

## 2. All other modes of reduplieation.

Gathered under one liead, this list contains instances of the phonetically altered modes of distributive reduplication described under "Monosyllabic distributive reduplication."

Reduplication with syncope of $a$ :
udíma to eover a vase, d. udá-udma. udoz0tkish whip, d. udo-udzótkish.

Reduplication without vocalic clange:
hilídslnna, yilódshna to push away, d. hilı-liihídshna.
yimē'shkat to abstraet, d. yime-imē'slika. uyozátko striped, streaked, d. uyo-uyozátko.

Reduplication of diphtliongic syllables:
uláyue to scatter, d. ula-ulíwe.
uláwa to spear through a hole, d. ula-úlhua.
utáwa to shake off, d. utá-utua.
Reduplication with apocope of suffix: ibéna to dig, d. ibépa, hipépa (for ibé-ipa).

## Distributive forms in -ishap.

Contrary to the linguistic principle of reduplicating the initial syllable, or part of it, to indicate severalty, a class of nouns comprehending terms of relationship by consanguinity or marriage appends the terminal -ishap. These forms, which in many instances seem to have also the function of plurals, are formed in this manner: To the terminals -ap, -ip, of the absolute form is substituted the uniform ending -ishap. There are even a few terms in -sll, which through the law of analogy have adopted the above ending in the distributive, simply because they belong to the terms of relationslip, as p $\overline{\mathrm{a}}^{\prime}$ ktish brother's child, d. pā'ktishap.

The suffix -shap is evidently a compound of the nominal ending -sh and the suffix -p; the intervening vowel -a- seems duplicated from -i- in -ishap and altered to -a-by dissimilation. The suffix -p points to intransferable ownership; cf. List of Suffixes.

Instances of these forms are:
múlgap brother- and sister-in-law, d. múlgishap.
pa-ánip elder brother or sister, d. pa-ánishap.
p'kíshap mother, d. p'kishishap.
pkúlip grandmother etc, d. pkúlishap.
plúgship grandfather and grandchild, d. phúgslishap.
psháship stepmother, stepchild, d. psháshishap.
ťé-unap elder brother, d. ťé-unishap.
Other terms possess two distributive forms; one in -ishap, the other being formed in the regular manner:
mákokap aunt, niece etc., d. mákokishap, mámkokap.
ptéwip grandmother etc., d. ptéwishap, pteptéwip.
ptíshap father, d. ptíshishap, ptiptáshap.
ptchî'kap brother-in-law etc., d. ptchóptchasliap, ptchúptchkap, and others, like ptútap, etc. Ptchóptchashap is the result of a combination of both forms of reduplication.

The ending -ni is another instance where the language reduplicates the end and not the initial parts of a term to form distributive reduplication, as in nepníni, yanakaníni. Cf. Suffix -ni.

## Nomina verbalia formed by distributive reduplication.

By appending -ish to the stem or basis of a verb generally of the transitive voice, verbal nouns are formed indicative of animate beings, persons, animals, or personified things performing the action enunciated in the verb. When -uish is appended, the substantive noun thus formed indicates that the subject in question has been performing the action in time past. The forms in -ish and in -uish may undergo the process of distributive reduplication, like the verb itself, and then indicate an animate being that is or was performing the action at different times or occasions repeatedly, habitually, or gradually. A few intransitive verbs like táměnu form similar derivatives, but with transitive verbs this feature is much more common.

Examples:
lutátkish one who interprets or expounds.
lutátkuish former interpreter, one who was expounding.
lultátkish habitual interpreter or expounder.
lultátkuish former habitual interpreter or one who employed himself regnlarly in expounding.
tamnuish one traveling (here-1t-belongs to the verb itself).
tatámnuish constant, habitual traveler; tramp; käíla=tatámnuish mole, lit.
"walker in the ground."
Many nouns of this class, called nomina agentis, or "performer's nouns," are found to occur in the absolute form, as shnantátchloish trapper; but they are used more frequently in the distributive form, and then should be
called nomina actoris. Indeed, the larger portion occurs only in the reduplicated shape; thus we have:
láldsish house-builder, architect, from látcha to build.
pápislı devourcr, from pán to eat; cf. máklaks-papísl.
papátalish parasite, cf. patádsha to stretch the hand out.
pápalish thief, from pálla to steal.
pépuadshnish prodigal, spendthrift, from púedsha to throw away.
shashapkělé-ish rhapsodist, narrator, from shápa to narrate.
shúshatish (and shútesh) worker, maker, from shúta to make.
tetádshish launderer, laundress, from tédsha to wash.
tetěmáshkish pilferer, from těméshka to abstract.

Exactly in the same manner are formed a number of substantives designating inanimate objects (or abstractions), which are the result of reiterated acts and appear in the distributive form. They are formed by means of the suffix -ash, and are nomina acti:
pápkash lumber, club, from páka to break.
koxpasl mind, from kópa to think (Mod.).
shashapkěléash narrative, story, from shápa to narrate.
The form of the preterit in -uish also occurs:
shutédshanuish plow's furrow; from shutédshna to perform on one's way.
Like this word, the largest number of the nomina acti do not show the reduplicated form of the first syllable.

Distributive reduplication also occurs in the absolute form of a few vcrbs, which are suggestive of collectivity, severalty, or distribution. Some of them show phonetic irregularity in their formation.
$i^{\prime}$ 'al $\chi a$, d. äï'-alqa to read, from él $\chi$ a to lay down.
leliwa to stand at the end of, from láwa to project.
papiä'na to have a picnic, from pán to eat.
shesh $\chi \bar{e}^{\prime} l a$ to act extravagantly, from kä'la to disport oneself.
shẹshatui to barter, sell, from shétua to count.

## ANATHESIS.

Another change affecting the vocalic element of the radix in verbs and their nominal derivations occurs when the verbs pass over into their reflective and reciprocal forms, and it may be sometimes observed also in their causative and nedial derivatives. These forms are produced by prefixing either $s$-, $s h$-, sh $n$-, the medial prefix, or $h-s-, h$-s $h-, h-s h n$-, which is the medial prefix increased by the pronominal demonstrative particle $h u$ abbreviated to $h$-, and pointing to an object in close vicinity or contiguity.

The process of rocalic authesis consists in the following: Whenever a verb forms derivatives by means of the above compound prefix $h$-sh-, these derivatives are vocalized like the distributive form of that verb; the first syllable assumes the vocalic sound of the radix (diphthongs have their own rules), the radical syllable assumes the vocalic sound of the second syllable of the verb's distributive form. Many derivatives formed simply by the medial prefix $s-, s h$-, shn- do not show this anathesis, but merely exhibit the vocalization of the simple verb, as shálgia fron lákia, spitcha from pítcha, shtúlaka from tálaka, shtchúzatko from tchúka.
I.-Anathesis in terms formed by the medial prefix $s$-, sh-, shn-:
kěléwi to stop, d. kékělui, caus. shnékelui to remove from position.
kilua to be angry, d. kíkalua, caus. slníkalua to irritate.
kshiúlza to dance, d. kshikshúlza, caus. shuikshúlza to make dance.
kélpka to be hot, d. kekálpka, caus. shnekálpka to heat.
kóka to bite, d. kokokka, refl. shnkóka to bite oneself.
ndsháma-a to look on, d. ndshandsháma-a, caus. shnándsh(a)ma-a to amuse by tricks, lit.: "to cause to look on."
ngé'sha to shoot arrows, d. ngengé'sha, refl. shengé'sha.
puíwa to blow, d. pnipnu, refl. shípnû to be full of air, cf. shípnush.
ptchíkap sister-in-law, d. ptchik'shap, refl. shiptchð́llaltko related as brother-in-law or sister-in-law.
tédsha to wash, d. tetádsha, refl. shetátcha to wash one's head.
túpakslip younger sister, d. tnitpakship, refl. shutpaksáltko related as brother and sister.
II.-Anathesis in terms formed by the compound prefix $h-s-, h-s h-, h-s h n-:$ hínui to fall down, d. hihánui, caus. hishanui to fell.
kíntchna to travel in file, d. kikíntclnna, recipr. hishkántchna. núta to burn, d. núnata, núnta, refl. hushnáta to burn oneself.
shíuga to kill, d. shishúka, recipr. and refl. hishûka.
shlín to shoot, hit, d. shlíshlan, recipr. and refl. híshlan.
shmō'k learl, refl. hushmō'kla to shave oneself, from an obsolete shmō ${ }^{-1} k l a$.
shnúka to seize, d. shnúshnұa, recipr. húshn\%a to shake hands.
spulí to loek up, d. spúshpǎli, refl. húshpali to lock oneself in.
stínta to love, cherish, d. stistánta, recipr. and refl. hishtánta.

## II.-RADICAL SYLLABLE CONNECTED WITH AFFIXES.

In polysyllabic languages we do not often meet with radical syllables in their original and nude shape, and forming words for themselves. When the process of word-formation increases in energy and extent, the radix is beset and preyed upon more and nore by its affixes through shifting of accent, vocalic and consonantic alterations, elision of sounds, and other necessary concomitants of advanced agglutination. In languages where the phonetic laws have great sway it often becomes difficult, as to certain terms, to recognize the elements belonging to the radical syllable.

Affixes are the links of relation connecting the radical syllables of the words which compose a sentence. They are real or altered radicals themselves, and when they no longer appear as roots it is because they were phonetically disintegrated into fragments by the continual wear and tear of the process of word-formation. Their function is to point out the various relations of the radix to the words it is brought in contact with; thus being exponents of relation they derive, for the largest part at least, their origin from pronominal roots or roots of relational signification. In Klamath some of them exist also as independent radicals, and figure as pronouns, pronominal particles or conjunctions (hí, hú, ka, ka-á, etc.).

Affixes do not always express pure and simple relation, or strictly formal connection between the various parts of the sentence, as, e. g., the idea of possession, of subject and object, of person, number, and tense; but
many of them, in American languages especially, express categories, as that of exterior shape, dimension, and proportion of the object or subject spoken of, of its distance from the speaker, or of the special mode by which an act is performed. Such particular notions qualifying the function of the radix are of a material or concrete import, and frequently result in polysynthesis or triple, quadruple, ete., compounding of the affixes. These combinations of several affixes may contain only relational affixes of a purely grammatic character, but in Klamath more frequently contain affixes of both classesthe relational and the material. A few examples will illustrate this.

A word composed of a radical and of purely formal or relational affixes only is, e. g., shílalsht when having fallen siek. Here i- in fla to lay down represents the radix, sh- is the medial prefix which makes out of íla: shíla to lay oneself down, though used only in the sense of to be (chronically) sick. The suffix -al-, -ala, implies the "becoming", "falling into a state or condition", and is here of an inchoative signification; -sh is a suffix forming nouns and verbals, -t the suffix of the conditional mode.

Terms composed of a radix and of material and relational affixes are as follows:

Lupatkuéla may be translated by to produce a scar, but the term has its special use. The radix pat appears in mpita to beat, strike upon with a tool, upáta to wound, u'hlopátana, patpátli, etc., and the prefix lu- shows that the blow is inflicted with a round article. The suffix -ka (here -k-) is that of factitive verbs, -uéla adds the idea of dovalhill, dwoward to verbs of motion, and thus the full import of the above verb is that of proolucing a wound, or more frequently a scar, being forced downemer or to the ground by a round article, as a wheel.

Né-upka to empty into is said only of the influx of a watercourse into an extended sheet of water, as a lake, not of the confluence of two rivers unless very wide. The radix of né-upka or néwapka is éwa to be full, as of water, the prefix $n$ - is indicative of something spread out, level, or extending to the horizon, and the suffix -pka usually refers to distance.

Shlelztchanolatko left bechind while walking. The radical is here n, of pronominal origin, which we also find in íla (éla), d. i-ála to lay down. With the suffix -lya, which generally points to a downward motion, e-forms élza
to deposit, to lay down. The compound prefix shl-, sl- referring to garments or other flexible árticles for personal use, and the derivation-suffix -tchna (here inverted as tchan ) pointing to an act performed while marching, moving, are joined to sllélza and make sllélztehna of it. To this is addel -otla, the completive suffix, which can be fitly rendered here by "altogether", and the participial suffix of the passive -tko, so that the whole term, for accurate re:rlering, necessitates a circumscriptive plrase like the following: dropped and left behind altoyether something garment-like while walling.

Taluálzank lying on ground faee turned upword. Radix ta-, thematic root tal-, occurring with change of vowel in télish face, télshna (for télishna) to behold; basis tálu-, u-meaning upward; -alza, compound word-formative suffix of a factitive nature (-ka); -ank, inflectional termination of the participle, usually referring to the present tense.

In the examples given the affixes pointing to round articles, sheet-like objects, distance, and downward direction are of the material order; all others I call relational affixes. The perusal of the words in the Dictionary affords the best method of distinguishing the two.

An affix is called a prefix when placed before the radical syllable, an infix when inserted into it, and a suffix when appended to it. Affixes fulfill two purposes of grammar: that of inflection, nominal and verbal; that of derivation or formation of derivative words. Not always can a strict line be drawn between these two processes of forming the units of speech, and in Klamath there are affixes which are in use in both categories. Some pronominal roots figure at times as prefixes, at other times as suffixes, as hi (i), hu (u), ma, p, and others, while nominal affixes like -tana are verbal affixes also, a fact which is partly due to the imperfect distinction between verb and noun.

But a thorough distinction between the prefixes and the suffixes of this language lies in the circumstance that the former are used for derivation only, while the suffixes possess either derivational or inflectional functions, or both simultaneously. I therefore present the affixes of Klamath in two alphabetic lists, that of the prefixes and that of the suffixes. More facts concerning them will be considered under the caption of "Verbal Inflection."

## LIST OF PREFINES.

The function of Klamath prefixes is to form derivatives, not inflectional forms, from radicals. Prefixes are not so numerous as suffixes, nor do they combine into compound prefixes so extensively as suffixes. There is no safe instance on hand where a combination of more than three prefixes occurs. A triple-compound is, e. g., ktchintchátchka to trample upon, said of one subject; it stands for kshiutchátchka (ksh-, ya-, u-), cf. yúshtchka to put the foot on something. Another is shu-ishtcháktchka to turn the head for a bite, from lishtchákta to be angry. The prefix ino-, inu- may be considered as triple also; but such combinations are rare. Suffixes, however, are found to combine into groups of four or five.

The remarkable fact is presented by the vocalic prefixes, preceded or not by a consonant, that they often become the radical syllable of the word (verb or noun). Thus in lúta to be susperded, said of a round subject only, lu- is as well the prefix (not l-only) as the root. This may be observed in words beginning with a-, e-, $\mathrm{i}-$, ksh-, t -, and with other prefixes.

A large number of intransitive verbs change their initial syllable or syllables to indicate a change in the number of the subject, as hídsluna to hurry, run, speaking of one; túshtchna, speaking of two or three, tímshna of many subjects. The syllables undergoing the change should rather be considered as radical syllables than as prefixes, as may be shown by the analogy of many transitive verbs which undergo similar or still more thorough changes when passing from one number to another.

All the prefixes will be found classified below under the caption "Recapitulation of the Prefixes." The function of each prefix found in verbs extends also to the nomina verbalia formed from these verbs. The categories of grammar which are chiefly indicated by prefixation are the genus verbi; number, form or shape, attitude and mode of motion of the verbal subject or object. ${ }^{1}$
a-, verbal and nominal prefix referring to long and tall articles (as poles, sticks), also to persons when considered as objects of elongated shape

[^47]Like u-, the prefix a- originally referred to one object only, plurality of objects being expréssed by i-; but this now holds good for a few terms only. It differs from tg-, tk-, now occurring only as part of a radical syllable designating immobility of one subject standing upright, by pointing to long things which need not necessarily be in an erect position.
aggáya to le suspended and to hang up, pl. of long obj. iggáya; cf. its derivatives aggá-idsha etc.
aggédsha to describe a circle, as the hand of a watch.
akétchga to break, as sticks, poles.
amníamna, úmnadsha to speak, cry aloud on one's way.
aláhia to show, point out, as a tree.
átpa, pl. of obj. ítpa to carry away.
atchiga to wring out, twist.
Prefix a- occurs in the following substantives:
ámda digging-tool, from méa, méya to dig.
adshagótkish violin, fiddle.
a wálěsh thigh of a quadruped's hind leg.
The prefix a- also appears in ai- or ei-, a-i-, e-i-, the initial syllable of verbs referring to a motion performed with the head. In ai-, ei-, the vowels a-, e-, point by themselves to a long or tall object.
aíka, eíya, and aikana to stick the head out, from íka.
aitzámna to be or grow smaller than, said of plants only, the tops of which are considered as heads; from ítzamna.
eilaka to lay the head down upon; from íla, cf. ílza.
eítakta to hide the head under, to place it between two things, as blankets etc.
e-s, prefix pointing to long-shaped objects, sometimes when single, but more frequently when in quantities. Cf. also ei-, ai-, under prefix a-.
élktcha to leave behind, as a rope.
él a to lay down, deposit, as a rifle.
émtclina to carry, as an infant tied to its board.
épka to fetch, to bring, as arrows.
etlé $\chi \mathrm{i}$ to lay crosswise, as logs; pl. of obj. itlé $\chi^{\prime}$ i, Mod.

There is difference in signification between édsha to suck and idsha to cause to go, épka to bring and ípka to lie upon, to keep, éwa and íwa ete.

Substantives with prefix e-are: élhuish baekbone, épat a tall grass
h- is a prothetic sound found in many words beginning in vowels and consonants, which is reciduous and without any distinct grammatic functions, except that of emphasizing. Cf. hlá-a and lá-a, hiwídsha and iwídsha, hutátchkia and utátchkia. Therefore $h$ - cannot be considered as a prefix, unless connected with the medial prefix sh- in the form of h-sh, q. v. Cf. -h-, under "Infixes."
h-sh-s, $h-s$-, $h$-shn-, compound prefix serving for the derivation of reflective, reciprocal, and causative verbs and their nominal derivatives. The intransitive verbs formed by means of this prefix are but few in number. The derivation is performed by means of the vocalic anathesis described, pp . 278, 279. As stated there, the prefix h -sh-is composed of the demonstrative radix $h$ in hu, pointing to contiguity, and of the medial prefix sh-, q. v. The vowel standing after $h$ - is that of the radical syllable, and no instance occurs where a diphthong occupies this place. In the majority of instances the medial form in slı, from which the other originated, is still preserved in the language; but there are a few where the stem without prefix has survived alone. These few verbs are all of a causative signification:
háshpa to feed, háshpkish fodder, der. pán to eat. Cf. spakála.
héshtcha to suckle, der. édsha to suck.
heshuámpéli to restore to health, der. wémpĕli to reeover.
hishánui to fell, eut down, der. hínui to fall.
lushpániua to give to drink, der. púnua to drink.
The following verbs and nouns, classified according to the genus verbi to which they belong, form an addition to the examples given above, p. 278 sq.:

## CAUSATIVE VERBS:

hasllá-ixa to smoke (meat), der. sllá-ika it smokes.
híslı‘ka to perforate the nose, ear, der. stúka to stab, pierce.
hashpánkua to ford a river on horseback, der. pánkua to wade through.
héshla to show, exhibit, der. shléa to see.
heshē'gsha to complain, der. shē'gsha to report.
lishitádsha to bring up, celucate, der. t'shín to grow
hishúnua to apply song-medieine, der. shuina to sing
hushnóza to bake, eook, der. shmíza to pareh, dry.
hushpátchta to seare, frighten, der. spítclita to seare.

- hushtíza to make dream, der. tuiiza to dream.
husháka to drive out of a den etc., der. shinka to drive out.
RECIPROCAL VERBS:
héshkû to make mutual bets, der. slió to bet.
heshtō'lya to live as man and wife, der. shetō ${ }^{-1}$ \%a to colabit.
hishamkínka to tell cueh other, der. hemkínka to speat.
hushtchóka to kill eaeh other, der. tehóka to perish.
hushtíwa to priek eaeh other, der. téwa to drive into.
hushpántchna to walk arm in arm. der. soínshna to take along.
reflective verbs:
hakshgáya to hang oneself, der. kshaggáya to hung up; presupposes a longer form hashkshgíya.
hushkaknéga to besmear oneself, der. kaknéga to soil.
hû'shtka to stab oneself, der. stúka to stab; cf. háshtka.
hushtápka to priek oneself, der. stúpka to priek, puneture.
hushpáli to lock oneself up or in, der. spuli to loek up.
i-, $i y$ - , $y$ - (No. 1), prefix of transitive verbs and their derivatives, referring to an act performed with or upon a pluality of persons or elongated objects, or on objects referred to collectively, when not in a standing, immovably erect position; when the object stands in the singular, the prefixes corresponding to $\mathrm{i}-\mathrm{are} \mathrm{a}-, \mathrm{e}-$, ksh-, $\mathrm{u}-, \mathrm{q}$. v . In the distributive form this prefix often appears as i-i-, instead of showing the regular form i -a-, as in i-iggáya, i -idshna.
idsha to make go, earry off; one obj., éna.
itpa to carry, convey, take along with; one obj., átpa.
iggáya to suspend, hany up; one obj., aggíya, kshaggáya.
idńka, idúpka to strike, as with a club; one obj., udúka, ndúpka.
fyamma, i-anna to take along with; one obj., ńyamua.
i-ílui, yáni to give long artieles; one obj., ńya, $\delta$-i.
itlē' $\chi \mathrm{i}$ to lay crosswise ; one obj., etlē'zi (Mod.).
Terms in which this prefix relates indiscriminately to one or many persous or long articles are the derivatives of ika and ípa; cf. the Dictionary.
$i$-, $y$ - (No. 2), locative prefix referring to the ground, soil, is identical with the locative adverb i , hi, and the suffix -i. It composes the suffixes yan-, yur, and appears as $\mathrm{i}-, \mathrm{y}$-, only in a limited number of terms as the radical syllable.
ibéna, Kl. yépa to dig in the ground, to mine.
ína, d. yána downward, down; yaína, etc.
This prefix refers to the individual or "self" in iha to lide, secrete, conceal, and to the lodge or home in íwi, híwi, iwídsha to feteh, lring home.
ino-, inu-, triple prefix composed of the adverb ina (i on the ground, -nia demonstrative particle) and the prefix 1 -, which in one of the two terms below points to singular number, in the other to distance. Cf. the prefixes i- and yan-, which latter is the distributive form of ina-.
inotila to put or send below, underneath; cf. ntila.
inuluuáshka to keep of, prevent; cf. huáshka.
yan-, $y a-$, compond prefix indicating an act performed with the feet, or upon the grome, underground or underneath, below some object. This prefix is nothing else but the adverb yána doomward, down below, which represents the distribntive form of ina, q. v., composed of i on the ground, and the demonstrative radix and case-suffix -na. Etymologically related to ína, yína are: yaina mountain (fron yáyana), y'pa to diy, scrutch up, ye-ush den of lurrowing animal. The prefix yau-, ya-, often becomes the radical syllable of the verb.
yadshápka to mash, mangle; cf. ndshípka, tatchápka.
yatáshlıa to press down; cf. yéts $\chi$ aka.
yána to hand or bring from below.
yánhua to be quite sick, lit. "to be down": yána, wá.
yankápsliti to bar an entrance, den.
yántana to put down into; from yána, ítana, or ítıa.
yaka'sla to press down with the foot.
yáshtchka to step on something.
The prefix ya-, y-, combines also with initial e-, $i-$, into one diphthong, as in yéwa to burrow, yitchíqua to squeeze down from with the foot, as some fatty matter.
yu-, a prefix analogous in its functions to $y a n-$, $y a-$, pointing to an act performed in a downward direction, or upon the ground, or lelow some object upon or by means of a long article, as the foot. It is a combination of $i-, y^{-}$, with the prefix $u-, q . v$. The prefix yu-generally becomes the radcal syllable.
yúa (for yúwa) to strike the ground or water.
yudshláktkal to slip with the feet.
yulalína to fall over an edge, rim.
i-unéga, yunéga to be below the horizon, as sun etc.
yumadsha to be at the lower end.
i-úta, yúta to be heavy, ponderous.
yutálpěli to twist, as paper, cloth.
yúslitclika to put the foot on.
yuwet'húta to kick with both feet.
$\mathbf{k}-, g^{i}$-, prefix formed from the adverb ke, ki, Mod. kie thus, so, in this manner.
kishéwa, gishéwa to think so, to be of the opinion, der. shéwa, léwa to believe.
kshápa, gishápa to suy so, to state, to suppose, der. shápa to declare.
ki-, $k e-, g e-$, abbreviated $k \cdot$, g-, is a prefix occurring in transitive and intransitive verbs and their derivatives, pointing to an act performed obliquely,
laterally, or a motion directed sidewise toward an object. Forms several compound suffixes; not to be confounded with ki- appearing in radical syllables as gi-, gin-, kin-, etc.
kiápka to recline sidewise; cf. ípka to lie.
kiulíga, nasalized nyiuliga to fall down upon sidewise, to drizzle; ef. lalíga.
kiatéga to go in laterally.
kiuyéga to raise, hoist up obliquely, sidèvise, to lift above oncself.
kiukíya to hang out sidewise; kíuks conjurer, cf. Dictionary, p. 135.
kíutehna to hold $u p$ while moving, traveling.
kiákuga, kianéga to move, rub laterally.
kídsha to creep, crowl, swim; cf. ídsla, kílshash.
kimā'dsh ant, viz., "moving, traveling laterally."
klátcha, gelítsa to move the hand sidewise.
knéwa to put out obliqucly the fish-line; der. néwa.
kpél tail, tail-fin; der. p’laí.
kléna, gléna to hop, walk on one leg.
knanílash small bat species; viz., "fluttering down obliquel y."
km-, a prefix resulting from the combination of the prefix $k$ - (abbreviated from ki-) and ma- (abbreviated m-), the latter indicating a curvilinear motion or object; km - therefore refers to a lateral and curvilinear motion or to the winding slape of an object, such as a rope, thread, wrinkle, etc.
kmapat'hiénatko wrinkled, furrowed.
kmélza to lay down, said of thread, ropes, etc.
kmúyulatko shaggy.
kmukoltgi to become wrinkled by wetting.
kmúltkaga and kmutchō'sla to bubble up in water.
ksh-, kis- is the verbal gish, kish of the verb git to be, in the signification of beiny there, and as a suffix it appears, augmented with -i, as the locative suffix -gishi, Kl. -kshi, redupl. -ksaksi. The prefix kshi- is found only in terms conveying the idea of placing, laying upoa, holding, or giving,
also in a few intransitive verbs of a locative inport. Originally it referred to one animate being only, and still does in the majority of terms, though kshéna, kshawína, and others apply to inanimate objects of long shape also. The vowel following the prefix generally points to the exterior form of the object or subject referred to, although in many cases it is no longer a prefix, but has become a radical vowel, and undergoes a change whenever plurality of the verbal object or subject has to be indicated. Many of the transitive verbs refer to one or a collective object carried upon the arm or arms. Not to be confounded with kish-, which forms verbs of "going" in the singular number.
kshaggáya to hang somebody; cf. aggáya, iggáya, shuggáya.
ksháwala to fix, tie, or deposit above ; cf. iwála.
kshélktcha to leave behind, quit; cf. lélktcha, shlélktcha.
kshél qa to lay down; cf. élqa, lélka, nél za, etc.
kshíkla to lay down and to lie on, in; der. íkla.
kshíulě̌a to dance; der. yúl $\not$ a.
kshíya to give, transfer; cf. úya, lúya, néya, shúi.
kshutíla to lie below; cf. utila, i-utila, gintíla.
kt-, prefix combining k- (cf. supra) with t-, which is indicative of length or tallness, upright attitude, and usually refers to one person or object only. The combination kt - therefore refers to a lateral motion observed on one standing, long subject or object, but in some instances is so intimately fused with the verbal radix that it becomes difficult to distinguish it from this.
ktíshlya to press down by hand.
ktáwal to strike upon the head laterally.
ktélza to let down, drop a long object, der. élza.
ktíudshna to push aside, der. húdshna or yúdshna.
ktiuyéga to push open, der. uyéga; cf. luyéga, shuyéga.
ktíulě̌a to make descend, der. yúlza.
ktíwala, ktíwalza to lift or to post upon, der. íwala.
ktúka, ktúyua to hit with the hand.
kui-, $g u i-$, , ku-, $g u$-, prefix representing the adverb kúi away from, far, distant, on the other side, ku -, gu-, being its apocopated forms. It is prefixed
to the verbs of traveling, leaving, departing, and sometimes becomes the radical syllable. The terms derived from géna to go present themselves for comparison.
guluáshka and guluásliktcha to depart, to set out from; cf. inuluáshka.
gúikaka to leave home, to run off.
guikínsha to start out from.
guiizi, guikídsha to cross over, to pass.
kuyántcha to fly at a great distance.
kúshka, gû'slika to leave, abandon; der. íshka.
l-, prefix occurring ing verbs and uouns descriptive of or referring to a round or rounded (globular, cylindric, disk- or bulb-shaped, annular) or bulky exterior of an object, to an act performed with such an object, and to circular, senicircular, or swinging motions of the person, arms, hands, or other parts of the body. Thus this prefix is found to refer to the clonds, the celestial bodies, rounded declivities (especially of the earth's surface), to fruits, berries, and bulbs, stones and dwellings (these being mostly of a round shape); also to multitudes of animals, rings, and crowds of. people, for a crowd generally assumes a round shape. It originally referred to one object or subject only, and does so still in many instances; it occurs in transitive as well as in intransitive verbs with their derivatives, often forms part of the radical syllable and composes other prefixes, as lya-, lu-, shl-. The manifold applications of this prefix necessitate subdivision.
(a) $l$-, when referring to one round object and forming part of a transitive verb, frequently occurs accompanied by the vowel n- (referring to long articles) in the form lu-, lo-. When a plurality of round objects is spoken of, pe- often takes the place of lu-:
ludshípa to take off from; udshípa a long object; cf. idshípa, shulshípa.
luyéga to lift or pick up; pe-nyéga many round objects.
lúyamna to hold in hand; cf. pé-ukanka.
lúya to give; to pay in coin; cf. péwi, úya, néya.
lushántchna to scratch a round hole.
lútza to take away, to wrench from; û'tza a lonj object; cf. lútkish.
(b) $l$ - occurs in intransitive verbs and their nominal derivatives, and then points to several, but more frequently to one subject of rounded or bulky slape.
laggáya to be hung up, to stand on the sky; cf. aggáya, iggíya.
lawála to be on, to spread over the top of; cf. lawálash, nawálash, íwal.
lbéna to dig a round hole; lbá seed or grain.
lbúka bulb or round fruit growing on the ground.
ldúkala to pick up a round object; cf. ndákal, ítkal.
léna to move in a round line, to ride on wheels; cf. éna.
lúa it is foggy, misty; lúash fog; líldam season of fogs.
lúdshna to drift, as clouds, fog; from hídslina to speed off.
lúta to stick or hang on; lútish round fruit ; útish ear-shaped fruit.
lutíla to be underneath, to stand below; cf. utíla, i-1tíla.
(c) $l$-sometimes refers to slopes, declivities of the ground, or motions observed, acts performed along such. The original form of the prefix appears to be in this case la-; it is the uneven or rounded irregular configuration of the slope which is indicated by l-.
láwa to project, as a cape, promontory; laláwash slate-rock.
lála to slope downward; lálash fank of animal.
hláa to foal, breed, viz., "to come down the flank"; cf. lalá-ish.
lápka to protrude, as cheekbones.
lěmúna bottom, depth in. the earth or water; cf. mû'na.
(d) lut, lui-, lue-, le-, li-. Terms beginning with these syllables form a distinct class of intransitive verbs. They refer to a crowding together into a bulk, ring, crowd, or multitude, all of which when viewed from a distance look like a circular or round body, a form which is pointed at by the prefix 1. The above syllables embody the radicals of the terms in question as well as the prefix. The verbs thus formed will be mentioned below as involving the idea of plurality, the singular being formed in various ways. To them belong luílamna, lúkantatka, liutíta, lińpka, lólua, lé-uptcha; only one of these las a transitive signification, lúela to kill, massacre.
(c) $\mathbf{I} \neq \mathbf{l}-, l \chi c$, $l \underline{l} c-$ is a radix with the prefixed $l$ - occurring in words which indicate wave motion or articles of a wavy, striped, undulating exterior. The radix $\chi a-$, $\chi e-$, ke- is a reflective form of ki-, ga-, ke-, ge- occurring in gákua, gáuta, géna, géwa; it points to a moving, procceding, goin!, of the subject. In this connection the function of the prefix l-approaches closely to that of ( $c$ ) above mentioned.
lqán to undulatc; l又ásh billow, wave.
lkakimítko striped horizontally; lkelkatkítko striped vertically,
ľal又ámnish long bag or sack, grain-bug.
lzet'knúla to hang down from mouth in wavy lines.
lqáwaltko provided with antlcrs.
lkápata to form surf; from lzán, q. v.
u-léxatko flexiblc and long, pliant.
1e-. Le is the putative negative particle not, and answers to Latin haud and Greek $\mu \dot{\eta}$, e. g. in the compound word $\mu \dot{\eta} \pi о \tau \varepsilon$ "lest at any tinue." 'Thus it forms not only privative nouns, but also proliibitive verbs. Under the heading "Particles" will be given examples where $l c$ is used as a separate word for itself, and in some of the terms below it could be written separate also.
lewé ula to forbid, not to allow.
lehówitko slow-going; i. e. "not racing."
léshma not to discover or find, to miss.
letaláni stupid, foolish; i. e. "not straight."
letelina to annoy, meddlc with.
letúměna to be excited, half-crazed.
m-, prefix referring to a motion going on in curvilinear form or zigzag. lines along the ground. It appears chiefly before a- and e- in radical syllables of intransitive verbs and their derivatives, which refer to the unsteady, varying directions followed by travelers, root-diggers, to the roamings of Indian tribes on the prairie etc. Cf. Suffix -ma.
máktchna to encamp while traveling.
mák’lě̌a to cncamp, to pass the night; cf. máklaks.
mákuala to encamp in or upon the mountains.
makuna to cncamp at the foot of a mountain.
médsla to remove, to migrate; cf. ídslaa.
méwa to encamp away from home, to live on the prairie.
méya to dig edible roots etc., said of one person; cf. mé-islı digging around, mé-idsha etc.
n-, prefix frequently occurring in transitive and intransitive verbs and their nominal derivatives, and referring to sheet-like, thin, smooth, pliant, and thread-like articies, or to objects having a level, horizontal surface, or to acts and motions referring to the above or to some distant spot on the line of the horizon. It composes the prefixes nu- and shn-, the latter having causative functions.

In its various uses this prefix may be classified as follows:
(a) It is prefixed to terms descriptive of or relating to thin, sheet-like, string-like articles, as cloth, mats, hats, ropes, handkerchiefs, paper, paper money, soles, skins, and especially the wings and flight of birds.
nákia to patch, mend, as garments.
nīl, nē 1 fur-skin; tiny feather of bird; from nél: nelína to scalp.
néya, né-i to give, hand over, pay in paper money.
nép palm of hancl, hand; nạpěnapslı temple-bone.
nédsqa to lay on top a thin article; cf. nétatka.
nélza to lay down, deposit; cf. lélka, éľa, shlélktcha.
ní long snow-shoe; buckskin sole.
ndshakwéta to hang, drop down, as curtains.
ná'hlish bowstring.
néna, nínia, naínaya to flap, move the wings, to Autter.
naggídsha to float, circle in the air; cf. aggédsha.
néta to fix, paste, or put on.
(b) n-occurs in terms referring to places of wide and level extent, as prairies, water-sheets; to phenomena observed above the ground, as weather,
or invisible, as sickness wafted through the air; to words, songs, and noises traveling through the air.
nā̀ $g$, K1. neé $g$, pl. nee'gsha who is absent, departed.
nen, particle referring to spoken words, sounds, noises.
nē'pka kú-i it is bad weather; nē’pka (shílalsh) to bring sichness.
ndslakwéta to hang, drop down, as curtains.
ne-úpka to ran into a lake, said of rivers.
néwa to form an extension, sheet.
níwa to drive on level ground or into water.
(e) nu- is prefixed to terms relating to motion in sky or air, as the flight of meteors, the throwing of stones, the swinging of round and bulky objects, the humming noise made by bulky insects.
núyauna to hum, to make noise all about.
nulakiúla to eut out a hole in the ice to spear fish.
núlidsha to be wafted downward.
nutódshna to hurl, throw away.
nutúyamna to fly around.
nuwallza to take an aërial fight.
p-, proprietary prefix indicating inalienable, intransferable ownership of an object. In the same function, but more frequently, $p$ occurs as a suffix, $q . v$, and is identical with the $p$ in the personal pronoun of the third person: pî, písl, pash, push, p'na, pat, etc. The prefix $p$ - is found, accompanied with the suffix - $p$, chiefly in terms of relationship derived from consangninity as well as from marriage, and occurs as such also in Salaptin and Wayiletpu dialects. In Klamath there are but few terms of relationship which do not exhibit this prefix: mákokap, túpakship, t'shíshap (Mod.), vúnak.
ptíshap father, Kl., from t'slín to grow up.
pgislap mother, from gî in the sense of to make, produce.
pé-ip daughter; ptútap daughter-in-law.
pa-alámip husband's sister and brother's wife.
psháship step-mother; step-children.
pkátchip female cousin and her daughter.

There are also a few terms designating classes of human beings who are not relations: ,
pslie-utíwash, archaic term for people.
ptchíwip master, mistress of slave.

- A prefix p- of a similar import, referring to the personality of the subject, is embodied in the following terms:

Nouns.
pshísh nose, snout; písh bile; pítiu dew-claw.
pétch foot; pillhap sinew.
Verbs.
péwa to bathe, plunge, wash oneself; cf. éwa, tchéwa, pána, pánkua.
piéna to scrape sidewise; from éna.
putóya to remove sod; cf. vutóya to dig with a spade.
ptchíkľa, Mod. ptchá'hlka to stroke, pat ; cf. shatálaka.
pníwa to blow, to fill with air; cf. p'ní, shípnu.
púedsha to reject, scatter, expend; cf. ídsha.
Of. the compound prefix sp-, slip-.
pe-, a prefix occurring only in transitive verbs with plural or collective object, which is eitler of a round, roundel, or of a heavy, bulky form; sometimes the prefix also refers to slieet-like objects and to animate beings.
pé-ula to lay down, deposit ; one obj., likla.
péwi, pä'wi to give, hand over, pay; one obj., lúya, lúi.
pe-uyéga to lift, gather up; one obj., luyéga.
pe-ukánka to hold in hand; one obj., híyamna
petéga to tear to pieces, as cloth ; from ndéga.
pekéwa to break to pieces, smash up; from kéwa.
sh-, s-. This prefix, the most frequent of all, is used in forming medial verbs, as they may be appropriately termed after their correlatives in the Greek language. The medial prefix sli-, $s$ - is the remuant of a personal pronoun of the third person, now extant only in its plural form: sha they,
shash them, to them, sham of them. Its original meaning seems to have been reflective, oneself, like that of Latin sui, sibi, se, because sh-, s-, places the verb into relation with its logical or grammatical subject ; the idea expressed by the verb may be said to revert or to be turned upon the subject of the verb and centering in it. This medial function will appear more clearly in the following examples, made up of transitive as well as of intransitive verbs:
shá-islii to keep as a secret; from aishi to hide.
széna to row a boat; from géna to proeeed.
shéka to squeal, whine; from yéka to howl, cry.
skintchna to crawl, ereep; from kíntchna to walk in single file.
shuína to sing solo; from wína to sing.
skă' to blow strong, said of winds; from ká-a strongly.
spitcha to go out (fire); from pítcha to extinguish.
shipapělánkshtant against eaeh other; from pipělángsta on two sides.
Some of the medial verbs now extant make us presuppose a vertbal base from which they are derived, but which exists no longer in the language as a verb; cf.skă'. Others have changed their prefix sh-, s-into tch-, ts-, especially in the Modoc dialect.

In the majority of medial verbs the mode of derivation observed is that of vocalic anathesis, a phonetic process spoken of previously.

The medial function does not always remain such in all the verbs formed by the medial prefix, but easily turns into (a) a reffeciive one when the subject of the verb is also its object: she-allza to name, call oneself; or (b) when the object is a person or other animate being, a reeiproeal verb may result : samtchátka to understand eaeh other; or (c) the medial verb turns into a causative verb when the verbal act passes over entirely to the verbal object: shkálkěla to hurt, injure, viz., "to make fall sick." A few of these verbs are reciprocal and reflective simultaneously: shákual (from radix gáwal) to find oneself and to find each other.

More examples are given under "Anathesis", pp. 278, 279, from which becomes apparent also the general couformity of the uses of this prefix with that of its compound $h_{1-s h}$. Other prefixes compounded with sh- are shl-, shn-, sp-, st-, shu-, q. v.

Shl-, sl-, composed of the medial prefix shl- and the prefix l-, refers in nouns as well as in verbs (which are almost exclusively transitive) to objects of a thin, flexible, or sheet-like form, as cloth, blankets, hats, and other garments or other articles serving to wrap oneself in; also to objects which can be spread out flat, and to baskets, because flexible. Sometimes the Modoc dialect changes shl- into tchl-
shlélya to leave behind, deposit; from élza.
shlémpěli to take home; from émpěli.
shlékla to lay down, to dress in; from íkla.
shlaníya to spread out for, as a skin; shlá-ish mat.
shlánkua to spread over, across; shlánkōsh bridge.
shlaúki to close the door; the door of the lodge being a flap.
shlítchka to pass through a sieve; cf. latcha.
shlétana to be loose, not tight-fitting; from íta.
shlápa to open out, to blossom; shlapsh bud.
tchléyanına to hold in hand something soft, flexible, Mod.
tchlekna to take out of, Mod.; from íkna.
tchléwiza to place into a basket etc., Mod.; from iwiza.
shn-, sn-, a compound prefix formed of sh- and $n$-, which forms a class of causative verbs and their derivatives. Cf. prefix n-, nu- There are, however, several terms not belonging here, in which the 11- of the initial shn- forms a part of the radix : shnikanua from nóka, shnayéna from néna, shnápka from nēpka. Shn- is causative in:
shnámbua to make explode; from nibáwa to explode.
shnáhualta to make sound, to ring; from wálta to resound.
shnékělui to remove from position; from kěléwi to cease.
shinikshúlza to force to dancc; from kshińlěza to dance.
slinumpshéala to unite in marriage; from mbushéla to consort.
shmuntchyóla to curl; from the verb of ndshokólatko curly.
slınáwedsh wife, viz., "one made to bear offspring"; from waíshi to generate.
sp-, shp-, a combination of the two prefixes sh-, s-, and $p-$, pointing to an act or motion, especially of drawing or pulling, performed upon an animate or inanimate object of long form. The original function of this prefix is causative, but some intransitive verbs also show it. I do not refer lere to such verbs as are formed by prefixing sh- to verbs begimning with $p$-, as slpáha to dry something, from páha to be dry.
spélaktelna to cut, said of sharp blades of grass; from láktcha.
spépka to pull the loustring; from épka.
spídsha to drag behind; from ídsha.
spiéga to assist in getting up; cf. ktinyéga.
spíka to draw, pull out, as a rope; from ika.
spíkanash, Kl. spekanótkish sewing needle; from spíka.
spitkala to raise, make stand up; from ítkal.
spińlhi to place inside, to lock up; cf. illhi.
spúnka to let out of, to let go ; lit.: "to cause to move the legs."
spulóka to rub sometling glutinous upon oneself; cf. ulóka to rub together long objects.
st-, sht-, compound prefix made up of the medial sh-, s-, and ta-, abbreviated t -, and hence referring to one object (sometimes several) placed in an upright or stiff, immovable position upon or within something. The medial sh-suggests that the act is done by or for the logical or grammatic subject of the sentence, or in its own or somebody else's interest, the verbs showing this prefix being almost exclusively transitive.
stéwa to mix with, mash up; from éwa to put upon.
stitza to cheat, defraud of; from ítza to take away from.
stiwíni to stir up, as dougli; from iwina to place inside.
stiwizótkish baby-board; from iwiza to place on, within.
stópěla to peel the fiber-bark; from upála to dry up above.
stutila to cover with a roof on pillars ; from utila to place underneath.
shu-, su-, represents the medial prefix sh-, s- united to the prefix u-, and is foind in transitive and reciprocal verbs and their nominal derivatives as referring to an act performed on the body of persons or animals, and in
a few intransitive verbs; cf. the simple prefix $u-$, vu-, wir-. Some of the terms are directly derived from verbs having the u- prefixed, as sluí to transfer, from úya, ú-i, $\delta-i$; shutíla to hold under the arm, from utila; shuyóka to shave etc. In many other words with initial shu-, u - belongs to the radix; in others, as in shuyúzala, shúktakla, u - is the result of vocalic anathesis.
shuítěla tö gird, as a horse ; from íta.
shulóta to dress onesclf; shulótish garment ; from l'úta.
shuéna to carry upon a board etc.; shuéntch baby-board; from éna.
shukoka to lite onesclf; from kóka.
shu-û̀ta to throw at each other; from vúta.
shứpka to lie in a hcap; from ípka.
shuklixiéa to compete in hopping; from kléna.
$\mathbf{t}-, t a$-, te-, prefix referring to long objects standing erect, as trees, posts, and to standing persons. When occurring in transitive verbs, this prefix points to acts performed with elongated objects not included under the uses of the prefixes a-, $i-, u$-; for instance, to what is performed with the arms or hands outstretched or put forward, with a knife, etc. In intransitive verbs t - refers to onc person or animate being in an upright position, and when combined with the radix -ka-, -ga- points to one person, etc., standing or moving. T- is abbreviated from ta-, te-, ter-, the pronominal particle and radix tà.
takī'ma to stand out as a circle, rim; cf. gaki'ma.
tamádsha to stand at the cnd of a row etc.; cf. lamádsha.
těméslika to abstract, take away; cf. yiméshka.
tkíp tall grass, reed, or stalk.
tkánả to stuff, as an animal; cf. shńtkuala.
tkéka to make a hole with knife or clasped hand; cf. kéka.
tkí-ukua to knock with the hand, fist; cf. uká-ukua.
tgá-ulěza to arise, get up; from ga-â'ľa.
tgakíya to stand, remain on, upon; from gakáya.
tkéwa to break a long article in two.
tu-. This prefix is either (1) the preposition tu out there, out at a distance, in which case it expresses horizontal and vertical distance or remoteness of the verbal act from home or from the one speaking, or tu- is (2) a compound of $t$-, the prefix spoken of above pointing to what is erect, and n-, a prefix indicative of long articles or articles placed above, on the top of (see below), on one's back. This compound prefix is in some respect comparable to shu-, q. v.

Examples of (1):
túkěľa to halt, stop on the way.
túklaktchna to stop at times on one's way.
tuitchéwa to hollow out by pressure.
túyamna to move about with knees bent.
Exanıples of (2):
tudshō'sha to smear on, line upon; cf. ludshō'sha, shudshō'sha.
túila to converge at the top; to stand out.
túdslna to earry on the baek; from tíi-ídshna.
tuítch $\chi$ ash ehoke-eherry; cf. yétszaka to ehoke.
tuinéga to cave in; cf. ína, d. yána downward.
túiza to swell up, protrude; from íka to extract.
túlamna to carry aeross one's baek.
tulńga to smear on, line upon.
tch-, $t s$-, prefix occurring in terms which refer exclusively to the motions observed in water and other liquids, the moving or floating of objects on or in the water, and the flow or motion of the liquids themselves. In sound it presents some analogy with the suffixes -tcha, -dsha, -tchna, which refer to motion in general. It should not be confounded with teli-, ts-, when this is merely an alternation of the medial prefix sh-, as in tchgax for ská, q. v. Words like tcliuk occur in several northwestern languages in the sense of water; cf. Chin. Jargon salt tchuk salt water.
tchéwa to float, said of water-birds etc.; from éwa.
tchíwa to form a boty of water; from íwa. tchlā'lya to sink to the ground; from élqa. tchípka to contain a liquid; from ípka.
tchókpa, tchótcha to drip down from; cf. tchétchapkatko.
tchíya to give, present a liquid; cf néya, úya, líya, shúi.
tchilála to boil water or in the water; from ilála.
tchíkamna to have the water-brash; from íka.
tchúyamna to swim below the water's surfaee.
tchl- ; see sllı-
u-, $v u$-, wu-, prefix originating from the pronominal particle hu, u, marking extent and distance, horizontal as well as vertical, and forming transitive as well as intransitive verbs, with their derivatives.

The terms in which this frequent suffix is found may be subdivided into two classes, as follows:
(a) Prefix u-pointing to horizontal distance, removal, separation from. These terms generally undergo dissyllabic reduplication when assuming the distributive form.
unéga to lower, let down; cf. ina downward.
uháktchna to gallop off; cf. húdslına, húka.
uláyue to seatter, disperse; cf. gáyue.
ulak'kánka to skate over a surface; cf. laklákli.
ut'háwa to shake off, as dust.
utila to place, be, or lie underneath; from ita.
utéwa to shoot up perpendicularly; from téwi.
(b) Prefix u-referring to one or many animate and inanimate objects of length or tallness, as poles, pieces of wood, implements, parts of the animal body, etc., and to acts performed by or with them; also to persons, because considered as objects of tallness. They reduplicate distributively in $u-u$-, or as above, by means of the dissyllabic reduplication. Some of the transitive verbs with prefix u-, vu-, refer to one object only, and take the prefix i-, iy-, when a plurality of objects is alluded to. Identical with uare wa-, we-, wi-, q. v.
udúpka, vudúpka to wnip, beat with a stick; pl. of obj. idúpka.
udshípa to strip, pull out ; pl. of obj. idshípa; cf. ludshípa.
úyamna to hold in hand; pl. of obj. íyamna.
uitza to wrench off from; pl. of obj. ítza; cf. lútza.
uyéga to lift a log, beam, etc.; cf. luyćga, shuyéga.
ulíplpa to flicker about; to shake the ears, as dogs.
ukai-ukua to knock with a stick; cf, tkí-ukua.
upatnótkish hammer, mallet ; cf. mpáta.
ulézuga to gather into a long basket; from íkuga.
udìntěna to beat, as with a drumstick; from tíntan.
ulézatko flexible and long, pliant
wa-, we-, wi-. These prefixes are reducible to the prefix u-, and produced by it throngh assimilation (1) to the vowel of the syllable following in the terms given below:
wapálash dead tree, for upálash dried on the top; cf. upála, stópěla, stópalsh.
wekíshtchna to totter, reel; for ukíshtchna.
wishíbam a reed with woolly substance; from udshípa.
widshíklqa to stumble and fall; other form of udshíklya.
(2) In other words wa- is the result of the reduplication of the prefix u-, hu-:
washolálqa for huhasholálqa; cf. hushólalza.
wál $\neq a$ for vuválza, vuál za; cf. vúl $\neq a$.
walíxish slanderer, Mod. for û'lkish; d. u- ̂̀'lkish, uwálkish.

```
RECAPITULATION OF THE PREFIXES.
```

The following synoptic table endeavors to give a lucid classification of the various functions in which prefixes are employed in verbs and noms. The majority of them are found tabulated under more than one heading; only a few occur in one function only.
A.-Prefixes referring to the genus verbi-

Medial verbs: sh- and h-sh-; the prefixes composed with sh-, as shl-, shn-, sp-, st-, shu-.
Reflective verbs: sh-, h-sh-, shu-.
Reciprocal verbs: sh-, h-sh-.
Causative verbs: sh-, h-sh-, shn-

Verbs that are transitive only: i- (No. 1), kt-, l- (No. a), pe-, shn-, shu-; the object usually an animate being: i-, pe-, shu-, $u$ -
Verbs that are intransitive only: l- (No. b).
Proprietary verbs: p-.
B.-Prefixes referring to number-

Siugular number of the verbal object or subject: a-, e-, ksh-, l-, t-, u-
Plural number of the same: e-, i- (No. 1), pe-.
C.-Prefixes referring to form or shape of the verbal object or subject-

Round, rounded, or bulky forms: l-, nu-, pe-.
Thin, flat, level, pliant, thread-like forms: n-, pe-.
In the shape of sheets, garments enveloping the body: shl-.
Long, elongated, tall forms: a-, e-, i-, u-.
D.-Prefixes referring to attitude, position-

Upright, erect, or immovable attitude: kt-, st-, t-, tu-
E.-Prefixes referring to motion-

Motion through the air: n-, nu-, u-.
Motion downward: yan-, yu-, l- (No. c).
Motion of, in, or upon the water or liquids: tch-
Motion performed obliquely, laterally: ki-, kni-, kt-.
Motion performed in zigzag upon the ground: m-.
Motion performed in wave form: lza-.
Motion performed with the head: a- (in ai-, ei-).
Motion performed with arms, hands: shu-, t- (tk-).
Motion performed with the back: tu-; with the feet: yan-, yu-
F.-Prefixes embodying relations expressed by adverbs-

Locative prefixes: i- (No. 2), ino-, yan-, yu-, kui-, l- (No. c), tu-, u(No. a).
Modal prefixes: k - thus; le- not (some being negative verbs).

## INFIXES.

Infixation of sounds into the radical syllable, producing a change in the signification of words, is not so frequent in American as in some Caucasian and other Asiatic languages; although inflection of the radix may
have been effected by infixes, all traces of this fact have afterward disappeared. In the preterit of Creek verbs an infixed ' $h$ produces a shortening of the radical vowel preceding it.

Of infixes of the Klamath language we cannot speak as a class of affixes, as we can of its prefixes and suffixes. Thus the - 11 - appearing in the dual and the -i- of the plural form in the verbs for ruming, e. g. húdshna to run (one subject), túshtchna (two to four), tínshna (many subjects), which form the radical vowel, are rather the result of a substitution for each other than of infixation, and may find parallels in the chapter on "Vocalic Alteration of the Root," pp. 254-257, and "Epenthesis," p. 228. The only sound which could be regarded at times as an infix in the radix, though it is mostly a prefix or a suffix, is 'h, when it stands for ha by hand, with hands or extremities.
' $\mathbf{h}$, an affix which emphatically refers to the use of one's hands, and gives a peculiar stress to the verbs in which it occurs We find it in:
ge'hlápka to step on, ascend by using hands; gelápka to tread upon, mount.
gu'hli to help oneself into; gulí to enter, go into.
p'lus shka to tear off by hand;; púshka to cut off with a sharp tool.
púl'hka to tear out by hand, and shupá'hlka to tear out from one's body; púlka to tear, pluck out.
wa'htákia to disperse, put to fight bv using weapons etc.; watákia to scare off, scatter.

We may also compare k'linúlĕqa with kiúlĕqa, l'hútkala with lō'tkala, and many other verbs. In muhimúya to shiver, 1 stands infixed in the radix, though not referring to the use of hands. Cf. "Diæresis," p. 216, and "Epenthesis," p. 228.

## LIST OF SUFFIXES.

In the language of the Máklaks we observe a large numeric preponderance of suffixes over prefixes. Not only is the whole system of verbal and nominal inflection carried on by suffixation, but also in derivation this element is more powerful than prefixation. A combination of more than
two prefixes is rarely seen, but one of four suffixes is not uncommon, and the manifold ways in which they combine into novel functions are quite surprising. The list of suffixes, simple and compound, which we give below, is already more than triple the full list of simple and compound prefixes, although the suffixes of the language are not fully enumerated in the list, for the good reason that they are practically inexhaustible in their combinations. Thus in regard to suffixation this upland language can be called polysynthetic in an eminent degree.

Suffixation prevails in the large majority of all the languages explored and some languages are known to possess no prefixes at all. On the other side, the Ba'ntu langnages of South Africa inflect by prefixes only. The same cause lias prompted the dark races of the Ba'ntu to prefix their pronominal roots to the radical syllables, which has prompted most Europeans to place the articles the and $a$ before and not after the noun. The power of largely nultiplying pronominal roots under the form of suffixes, which appears in many Asiatic and American tongues and also in the Basque (Pyrenees), seems extraordinary to us, because we are accustomed to the analytic process in thought and speech. The Klamath Indian lias no special words corresponding to our about, concerning, to, on, at, in, upon, through, but expresses all these relations just as clearly as we do by means of case suffixes or case-postpositions; he has not our conjunctions whilc, becausc, but, as, than, when, that, since, until, before, aftcr, ${ }^{1}$ but all the relational ideas suggested by these are expressed by him just as distinctly by conjugational suffixes.

The Klamath Indian employs derivation-suffixes to express the following material ideas, which English can express by separate words only: commencing, continuing, quitting, returning from, doing habitually, frequently, or repeatedly, changing into, moving at a long or short distance, moving in a zigzag or in a straight direction, going upward, along the ground or downward, circling in the air, coming toward or going away from, seen or unseen, moving within or outside of the lodge, on or below the water's surface ; also an infinity of other circumstantial facts, some of which we would not observe or express at all, but which strike the mind of the Indian more powerfully than ours.

[^48]For the study of the mechanical part of suffixation the following rules will prove useful:

There are two classes of suffixes, inflectional and derivational. Most suffixes belong either to one or the other of the two classes, but a few belong to both: -úga, -óta.

Inflectional suffixes always stand after the suffixes of derivation, in the absolute as well as in the distributive form. The former are identical in both dialects with very few exceptions (Kl. -ank, Mod. -an), but among the latter small dialectic differences are perceptible.

There are pronominal roots which figure as prefixes as well as inflectional and derivational suffixes; while others occur only as suffixes or component syllables of such, or belong to one class of suffixes only. Some verbal suffixes also figure as nominal suffixes: -ága, -tana, -tka, etc.

A few suffixes show a wide range in their signification and use, for their meaning varies according to the basis to which they are appended; cf. -ala, -tka, -úga. In this respect compound suffixes vary less than simple ones. The purport of such compound suffixes as we observe in hulladshuitímna to run continually back and forth can be inquired into by looking up severally in the list below all the snffixes following the radix hu-: -ăla (-la), -tcha, -ui, -támna, and then combining their significations into a whole.

Most suffixes originally were of a locative import, and the few temporal suffixes in the language trace their origin to some locative affix. The concrete categories of location, position, and distance are of such paramount importance to the conception of rude nations as are to us those of time and causality.

The accumulation of suffixes in one word is sometimes considerable, but never exceeds the limits of considerate measure (five suffixes), so that the mind always remains capable of grasping the totality of some polysynthetic form. Cf. in the Dictionary such vocables as: hópelitchna, kauloktantktámna, klutsuótkish, shuntoyakea-ótkish, spmngátgapěle, sputídshannish, tpugidshapělitímna, tehīlltgipěle. The best method of studying the workings of suffixation is to compare with one another the derivatives of such roots as are most productive in derivational forms by transcribing them from the pages of the Dictionary.

There are some suffixes which in fact are verbs of the language closely agglutinated to the basis of the preceding term, and thus form a transition between suffixes, auxiliary verbs, and verbs forming compound verbs: -kakua, -kakiámna, -kédsha, -túmna, -wápka. In southern languages, as Atákapa, Káyowē, etc., this sort of grammatic combination is much more frequent than in Klamath.

There are a large number of other compound suffixes which were not mentioned in the following list on account of the small number of terms known in which they occur. Such are -ini, -kiéni, -mla, -tclla, etc.; but the majority of these may be understood by analyzing them into their components and comparing them with suffixes formed in a similar way, as -ina, - xiéa, -m'na, -tchna.
-a, the most frequent of all suffixes, is appended to consonantal as well as to vocalic stems or bases, occurs in almost every part of speech, and forms compound suffixes. The different uses made of this ubiquitous suffix necessitate subdivision.

1. Verbs in $-a$. A large majority of verbs shows this suffix or a suffix composed with $-a$. It is in fact the particle $a$ of the declarative node, which sometimes appears as a word for itself. Being usually unaccented when appended to the word, it becomes so closely connected with it as to turn into a true suffix, and in inflectional forms is often replaced by other endings. With other vocalic suffixes it forms a contrast of a locative import: hinua to fall on something; hínui to fall on the ground; tchálamna to sit on, against something; tchálamuu to sit on an eminence or at a distance. The great frequency of the suffix $-a$ is accounted for by its general, wide, and indistinct signification. We find it in transitive and intransitive verbs, and among the latter in impersonal and attributive verbs. In most of the verbal suffixes it occurs as the final sound, alternates at times with the suffix -la, as in téla, télha to look upon, to resemble; sometimes assumes the accent (guká, etc.), and in the verb lila' seems even to form a part of the radix. This is done, however, to distinguish it from hlá-a, q. v. Free from all connection with other suffixes, -a does not occur frequently except in verbs with iterative reduplication. We find it in:
kila to be in a hurry, to be excited.
ltóka to make a round dot; subst. ltók.
múka to menstruate; cf. múksh babe.
péta. pét'a to disrupt something; cf. lepéta to indent.
skía to fizzle; cf. kíu anus.
skóa it is springtime; also subst.
tíla to make a noise, as by stamping with the feet; cf. tílila.
Examples of verbs formed by iterative reduplication:
hiuhíwa to be elastie, soft.
yályala to be limpid, clear.
ka-ukáwa to rattle.
múlmula to lower the eyebrows.
púkpnka to eraek with the teeth.
shiákshiaga to balance on the arms.
shúkshuka to shake one's head.
tiltila to make a noise, as by rapping.
2. Nouns in -a. Substantive nouns in -a exist in considerable numbers. Some of them are abbreviations from -ap, -ash, q. v., while others, and the larger part of them, have been verbs in -a or are still so, having without any phonetic change assumed the function of a noun, the distinction between verb and noun being less marked in most Indian languages than in our own. The examples below contain substantives partly formed with compound suffixes:
kía lizard, and kúdsha field-rat; cf. kídsha to ereep, erawl.
náka cinnamon bear.
pála, páhla wicher plate or paddle, from pála to dry.
páta summer season; cf. páha to be dry.
klípa mink; kěláyua, species of long-tailed mouse.
$\mathrm{pa}^{\prime} \mathrm{ka}$ grandfather's brother, for $\mathrm{pa}^{\prime} \mathrm{kap}$.
skóa and skó spring season.
shtía piteh, resin, and tía seed-paddle.
saíga grassy plain, prairie.
káptcha fifth finger, and to go or hide behind.
nkika dust, atoms, and to be full of dust.
wípka overshoe made of straw.
wekéta and wekétash green frog.
ktúshka sliee, elipping, and to eut off, slice off.
mbúka and mbúkash earth crumbling into dust.

Also a large number of botanic terms, especially food-plants, as: káshma, klána, klápa, l’bá, tchuá, tsuníka, etc.
3. Participles with -a oxytonized ( $\mathbf{-} \mathbf{a}^{\prime}$ ) are abbreviations from -átko, -atko. Examples to be found in the Texts and Dictionary are n n itsí(tko) atrophied, pahá dried up, kewá broken, fractured.
4. A number of adverbs also end in $-a$, most of which are or have been formerly verbs:
ká-a very, very much; cf. ská.
'ké-una (and ké-uni) slowly, loosely, lightly.
kuáta tightly; also adj. hard, tight.
níshta all night through.
ská, shkí coldly; strongly, and to blow cold, strong.
stá, shtá to repletion; entirely, and to be full.
wäíta all day long, and to pass one day.
Of postpositions ending in -ta the majority are abbreviations from -tana or tala.

An inflectional suffix $-a$ occurs in the oblique cases of nouns in -a , as p'gíslap mother, p'gísha (obj. case). Cf. "Nominal Inflection."

- $\mathbf{a}^{\prime}$, see -a No. 3, -tko.
$-\mathbf{a}^{\prime} \mathbf{- a}$, a suffix which is the combination of the last vowel of the base with the suffix -a preceding, aualogous to -éa, -fia, -ua. The accent always rests on the penultina, a rule from which the verb ndsháma-a and its medial form shnándshma-a form perhaps the only exceptions. Sha-apá-a to dare, provoke, is formed by vocalic diæresis fromı shápa to speak, tell. The word shukekí-ash parents, in Kl. shukikash, presupposes an obsolete verb shuke-kí-a. Examples:
hl'́a-a to lay eggs, to bear young.
kupkupá-a to knock at something hollow; cf. kupkúpli concave.
yá-a to scream, vociferate; Mod. kayá-a to cry aloud.
shalkiá-a to put on airs, to swagger.
shapkuá-a, Kl. shápkua to strut about.
stiná-a to build a house, or willow-lodge.
saká-a to be raw; to eat raw.
-ăga, -ak, -ga, -ag, -ka,-k. This nominal suffix is formed by the particle ak "only, just only, but," and in the form -ăga by the particles ak a, of the same signification. Words showing this suffix are dimimutives, and, although the majority are substantives, a few adjectives and pronouns form diminutives by means of the same suffix.

1. Substantives in-ăga. Substantives form their diminutives either by. appending -xga in full or by syncope of the short $\mathfrak{a}$ of -ăga into: -ga, -ka, -g, -k. Nouns composed of two or nore syllables and ending in -sh in the subjective case, drop that terminal to assume -ăga instead, which then undergoes all the phonetic changes produced by the collision of vocalic and consonantal sounds. The diminutive function results from the signification "just only" of the particle ak: pe'tch foot, pétchaga "just a foot only", little foot. The language forms no augmentative nouns like Italian, only diminutives. In many languages the diminutives assume the signification of endearment or praise, especially in the terms of relationship; in Klamath nothing of the kind is perceptible, except in the pronouns mentioned below and perhaps in the terms with double diminutive ending.

> ánkuaga little stick or tree, from ánku stick, tree.
> lúlpaga, húlpag little eye, from lúlp eye.
> kápka small pine tree, from tkáp stalk.
> ndshíluaga young female (animal), from ndshílo.
> táldshiag little reed-arrow, from táldshi reed-arrow.
> ntéyaga little bow, from nté-ish, ntē'sh bow.
> wé-aga, wēka little child, from wéash offspring.
> awalóka little island, from áwaluash island.
> sháplka small seed-paddle, from sháplash paddle.
> nútak glyceria grass seed, from nút (verb: núta to crack in the fire).
> kilidshíga little duck, from kilidshíwash lony-necked duck.
> shikenitgíka little pistol, from shikenítgish pistol.
> spúkliga little sweat-lodge, from spúklish sudatory.
kítchka, kítchga small fin, from kídshash fin.
shuplúga little play-ball, from shúpluash ball.
A few diminutives accentuate the penultima, though they may emphasize one of the syllables preceding it as well :
lełedshiága and lelédshiak very young cub, puppy.
nepága and népaga, népag little hand, paw.
nushaltkíga and nusháltkaga headwaters of river, from nusháltko springing from.

The diminutive Shastiága, Shastíka, Sástiak, signifies a little person of the Shasti tribe or a half-Shasti, one of the parents being a non-Shasti.

Diminutives in which the ending -aga occurs twice are the pronouns húktakaga (from húktak) and vúnakaga, únakak little son or offspring, from vínak.
2. Among the pronouns and pronominal adjectives susceptible of this ending we mention:
húktag and húktakaga this little one.
nékag the little absent one, from nég absent.
tánkak a few only, from tánk so many, so much.
túmiaga few, not many, from túmi many.
Adverbs often assume this syllable, but then $a k$ is no longer to be considered as a suffix, except perhaps in mā'ntchaga a while ago; it is the particle ak, ak a, just only, and the transitory stage from this signification to that of a diminutive is often plainly perceptible. Examples: kíutak, lápiak, nénak, pänak, nishtāhk, pálak (Mod. pélak), pálakak, psínak, tināh $k$, tchússak, wigá-ak.

The adjectives kéliak deprived of, péniak undressed, also contain this suffixed particle.
-ăga. The verbal suffixes -ăga and -ága, although of similar origin, have to be distinguished from each other. The first contains the factitive suffix -ka, -ga appended to verbal stems ending in short, unaccented -a, while in the latter suffix, -ága, this same factitive terminal is appended to
verbal stems accented upon the ultima. The signification of both suffixes is factitive; cf. ka, -ga. In the same manner we observe verbs formed by the suffixes -ala and -ála, -iga and -íga, -uga and -úga.

The verbs in -ăga are intransitives, those in -íga transitives, as will appear from the lists below. Srae of them show the compound suffix -tzaga, -tkaga, the -t $\%$ - of which marks repetition or return; and -ăga seems to occur only as the final prit of compound suffixes.
gálampaga to walk behind, to follow in a file.
kmúltzaga to bubble up in water.
két $\chi$ aga to begin to grow again; cf. kédsha.
ntúltqaga to run down from its spring.
ntúptchmaga to form bubbles in water.

- a'ga. For the origin of this verbal fuctitive suffix, see-ăga. It occurs in transitive verbs only and always forms a compound with other suffixes, as -tch-, -t $\%$-, etc. Alternates at times with -áka; cf. -iga, -ka, -úga.
hakshkága to carry about an infant on the breast; cf. haksháktchui, kshéna. kuatchága and kuátchaka to bite into; from kuátclia. shouluága to pineh with a pole, to run a stiek into.
shkintchishzága to shed the skin, said of amphibians.
shma'htchága to project one's shadow while moving.
shvuyushága to remember, study at.
tchuktzága to try, attempt repeatedly.
- $\mathbf{a}^{\prime} \mathbf{i}$, see áya.
-a'ya, -ái, verbal suffix composed of the particle i (hí) on the ground, joined to - $\{$ (emphasized), which here stands in the sense of on, upon something. From this combination results the function of -aya as that of doing or being upon, on something, and the secondary function of doing or being in the woods, thickets, recesses, in the timber, or in marshes, upon eliffs. The locality is generally added to the verb in the locative case in -tat, -at: tchikass ánkutat tchaggáya the bird sits upon the tree. 'The majority of the verbs in -aya are intransitive and the few transitives seem to have originated from intransitives. When the terminal -áya becomes abbreviated into -aii
the accent sometimes recedes upon a preceding syllable, as in gelkáya, gelkái, gélkai to erect a platform upon a scaffold. Substantives like tchátchlai fire-fly, tcháshkai weasel, seem to embody the same suffix, -áya. Examples:
kshaggíya, íggaya, lággaya to hang down from something, and to hang $u p$, suspend on something.
ktchikíya to climb, creep, crawl on, upon, ana to creep upon a tree, or through the timber.
hukíya, gakáya to run, to go into the woods.
tgakáya, liukáya to stand or remain on; to stay in the woods.
shualáya to be idle; cf. wálza to sit waiting.
-ak, see -ăga.
-akia, see -gien, -tki.
-akie'a, see -xiéa.
-akla, see -kla.
-akta, see -ta.
- axia, see -xiéa.
- $\mathbf{a} \chi \mathbf{i} \mathbf{e}^{\prime} \mathbf{a}$, see - - iéa.
-al, see -ăla.
-ala, verbal suffix related to -ǎla and composed of the same elements, but differing from it by the location of the emphasized syllable. The verbs composed with both terminals are almost exclusively of a transitive nature, and the verbs in -ăla and in -ála are in part verba denominativa, but more generally derivatives of other verls. The suffix -ala composes many other suffixes, as -al $\chi a$, -alsha, -alshna, -alsh, ete. The origin of this suffix seems to have been the same as that of the prefix $l$-No. 2, pointing to a downward motion along something, which is also embodied in the words lásh, hla', hlála, q. v., the roots of which are made up by the sound $l$. Some of their number can geminate the $l$ of the suffix, and they do so especially in song lines: shuinálla, genálla. Cf. -altko, -éla, -íla.

Derivatives from other verbs:
spalála to feed the young; for spanála; cf. pán to eat.
stalála to fill, fill up; for stanála; cf. stáni full.
sluminála to accompany in singing; cf. sluina to sing.
ndokíla to be kinky, curly.
genaila to start off and to approach; from géna to walk.
washlála (and wáshlala) to luunt ground-squirrels, from subst. wáshla.
yauzalála (and yaízalala) to luunt buld eayles, from subst. yaízal.
sline-nyála to destroy almost.
shleála to perceive, look at: from shléa to see.
-axla, - $\check{l} l a,-a l,-l a$. 'This verbal suffix is of great frequency and various import. It also forms quite a number of compound suffixes. The similarity of origin with -ála and other analogies were pointed out when speaking of that suffix. The circumstance that the accent rests upon the base of the word, and not on the suffix, causes a weakening and falling off of vocalic parts of the suffix; thus -ăla clanges into -ěla, -la, -al, and into -la, which is more frequent than the other forms. Many of these are denominative verbs. It will be best to divide these verbs into intransitives and transitives and to subdivide the latter into verbs formed (a) from substantives in -sh, (b) from substantives having other endings, (e) from verbs.

1. Intransitive verbs in -ăla etc., formed from other verbs apparently.
shákatla to come up the road or trail.
telíkla to sit on, upon, within.
skútchala to dress in a mantle, blanket.
pákla to bark at.
múluala to rot, to become rotten.
spuné'kla it is getting late at night.
2. Transitive verbs in -ăla etc.
(a) Formed from substantives laving the usual suffix of substantives, -sh (-ash, -ish, etc.); therefore these verbs all end in -shla or -shala. They indicate that the object represented in the noun, of which they are derivatives, is collected, manufactured, made into soniething or turned to account.

A special class of these is formed by the verbs referring to the harvesting of food-articles and crops.
itíshla to use for embroidering; from ítish, íta.
lû'gshla to capture in war, to enslave; from lúgsh.
shilkshla to dig a well; wā'shla to dig a hole.
spúklishla to ereet a sweat-lodge; from spúklish.
luldemáshla to build a winter-lodge; cf. lulldamaláksh.
shlánkōslila to construet a bridge, bridges; from shlánkōsh.
witchúlashla to make a witehólash-net.
tchulíshla to make a shirt, and to wear one.
wókashla, wō'ksla to eollect pond-lily seed; from wókash
kěládshla to colleet the kěládsh-berry erop.
(b) Formed from substantives ending in another suffix than -sh; some of their number are diminutives in -aga, -ak.
unákala and unakíkala to give birth to a son; from vúnak, únakak.
péyala to give birth to a daughter; from pé-ip.
wé'kala to bear offspring; from wéka, dim. of wéash.
nteyákala to make a little bow; from ntéyaga.
na-íla for na íala to make a nái-basket.
lákiala to take as a husband; from lakí.
slnawédshala, snawédshla to take as a wife ; from shnáwedsh.
(e) Formed from verbs or verbal bases.
shéllual to make war, to fight.
ndákal, ítkal to pick up, find something long; cf. ldúkala.
pátkal to rise from sleep.
shéwala to aver, state ; cf. shéwa to be of opinion.
shúkěla to mix into, said of liquids.
shálakla to cut or slash oneself; cf. láktcha.
shaktákla to wound by a single eut.
wépla to tie with straps etc.
pákla to eat upon, on something; from páka to feed on.

- a'lamna, see -lamna.
-alpka, the combination of the suffixes -ăla and the iterative -pka. This suffix appears in connection with the terms of relationship, and then signifies to eall somebody futher, sister, etc., or to eall the father, sister, etc., by his or her name: ptíshal'pka, tripakshalpka. Usually -al- in -alpka is not emphasized, and the verbs are all transitives.
p'tíshalpka, Mod. t'shíshalpka, to eall somebody futher.
péyalpka to eall somebody daughter; cf. péyala to bear a daughter.
pshéyalpka to call somebody unele.
pshákalpka to eall a person maternal aunt.
pkúmalpka to eall a person paternal grandmother.
vunakálpka to eall somebody son, ehild; cf. vúnakala to bear a son.
-alpkash, see -altko.
-alsha, -alteha, verbal suffix produced by combination of the suffixes -ăla, -sh and -a, q. v. Like the verbs in -sha the large majority of the verbs in -alsla are transitive ; they are formed from the verbal in -sh, which I call the verbal indefinite, by the addition of the declarative and verbifying suffix -a. The derivation is as follows: wókash pond-lily seed; wóksăla to gather pond-lily seed; wókashalsh, contr. wóksalsh, the aet of gathering pondlily seed; wóksalsha to be in the aet of gathering pund-lily seed, to gather that seed for a time. The verbal in -sh represents the act or state expressed by its verb as a lasting one, and therefore easily assumes the function of a substantive. Several of the verbs in -alsha possess another form in -alteha, which I regard as a phonetic corruption. The verbs in -alsha have the accent upon the word-stem or at least before the ending, and many of them refer to the hunts of game or to the annual gathering of crops, without being real usitative verbs for all that. Hhítkalsha to rise up suddenly, is an example of an intransitive verb laving this suffix; another is: tchalā'lsha (for tchialá-ălsha) to stay at home.
shútualsha to throw at eaeh repeatedly; from shu-úta.
shákalsha to play the four-stiek game; from shák'la.
plaíwaslalsha and plaiwashaltcha to be on a bald-eagle hunt.
wáshlalsha to be on a ehipmunk hunt; from wáshala.
stópalsha to peel off the fiber-bark or stópalsh.
ktélualsha to gather pine-nuts for a time.
kolalsha to be in the act of gathering the kiō l-bulb.
máyalsha to gathcr tulc-stalks in seascn; cf. má-i, máyala.
-alshna. This suffix, not of frequent occurrence, is -alsha increased by the suffix -na, q. v.
hútkalshna to get up precipitately.
-alta, see -ta.
-altko, in the oblique cases -alpkash, -alpkam, etc., is the form of the past participle of verbs in -ăla, transitive as well as intransitive. When derived from transitive verbs, the form in -altko, which in the northern dialect is rarely accentuated on the penult in the subjective case, has as well an active as a passive function, though of these two generally one prevails.

No special mention would be made of these participles as regular inflectional forms if they did not at times pass into the condition of verbal adjectives. This is the case when the parent verb is no longer in use or when the signification of the form in -altko shows an alteration from the form of the verb. Many of the "comprehensive" terms of relationship through blood and marriage belong here. Cf. -tko, -antko.
shétze-unaltko related as brothers; cf. txé-unap elder brother.
shaptálaltko related as sisters or female cousins; cf. p'tálip.
lúlpaltko provided with cyes; fronı a supposed lúlpala to obtain eyes.
shunuíshaltko possessed of ; cf. shínuish property.
${ }^{0}$ 'lshaltko gray-haircd; from ólshala to resemble the ólash-dove.
petchákaltko having little feet; from a supposed petchákala.
shmókaltko wearing a beard; from a supposed shmőkala.
tchuyesháltko wearing a hat, cap; cf. tchíyesh hat, cap.
-altcha, see -alsha.
-am, -lam, the suffix of the possessive case in the absolute and distributive form; -lam is placed after the vowels $-a$ and $-e$ of the nominal base, - am after consonants and the vowels $-i,-0,-u$, which in that case are considered as consonants ( $y, w$ ). Both suffixes are pronounced very short,
alnost like -ěm, -'m, -lĕm, -l'm. The origin of this suffix will be shown under the heading of "Substantive."

This possessive case form becomes in many nouns a subjeetive case, undergoing an inflection similar to that of the real subjective case. We subdivide these as follows:
I.-Names of plants, especially fruit-bearing trees, shrubs, or herbs. The possessive suffix composes the majority of vegetals furnishing berries, unts, and soft fruits to the list of Indian provisions, and a few only, like the serviceberry bush, tchakága, have other endings. The pine-tree, $\mathrm{ko}^{-}$sh, furnishes only the resinous, ill-tasting pine-nut, and does not show the possessive form, but some of the seed-grasses, as tchipsham, exhibit it. Many of the plant names in -am exist in the distributive form. Besides the form in -am exists the other form in the subjective case, to designate the fruit, nut, or berry of the plant. The plant-name is the fruit-name placed in the pos. sessive case, and the term ánku tree, stem, or tchélash stalk, has to be supplied: kpók gooseberry, kpókam (ánku) gooseberry bush. Bulb plants, weeds, and low stalks with flowers often have the same name as their fruits, standing in the subjective case, like $\underline{\mathrm{k}} \bar{o}^{\prime} l$, wókash, léhiash, thongh even in moss-names the possessive case occurs, presumably through the law of linguistic analogy. The generic terms íwam berry, lé-usham, d lelé-nsham flower, and some terns referring to animal food: káwam eel spring, núksam dried fish, also take this suffix.
hútchnam white-oak tree; húdsha acorn.
äplsam apple tree; ä'pulsh, ä'pul apple.
luluíluisham gooseberry bush; húiluish, species of gooseberry.
tuítch $\chi$ sam choke-cherry tree; tuítch $\chi$ ash choke-cherry.
ípshunalam swamp dogberry bush; ipshína blue swamp dogberry.
pû'shxam bough of conifere; pû'shak little whorl.
kápiunksham the grass producing the kápiunks-seed.
Add to these padsháyam, pánam (and pán), pátchnam, skáwanksham, shléshlaptcham, shué-usham, tútanksham.
II.-A few nouns indicating seasons of the year and phenomena of nature also show the terminal -am, -lan. T'zalam west wind is an abbreviation of tzálauni (shléwish) and does not belong here.
lúldan winter-time; cf. híash fog, mist.
sháhlhlam, shálam autumn.
yálzam tempest, storm.
III.-Of manufactured articles showing this suffix I have net the following:
kítchkam handkerchief, tchû́ksham or tchû'kshûm coffee-pot, lám=púnuishan glass bottle.
-amna, -ámna. This verbal suffix, the final portion of which, -m'na, is a phonetic alteration of -mana, -amana, which is composed of -a, the common ending of verbs, -ma and -na, two suffixes marking direction and distance, $q \mathrm{v}$. The idear conveyed by -amna, -ám'na is that of being or coming around, upon, on or above, near somebody or something, and that of surrounding, of covering. It forms transitive and intransitive verbs from other verbs, not from nouns, and has to be kept distinct from the suffix -lamna, -álamna. Cf. the suffixes -ma and -na.
tchilamna to be crowded together, around; cf. tchilla.
gatpanina to approach near, to come to the lodge.
tchúyamna to swim about.
tníyamna to swim around below the water's surface.
nutíyamna to hum, buzz, whirl around buzzing.
núyamna to whirl around, to skip about.
skíyamna to hold, carry about oneself in a basket.
liukiámna to go around, to surround; cf. liuká-a to collect.
stunkiámna to go around, v. intr ; to encompass, v. traus.
shléyamna, líyamna to hold, carry in the arms, hands.
Cf. also í-amna, kshúyamna, shíamna, tchíamna, ńyamna. In the verbs ending in -kiámna the syllable -ki- belongs to the stem of the word: sluhlakiámna to dodge around (stem: húka or húkia), shatalkiámua to look around (cf. téla, télish); compare also shashknakiánnish mitten, Mod.
-ampka is the suffix -pka appended to verbs of motion terminating in -na, -ăna, -ěna, by the same phonetic assimilation as observed in gémpěle, as formed from génapěle, gén'pĕle. The forms in -ámpka imply remoteness from the one who speaks or is supposed to speak or relate, and they often
combine therewith the idea of being unseen by him. They are transitive as well as intransitive verbs. Not to be confounded with the suffix -tímpka. Cf. -ípka.
hutáupka (for hutínăpka) to run into distance; der. húta to rush upon. ne-ulaktámpka to punish without being present; ne-ulákta to punish.
tinslaímpka to run avay meseen by the speaker; tínshna to run away. gaya-idslámpka to pass in front of into distance.
shualaliámpka to administer, provide for.
steyak'kámpka to listen outside of a lodge, building.
shnuitámpka to keep up a fire aucay from people; cf. núta to burn.
-ankat, -anka is a frequent suffix, composed of -ank, the ending of the present participle, and the $a$ of the declarative mode. Thus it verbifies the act or state expressed by the participle, and expresses its duration. This may best appear from the following instances:
kókanka to masticate ; der. kóka to bite. lúshkanka to reffect, think over; húshka to think.
shnikanuánka to make pauses in gathering crops; shníkanua to let ripen. ndéwanka to fall when sitting or standiny; udéwa to topple over. stillitánka to report, bring news; stilta to amounce.
shakpát'tanka to compress or pin together.
shulitanka to move an object down and up.
spúkanka to move the fect quickly; spúka to put out the feet.
spúnkanka to take as one's companion; spúnka to let go.
-ansha. Like the verbs in -alsha, -ampka, -anka, -antko, etc., tlose in -ansha are the result of a verbifying process to which an inflectional form is subjected. Here the verbal indefinite in -sh of verbs ending in -na, -ăna, -ěna becomes verbified by the apposition of -a, and -ansha conveys the idea of locouotion axay from somebody or something, of starting out into distomee, and sonectimes that of passing through or out of. The word-accent sometimes passes upon the suffix itself (-insha), and -ansha is preferable to the form -ántcha, -andsha, which is sometimes used instead of it. Gékansha to stayt from is therefore derived from geknash the act of starting from, this from gékua. Gékuash, by becoming lengthened into géknasha, inverts $n$ and $a$
and becomes gékansha. The majority of these verbs are intransitive. Cf. -insha. -ansha re-enforced by -na occurs in yútlanshua to hit, or shoot aside of the mark.
húkansha, tíshkansha, tínkansha to run out of.
huízansha to run along a river, along its current.
gátpansha to come near some place.
kokáusha, kókantcha to climb up to a distance.
kiluánsha to hurry away.
hukiétansha to pass quickly by somebody.
kshékansha to fly or soar up.
ktchíkansha to crowl through a hole.
shlétansha to go to see, to visit somebody.
nik'kansha to put the arm out of or through an orifice.
tilankénsha to roll something away.
-anshna, see -ansha.
-antko, -íntko forms participles and verbal adjectives from verbs in -na, -ăna, -ěna in the same manner as -altko from verbs in -ăla, -la. Analogous in derivation with these two participial forms are the adjective suffixes -li and -ni. The suffix -antko forms its oblique cases: -ámpkash, -ámpkam, etc.; it conveys a passive and sometimes a medial signification. In some of the examples below, the original verb in -na exists no longer, and in others like káwantko the -n- seems to be the product of a nasalizing process only.
kintchántko passablc, pervious; kíntchna to march in a file.
kilkántko humpbuck; cf. kíľa to become humpbacked.
shulútantko dressed, clad; shulótana to dress oneself.
tilhuántko submerged; tílhua to overflow.
káwantko poor, indigent; káwa to be poor.
-ap, see -p.
-a'pka, -apka. The suffix -pka forms verbs in -ápka from verbs in -a in the same manner as it forms derivatives in - $\bar{u}^{\prime} p k a,-\bar{o}^{\prime} p k a$ from verbs in -wa, -ua, or derivatives in -ámpka from verbs in -na, -ĕna. Verbs in -ápka describe an action performed or state undergone at a distance from the person speaking or supposed to speak or relate, and are intransitive as well as trans-
itive; other verbs in -ápka are nsitatives or iteratives. From the verbs in -pka they differ only by the presence of the basal -a.
I.-Verbs expressing distance from the one speaking:
(a) Distant, when lying on the gromed or within reach.
ilípka to eharge, load by placing the load on the bottom (of boat).
kiapka to recline sidewise.
slmnkpápka to hold down on the ground.
tchiápka, wawápka to sit on the ground.
(b) At a distance from the one speaking, but still visible:
gelápka to climb into, step upon at a distance.
telhápka to survey, overlook, as a country.
tinolénapka to set, said of celestial bodies.
(c) Removed out of the usual position, or at a distance sufficient to prevent contact:
klämtchápka to kecp the eyelids elosed.
shatashťápka to seize an object with the hand so that the fingers do not touch the thumb in grasping.
shmuktchápka to pout the lips.
(d) At a distance out of sight:
k'lewidshápka to leave behind in the lodge.
kpídshapka to pursue an object out of sight.
II.-Iterative verbs are as follows:
shkanakápka to assail repeatedly.
shuktápka to strike oneself repeatedly. vutikápka to draw the tongue in and out.
-as, see -ash.
-ash, -as, -sh. The most' frequently occurring nominal suffixes are -ash, -ish, -ush, all formed by the comection of the vocalic sten-endings of verbs with the noun-making suffix -sh, -s. All of them differ in their functions, and it is therefore preferable to treat of them in separate articles. The suffix -ash is pre-eminently a suffix for names of inamimate objects, while -ish
is the suffix forming names of animate beings chiefly. The difference is best shown by examples:
shashapkěléash story, narrative, myth.
shashapkělé-ish narrator, story-tellcr.
shlélaluash upper pyclid, or "cover" moving by itself.
shlélaluish cream of milk, or "cover" to be removed by hand; the real meaning of shlélaluish being cover.
tclin'sh (from tclíash) settlement; tchī'sh (from tchí-ish) settler.
The vowel -a- in -ash is often clided by syncope, especially when preceded by a consonant, or suffers contraction, as -á-ash into -āsh.

As an inflectional terminal, -ash forms the objective casc in the adjective, and also in the majority of names of animate beings in the absolute as well as in the distributive form. In the numerals, -ash has the function of a locative suffix; cf. "Numerals."

It also forms the verbal indefinite of the verbs in $-a$ : shiyúta to exchange, barier-tuá î shaná-uli shiyútash? for what will you baiter this? The verbal signification is still perceptible in the nouns kó-i piluyéash onion, viz., "bad smeller", and in kó-i túměnash noise, viz, "disagreeable hearing".

1. Dcnominative nouns in -ash. I mention a few instances in which the primitive term is still in use at the same time with the derivative, so that there cannot be any reasonable doubt of a derivation laving occurred:
käíla earth, ground; käílash mud, dirt, semen.
lō'k kernel, seed; lúkash fish-roe.
múksh down; múkash owl, "downy bird."
núlu, sometling rotten; mólash phlegm.
slīl cloth, tissuc; shílash tent.
tóke horn, prony; tóksh navel; fish-bladder.
2. To the above may be added a few nouns formed through onomatopœia:
túktuk (cry of hawk), túktukwash fish-hawk.
wä'k (note of duck), wä'kash, a duck species.
wékat (cry of frog), wéketaslı grcen. frog
3. Nomina verbalia concreta or substantives in -ash, formed from transi-
tive or intransitive verbs in -a and designating inanimate things of a conerete signification, among which are included all animals of a lower order. By syncope or elision -ash may dwindle down to -'sh, -'s, or may be pronounced -ish incorrectly. In many instances the verb from whieh the nouns in -ash are derived has become obsolete, as in yapalpuléash whitish butterfly. Some of these nouns in -ash are of an active or instrumental, like shápash, others, as títash, of a passive signification. This is easily explained by the fact that the transitive verbs of this upland tongue undergo no change in their form when passing from the active to the passive voice.
háshuash vegetable, maize; from háshua to plant, sow.
któdshash rain; from któdsha it rains.
lálash side of animal; from lála to slope down.
léwash play-ball, globe; from léwa to play.
shápash sun, moon, elock; from shápa to indicate.
shétaluash glass, mirror; from shétalua to refleet.
shlitchízash comb; from shlítch'ka to sift.
tínuash drowning-place; from tínua to fall into water.
tútash trunk of tree; from túta to remove.
Some of the nouns mentioned under -a have lost their -sh: skóa for skólhs, nkíka for nkikash, mbíka for mbíkash, wekéta for wekétash, both forms now existing simultaneously; probably also páta summer heat, páhla tray, dish, pála liver.
4. Nomina verbalia abstraeta, or substantives in -asl, formed from verbs in -a (mainly transitives) and designating abstractions. Their signification approaches very nearly that of a verbal indefinite in -ash.
húslıkanksh thought, mind; from húshkanka to think.
kpápshash sense of taste; from kpipsha to taste.
kóxpasili (Mod.) thought, mind; from kózpa, d of kópa to think. '
sha-íshash a seeret; from shá-ishi (here from shá-isha) to lush up. ${ }^{1}$
shéshash name, price; from shésha to name, call.

[^49]-īsh. This nominal suffix is the result of a contraction either of -áash or of ti-ish:
(a) Contracted from -í-ash, and therefore pointing to some object of the inamimate class; cf. -ash:
stinā'sh willow-lodye; Mod. lodge, from stiná-a.
pálāsh, pálaash flour; from pála.
(b) Contracted from -á-ish, and therefore pointing to a nomen actoris: sheshtálkāsh wag, funny fellow.
ulaktchnāsh one whose head is not flattened.
-atch, a nominal suffix which is a corruption of -otkish, the instrumental suffix, as in-
shúmaluatch, from shumaluótkish implement for writing, painting or drawing; from shúmalua.
lěmátch mealing-stone, prob. for lamótkish.
-ail, see -e.
-ȧga see -éga.
-äì $\chi \mathbf{i}$, see -
-äm, see -m.
-bli, see -pělí.
-dsh, see -tch.
-dsha, see -tcha.
-dshna, see -tchna.
-e. The terminal -e occurring in verbs is but a part of a suffix, as -tze, . -ue, and in every instance alternates with -i; therefore it does not require to be treated separately. Verbs belonging here are húlhe, gáyue, gútze, skíyue.

Of the substantives in -e some are derived from verbs. In a few the ending also alternates with i , as in tchékele blood, tóke horn, lítke evening, kné-udshe coarse bark of tree. In others -e alternates with -ě and -ii:
káwe eel, lamprey-eel; poss. case, káwam.
kóye, kó-i lobster, crab.
kúmme, kúmmě cave, cavern.
shkńle, skńlï, Mod tsxúle lark; poss. skúlälam.
tále, tálě little lake, pond.

- е. see -e.
-e'a, verbal suffix related to -ía. It refers to acts performed with or on one's own body or'that of another person, and generally is found with intransitive verbs only. It sometimes alternates with -ía, íya, which is a more frequent suffix; but when -ia is the original form it does not frequently alternate with -éa. Thus, Kl. and Mod., shashapkelía to recount stories to somebody is in Modoc shapke-fia and shapkéa.
kedshamkedshalkéa to wheel around on one's feet.
palaléa to pull out by the roots.
shakatpampeléa to have a horse or foot race.
shetalxéa and shutapkéa to stand on one's head.
tilampudshéa to roll oneself about.
tilanshnéa to contort, turn about one's limbs.
tchikual $\chi$ uléa to turn somersaults.
- e'ga, -ä'ga, -iéga, a suffix forming inchoative or inceptive verbs, and identical in its function with -támpka, but more frequently occurring in Klanath Lake than in Modoc, where -támpka preponderates. There are verbs which assume both endings indiscriminately, as-
ktudshiéga and ktudslıtámpka it begins to rain.
tchutchïyéga and tchutchai-itámpka it begins to melt (as ice).
After the consonants $l, t c h, d s h$, and after all the vowels, -éga appears in the form -iéga, -iï'ga,--yéga, which is perhaps the original shape of this suffix. Like the Latin verbs in -are and the Greek verbs in - $\dot{\alpha} v,-\varepsilon i v$, which once were inchoatives also, the verbs in -éga have dropped the function of inchoatives to express the act or state itself indicated by the base of the verb. The suffix forms verbs from other verbs only, not from nouns, and they are transitives as well as intransitives.
(a) Verbs of inchoative import in -éga, -iéga:
i-unéga to become dark at night.
tinéga, tinnä'ga to set, said of celestial bodies.
gutéga to penetrate, lit. "to begin to enter"; cf gáta.
guhiéga to begin to swell up; cf. gúlia.
shakaliä'ga to commence gambling; cf. shákla.
shuteyéga to make, create first; cf. shúta.
liwayéga to begin to lift; to lift at one end.
luyéga to ascend, said of fog, clouds, etc.
shuyéga to start a song; cf. shuína.
tmuyéga to begin at one end.
(b) Verbs in -éga, -iéga, no longer inchoative:
huwaliéga to run uphill; cf. húwala to run upward.
shlatchiéga to splash.
tpualiéga to drive up to the top.
witchuyéga to blow something up.
kshawaliéga to transport, carry uphill.
ndiunéga to fall, roll into.
tchiéga to flood, overflow.
spiéga to assist in getting up, rising.
(c) A number of verbs belong to neither of the two categories above, but are applicative verbs in -ga, -ka, with accentuated -e-before it, which points to an act or state of the subject's own body.
kiuyéga to hold over somebody obliquely; cf. uyéga.
ktchiéga to help oneself up by using the arms.
ktutéga to sink down in water, sand, mud.
tinéga to snort.
The verbs ktetéga, powetéga are derivatives of téga, and hence do not properly belong here.
-e'-ixi, see -xiéa.
-čka, see -ka.
- $\overline{\mathbf{e}}^{\prime} \chi \mathbf{i}$, see $-1 \chi \chi$ i.
-e'la, an unfrequent verbal suffix, pointing to superposition or to a raising up above other objects.
slikantéla to lay one thing upon another; of. shikantíla.
tchekléla to sit down on the side, edge of.
vutukayéla to throw up a long object.
-ěla, see -ăla.
-éltko, a Modoc form occurring in a few words and in every respect parallel to Kl. -altko. The Modoc dialect shows a tendency to substitute sometimes $c$ for $a$ in radical as well as in derivational syllables, when they stand between consonants, as in shétma for shátma, néshki for náshki, nétkla for mátkla, uléplpa for uláplpa. Cf. -altko.
weweshē'ltko, Kl. wewesháltko having offspring.
-e'na, -iéna, two verbal suffixes closely connected in their origin and functions. The former, -éna, is also pronounced -ä'na, -héna, and refers to an act performed or state undergone within, inside of something, while the latter, -iéna, also pronounced -yćna, -iä'na, -yä'na, -hiéna, -hiia'na, refers to an act performed inside the lodge or house, indoors. The -i- composing this suffix is the particle i , hí, which means (1) on the ground and (2) in the lodge; for the suffix -éna, see -na, its component.
(a) Verbs inl -éna:
shleyéna to line a garment enveloping the body; cf. shléya.
neyéna to place a lining into, as into a hat; cf. néya.
shikpualhéna to roll in the mouth an object not protruding from it; Kl. slikpualkína.
kuloyćna to stir up a liquid in a vase.
(b) Verbs in -iéna:
goyéna, pl ginhiéna to go into, intrude into the lodge.
huihiéna to run around within a building.
kiwalhiéna to cohabit indoors.
luyä'na to go in a circle inside a wigwan.
payï'na, d. papiä'na to go around eatiny indoors.
shnayéna to fly, flutter around, as a captive bird.
-e'nash, see -ni.
-esh, the result of a contraction from -í-ish and -é-ish; forms concrete and abstract nouns from verbs, as follows:
shútēsh maker, creator; from shuté-ish, shuta' ish .
ngèsh for ngé-ish, nkéwish arrow, missile, from nkéwa to break.
tíkēsh (Mod.) argillaceous soil.
tchikēsh land overflowed; cf. tchíqi to be overflowed.
shlum=dúmtēsh grass filling gaps in the lodge-walls.
lóteslı, piece of matting; from lúta to hany down.
-ěsh, see -ash, -ish.
-e'ta, see -wéta.
-g, see -ăga, -k.
-ga, see -ăga, -ka.
-gakia'mna, see -kakiámna.
-ga'nka, see -kánka.
-gi, see -ki, -lki.
-ggi'dsha, see -kídsha.
-g'gi'ma, see -kīna.
-gi'anki, see -gien.
-gien, -akia, -kia, a terminal appearing under many various forms and representing in fact not a suffix, but an agglutinated pronoun gíanki for oneself, in one's own interest. This pronoun originated from the participle giank of gi to do, perform, act, and the particle $i$, having reflective signification, appearing also in suffixes like -ía; thus it really means "doing for oneself." The more frequent abbreviations of -gíanki, -gianggin, are -gink, -kink, -ginggi, -kinki, -gin, -kin, and when fully reduced to the shape of a verbal suffix combined with the verbal ending -a:-akia, -ăgia, axki, -agi, etc. Appended to verbs in -ala, -la this suffix appears as -lki, -lgi, q. v.
(1) The suffix is appended to the emphatic form of personal pronouns in both dialects:
nu $I$, nútak myself, nutagiánggi for myself.
$\bar{a} \mathrm{t} y e, \bar{a}^{\prime}$ tak yourselves, à'takianki for yourselves.
And also appears in certain adjectives:
tídshi good, tidshkiánki careful, viz., "acting well for oneself."
(2) In verbs the suffix mostly appears in the form -agia, -akia, -agi, ete:
shiińlagia and shiúlagien to colleet for oneself; Mod. shiólagianki, contracted into shiū́lki, shiō ${ }^{\prime} l \chi \mathrm{i}$.
shnokakia to detest, hate.
hashashuákia to converse with.
súlakia to miss from one's company.
(3) In a series of verbs in -kia, -gia the function of the suffix is simply that of a factitive -ka, -ga, with the particle-i-inserted. This particle gives it the locative meaning of in place or at that place, on the spot.
lákia, shlákia to lay, spread against a wall etc..
nxútagia to burn at the bottom of a cooking-vase.
shnúikia to build a fire on the spot.
shúixia to earry on one's shoulder.
tchákia to put into the mouth.
-gin, see -gien.
-gish, see -kish.
-gshh, see -kislh, -ksh.
-guish, see -kuish.
-h-, see Infixes.
-ha, verbal suffix forming intransitive and transitive verbs from verbal roots or bases. In some instances the -h- may be an epenthetic sound, as in páha to exsiceate, for pá-a; but in the majority of verbs the suffix points to an act etc. being done upon, on the top of something, and -h- can be thrown out, especially when standing after a consonant. This terninal is especially
frequent after 1 - and $t$, and seems to be a contraction of -hia, -a being the declarative, verbifying suffix, and hi the particle hi, i , "on the ground."
télha, téla to look upon, to overlook.
flha, ila to lay down upon; cf. ilhi to carry inside.
skúlha to lie on the top of; cf. skúlqa to be prostrate, to slecp.
stílha to put a string, rope, belt, etc. on oneself.
tchíaha to heat over the fire (liquids only).
shatnálha to heat the cooking-stones for baking.
kláha, kkála hail is falling.
nét'la, néta to place, put something sheet-like upon.
shlét'la to cover with, said of mantles etc.
-hi, suffix forming transitive and intransitive verbs from verbal stems. It has the same origin as the suffix -i, and often alternates with it by losing $-h_{1}$-, but is not quite identical with it. The function of -lii may be specified as pointing to an act or motion toward or into the lodge, dwelling, house of somebody or of oneself, that of homeward; the location upon the ground indicated by the particle hi, i being also the floor of the Indian lodge. This suffix often becomes emphasized, and is chiefly appended to verbal stems in -1 , -t, like the suffix -ha. Cf. -i.
spúlhi, spulí to lock up, said of one person; cf. ilhi.
télhi to look or peep into a lodge, a house, etc.
gúlhi, gulí, plur. killii to enter, pass into, go into.
húlhi, hálhe to run, rush into, inside of the lodge.
stílhi to report, amnounce at one's house.
puélhi to throw down into the lodge.
skílhi to crawl into a hole, den.
-hià’ıa, -hiéna, see -éna.
-huya, see -uya.
$\mathbf{- i},-\hat{i}$, a suffix frequently found in verbs as well as in nouns and adverbs Its function is not well defined or circumscribed, but may be generally described as localizing or locativc. When appended to nouns it is simply the particle i , hi; cf. hí in Dictionary; when suffixed to verbs it is derived f:om
it. The original function of -i , however, is not always apparent in the derivatives given below, for many of them refer, for instance, to the human or animal body. Cf suffix -hi.

1. Locative suffix - $i$ occurs chiefly in topographic terms and local names, and forms the locative case of substantives desiguating settlements, islands, rocks, rivers, brooks, islands; also composes locative case-postpositions, as -kshi, -ksaksi, and many particles. Appended to the nominal forms of the verbs it assumes temporal function; cf. 29, 19. 20. Examples: tchī'slii in the camp; stékishi where the door is; Mbákualshi, Néwapkshi, etc.

2 Substantives in -i. Some are derived fron verbs or are verbs made into nouns. They form the oblique cases in -am, -at, or -tat, etc. Those in which -i alternates with -e were mentioned under suffix -e. Several of their number are terms for parts of the animal body; others are animal and plant names.
(a) Parts of the animal body: láki forehead, ä'pakli hip, tchä'-i posteriors, tóki, Mod. tsónki, tsónұi horn.
(b) Names of animals: mú-i woodchuck, shuá-i white-tailed deer.
(c) Names of plants: klä'pi, species of rush, pä'ni, species of tall grass, lúlsi, species of Sagittaria, widshípi Mod. for widshíbam Kl., species of lacustrine reed, má-i bulrush.
(d) Other nouns: ktá-i rock, stone, vumí cache, klä'pki red paint, tchúyi bottom of vase, mállui rabbit-nct, kúkui brother of grandparent, mét'hli key-hole.
3. Adjectives in -i are:
tchmuyúksi unkempt, pumúksi having frizzy, crisped hair.
Pronouns in -i are:
huní and hukí he by himself, she by herself.
4. Adverbs in -i are not frequent, but show throughout a signification which was originally locative:
atí, áti, f́-ati distantly, far off; high up.
kí-i away from, on the other side.
kи́-i, kó-i badly, mischievously.
pélui down, down in, further away; cf. túpělui. plá-i up, high up, above, on high.
5. The verbal suffix -i in some instances alternates with -e, q. v., forms transitive and intransitive verbs from other verbs, and also occurs in several compound suffixes, as -lgi, -óli (-úli, -óle), -pělí (-p’li), -ui (-wi), etc. We have to distinguish between-
(a) The -i equivalent to -hi, as in gulí etc.; cf. -hi.
(b) The -i as an abbreviation of -ya, -íya, as in gélkai for gelkáya, né-i for néya, shúi for shúya; cf. -áya, -ya.
(c) The suffix -i used with reference to an act or status of the human or animal body. Examples:
aishi to secrete; refl. shá-ishi to keep as a secret.
äwisi to digest food.
kaili to gird oneself.
kuatcháki to bite in the hair.
pui to cut in fringes, to fringe.
tchuli and tchulía to put a shirt on.
A few verbs are inflected simultaneously in -a and in -i, there being a shade of difference in the signification of the two: hinua to fall upon something, hínui to fall on the ground, soil; gélzalka and gélzalgi, vulína and vulíni, pékslıa and pékshi, q. v.

Other verbs change their - $a$ to $-i$ in some of the verbals, as núta to burn, nutì'sh the burning, nuti'slit having been burnt; nan'sha to be sick, etc.
-i'a, -iya, a verbal suffix not to be confounded with -ia, because always accentuated upon the -i-, which is the particle $i$ used in a personal sense: for somebody, or in the interest of somebody. It is confined to transitive verbs only, and alternates with -éa only when that suffix is appended exceptionally to transitive verbs. The "somebody" or indirect object pointed at by $-i$ - is not always made mention of in the sentence in which the verb is used.
elktclinía to lay down for somebody on one's way; cf. élktcla.
kinshipkía to beckon somebody to come; kinshípka to point at. nutuyakía to throw for and toward somebody.
shapía, shapíya to inform somebody of; shípa to tell, apprise.
shlaníya to spread out for somebody.
shnukía to seize for somebody; shmúka to seize.
shuinía, dissim. shuinéa to sing for someborly; shuína to sing.
shutía, shutíya to make for some one; shúta to make.
vutikapkia to stick out the tongue at somebody; cf. vutikápka.
A special class of verbs in -ía are those pointing to doing something in sight of another to deceive or fool him, or to indicate an act by gesture.
shakěmía to play treacherously or deceptively; cf. shákěma to play.
shatashpapkía to make the gesture of washing one's face; ef tédsha to urash.
shelaktchía to indieate throat-eutting by gesture; cf. laktcha to eut the throat.
-ia, -ya (No.1), verbal suffix, unaccented, but of the same origin as the accented -ía, -iya Among the great variety of verbs exhibiting this suffix the only characteristic which they have in common is that they refer to the subject of the verb. These verbs are transitive as well as intransitive and are derived from other verbs. One of then, tchilqia, means to place upon the ground; the adverbial idea upon the ground being expressed by the i of the radix, and not by the $-\mathrm{i}-\mathrm{in}$ the suffix -ia.
(a) Intransitives in -ia, -ya:
kimália to feel pain, to smart.
máhia and smáhia to cast a shadow.
mékia to be or become a dotard.
ninia to flap the wings.
shlámia to be a mourner.
smúkia to take a mouthful.
shnéya, tchnéya to run straight out.
tchúya to melt; cf. tchókpa, tchutchéya.
(b) Transitives in -ia, -ya:
aláhia, álaya to point out, to show.
íhia to piek out, ehoose, seleet.
lgúya to piek berries, to shuek.
ndsákia to elose up, as an opening.
shatchlxamia to paint one's face or body white.
tkíya to rub slightly with fingers.
tchiléya to give, hand over something liquid or soft.
utátehkia to place a cover upon.
-ia (No. 2), a nominal, unaccented suffix which seems to form dininutives and to be an abbreviation of -iaga, -iag, -iak, though only a small number of bird-names proves its existence.
kúitchia, kúitsia, probably species of grebe.
titákia suallow; Mod. for títak Kl.
tuitia young duck.
-iát'na, see -éna.
-ie'ga, see -éga.
-ie'na, see éna.
-i'ga, -ika. The verbs in -íga, -ika stand in the same relation to those in -ĭga, -ika as the verbs in -ága, -úga to those in -ăga, -uga; cf. suffix -ăga. The suffixes -iga, -iga are combinations of the factitive -ga, -ka with -i-, which is either (1) the locative or (2) the personal particle $i$, reflecting upon the subject of the verb. In sheshatuika the -í- belongs to a suffix now forming part of the word-stem; -ka is the real derivational suffix. The verbs in -iga are formed from other verbs and are transitives as well as intransitives; cf. -liga.

> -i- personal:
shawíga to be irate, in a wrath.
shiukíga to kill, as birds etc.; cf. shiukía to kill for somebody.
-i- locative:
1shiklakuiga to frame a shed, lodge by means of rods etc.
shluyakíga to whistle, as a tune.
spatchíga to twist ; to ring a door-bell.
-iga, -ika. For the origin of the unaccented suffix -iga, see -íga. It forms transitives and intransitives, often forms compounds with other suf-
fixes, cf. shnákptiga; and -ga, -ka gives a factitive signification to the verbs composed with it.
ániga, ánika to advise one to help oneself to ; cf. ána.
kédshika to tire out, to become tired; cf. kédsha to be unable.
shínshiza to erowd each other.
skï'-ika to walk backward.
slnákptiga to ṣeize with tongs.
utchá-ika to grasp by the handle or long end.
widshika to be stingy, avaricious.
-i'ya, see -éa, -ía.
-i $\chi \mathbf{i},-e^{\prime} x^{i}$, a compound verbal suffix conveying the idea of local superposition, location above, and answering to our over, above, on, or over the top of, resting or remaining above somebody or something, or moving over the top of some object. The suffix has the penult long through accentuation and forms transitive and intransitive verbs from other verbs.
etlé $\not \mathbf{1}$ i to lay aeross and on top of another long object.
heshlíxi to put or wear a garment over or on one's shoulders.
huyiki to jump out upon the shore from the water.
ipené'zi to lay on the top of a receptacle already filled.
ktiwizi to lift or post up above, on the top of.
'mbutéze (for himbutéze) to jump over a log (hímboks).
ngangatíxi to play leap-frog.
shiwfixi to inerease, beeome stronger, as winds.
spíxi to pull, draw out upon something.
telizi, lukantízi to look over something.
tinizi to rise (sun, moon); to go uphill.
winíxi, Mod. vuízin to surpass, exeel.
-ixie'a, see - xiéa.
-ixia, see -xiéa.
-i'na, a suffix of transitive and intransitive verbs implying departure, separation, or removal of the verbal subject or object from the one speaking or from the indirect object. It is a compound of -na, q. v., and the par-
ticle i , hi on the ground, and points therefore to a motion either along the ground or downward to the ground. The suffix is frequently used to form derivatives from verbs in -la (-ala) and in -li, -lí, although to establish a suffix -lína would hardly be justifiable. Cf. -wína.
iwina to place, put down into; cf. íwa.
yiulina to send over the edge, push off from.
kituína to pour down on, into; ef. kítua to pour on.
nde-ulína to fall down from; cf. ndé-uli.
nelína to scalp, flay; from nīll, nél fur, animal skin.
uge-ishlina to make arrows from; ngé-ishla to make arrows.
tpulína to drive off, oust from; tpulí to drive out.
tulina to leave behind many objects; cf. túlha.
vutokělína to fall down from when hurt, shot, or drunk.
-insha, a suffix verbifying the verbal indefinite in -sh of verbs in-ina, -ina exactly in the same manner as -ansla does the verbal of verbs in -na, -ăna, -ěna. The functions of both suffixes are the same, except that -insha gives the additional idea of starting away from the water, or prairies, open places.
guikinsha to start away from water ete.
huikinsha to run away from the river etc.
huslilinsha, tilíndsha to leave at home, in the camp.
-ip, see -p.
-i'pa, suffix occurring mainly in transitive verbs. It is composed of the suffix -i as found in the verbs in -ía, and of the verbal suffix -pa intimating a motion toward the verbal subject. The function of -ipa is to show removal from somebody or some place toward the one speaking or acting, or supposed to do so.
gahípa, ga-ípa to catch breath with a grunt.
pudshípa to pull out.
shulshípa to take off, as a ring, from one's own finger.
udshípa, idshípa, ludshípa to strip, take off from; cf. ídsha.
-ipka, the idea of approaching, coming toward, nearing the verbal object, often the oive who speaks or is supposed to speak. It may refer to acts or processes performed at a distance, in close contiguity or vicinity, or on some person's body. Sometimes, however, the ending -ipka is the result of a contraction, and then -pka is the suffix, not -ipka; cf. gaká-ipka fronı gakáyipka (Dictionary, p. 33), and shne-ípka to kinkle a camp-fire habitually, which presupposes a verb slnéya. Cf. -pka.

The forns -ipkam, -ip $\overline{\text { ēni, etc. and -ípkash, -ípzash are sometimes }}$ oblique cases of the participles or verbal adjectives of verbs in -i, sometimes of verbs in -a. Cf. -tko, which is the form of their subjective case.
hantchípka to suck out of a person's body.
huntchipka to fly toward.
kidshipka to have the waterbrash.
láyipka to tuke aim at sonebody.
pakluípka to bark, howl at from a distance.
shikúdshipka to lean on a support.
tilō'dshipka to see somebody approaching
tínshipka to rise; said of sun, moon, because they seem to come nearer after rising; cf. tíushna.
-ish, -is, -sh. The real function of the suffix -ish, abbreviated -sh, has been pointed out under the heading of -ash as that of forming active or animate nouns from verbs. This suffix is appended directly to the verbal basis of verbs in -a, and usually remains unaccented. When the suffix is accented, -ish has the vowel long, and in the two following instances at least is the result of a contraction from -iash; it therefore belongs to -ash and not to -ish:
gukī'sh act of climbing; from gukí to climb up.
nuti'sh, nútish conflagration; cf. núta to burn.
A shortened pronunciation of -ish is that of -ěsh.
The suffix -ish produces nominal forms which nay, according to their signification, be classified as follows:

1. Verbals descriptive of quality, which are either verbal adjectives or adjectives, formed from attributive verbs:
pákish eatable, serviceable as food; from páka to feed on.
shánخish raw, uneooked; from shánki to bc raw.
shkóntchish pole-neeked; from skóntchna to stick the head out.
víshish coward; from vúsha to be afraid.
wawíshish productive of offspring; from waíshi to generate.
To these may be added the adjectives skétish left, left-sided; stelápkish right, right-siderl; vultchíkish, contracted: vúltchiksh dolichocephalic.
2. Substantive nouns, or names of inanimate objects, which are (1) either produced by the action of the verb from which they are derived (nomina acti), or (2) serve as instrument, tool, or means to the one performing the action of that verb.
lukísh breath, spirit; from húka to breathe.
kaílish belt, girdle; from kaíli to gird oneself.
kílkish hump, gibbosity; from kílka to become humpbaeked.
lěmé-ish thunder; from lĕména it thunders.
lútish round fruit, berry; from lúta to hang. down.
shléwish wind, blast; from shléwi to blow, v. intr.
spúklish sweat-lorlye; from spúkli to perspire.
shulótish garment; from shulóta to dress oneself:
Since the main function of -ish is an active and personal one, the above nouns can be regarded as things personified and acting. Indeed in English we can fitly render kailish by "girdcr," lutísh by "hanger-down," shléwish by "blower," and spíklish by "sweater."
3. Substantivcs in -ish, called nomina aetoris. These nouns designate animate beings which perform the act described by the verb more than ouce, constantly, repeatedly, or habitnally. When they are frequentative or usitative nouns they generally stand in the distributive or reduplicated form.
búnuish drinker, bubánuish drunkard; from búnua to drink.
ndéndinish prattler; from ndéna to prattle, speak.
pepuádshuish spendthrift; from puédsha to throw away.
shéshatuish store-keeper; from shéshatui to sell.
sheshtólkish prostitute; from shetólza to consort.
shishńkish fighter, bully; from shiúka to beat, whip.
Besides these are several terms of zoölogy in -ish, the roots of which have become obsolete, viz: kée-ish rattlesnake, híshtish sucker fish, tcháshish skumk, tchélish hetgehog, and others.
4. A few abstract nouns end in -ish: lushhúshlish warmth, from lushhúshli warm.
-ita, see -ta.
-i'ta, accented verbal suffix occurring chiefly in intransitive verbs, and indicating location away from or a motion toward the ontside. That function of its component -ta which indicates distunce is perceptible in it.
gunita to go or be beyond, on the other side of.
kitita to burst, cxplode.
kshifta to escape by rumning etc. (Mod.).
nitita to be open, sore, as from a wound.
shnekshita to save, deliver out of.
tgatita, tgutíta to stand outdoors.
-ya, see -áya, -ia, -ía.
-ye'ga, see -éga.
-ye'na, see -éna.
-yua. The verls in -yua are derived from transitive verbs in -ka, -ga (-uka), and are used when the action refers to a fow objects only. In the Dictionary a reciprocal function was given to some of them, but this appears to be secondary to that of a fcw.
idúyua to give kicks to a few; from idúka to kick.
ko-úyua to bite a few, or each other.
ktúyua to hit a ferw, to hit each other; from ktúka to strike.
stúyua to stab a fow; from stíka to stal.
udúyua to whip a few or each other; from sudukk: to beat
$\mathbf{- k},-\chi,-g$. Whenever gutturals appear as final sounds of a word, this is very often due to the dropping of a vowel-sound at the end of the word or to the transposition of sound within the final syllable. The various instances where gutturals figure as final sounds may be classified as follows:
5. Verbal forms sometimes drop the declarative -a, as in gánkank, hushtsō ${ }^{\prime} \chi$, shíug, especially in the Klanıath Lake dialect.
6. The partieiple of the present las the terminal -ank, -ink, -nnk in the Klamath Lake dialect.
7. Transposition from $-\mathrm{ka},-\chi \mathrm{a}$, as in tápaұ leaf, for tápka; verb tápka to stand out, project.
8. The gutturals are final sounds of a thematie root, as in láklak, adverb of laklákli smooth, level.
9. The diminutive nominal suffix -ága, -ak, -ag in an abbreviated form. Instances of this will be seen under -ăga; but we can add ktchítchok little bat, for ktchítchoaga.
10. Sometimes the demonstrative pronoun $k \bar{e}$ is abbreviated into $-k$, as in ik thou, or the verb gî to be, to do, to say into the same sound; cf. lápīk there were two (of them), katak to tell the truth, etc.
11. Substantives in which the final $-k$ could possibly represent a real derivational or formative suffix are the following:
ktchák mother-of-pearl shell (abbre- nē'k, nég, plur. nēgsha absent; cf. viated from ktchálka).
ktchīk oar, paddle.
$\underline{k} \ddot{i}^{\prime} \underline{k}$ penis; from kéka to pierce.
lák hair on head; cf. lála.
lqák canoe-pole.
lúk grizzly bear.
mā'nk $f l y$.
múlk worm, maggot; cf. múlû rotten wood.
níwa, níukla. stámk wasp. tápsnēk brain, Kl. tók, species of plant. tsuák, species of plant.

- tsúk, species of grass. wai'k, wék arm, limb of tree; from wá to be productive (cf. wéka child, offspring).
-ka, - $a$, verbal suffix occurring sometimes also in the shape of -ěka, -ga. Like-aga and -íga it forms factitive verbs, this term to be taken in its
widest, most general sense, and not to be limited to transitive verbs. From the other verbal factitive suffixes -aga, -íga, the suffix -ka differs ouly by having no vowel or syllable between it and the radix; -ka mainly occurs in short verbs of two or three syllables and forms usually verbs from other verbs, rarely from nouns or particles. The power of the suffix -ka can best be defined as directing the action expressed by its radix to a certain object, or as specializing, the action or state. Verbs like these are called by Spanish grammarians verbos aplicativos. The origin of our suffix lies in the pronominal radix k-, which appears as $k a, k \bar{e}$ and $k u$, some of its derivatives having been enumerated on page 251.
géka to set out from one's lodge etc.
íshka to extract; cf. ídsha to cause to go.
kédshka to remove out of, v. trans.; from kédsha.
kilka to become humpbacked; from radix of kílkali round.
kúiza to recognize; from kúi far off.
lápka and tápka to project, as cheekbones.
nīlka the day dawns; cf. nilíwa.
níuqa to drive out of an inclosure; cf. níwa.
nđámka nîsh it aches, lurts me.
pä'ka to dry out, to make dry, as the throat (Mod.).
púka to roast; cf. páha to dry.
shílàka, shílza to fall sick; fiom shíla to be sick.
shláka to watch, keep guard; cf. shléa to see.
shnéka to burn through; cf. núta to burn.
spúka to put the feet out; cf. ika to put out.
stápka to pound, mash up; from stáp stone implement.
stúka to shout through the hands; fiom stú passage.
tílza to drizzle down; from tíla to overflow.
-kakia'mna. Words showing this terminal should be called compound words, for -kakiannena is not properly a suffix, but a verb, and the first component is a verbal base or a particle. Only when these compounds are not used as verbs, but as particles, may -kakiáuna be regarded as a suffix. As a verb, kakiámna, gakiámna means to go around, to encircle, surround (see

Dictionary, p. 33); hence in the words below it lias the sense of moving, traveling, or going around an object or objects, and occurs in transitive and intransitive verbs.
ginkakiámna (1) to encircle as a hollow body; (2).postp. all around.
i-ukakiámna, adv. and postp., around, about, in the vicinity.
ipekakiámna to dig while going all around.
kuakikakiámna to go around here and there while eating, munching.
ntultakakiámna to flow around.
shalkakiámna to go or climb around an object.
shatashkakiámna to pass around while touching, grasping.
-ka'kua, verbal suffix appended to verbs of motion. It indicates a movement or swaying back and forth, to and fro, and is nothing else but the verb gákua, kákua to cross over, appended in suffix form to verbal bases.
nutókakua to swing to and fro, referring to the heavy disk on the pendulum.
stílkakua to send somebody forth and back, e. g., as messenger; cf. stílkakuish, Dictionary.
vutókakua to swing to and fro, referring to the long shape of a pendulum, stick etc.
-kani, -gani is a terminal appended to some adjectives, referring to an indefinite, uncounted number of objects, and differing from -kni. -kani is not always a suffix, but sometimes it is the adjectival suffix -ni appended to bases ending in -ka; therefore the adjectives in -kani are found variously accented. The adjective yanakaní, e. g., some one below, forms a plural yanakaníni. ()thers belonging here are kitchkáni (from kítchka), ndshékani, tyalampánkani, túmikani, etc., and some of the numerals. Cf. Dictionary, pp. 116. 117.
-ka'nka, or -gánka is a formative suffix found only in intransitive verbs or transitive objectless verbs. It points to an act or status undergone while walking or moving, and thus forms a class of ambulative verbs implying a single act, or the repetition, continuance, and steady succession of acts performed while in motion. These verbs describe the varions modes of walk-
ing, running, traveling, rolling, etc.; -kánka is the verbified participle -kank of the verbs in -ka, -ga, q. v.
gánkanka to be on a hunt; cf. géna to go.
killikínka to speed off; from nkíla to be in a hurry.
lokanka to go astray; cf. lúa to clrift about.
ndakalkánka to pick up while walking.
sha-ulankánka to follow constantly.
shniulatchgánka to glance off while in motion.
shipalkánka to go about stinking; from pílui to smell.
tilankánka to move onward by rolliny oneself.
vushókanka to go about while afraid of; cf. víshish terrified.
-ki, -gi. This is the verb gî used in its various acceptations of to be, exist; to do, perform, and closely connected with an adverb or noun preceding it. In most of these words gî could be written as a separate word.
(1) gî to be, exist, occurs in:
kä'gi, käíki to disappear, be absent; from ká-i not.
láki it is stolen, gone, missing; from lé, lá, gî.
lushlúshki to feel warm; from lúshlush.
p'laiki or p'laí gî to be at the culnination point.
shā'tki to be tired, exhausted.
stági to fill, to make full; from stá, adv.
Perhaps $k \bar{a}^{\prime} \operatorname{ltgi}$ and $\mathrm{ta}^{\prime} \chi$ tgi belong here also.
(2) gî to do, perform, occurs in:
ngà'sgi to have the diarrhea; from ngásh belly.
nkákgi to give birth to; from nkák top of head.
It also forms the substantive p'gishap mother, which I take to have the literal meaning of "generator."
-ke'dsha, see -kídsha.
-kia'mna, see -amna.
-ki'dsha, -ké'dsha, or -ggidsha, suffix found only in intransitive verbs and the causatives formed from them. It indicates a special circular motion,
that of veering or revolving around a real or assumed center, as we observe it in the motion of eddies, wheels, slings, or the circling of the birds of prey. The syllable ki- in -kídsha appears as a radical syllable in aggédsha and some other verbs, and in an iterated form in kedshamkedshalkéa. As for its etymology, it represents the verb kidsha to cravol, as snakes, lizards, to swim like fish. This verb really means to move sidewise; it is composed of the prefix ki- and the verb ídsha. From a large number of verbs in -kídslıa we select:
kiuggídsha to describe circles, to cause to turn.
ktiwalkídsha v . intr. to veer around; v. trans. to make revolve.
muigídsha to form eddy.
nakídsha, naggídsha to circle, float in the air.
niulgidsha to whirl around.
shtclukalkidslia to form a bend or bends turns.
talkídsha to rotate, gyrate.
tunkidsha to form a circle, as the rings in tree-trunks.
tchishgídsha to form a whirlpool, vortex.
wakídsha to make a completc revolution.
-kie'a, see -xiéa.
-ki'ma, or $-k k^{\prime} m a,-g g \imath^{\prime} m a$ forms intransitive verbs only, and points to something going around or encircling some round object in a level plane, as a rim encircles a basket, vase, etc. The syllable ki-, which expresses the idea of the circle, is the same as in the suffix -kidsha. In some instances the verbal suffix -ki'ma also serves for the nominal form, or the word may be used as a postposition. Cf. the suffix -ma.
aggi' ma to encircle, as inanimate things.
gaki'ma, plur. ginki' ma to move around in a circle.
takíma to form a ring, to stand in a circle.
tunkī'ma (1) to follow the edge, as of a plate, book; (2) postposition, all around, e. g., along the line of the horizon.
In compound suffixes $-\mathrm{ki}^{-}$ma also occurs in the words l $\chi$ akī'mitko having wavy lines, ktakimúla to cut off a round portion. A suffix -kē'mi appears in gakē'mi to describe a turn or bend.
-kish, -gish, or, in contracted form, -ksh, -gsh, -ks, is a nominal suffix forming substantives and adjectives from nouns and fromı verbs. It is composed of the radix $k i, g \hat{\imath}$ of the verb gî to be, exist, and to make, do, perform, and the nominal suffix -sh, -s, and has to be carefully distinguished from another suffix -ksh, -gsh which forms substantives also, but has a different origin. Cf. -kish No. 4 and -ksh. Our suffix -kish appears in the following functions:
(1) -kish, -gish, in the sense of dwelling at, living in, existing in, is the verbal indefinite of gì to exist, live. It forms some adjectives and names of tribes or nomina gentilicia. In the latter the oblique cases are formed from -kish, but in the subjective case -kish is usually superseded by -kni. Chiefly refers to animate beings.
ámtchiksh old, ancient; inverted from mā'ntch=gish.
p'laíkish living above; for the more frequent p'laikni.
shkíshgish tumblebug; lit. "living in the dung."
Móatokgish, contr. Mō’dokish inhabitant of Modoc Lake, and Modoc Indian.
Nushaltkágakish dweller at the head-waters (of Lost River).
(2) -kish, when derived from gî to exist and referring to inanimate things, is found in substantives descriptive of the place, area, or locality where an act is performed or a state undergone. The case-postposition -kslii, Mod. -gishi, lit. "where it exists, lives", is one of the oblique cases of -kish. Cf. -kuish.

Aíshishamksh, for Aíshisham kísh lodge of Aishish, 96, 23; cf. 122, 16
hashuákish vegetable garden; lit. "sowing place", from hashuá-a.
luélkish slaughtering place; from lúela to kill.
otilks dam below water; from utíla to lie below.
pálkish dry river bed; from pála to dry up.
pánkōksh for pánkuakish ford; from pánkua to wade through.
stókish gate; from stú passage.
shúdshgish fireplace; from shúdsha to build a fire.
shumálkish mouth of river; from shumálka to empty itself.
(3) -kish when derived from gî, in the sense of to make, do, perform, forms nouns which indicate that the action of the verb is done by means of them; that they serve to fulfill the purpose expressed by the verb, though not being exactly tools or instruments in our sense of the terms. The suffix for these is $-{ }^{-}{ }^{\prime}$ tkish, which is a compound of -kish. In some instances -kish can be rendered by "maker."
bnnōㅊish beverage; lit. "drinking object."
ínnaksh, for i-ímnakislı neckiwear; lit. "tling for wear."
háshpkislı fodder ; lit. "feeding-thing-for."
lóloksgish gun, rifle; lit. "fire-maker."
né-ulakgish council-meeting; lit. "decree-naker."
shípkgish nose-ring; lit. "used for wearing."
skä'kish heirloom; lit. "thing placed apart."
szolakgish Kl., s\%úlkish Mod., Indian bed; lit. "thing to lie down upon." tchúnukish vomitive ; lit. "vomit-causer."
(4) There is a number of substantives in -ksh, the origin of which is not exactly known. In sháyuaksh, wáltkish, widshíkish the ending is not -kish but-ish, and túpaks younger sister is abbreviated from típakship. The following may possibly owe their ending to a transposition of sounds:
hímpoks fallen tree, log; cf. hínui.
knúks thread, striny.
tchuléks meat, flesh; cf. tchilála.
-kla, -akla. This verbal suffix is a combination of -ka, -ga which forms factitive verbs, and -ăla, the meaning of which is very indefinite now, though originally it must have pointed to a downward motion along the body or other object. Most verbs in -kla are transitives and have the emplasis on the antepenultima.

> émtakla (for émtkala) to carry a baby on one's back.
> hashuákla to stay in company of.
> nílakla (for nilka-ĭla) to appear, said of daylight.
> níukla to confer through another; from néya to give.
shituakla to wrestle with.
sllukútakla, spukútakla, stíntakala to carry a child on the back, not tied to the baby-board.
-kni, nominal suffix forming adjectives and tribal names from nouns indicative of places, regions, localities, rivers etc., and from adverbs of locsative signification. The suffix can be circumscribed by "living or staying there, inhabiting that locality, to be found in that locality", and from this is derived the secondary function of "proceeding, coming, arriving from there, being a native of that spot or country", which we also find in the Latin ending -anus, the Greek - 205 , the German -er. -kni is appended more frequently to the case-suffixes and case-postpositions of nouns than to their subjective case, and when the adjectives in -kni occur in their oblique cases -kni is superseded by the oblique cases of -kish. Tribal names, names indicating citizenship, nomina gentilicia, are adjectives in all languages, and so are they here. A subdivision of the nouns in -kni are those in -tkni, q. v.
(1) Formed from nouns and particles:
atíkni stranger, alien, foreigner.
gitákni coming from, native of a place.
yánakni inhabiting lowlands or the lower course of a river.
kokagtálkni coming toward, from, or across the stream.
nákush $\chi$ ēnkni living near the dam, nákūsl.
tapítankni staying in the rear of
trigshtakni (for túgshtalakni or túgshtatkni) coming from or native of the other side.
Also in three numerals of the cardinal and adverbial series; cf. Numerals.
(2) Formed from local names:

E-ukshikni Indian (or settler) living on Upper Klamath Lake.
Kúmbatkni person living in or near the rocky caves.
Lókuashtkni Warm Spring Indian; lit. "Indian of the Hot Springs."
Móatokni (for Móatok-kni) Indian living on Móatok Lalie: Modoc Indian.
Oreginkni innabitant of Oregon State.
Plaikni highlander; uplander on Sprague River.
Tchakä'nkni Indian of the service-berry tract, for Tchak $\chi e^{-\bar{\prime}}$ nikni.
-ks, see -kish, ksh.
-ksh, -ks,--gsh, with vowel preceding. A number of words, chiefly substantives, exhibit this terminal on account of a transposition of sounds, . by which the rowel coming after the guttural was placed before this somd. All of them are derivatives of factitive verbs in -ka, -ga, chiefly intransitives. Not to be confounded with - kish, -ksh.
gútaksh (for gútkash) minnow; from gúta to adhere.
kátagsh (for kátkash) chill and adj. cold; kátka to be cold.
kélpoksh boiling heat, and adj. hot; kélpka to be hot. mépoks (for mépkash) company; mépka to live together.
shlä'yaks (for shlï-ikash) smoke; shlï'-ika it smokes.
shákpaksh (for shákpkash) plait of males; shákpka to braid one's hair.
-ksh, see -ash, -kish.
-kshka, -ksga, verbal suffix composed of the verbal factitive suffix -ka, -ga appended to the verbal indefinite suffix -kish, -gish, -ksh It can be rendered by to come near, to attempt, to do almost, forms transitive verbs only, and is of rather frequent occurrence. In its function it approximates -uya, -huya, q. v.
élqakshka to attempt to give a name; from élqa.
hishlákshka to come near killing each other; from híshlan.
któktakska to crop the hair; cf. któktcha.
kuakakshka to tear off only a piece with the teeth.
shlíkska to come near hitting, shooting; from shlín to shoot.
-kta, suffix forming chiefly transitive verbs, compounded of the factitive suffix -íga and -ta, which forms applicative verbs and usnally refers to persons or long objects standing upright. All the verbs in -kta had better be considered under -ta; some of them are nshákta it is sticking, shitchákta to quarrel, shnuyákta to singe, etc. The verb shnahualpákta to raise an echo is inverted from shnahuálpka-ta.
-kue'la, a suffix forming transitive and intransitive verbs of motion, with the idea of a downward motion in an oblique dircction, in direct contrast with the verbs in -wála, $q \cdot v$. The suffix contains the adverb kui or ku, which
implies distance, and the verbs in -kuéla mainly refer to falling or moving down hill or down stairs.
gekuéla to go downhill, to descend.
ktekuéla to slide downhill.
ktiukuéla to kick downhill or downstairs.
makuéla to cncamp on the hill-slope.
nde-ukuéla to fall or roll downhill.
shektakuéla to play at sliding downhill.
wetkuéla to flow, run, drip down.
-kuish, -guish, the preterital form of the nominal suffix -kish No. 2, describing place, locality.
máklakuish former camping-place; from máklak-kuish.
pálkuish ancient river-bed; from pála to dry up.
púkuish, abbr. from púkguish former roasting-place; from púka to roast.
-zie'a, -kiéa, is the verbal suffix -ízi, -é ${ }^{-} \not \subset \mathbf{i}$ preceded by one of the vowels $-a$ - or $-i$ - and amplified by the additional suffix -éa, -ía. This compound suffix therefore appears in the forms: -axiéa, -akiéa, -axia, -axia, and -iziéa, -ixia, -e-ixi, -aízi and others; it forms transitive and intransitive verbs, and points to an act performed on, over, or on the top of, refers to a location above another, to a pre-eminence or surpassing in height, position, or other quality. It also forms the substantive shuntoyakea- ${ }^{-}$'tkish play-ball.
ktiwiaxía to post upon, lift upon something.
ngankatíxi (for ngankatixiéa) to play leap-frog.
slampatixića to jump over logs.
sheatataläíxi to tilt or ride at seesaw.
sheklixiéa to hop on one foot.
shuklixiéa to compete, rival in hopping.
shuteliyía to carry on one's shoutler.
shutuyakiéa to throw at, upon, on the top of.
winíaxia Mod. for winíxi Kl. to surpass, excel.
-l, suffix found in substantives, especially names of animals; it is probably the remnant of a longer suffix (-ala, -ala), when it does not form part
of the root, as in spál ocher, from pála to beeome dry. We find it as follows:
yaúzal white-headed eagle; cf. yauyáwa, yä'ka.
kátchkal tobaceo, lit. "mixture", from katchága to mix.
kpél tail; cf. kpá poker.
skēl mink, Mod. telikél; probably from skílhi to creep into.
Other nouns aré: kó-il mountain sheep, yámal or kúmal pelican, nápal egg, ngî̀l jaekass-rabbit, táplal loon, tmókil green lizard, tchnípal shoulder.
-la, see -ăla.
-la'la, suffix forming transitive as well as intransitive verbs, referring to an act performed at, in, or near the fire. The word lúlukslitat in, at the fire, may be added or omitted, but originally the verbs in -lála referred to other things also besides fire, and seem to have implied nearness, close contact only.
galála to reach the eamp-fire, or place in which to pass the night.
hulála to run into the fire.
ilála to set to the fire, as meat.
kshalála to lie near the fire, or to place near it.
ktululala to push into the fire.
nutolála to throw into the fire.
tchilála to boil water, or in the water.
wiulála to strike a blow into the fire.
-lali'na, compound verbal suffix implying contiguity or contact and, as the particle -i-indicates, referring also to a motion downwird or on the ground ('hí, i).
galalina to walk on the water's edge.
yulalina to fall over an edge, said of water; to form a beach; also postposition: along the brink of.
-lalo'na or -lalúna, a suffix combined from -lála and -óna, -úna which implies contact or close contiguity, and by the particle $-u$ - refers either to
distance or elevation above the surface. This suffix, like -lála, is generally preceded by a vowel, and forms transitive and intransitive verbs.
ayulalóna to dry by the fire; cf. awála.
ilalóna to have something around the fire; cf. ilála.
yulalóna to move forth and back, to rub.
kshelalúna to stand along the shore, said of plants.
ktchi'hlalinna to creep around, or toward.
'mpetlalóna to float on the water's surface.
shekelalóna to cover up, fill in, as a hole.
shektlialóna to skate.
tilalhalúna to roll something over and over.
udumlalona to swim away on the water's surface.
-lam, see -am.
-lamna, -lámna, -álamna, a suffix composed of -ála and -amua, which forms almost exclusively transitive verbs. It conveys the idea that the action of the verb is performed upon or more especially across, all over one's or another's back. A distinction is made between túlamna to carry about across one's back and túdslina to carry on one's back.
aishílam'na to secrete about one's back or body.
galám'na to follow behind another.
hashupat'lámna to strap, tie to one's back.
hishplámna to lead, drag, tow by means of a rope slung over the back.
piligalámna to smear on somebody's back.
shépolamna to carry on one's back.
shiálamna to rub, smear on one's back.
shna-ulámna to spit all over another's back.
tchálamna.to sit with the back against something; cf. tchía to sit.
-lga, see -lxa.
-lgi, see -lki.
-li. Together with -ni, -li is the most frequent suffix employed in forming adjectives. But while -ni is appended to the simple root or stem,
-li is affixed to adjectives formed almost exclusively by iterative reduplication of the root which invariably ends in a consonant (exception, see p. 262). This consonant has coalesced with $-l$ - of the suffix in pálpali white, which thus stands for pálpal-li. The adjectives in -li describe color, sur-face-quality, temperature, or external shape, and the word, when the -li is retrenched from it, is an adverb. Many color adjectives exist showing other suffixes, but those in -li are the true and original color adjectives. The accent usually rests on the penult, though it often recedes to the antepenult. To the numerous instances of adjectives in -li given on p. 262 we add the following:
litchlítchli strong, robust, powerful.
lushlúshli warm (of animal heat).
mäkmä'kli gray.
patpátli smooth, even, level. taktákli, taktä'kli red, scarlet, crimson. táltali (for táltal-li) rumning straight.
-li'ga, -lika, verbal suffix forming intransitive verbs, some of which have passed into the condition of transitives. This terminal is a compound of three suffixes: -ala, the locative - i -, and the factitive -ga, -ka, it forms verbs pointing to a remaining on, upon, or near, especially near the water; on the beach or shore ; or to an act or motion performed on, upon, or near something, especially near, on the brink of the water.
kiuliga, nziuliga to drip or drizzle down, to fall upon.
laliga to stick upon; to be, remain on; to be on the water's edge.
pitlíga to smear, daub on, as pitch.
shatelíka to stick up on one's forehead; cf. tálka.
taliga to be in contact with; to be near the water.
tgaliga, liulíga to stand at the water's edge.
tchaliga, wawaliga to sit near, at the water, river.
-li'na, see -ína.
-1ka, see -lza.
-lki-, -lgi, verbal suffix composed of -ala, -la, and the abbreviated -gien, -giánggi, -kianki for oncself. Verbs showing a vowel before -gien were spoken of above, cf. -gien ; some of the verbs belonging here are as follows:
galtchuilki to go and mect somebody.
gél zalgi to reach the ground when descending, climbing.
gilxi to pass through onesclf.
hushtō'lki to heap up, accumulate for oncself.
klukálgi to haul, fetch, come for something.
shiō'lki, shiū'lki, shiō'lxi to gather, contracted from shiúlagien.
-l $\chi \mathbf{a}$, $-l k a$, -lga or -lěka, -filxa is a frequent suffix of verbs, transitive as well as intransitive, the former being chiefly of the objectless class. Many of them have to be considered as verbs in -ka, -ga, which suffix is appended to verbs or stems in -ala, -al, -ála; others are in fact verbs in -uál $\chi:$, q. v. In gatámlza to go around something, -lqa stands for $-n \not \approx a$ (gatámma-ka). The form -lxa is more frequent than -lka and the others above mentioned. The rather indefinite function of this suffix is to direct the action of the verbal basis upon a distinct objcct upon the same ground or level, a downward motion being implied in many instances.

> éza, nél $\chi$ a etc. to lay down upon, to deposit.
> gilxa to pass over a spot while stepping on it.
> gútal $x$ a to pass into, to enter; cf. gúta.
> yúlxa to strike, come down, said of missiles.
> kítěka to pour down, as rain; cf. kitíta.
> kpúlza to drive off; cf. puélxa to throw down.
> máklĕxa to strike camp for the night.
> mbútlya to jump or leap down.
> ptchiklxa to caress by patting.
> shemtchalla to find out, discover.
> shnalifga to blow noisily against, upon, above, said of the wind.
> stipálěa to turn upside down.
> udshiklza to fall when stumbling.
-lsh, -ls forms nomina verbalia by means of the universal nominal suffix $-s h,-s$ from verbs in -ăla, -la, which have partially become obsolete. The words belonging here may be classed as well under -sh as under -lsh.
kakıō'lsh parflesh, skin-armor.
luátpishlalsh death-lament; from luátpishlala to mourn over.
sháwalsh arrow-head; from sha-úla to place at the end of.
shéllualsh warfare, war; from shéllual to make war.
shuä'kalsh sleeve.
túpalsh persimmon; cf. túpesh dough, soft substance.
-m. Substantives in -m preceded by a vowel other than a, $\ddot{i}$ (-am, -lam, -im ) are not frequent and seemingly all monosyllabic. This suffix seems to be the remnant of a longer one, and in the case of lgúm is a possessive case (for lgíam). We add two terms in -äm with difficult etymology.
kiä'm fish; cf kídsha to swim, kä'mat back.
lgám coal, burnt wood; from Igú black paint.
púm beaver
spúm female of the skä'-bird.
shúm, súm mouth; cf. sí mouth, tooth in Californian languages.
witä'm black bear.
-ma, suffix occurring frequently in transitive and intransitive verbs, and pointing either (1) to an act performed or state undergone upon the ground or on a level plane, as lying about, spreading around; or (2) to a curvilinear motion made upon the ground, on the body or some other object, or in the air. This suffix forms many compound suffixes, as $-k^{-1}$ ma, -maga, -mā'shka, -máwa, -měni, -mía, -mla, -m'na, etc. Ma also occurs in substantives, as in káslıma (a plant-species); with -i-inserted in shatchlzámia to paint oneself white.
(1) éma to hand over, as a babe tied to the board.
kéltama to let fall, drop upon the ground.
ktuyúma to cut into many pieces.
kuyúma to be muddy.
léshma not to discover on the spot where sought for.
skipma to vanquish, eonquer.
tchuyóma to be idle, to lounge about.
udáma, vudáma to cover with something thin.
(2) gaima to grind, to entsh, to mash fine.
shá-utama to wrap around oneself.
shuadshamtchma to wag the tail.
shutelóma to smear upon one's body.
tchatchákma it is hazy weather, Mod.
tchéma to fracture, break, as a limb.
tchíptchima to driszle down in atoms.
wapíl'ma to wrap, tie, wind around an object.
-m'na, -mиa or -ména, with another vowel than $a$ - preceding, has been analyzed under -amna, q. v, and like this, points to the act of coming or being around, upon, above, of surrounding etc. Cf. also -lamna; their distributive form, see p. 273.
hishplâ'mna to drag by means of a string over the shoulder; refl. of shepolámna.
kpúyumna to revolve in the mouth, to masticate.
-měni, -m'ni, suffix composed of -ma and -na, the locative suffix -i being substituted to the - $a$ of -na; -měni expresses a winding around something, and is also met with in the substantive kén'ni vine, creeping plant.
gáněni to wind around, climb by going around, to dodge.
háměni to attempt, to try; lit. "to try around."
hunúměni to fly up by turns, ko'shtat upon a pine tree.
The same suffix also composes the verb hushamnitimna to shrug the shoulders continually.
-mtch, -mtcha, -mtchi, see -ptchi.
-11 is a suffix occurring in a restricted number of verbs and nouns, all short and mostly monosyllabic. This suffix $-1 n$ is preceded by a vowel, and is probably in most instances the rest of an apocopated -na, -ana, -ina etc.

Ndán three is abbreviated from ndáni; té-in recently, from té-ini new, recent; tapítan, wigátan and other postpositions in -tan stand for tapítana, wigátana.

1. Verbs in $-n$ are chiefly intransitives, and lose this suffix in several of their inflectional forms, like the verbs in -na; cf. pá-uk for eating (from pán), shlā't! shoot ye! from shlín, ā't. See Paradigm below.
ktclıán to masticate.
kápen to cool down.
lxán to form waves.
pán to eat, feed upon.
p'lín to become fat.
shnípělan to make fat.
shlín to shoot, wound.
t'shín to grow up.
ukídshlin, v. intr. to blow, pass, or waft through.
vulán to watch fish at ice-holes.
wén to freeze.
2. Substantives in -n. A few of the nouns below appear to be participial forms, but of the majority the derivation is unknown.
kā'n urine-bladder.
kä'nkan, kéněkan gray squirrel.
kshún hay, from kshéna.
kákan a bird-species.
pshín night-time.
tíntan bell, fromı udíntěna.
vū'n elk, from vu-úa to halloo; lit.
"hallooing (deer)."
wán yellow or red fox.
-na, a suffix of a more abstract nature than most others in Klamath, forms nouns and verbs, and as a verbal suffix is very fiequent. It is derived from the same radix as the prefix n-, the verbs néya, néwa, naináya etc., all of which refer to something thin, sheet or string like, or to something extending along the ground into distance as far as the horizon.
3. -na as a case-suffix expresses direction, and is called by me the suffix of the transitional case: to, toward, in the direction of. Cf. Inflection of the Substantive. It also serves as a suffix to particles : ina, yána, múna, túna, etc.
4. -na as a nominal suffix is related to the adjectival -ni, and occurs in the following substantives, some of which have probably been verbs at first:
klána, species of a root or tuber.
yaína mountain, yaina-ága hill; cf. yána.
lěmúna ground, bottom, depth.
tchuákěna cotton-tail rabbit.
wákshna moccasin.
5. $-n a$ as a verbal suffix is appended only to transitive and intransitive verbs describing or considered to describe motion, and there are many instances where the simple form and the form in -na occur simultaneously. Verlss of motion in which -na is found are those of taking, throwing, giving, conferring, walking, flying, traveling by water or land, etc., and also those expressing motion of the air produced by sound, as calling, hearing, thundering. This suffix also composes a large number of other suffixes, as -kna, -tana (-tna), -tchna.

In many instances the function of -na is to point to a distance, or to a short distance, away from the subject of the sentence or from the one speaking. This will appear from the following examples:
hémta to call somebody, héntana to call somebody to come.
húta to rush at, hútna to rush some distance at somebody.
kpútcha to expel, oust, kpítchna to spurt from mouth.
léwa to play, lé-una to play at some distance.
kédsha to grow, kédshna to grow on, to continue to grow.
k'léka to die, expire, k'lékna to be moribund.
ndé-uli to fall or roll on the ground,, nde-ulína to fall, roll a short distance.
wélka to produce a blaze, wélkana to blaze up.
There are many other parallel forms of this sort to be found in the Dictionary:
lúnta and húntna to fly.
íka and íkna to extract.
líwa and líuna to assemblc.
vutódsha and vutódshna to reject.
wíudsha and wíudshna to bcat.

Other verbs in -na occur only in the suffixed form, because with them the object of the verbal motion is always removed at some distance, large or small, from its subject, or the subject is supposed to be in progress from place to place, as in lěména it thunders.
génana to travel uninterruptedly.
húntclma to fly or soar in a straight line.
yúshakna to usc the index-finger (yúshzish).
kuéna to make or leave footprints.
l $\chi$ áwana to move the fingers, toes.
pána to plunge under the water.
shewána to give, hand over.
spélslına to put fingers forward; cf. spéluish.
stút\%na to emit somnd or voice, stút\%ish.
wakěna to ehange the voice at maturity.
Many verbs in -na lose this suffix in the distributive form ; cf. p. 273.
-ni, nominal suffix related to -na, and especially frequent in adjectives and numerals.

1. Among adjectives those in -ni are among the most frequent, and doscribe qualities of an abstract or immaterial sort, while those in -li are of the concrete order. This suffix is almost invariably preceded by a vowel, and in the oblique cases clianges to or adds -énash, -ä'nash, -yä'nash etc., as will be seen in the chapter "Adjective." When the suffix -ni is retrenched, the stem or radix remaining is usually, not always, the adverb. Cf. Suffix -tani.
ké-uni slow, easy; adv. ké-una and ké-uni.
kiukáni few, scarce; adv. kínka, ginka.
komû'shni rmaway, wild.
letaláni mischievous; vicious; cf. tála straight.
lupíni first in rank or age; adv. lupí.
múni great, large, bulky; adv. mû.
stáni full, replete of; adv. stá.
tapíni coming next, subsequent; adv. tapí.
2. Certain substantives can be transformed into a sort of adjectives by the affixation of -ni, in the distributive form -nini, with the definition of: "all that sort of, all that refers to or is connected with him, her, it, them." Thus wéwanuish women forms wéwansni women and all, women and their families; máklaksni Indians and all connected with them. Tátaksni children occurs in
that form only; obj. case tatákiash. The adjective yánakani lower forms a distributive yanakaníni. Example:
népni nû shlín $I$ was shot in the hand.
nepníni nû shlín I was shot in my hand or hands at more than one spot.
nepníni nû shlíshlan I was shot in my hand or hands at different places by scveral shots.
3. In the numerals there is a series in -ni corresponding to our adverbial numerals, and another giving the series of cardinals in the non-apocopated form. Ex. vúnepni five and five times. More about this see under "Numerals" and suffix -kni.
-ni'ni, see -ni.
-nsh, -ntch, see -tch.
-0, see -u.
-odshna, see -utchna.
-oi' $\mathbf{i}^{\prime} \mathbf{i}$, -fǐizi, a compound suffix approaching nearest in signification and origin to -wiza, q. v.; but it differs from it by pointing to something being turned up or inside out. The particles composing this suffix, even the final -i, are all of a locative character. Cf. -ízi.
ndshindshoíxi to turn up, as a hat's brim.
pleto-ixi to purse up the lips.
tchlitóixi to turn inside out, as sleeves, the eyelid etc.
-ok, see -úga.
-o'la, -íla, originally -úala, -wála, a verbal suffix emphasized upon the penult, which is long by contraction of the $u$-, lut-, pointing to distance, with a- of the suffix -ala. It can be appended to the majority of verbs in Klamath, and generally points to discontimuance. No verbs in -ola, except perhaps kapóla to doff one's coat, are verba denominativa.
(1) -óla, -úla implies cessation or termination of the act, condition, or state expressed by the verbal basis. They are so easily formed that dictionaries need not mention all of them.
búnua to drink, bunúla to cease, stop drinking.
hushákia to lock, hushakióla to unlock.
$\mathrm{kto}^{-}$dsha it rains, ktodshióla the rain is over.
wítcha to blow, witchóla to cease blowing.
(2) -óla often imparts to the verb the idea of taking off, depriving, departure or abandonment; and in consequence these derivatives often mean just the contrary of the simple verbs. Thus -óla often corresponds to our un- in unyoke, to dis- in dismount, or to the particle off.
gelóla to dismount from horse, wagon etc.
illóla to take off a load, to unload.
ktchikayúla to come out of the woods. shataknúla to remove from the mouth. tchelóla, Kl. ktchelóla to husk, to peel. witznóla to blow out from mouth.
(3) A third class of verbs in -ofa embodies the notion: on the surface, on top of, and will be discussed under -wála, q. v., of which -óla is the contracted form.
-O'li, -óle, -úli, a verbal suffix formed like -óla, with the penult long and with substitution of the locative - (-hi) to the ground for -a. It occurs only in verbs of motion and imparts to them the idea of downward, downhill. Thus kukóle to undress possesses the literal meaning "to let the $\mathrm{k} \hat{\mathrm{u}}^{\prime} \mathrm{ks}=\mathrm{gown}$ fall to the gronnd."
histanúli to cause to go down.
ndé-uli, wetóli to fall, slide down on the ground.
shanalıōli to wish, desire, want.
shutúli (and shutúla) to unloose, to unfetter.
telóli, telúli to look down upon.
tinóli, tinúle to run or go downward.
tpékūle to stoop, to bend one's body.
-ōpka, - $\bar{u} p k a$, verbal suffix, in which the long vowel $\bar{o}, \bar{u}$ is the result of a synizesis of $u a-$, wa-. 'This long vowel is sometimes accented, sometimes not; the verbs from which the derivatives in -ōpka are formed are of a dif-
ferent character, and so the suffix itself of the derivatives assumes different meanings.
4. Desiderative verbs in -opka formed from the original form of the future tense, -uápka:
panōpka nûsh $I$ want to eat; from pán to eat.
shlï'pōpka to observe, lit. "to want to see"; from shléa to see.
5. Derivatives in -ōpka pointing to distance or height above the ground; derived from verbs in -ua, -wa or from nouns in -o, -u :
kapō'pka to put another's (absent) coat on; from kápo.
liupka to sit in a circle or crowd; from líwa.
né-upka to discharge itself into a lakc; from néwa.
shnekúpka to be lit up above; from shnéka.
6. Usitative and iterative verbs in -opka, -upka have their -o-, -u- short; see -pka.

- $\overline{\mathbf{O}} \mathrm{Sh},-\bar{u} s h$ (vowel long), a nominal suffix formed by synizesis from -uash, -wash. It forms derivatives of verbs in -ua, -wa, which are either adjectives or substantives. In héshkush game-stake, $u$ is short, because derived from héshku to bet.
héshtchûsh decoy, snare.
kílōsh, nkílūs angry, audacious; subst. fighter.
lalá-ūsh and laláwash slate-rock.
lélosh for leléwash, d. of léwash ball, globe.
lkólkōsh, Mod. hlekohlékōsh flank of quadrupeds.
nákōsh, nákūsh dam; from nákua.
nta-u'htūsh pulsation of heart; from ntá-u'htua.
skaúkuslı, ska-ukōsh species of woodpecker.
ukaúkōsh moon in all phases; for uka-ukáwash, this from ukéwa to break into pieces.
- o'ta, see -úta.
-0'tkish, -útkish, nominal suffix extensively used in nouns, with penult long, and in the conversational style often contracted into $-\bar{o}^{\prime}$ tch, $-\bar{u}^{\prime}$ teh,
-atch This suffix is a compound of the durative suffix -úta, -óta and of -kish, -gish, q. y. (-ōtch occurs also as a contraction of -uish.)

1. In personal names, -6tkish forms nomina actoris, describing the habitual employment or every-day occupation of persons. The component -kish can be rendered here by maker, from gî to do, perform.
shaklótkish player, gamester, gambler.
shashzótkish beggar.
shīteótkish player in a throwing game.
2. In names of iuanimate things, -ótkish forms nomina instrumenti descriptive of tools, instruments, as things used repeatedly, habitually, customarily. The component -kish is here -kish No. 3, q. v.
hushmoklótkish razor: beard-pincers.
kshulótkish, Kl. mulinótkish scythe.
pienítkish, contr. pienúatch scraping-paddle.
shımalótkish, contr. shámaluatch pen, pencil etc.
shutoyótkish, Kl. sputoyótkish plow.
-ōtch, see -ótkish, -uish.
-p, a suffix marking inalienable property, which now occurs in substantives only, but at an early period of the language may have been a possessive pronoun, his, her, its, theirs, or somebody's, for it is evidently related to pi, p'na, p’nálam, pāt, pish, pash, and to the prefix p-.
3. Terms of relationship in -p, usually -ap,- ip . 'They mark relationship by kin and by marriage; and here we find also the prefix $p$ - in exteusive use in the ascending and in the descending line. In the oblique cases and in forming compounds and derivatives the terms in -ap, -ip lose these terminals: ptísh=lûlsh deceased futher, for p̈tíshap=lílish; shiptch $\chi$ álaltko related to each other as brothers- or sisters-in-law, from ptchíkap sister-in-law. Distributive plurals are formed from -p by substituting -ishap to it, and a few of these terms possess another distributive form created by reduplication:
makokkap, d. makokkislap and mamkokap sister's son or daughter, said by aunt.
pgíshap, d. pgishishap mother; pgish:lúlatko bereaved of the mother.
ptálip, d. ptálishap elder sister; said by younger sister.
ptéwip, d. ptéwishap and pteptéwip son's son or llaughter, said by grandnother; and grandmother, said by son's son or daughter.
skúksap mother whose children are all alive.
túpakship, abbr. túpaksh, d. tútpaksh younger sister. Cf. p. 275.
4. There are a few other generic terms in -p in use to designate persons as "belonging to somebody":
ptchíwip master, mistress of slave.
shítchlip friend; from shítclla to associate with.
5. Some parts or limbs of the body, human or animal, show this proprietary suffix $-p$; here it is not dropped from the words when oblique cases or compounds are formed: lúlp eye; nép hand, cf néya to give; pílhap sinew, ligament; shuakáp omoplate; also káp in kapkápo wristbone; ťóp in tzópo thumb.
6. Other terms in -p, some probably formed through apocope, are as follows: lép bran; pä'p marten; sxīp a bird-splecies; stáp stone implement; tk fop plant with upright stalk; cf. tzópo thumb.
-pa, verbal suffix pointing to an act directed toward the subject of the verb. It is related to the pronoun of the third person pi, pish, pāt. Other suffixes are composed with it, as -ípa and -tpa, q. v.; in the latter the above function of -pa becomes still mor6 apparent.
hlópa to lap, draw into the month.
ktétspa to tear or cut particles from the rim.
ndúpa to smell something; to be rotten.
shnúkpa to take to oneself; cf. shnúka to seize.
tchókpa to drip down, said of water, snow, ice.
The meaning toward oneself is not so plainly marked in verbs like kshápa, ntúptpa, ndshíptchpa, shápa, shninshíptchpa and udúpkpa; cf. -tpa. In háshpa to feed, -pa, from pín to eat, represents the radix.
-pali, see -pěli.
-pa'ta, verbal suffix marking contact and occurring in the verbs of touching, reaching up to, pushing etc. Being composed with the suffix -ta,
q. v., it refers to long objects, as canoes, poles, persons, hands, etc., these being either the objects touched or the objects through which other objects are touched, pushed etc.
kapaita to touch: skapaita to touch oneself.
kiupáta, sqapáta to land, disembark.
kshapáta to lean against.
lkapáta, ndakalpáta to make surf.
stapáta to stand against something.
tapata to hold something by means of an intervening substance.
tchapáta to reach the shore, Mod.
-patch, see -ptchi.
-pěli', -p'le, or -p'l, -bli, various forms of one and the same verbal suffix, whose original $a$ re-appears after $p$ in several inflectional forms: sukōlkipaluk in order to re-assemble. This suffix marks return, repetition, re-instatement in all kinds of verbs, and can often be rendered by the English preposition re-; its primary meaning was that of replacing into the former condition or location. When appended to verbs in -na, -pěli becomes -mpeli by assimilation: wémpěli to recover one's health.
7. Verbs in -pěli denoting motion in zigzag lines or voltas, thus impressing one's vision with the idea of return to an earlier position or place:
gutilapkápěli to make turns while descending.
húlipěli to run into or through a tortuous road or valley, cañon.
huízipěle to run, jump out of again.
hópěli- in hópélitchna to dodge.
yutálpěli to twist, as paper, cloth etc.
8. Verbs in -pěli denoting re-instatement often express the idea of taking or going home, doing a thing again etc. :
émpěli to take or bring home; from éna to bring.
gémpěle to return home, to one's camp; from géna to go.
gutgápěli to climb down; from guká to climb up.
hashpáxpěli to rub oneself dry; from spáha.
kilibli to retire to the den; from kílhi to enter.
kúkpěli to put on the kúks-gown, as done every morning.
na'hlípexli to string the bow, even when not strung before.
népěli to turn over, upside down.
waltákpěli to debate, to talk over and over.
-pka. The verbs in -pka preceded by a consonant, a few verbs in -ípka, and those ending in -opka, -upka ( $o$ and $u$ short) when $i, o, u$ belong to the stem of the word, are :
(1) Iterative verbs, and have the penultimate accented. They are formed from transitive as well as from intransitive verbs, and some of their number are usitatives, indicating habitual practice. A compound suffix -ámpka is made from verbs in -ána, -ana; -ánkpka is made from verbs in -anka; another; -alpka, q. v., from verbs in -ăla, and here the accent sometimes recedes further. The suffixes -alpka, -ápka, -ipka, -ōpka, -uápka were spoken of separately.
ktúpka to strike repeatedly with clasped hand.
léklekpka to whisper.
mákpka to encamp many nights away from home.
sla-ámokpka to call somebody of one's kin .
shahuálpka to send the echo back, to form echo.
shä'tupka to consort with, cohabit.
shuktúpka to push repeatedly.
vudúpka, udúpka to strike repeatedly with a stick etc.
watchpka to win all the stakes.
(2) Other verbs in -pka, with consonant preceding, point to distance, and belong to the class of -ápka, -ípka, q. v. For instance: skúlpka, shuílpka, telitánkpka, telshákpka, túpka.
-p’1, -p’li, see pěli.
-p'na, -pěna, -pna, suffix appẹded to verbs of nıotion and marking contact, approach or going past, passing beyond some object; is composed
the two suffixes -pa and -na. Their distributive form is made after the rule pointed out p. 273. Cf. -na.
gátpna to go, come near ; gaitpnunk passing by.
liutápěna to run near, to rush past.
kinyátp'na to form an angle; also subst. angle.
ktútpna to bring near or to somebody.
-ptchi, -tehi, -teh, -mtchi, -mteh is a nominal suffix forming adjectives from substantives, pronouns, and adjectives, with the signification of like, looking like, resembling. 'This suffix of comparison forms adjectives of a concrete, palpable signification, while those formed with shítko, Mod. shútka, are of an abstract meaning. Through phonetic fusion of the word and the suffix the labial of the latter is often altered and the last vowel dropped, and in the oblique cases we have -ptcha, -tcha, -mtcha; in shípatch adapted to, inversion takes place for shí=ptchi. Ptchi seems to have been once a term for body or face; it shows the prefix p-and seems related to pshísh nose, ptchaklza to pat, earess. Some nouns in -sh lose, some preserve this suffix, when they assume the suffix -ptchi.
9. Derived from pronouns and adjectives:
haktchámptchi one who looks or behaves that way.
húmtchi sueh-like, one of that kind; for hû'n=ptchi.
kó-idshiptchi ungainly, hateful.
shuhánkptchi similar to, of same shape.
tidshiptchi pretty good, laudable.
wákaptchi how shaped, how formed.
10. Derived from substantives:

Aíshishtchi Aishish-like, beautiful.
yámnashptchi bead-like, of blue color.
kó-eptchi toad-like, looking like a toad.
tulalíptchi light green, looking like a swamp-grass mantle. vunshákaptchi long and hollow-shaped, lit. "small-canoe-like."
-sh, $-s$, is the regular and most common nominal suffix, the substantiveforming suffix par excellenee. 'Through it a large number of roots and bases
assume nominal fumctions. It occurs in the great majority of substantives in their subjective case, forms the objective cases of the generic terns for persons and proper names of persons, of the rames for the higher animals, of adjectives, numerals, and pronouns, and composes several of the verbals. In all these forms it is preceded by a vowel, generally $a$, though this is frequently elided. It composes the majority of the nominal suffixes, as -ash, -ish, -kish, -lṣh, -ó'sh, -ótkish, -uash, -uish, etc. The final -s is more archaic than -slo, and is chiefly used in the conversational form of language.

1. The verbal indefinite and verbal conditional are formed by adding -sh, -sht to the full form of the verb, though phonetic laws sometimes effect changes and inversious of sounds.
ká-ika to act extravagantly; ká-ikash "the extravagant actiug"; also, "one who acts extravagantly."
shéllual to make war; gé-u shéllualsh "the making war of mine", my warfare.

Only the syntax can convey a full understanding of all the mearings of these and other verbals. Cf. -ash (Note).
2. Adjectives in $-s h,-s$ are those in -ish, a few in -ash (pópamkash hairy), the numeral nā̀dsh, then kélpoksh hot, kátagsh cold.
3. Substantives in $-s h,-s$. 'Terms where this suffix is joined to the radix without any intervening sound, or where the quantity of the radical syllable points to a contraction of some kind, are mostly monosyllables.
(a.) Parts of the human and animal body:
kólansh knee, nísh neck, nkáslı belly, ıû̂'sh head, písh gall, pshísh nose.
(b.) Other objects of a concrete signification:
é-ush lake (from éwa), héshkush game-stake, kō’sh pine tree, kúlsh badger, $l^{\bar{a}}$ 'sh wing, $\mathrm{lo}^{\prime}$ 's a goose-species, wē'sh ice (from wén).

In a few terms -sh alternates with -tcli, as in kí-inslı, kí-intch yellow jackct-wasp; but this change has to be ascribed to phonetic corruption; cf. suffix -tch.
-sa, see -sha.
-sha, -sa, a suffix forming almost exclusively transitive verbs from other verbs. They refer to acts performed with one's own body or upon one's own body, or parts of it, some of them being iteratives, as kpudsho${ }^{\prime}-$ sha, ulágsa. Some analogy exists between the suffix -sha and the medial prefix sh-, and in a number of terms both affixes are found simultaneously; -sha is somerimes heard as -tcha through faulty pronunciation.
génashia to follow or to go pell-mell ; cf. géna.
hamóasha to shout at somebody.
hushásha to threatcn with a blow.
kpápsa to taste, degustate.
kpudshō'sha to suck at.
ndílsha to knock, produce a thud.
shatzásha to put paint on body, face.
shégsha to inform, report, apprise; cf. shéka.
shlépĕsha (and tchlépeshi, tchlépshi) to cover with ashes.
ulágsa to lick, lap, lap up.
A few intransitive verbs in -sha are as follows:
kmutchō'sha to bubble up in water.
shúisha to bccome lean, mcager.
-shka, -ska, suffix forming transitive and a very limited number of intransitive verbs from other verbs by imparting to them the idea of departure, separation, divergence, or removal. When removal is expressed it is usually a sudden removal by the hand.
guhuáshka to depart, leave, quit ; cf. gúshka.
húshka to run or swim away.
inuhuáshka to prevent, kecp away from.
ktúshka to cut out from, to cut through.
ntcliama'shka to wipe off.
skínuashka to creep away from.
sұowáshka to keep away from the shore.
shuilálslika to shake off from one's body.
-sza. This verbal suffix, sometimes pronomeed -shza, is usually appended to verbs ending in -na, -ta, -dsha or -tcha, and therefore has a consonant before it (excepted tósza, tús za to shove, introduce into) which is preceded by a short vowel. This suffix conveys the idea either (1) of close proximity, and then answers to our near to, through, between; or (2) that of superposition, and then corresponds to over, upon, on the top of. Cf. -tchka.
(1.) hutámsza to run, rush, jump between; from hítna.
i-utánsza to be among, between; postpos. between.
ntúltch $\chi$ antcha to flow through or between.
tálsza to see, look through a tube.
tgits $\chi$ a to stand near or between.
(2.) hínsza to fall upon or near something.
idsza to deposit long objects on the top of; from íta.
shlédšza to spread a sheet-like object over; from slléta.
tilans $\chi$ a to roll upon or to move the hand over something.
-shla. The verbs ending in -shla are, the majority of them at least, derived from nouns in -sh, and therefore belong to the verbs in -la, -alla, q. r. Of these verba denominativa we have given examples under -ăla $\mathrm{N} ぃ .2$, p. 315 .
-t frequently terminates words, especially when preceded by a vowel. Final -t is an inflectional ending or part of such, and often appears in an apocopated form in the following two kinds of suffixes:

1. Verbal conditional mode in -t: shurikat, from shmúka to grasp; pait, from pán (for pánat) to eat ; ídshant, from ídshna to carry off etc. Cf. Verbal Inflection.
2. Suffix -t, apocopated from -tat, -ta, -ti, -tu, is frequently met with, especially in the oblique cases of adjectives, numerals, and of pre and post positions; cf. Nominal Inflection and suffix -ta.
käílant, kaiilat for kaiilanti, kaílatat on or in the ground.
lápkslapt for lápkshapta(ni) seven.
nágshtant, túgslitant for nágslitanta, túgslitanta.
3.     - $t$ appears as a derivational suffix in a fow substantives, though in monosyllables we are uncertain whether it forms part of the radix or not (k $\hat{u}^{\prime} \mathrm{t}$, tút):
gilít, kilít hole, fissure, anus.
kěnáwat horse-sorrel.
knā't rocky, dry land.
kût, sort of flour.
néwisht remains.
Sā't, Shā't Snake Indian.
tút, d. tútat tooth.
tchk $\hat{u}^{\prime}$ t, species of bitter cabbage.

The points of the compass, as yámat north, lúpit, múat, tqálamt are abbreviated forms from yámatala etc.
4. There are a few particles ending in $-t$, as-
àt, át at the time, then; gént thereabout; húmasht thus; mbúshant to morrow; pä'dshit to-day; pä'ktgisht after daylight; pshéksht, pshíksht (and pshéksh) at noon-time.

The two last-mentioned clearly bear the stamp of verbal inflectional forms. Cf. also the postpositions ending in -ant.
-ta, a suffix chiefly occurring in transitive verbs, also in a few nouns which probably were verbs before. The function of -ta is that of forming applicative verbs analogous to -ka, but differing from this by referring more exclusively, like the prefix ta-, to persons and to erect objects of an elongated form. Originally, $t a$ is a radix of demonstrative signification, which still appears in táta at that time, tánk then, and in pronouns -t refers to animates and inanimates as being at a distance: hû't, hû́kt, lúkta, hû'nkt, etc. There are, however, some verbs in which a reference to tall, erect, or distant things as direct or indirect objects are no longer to be detected. Composes several suffixes, as -alta, -ita, -tchta and -kta (from verbs in -ága), and others, all of which we treat here under the one heading of -ta.

1. Verbs in ta; a person is the direct or indirect object:
hémta to speak, tell to; from hä'ma to emit sound.
hishkíta to give a false report to; from kíya to lie.
yúta to shoot at (plurality of objects).
matcháta to listen attentively to.
sheï'ta to pay off, distribute to; cf. shétu to count.
skúkta to reward, repay to.
slléta to show, exhibit to; from shléa to see.
tchímta to have eruptions on skin.
wétanta to laugh at, deride; from wéta to laugh.
2. Verbs in -ta; the direct or indirect object is inanimate and standing upriglit. Some verbs refer equally to persons and things, as gánta, gúta, húta, núta:
lúta to run, rush up to.
ká-ishta to shut the door-flap or door.
mpákta to break upon, on something.
núta to burn, v. intr., originally referring to long objects, sticks, etc.
pélta to put the tongue out.
pétclita to touch with the feet; pétch foot.
shlákta to saw a log crossuise.
shlápshta to close, elinch the hand.
shmukálta to wet, moisten (persons or things).
slinikita to lose, let fall, as from one's pocket.
wukétchta to strike the flint for sparks.
3. Verbs in -ta, in which a reference to persons or long objects is no longer traceable with distinctness:
sliátakta to make a screen of sticks for camp fire.
shúta to make, produee, ereate.
waíta, wäíta to lie over one day and one night.
4. Nouns in -ta of uncertain origin:
kúlta otter; cf. kûlsh badger, gulí to creep into.
sákta peg, awl, nail.
-ta'ki-, -tákia, see -tki No. 2.
-ta'kna, see -tka No. 5.
-taknil'la, contr. -thnúla, -txnola, is a compound verbal suffix, the elements of whicl are -tka No. 5 (q. v.), -n- (or suffix -na) and -úla, -óla. It expresses removal from the mouth.
lyet'knúla to hang down from the mouth.
shataknúla to remove from one's mouth.
shlewitaknúla to blow breath from one's mouth.
tilutaknúla to see somebody spitting, removing from mouth.
witznóla (for wit'taknúla) to blow out from mouth.
-ta'ktana, see -tka No. 5.
-ta'kua, see -tka No. 5.
-ta'mna, -tamna, suffix forming iterative verbs, transitive and intransitive, which imply not repetition only, but also continuance, persistence, and steadiness of action. This suffix differs from -alsha, -ăla (-la; cf. -shla), which form similar verbs, and from -kínka, which is appended exclusively to verbs of locomotion, as going, coming etc., by marking acts performed steadily, successively, or repeatedly, while loconotion of the subject is not necessarily implied. In verbal form -támna reappears in the verb táměnû to travel, in which - $\hat{u}$ points to distance.
hähä'tamna to continue shouting hähä.
lushti'ktamna to dream every night; from hushtíxa.
shetaltíltamna to look down steadily; from shetaltíla.
slliftamna to hit every time; from shlín.
shuetchantámna to go gambling evcry time; from shuétchna.
telshantámina to look at persistently; from télslına.
-ta'mpka, verbal suffix involving the idea of beginning or commencement, and forming inceptive or inchoative verbs. It differs from -éga, -iéga, - -a'ga $^{\prime}$ ga being more frequently appended to transitive than to intransitive verbs, and by being used oftener by Modocs than by Klamath Lakes, who prefer -éga. Some verbs show both endings, while others, like shuimpatámpka to lean on the back of chair, are in fact not verbs in -támpka, but in -ámpka, q. v.; compare shuimpáta to recline.
hemkanktámpka to commence talking, discussing.
yutetámpka to begin shooting.
patámpka to commence eating.
shuktámpka to bcgin the fight.
tchutche-itámpka (and tchutcheyéga) to begin to melt.
-tana, pronounced at times -tna, -tánna, is a componud suffix used for inflection in nouns and postpositions and for derivation in verbs. In both it signifies alongside of, on the side of, by, besile, along, and is a compound of -ta and -na, q. v. Generally the accent does not rest upon it.
5. Verbal suffix -tana, forming transitive and intransitive verbs from other verbs:
hesqátana to become rusty the whole length.
hiliántana to roll toward, to the side of.
pélqatana to lick from end to end.
piupiútana to pick all along a tree etc.
shikántana to show something on one's body, side.
shokótana to bite one's tongue, lip etc.
ulokátana to rub up and down.
6. Nominal suffix -tana; forms a case-postposition, though not every noun can take it. Cf. Inflection of Substantive, Adjective, Pronoun; also the chapter on Postpositions, where this suffix is in extensive use.
-tani, a suffix of adjectives, which is formed from -tana, a case-postposition, q. v. It occurs in a few adjectives only; in the numerals for six, seven, eight it is abbreviated from -tankni.
kanitani being on the outside of; adv. kanitana.
lápkshaptani seven.
nágshtani what is on one side only; one of two.
p'laítani who, what is above, on high; adv. p'laítana.
-ta'nna, see -tana.
-tgi, see -tki.
-ti, a verbal and nominal suffix with an originally locative signification, the ending -i pointing to something lying upon, on some object, or upon the ground. In nouns, $-t i$ is either inflectional or derivational.
7. Nominal inflectional suffix - $t i$ serves as a case-suffix in generic terms for animate and inanimate objects (partitive case), and in the inflection of the verbal indefinite. Details will be found below.
8. Nominal derivational suffix -ti. When nsed as a derivational suffix -ti indicates substance, quality, material, or locality; this also belongs to its functions when a case-sutfix, and make of it a genetive ( $\gamma \varepsilon v z u$ iv) suffix. In the oblique cases the case-terminals are then appended to the subjective case in -ti.
kiailanti ground-snake; from käíla ground.
pokóti kettle-metal, shect-iron; from póko bucket.
wáti thorn, spine; straight knife; from wá to grow upon.
wátiti metal ; lit. "knife-substance."
wíkam=wáti, abbr. wíkamua glass.
9. Verbal derivational suffix -ti; it is apocopated sometimes from -tia; cf. kpatia to poke in the fire.
yankípshti and yankápshtia to place into an opening.
kmákapshti to put a stick into an orifice.
ndá-iti (and ndaítia) nûsh $I$ feel cold.
-ti'la, compound verbal suffix occurring chiefly in intransitive verbs, and involving the idea of under, beneath, below. The verbs in -tíla express a staying, remaining below or under, or a placing or an act performed below, underneath, while those in -kuéla point to a downward motion. Several of the intransitive verbs in -tíla are used also as postpositions. The verb petíla to act as midwife contains the base pét'a to disrupt, with a suffix -íla.
gutíla to go underneath, to take shelter.
i-utíla, yutíla to be or lie underncath; also postposition.
kshutíla to exist below, to lie in the shadow of.
liutíla to be crowded underneath.
puetíla to put, throw under something.
shikantíla to show something on one's feet, as moccasins etc.
witíla to blow underneath.
-ti'ta, verbal suffix referring to an act performed outside of a house, lodge, inclosure etc. . This suffix seems to occur in intransitive verbs only.
gatíta to walk along the outside of the lodge.
liutíta to crowd, to gather up outside of.
squltíta to lie down, to sleep outside the lodgc.
-ti'tana, verbal suffix differing from -títa only by the circumstance that the act is performed at a slort distance (-na) outside of the lodge, inclosure etc. It is sometimes contracted into -titna. Here and in the foregoing suffixes the locative function of -ti is clearly shown.
gatitana, kishtitana to walk around the lodge etc.
liutitana, or liutínna to crowd outdoors at a short distance; plural form of tgatítaná, or tgatítna to stand (as above).
-tka, nominal and verbal suffix having various functions.
10. Nominal inflectional suffix -tka; forms the instrumental case in substantives and adjectives, sometimes assuming a temporal meaning. Combined with -sh to -shtka it forms the verbal desiderative, q. v.
11. Verbal inflectional suffix -tka sometimes stands for the -tki of the verbal intentional on account of neglectful pronunciation. Modoc often uses -tka and -tku for the participial ending -tko, q. v.
12. Verbal derivational suffix -thia nost frequently expresses a return from, or an act of locomotion repeated in a direction opposite to the act preceding it. When standing in the participial form of -tkank, Mod. -tkan, it therefore often corresponds to our pluperfect tense.
gankánktka to return from hunting; gankánktkank after having hunted; lit. "after having returned from the hunt.".
itka, lútza, útza to take back, wrench off from.
yumáltka to return from the berry-harvest.
luluksháltka to return from cremating.
shitchátka to fly back.
taměnútka to return from a place visited, from travel.
13. Verbal derivational suffix -tha sometimes adds to the radical verb the idea of above, over somebody or something.
itatka to hold long-shaped objects above.
lútatka to hold round things; nétatka fal things; shlétatka sheet-like things above an object etc.
stintka to be standing (animals).
14. Verbal derivational suffix -tka, -tk, often inverted as -tak, is found in verbs which express a passing into or from one's moutl. It chiefly appears in compound suffixes, as -tákna, -táktana, -takua, and in -taknúla (separate item above); it excludes the acts of eating and sucking.
> ámbutka to be thirsty.
> hántakua to stand open continually; Lat. hiare.
> pniutáktana to blow into a tube, hollow body.
> tilótakna to see somebody putting (food) into his mouth.
15. Some other verbs in -tha do not properly belong here, being derivatives of verbs in -ta through suffix -ka, -ga; matchátka, tgútka, wáltka. In háshtka to pierce one's nose, -tka contains the radix.
-tki, a verbal suffix somewhat analogous to -tka, q. v., although the final $-i$ gives to it a locative signification, which is recognizable in the majority of the verbs.
16. Verbal inflectional suffix -tki, usually followed by the causal verbal gíuga, gíug in order to do, and called by me verbal intentional. Sentences dependent on certain verbs on Klamath are always expressed by this verbal: ká-i wé-ula gulítki hít gíug I do not allow anybody to enter here.
17. Verbal derivational suffix -tki, also pronounced -tgi, -tzi, -t $\chi$, -taki, -takia, refer to a motion onward, or a going to the place of the first start (like -tka); but the final -i points to the ground, earth, or soil as the place toward which the motion is made, which implies the idea of downward, down.
hō'tze, hútxi to run downhill; to rush down.
húntakia to rush, pounce, fly down upon.
lútki to go downward, as fog, clouds.
kmukō'ltgi to wither, fade, become decrepit.
ndí-utye to fall down; also other verbs of falling, rolling.
ndshátchtyi and ntúltki to form a waterfall.
tílantze, v. intr., to roll down.
18. Verbal derivational suffix -thi, also pronounced variously like No. 2, forms verbs which mark an effect or return upon somebody or upon onesclf, a reversal upon onc's own body, this being here indicated by $-i$ :
> kāltki to bccome round, hard, dry, strong; from kálkali round.
> léltki to look or to peep at.
> kúktakia, kī'ztgi to covet, to be cnamored of.
> lítchtakia to try hard, to endeavor; from litchlítchli powerful.
> tā' $\chi$ tgi to become rcl, to blush; from taktákli red.
> tchámptki, Mod. tchámptakia to be frightened.

-tkni is a suffix of adjectıves, in which the ending -kni, q. v., is appended to one of the locative cases (-tat, -ti) of substantives, adjectives, or pronouns. Hence the nouns in -tkni form but a subdivision of the ones in -kni. Besides Kúmbatkni (from kúmme cave, locat. kúmmětat or kímbat) and Lóknashtkni mentioned there, we have:
> ge'tkni coming from out therc, from alroad.
> hatáktkni coming from that place.
> nákantkni coming from the places all around.
> Skítchueshtkni name of a tribe in northwestern Oregon.
> Téaqtkni Indian from Tygh Creek.

-tko, -tk, in Modoc -tho, -tku, -tha, -tk, in the oblique cases -pkash, -pkam etc. in both dialects, is a suffix forming the participles of verbs, mostly indicating the preterit tense. Verbs in -ăla form their participles in -altko; those in -na, -antko (q.v.) This suffix is susceptible of inflection just like nouns, and corresponds in many respects to the Old English prefix $y$ - in yclad, yclept, which is the German ge- in gekleidet, gefangen, gescheidt. When derived of transitive verbs, the participles in tho are either of active or of passive signification, sometimes both. Some are derived from impersonal verbs, and of others the parent verb has become obsolete or never had any existence. Many terms in -tko have become verbal adjectives, or substantives either of a concrete or abstract signification. In the conversational language -tko is often thrown off: pahá for pahátko dried, 74, 6.

1. Participles in -tko of active and preterital signification are not frequent. They are sometimes connected with personal pronouns:
hemkankátko one who has delivered a speech.
nû ki'kotko after I had tried.
shaná-ulitko having wished for 186; 56.
2. Participles in -tho of a passive and preterital function. These are the real participles in ttko, and a reference to the present tense is rather exceptional.
idukátko one who was or is kicked.
kutólitko one whose pimples were squeezed out.
pátko eaten up, consumed.
shnúkatko seized, grasped, apprehended.
3. Participles in -tho formed from intransitive and attributive verbs; many of them are verbal adjectives, and in English have to be rendered by adjectives. Cf. Texts, page 110, 1.
gútzitko one who has climbed down from.
hiuhiuwátko marshy; from hiulíwa to be elastic.
k'lékatko dead, deceased.
nkillitko brave, robust, impetuous.
p'litko fat, fattened, well-fecr.
shítko, Mod. shútka alike to; from shi-iha to agree.
tchípkatko contained in a pail, zase.
We may add here, as formed from an impersonal verb:
gélzatko accustomed; from kélza nîsh $I$ am in the habit of.
4. Adjectives in tho, derived from nouns and signifying "provided with, wearing, having on oneself, making use of," are the result of a contraction with gitko having. From this we may except lúlpatko provided with, using one's cyes, which seems contracted from lúlpaltko. The accent rests either on the penult or on the antepenult.
kapútko wearing a coat, for kápo gítko.
kókatko clad in a gown, for kû'ks gítko.
shnawákitko wearing a necklace, shnawā'kislı.
táldshitko provided with reed-arrows, táldsli.
tchuyétko wearing a hat or head-cover, tchíyesh.
waľâtchkatko poorly dressed; from waľátchaga, q. v.
5. Substantives in -tko, which formerly were adjectives or participles, and have gradually developed into concrete or abstract substantives without assuming the nominal suffix -sh , -s. Among their number we have:
knáklitko shore-line.
ktáklitko wound, gash.
mulnúlatko quagmire.
nkillitko power, force, energy.
piltpantko fat of deer.
-tknu’la, see -taknúla.
-tku, see -tko.
-txi, see -tki.
-t $\chi$ nóla, see -taknúla.
-tna, see -tana.
-tpa, a combination of the two verbal suffixes -ta and -pa, which implies motion toward some object standing erect (-ta), men or people being generally understood. Forms transitive as well as intransitive verbs; cf. -pa.
gátpa to come, march toward.
hushótpa (for liush'hótpa) to ride up to.
hútpa, hótpa to run up to the one speaking.
kshípa to crawl toward.
shláltpa to surrender to somebody for use.
spúntpa to bring, accompany homeward.
tilótpa to see somebody coming.
-tch, -dsh, nominal suffix rarely found in adjectives (tchmîtch lean, meager), but oftener in substantives, and preceded by a vowel. When preceded by 11 - it alternates with -sh (-ntch, -nsh), and is identical in function with - sh, -s. It has originated in several of the terms below froin the verbal
suffix -tcha, -dsha. The suffix -ō'tch, $-\bar{u}^{\prime}$ tch, sometimes -ătch, is a contraction of $-\bar{o}^{\prime}$ tkish, q. v.
yántch, species of root or bulb.
kíadsh yolk of egg.
kí-intch, kí-insh yellow-jacket wasp; from kíntchna.
kimā'dsh, kimátch ant; lit. "sidewise-goer."
lqawáwintch finger, toe.
mbúitch sinew, ligament, tendon.
nslıédsh shell, pod, outside bark.
páwatch, páwash tongue; from páwa to eat (?)
púlquantch eatable chrysalid.
sgútch father of a first child.
shuéntch baby-board Kl.; baby Mod.
Verbs in -tcha, -dsha sometimes lose their final -a by rapid or negligent pronunciation, like some other suffixes.
-tch, see -ptchi.
-tcha, -dsha, also pronounced -tsa, -dsa; two verbal suffixes identical in their functions, and differing only in this, that -dsha usually follows after syllables long by themselves or pronounced long by reason of the accent being laid on them, while -tcha is suffixed to short syllables. We find them forming transitive as well as intransitive verbs, and implying motion at a distance, or away from the real or supposed speaker. They enter into the composition of many other suffixes. According to their signification they may be subdivided into three groups:
(a) With the meaning of "in the course of events, as a part of other acts."
(b) With the meaning of "to go to, to be on the way to."
(c) With the meaning of "to do, perform while traveling, moving, or going." Examples:
(a) ktándsha to fall asleep; from ktána to sleep.
ka-úldsha to gnaw through; cf. koka to bite.
vulódsha to split, chop.
(b) haítchantcha to set out for a hunt; from haítchna to pursue. iwidsha to go and haul; from íwi, híwi to haul home. ksiuláktcha to go to dance; from kshińlěza to danee. shlédsha to visit, to go to see; from shléa to see. shualko'ltcha to go and cool oneself off.
(c) élktcha, nélktcha etc. to leave behind when departing.
ktchikayúltcha to erawl, creep out of woods etc.
ktchitíltcha to crawl to or in the distance.
k'lewidsha to quit, leave; from k'léwi to stop, ceasc.
sá-atcha to dance a scalp-dance.
shuwálktcha to fly after something; from shuwálqa to fly.
-tcha, see -ptchi, -sha.
-tchi, sce -ptchi.
-tchka, verbal suffix cemposed of -tcha in its various acceptations and of the factitive -ka, -ga, - $\chi$ a. The forms -tchka, -tch $\chi$ a occur after consonants and short vowels. The sufixix forms transitive and intransitive verbs from verbal bases. For -dsqa, see -s $\chi$ a.
6. Suffix -tchka referring to an act performed above, on the top of something, when this act is done in the sequel of other acts, or as a part of such:
hashkátchka to stick upon oneself, as feathers.
yáshtchka to step on.
yúshtchka to put the foot on.
ktchiutchátchka to trample on, upon, Mod.
7. Suffix -tchka marking repetition of an act usually performed in the distance:
mpatchítchka to crackle, said of burning wood.
shnumátchka to annoy, teasc; from mútchka.
shuishtcháktchka to bend, turn the head for a bite.
utchkátchka to weavc a pole repeatedly in one direction.
-tchna, -dshna are suffixes differing merely in phonetics, as -tcha dees from-dsha, q. v., and not in their meanings. They form transitive and intransitive verbs from verbs, not from nouns, and represent a combination
of the verbal suffixes tcha and -na, q. v.; they are also pronounced, by Iternation of sounds, -tsna, -dsna, and some of these verbs simultaneously exhibit a form -ĭna, -ăna:
gasáktsina and gasháktchna to march behind, to pursue.
máktsina and náktclına to encamp whilc travcling.
tchaluítchana and tchaluítchna to go to somebody's housc, lodge.
The function of the suffix -tchna may be stated as either referring:
(a) To an act performed at a distance (which is expressed by -tch-, $-d s h-$ ), or while going, walking, traveling, moving; the suffix also implies a motion of the verbal subject away from (not toward) the one speaking, or from the verbal object; or referring:
(b) To an act performed or a state undergone in continuity, whether moving, walking or not; whenever motion is implied, it is motion away from the one speaking or from the object of the verb.

## Examples of (a):

aggá-idshna to hang up while going; from aggáya to suspend.
gúlatchna to recede into on being reached; cf. gulí to enter.
kítitchna to spill whilc going, walking on.
kpútchna to spurt from mouth; cf. kpúdsha to expel.
shnigō'tchna to send by mail, as letters.
shnindúdshna to lose, as from one's pocket.
spidshúdshna to uncoil a string fastened at one end; cf. spídsha to drag behind oneself.
stilántchna to let go, run, drop along something.
shiptelina to travel, said of a loaded wagon etc.
vutúdshna to throw away from oneself.
Examples of (b):
hóntchna to fly in a continuous straight line.
ktulódshna to push away continually or repeatedly.
níudshna to drive (cattle) into a prairie etc.
ntúltchna to run contïnuously, said of water.
o-idshna to advance in front file or line.
shiktī'dshna to push oneself.
stintchna to go with an object from plaee to place.
wíudshna to inflict blows in continuous suceession.
-tchta, see -ta.
$\mathbf{- 1 1},-0$, verbal and nominal suffix occurring mainly in dissyllabic and other short words, the pronominal radix -u (hu) in this suffix pointing either to distance or to elevation above the soil.

1. Verbal derivational suffix -u. Some verbs have a form in $-a$ and another in $-u$; the former expressing an act performed close by or upon the ground, the latter an act in the distance or above:
támĕnû to mareh, travel; suffix -tánına, which forms continuative verbs.
tchilamna to be crowded together.
tchílamnu to be crowded high up, or far away.
2. Verbal derivational suffix -u, apocopated from -ua, -wa, q. v.
kpéto to taste, to sip.
kä'ko, kéku to try, to endeavor.
mému for mémua, d. of méwa to camp away from home.
nitu to guess, eonjeeture.
shéto and shä'tua to enumerate, count.
shió to bet; héshkî to make mutual bets.
shípnu to blow something up; from pníwa to blow.
shpótu to fortify oneself, for shpá-utua "to plunge into the watcr."
tchitu (1) to be sterile; (2) ehildless woman.
3. Substantives in $-u$, -o. These are generally names of objects of nature possessed of a tall, long form, as trees, plants, weeds, many of the smaller animals, also some inanimate things and parts of the human and animal body.
(a) Plants, weeds etc.:
ánku tree, stiek, piece of wood.
klû' speeies of root.
ktä'lu pine-nut.
ktséämu, species of aquatie grass. tchákělı greasewood. wáko white-pine tree.
(b) Animals, inanimate objects:
yuhó buffalo.
kaíliu skin-robe, fur-dress.
kálo skiy.
kúktu dragon-fly.
ktchídshu bat.
mámaktsu, species of $d u e k$.
mh $\hat{u}^{\prime}, \mathrm{Kl}$. tm $\hat{u}^{\prime}$ grouse.
ndshílu and nkúlu female animal.
póko bucket, vase, cup.
stii'yu wood-rat.
tchpínû̀ burial-ground.
(c) Among the parts of the animal and human body we mention:
káyedshu, k:i'dsho chin.
kapkápo wristbone.
kín anus.
kóto loin.
ngénu lower belly.
páto, mpáto cheek.
p'lú fat, grease.
tlózo brain, Mod.
t $\chi$ ópo thumb.
vúshu chest.
-11a, -wa, compound verbal suffix of frequent occurrence. As may be inferred from the first component, which is the particle hu, $u$, the verbs in -ua relate to acts done at a distance or at an elevation above the ground. Many nouns in -u, -o express portions of the animal and luman body, and in the same manner some verbs in -ua refer to acts or conditions of the whole body or parts of it, especially to motions performed in the water. The verbs formed by means of suffix -ui, -wi present many analogies.
4. Suffix -ua, indicative of distance:
lólua to sleep outdoors.
méwa to camp away from home, to live in the prairie.
níwa to drive upon level ground.
núyua to shine from a distanee.
shnátkolua to build a fire away from the eamp.
tpéwa to give orders to.
5. Suffix $-u a$, indicative of elevation above the ground:
línua to fall upon something, as trees, logs.
mbáwa to burst, explode.
nilíwa to blaze up, to burst into a light.
6. Suffix -ua, refering to acts performed by means of or upon the human body or parts of it; includes transitive and intransitive verbs:
antchilua to press forward, to crowd on.
hlékua to drink out of the hand; to lap.
kitéwa to squeeze down, as with the finger.
ldúkua to hug, caress; cf. shúldakua.
múlua to prepare oneself, make ready.
ndéwa to laugh dcmoniacally.
ntá-u'htua to pulsate, said of heart.
púnua to drink.
shápkua to put red paint on one's face.
skäyádshua to yawn.
shuatáwa to stretch oneself.
shúmalua to wear a necklace of bird-bills.
tákua to apply a gag.
7. Suffix -ua, referring to motions performed in the water by animate beings; here the particle -u- means up to, pointing to the water rcaching up to a certain level on the body.
húwa, hó-a to leap into water.
yátchua to step into water, dip the fcet; from tchéwa, q. v.
kílhua to reach up to on the body.
ktúlua to rush under water.
kélua to bathe in hot water.
niwa to drive into the water.
pánkua to wade through; cf. hashpánkua.
shnindúwa to dip, douse, lct fall into the watcr.
tcheléwa to produce ripples, waves.
udúmkua to cross by swimming.

- L1al, -uála, see wála.
-talya, verbal suffix indicative of a continuous upward motion, the "upward" being expressed by the particle -11-; in some verbs, as in shlatchuál $\chi$, distance may be expressed by it. 'This suffix is a compound
of -wála, and the verbs in -ualqa are originally transitives and factitives of those in -wála, q. v.
kínual $\chi$ a to go uphill in a file or otherwise.
múlkualza to scnd up smoke.
nikuálka to extend one arm, hand.
shlátchualqa to splash up, or out.
tálualya and telíkualqa to turn the face upward; cf. telish face.
-11ash, see -wash.
-ug, -uk, see -úga.
$-\mathbf{u}^{\prime} \mathbf{g a},-u k a$, -óga, -oka, a suffix forming transitive and intransitive verbs, generally accented upon the penultima, and either derivational or inflectional. When derivational, this suffix implies the idea of within, inside; or that of upon, on the surface of; or that of away from; when inflectional, it points to the cause or reason of an act or condition, and therefore implies causality. There are, however, many verbs in -úga which properly belong under -ka, -ga, the syllable -u belonging not to the suffix but to the basis of the word: shuá-rika to squeal, sha'hmóka to call out, assemble, and others. On the difference between -úga and -uga, ef. suffix -ăga.

1. Suffix -úga, corresponding to our inside, within, indoors.
ikuga to place inside of, to load, as a gun etc.
kshíkoga to put or place into.
shluyúga to whistle; lit. "to blow inside."
skulzóka to lie down, sleep indoors.
tgízuga to stand indoors.
tchizóga to live or stay within, indoors.
ulézuga to gather or place into a long vase.
2. Suffix -uga, pointing to an act performed upon or on the surface of an object; or to the removal of an object from the surface of. Cf. the suffix -iga.
nutchúka to burn, singe off somebody's lair.
putóga to tcar out, pull out ; cf. shuptóga.
> slipat\%íga to shicll, cover oneself.
> shiúluka to fun somebody.
> shnuyóka to canse to burn off, to singe off.
> shnulóka to snap at; to seold somebody.
> sluídshoka to wash one's borly or part of it.
> shuyíka to clip one's heir; cf, ktuyúga.
> slupelóka to lay on, heap upon.
> telíga, telúka to assail, pounce upon.
> tulúga to smear on, to line upon. .
3. Suffix -ága, forming the verbal causative in the inflection of all verbs; cf. below. It is often pronounced -uk, -ok, $-\mathrm{ug},-\mathrm{og}$, and then the accent recedes toward the initial syllable:
kik t\%útzuk hä'ma the raven eries for the purpose of presaging. kélpkug ámbu wákwaka water vaporizes by heat.
-lli, -wi, suffix forming transitive and intransitive verbs from verbal bases, and implying motion toward an object. Its component-u-points to distance in space, to altitude etc.; while -i, which represents the pronominal radix $i$, hi, refers to the soil or ground, to the house, home, or lodge, the floor of which is the ground itself, or to the person speaking. It is analogous in many points to -ua, q. v.
4. Suffix -ui, implying motion toward the ground, or over, along the gromd, or toward the home or lodye.
gáktchui to go into the rocks or woods.
hínui to fall to the ground.
híwi to haul or fetch home.
skíyui to send out, dispateh; from kúi far off.
shléwi the wind blows.
téwi to shoot at with arrow, gun etc.
tilalhálui to roll something long.
uláyui to bend doumward, as trees in the wind.
wawiwi to lean over head forward.
5. Suffix -ui, implying motion toward a person, generally toward the one speaking.
gáldshui to approach somebody or one's lodge.
pékalui to bc an accomplice.
sháhamui to call somebody to comc.
shéshatui to scll ; from shésha to value, prize.
shtclíkui to drag after oneself.
shuánui to be in love with, to covct.
táshni to touch; to attack with weapons.
táwi to bewitch by magic spell.
6. Suffix -ui, in the adverbs átui now, gétui over yonder, is simply a combination of the two well-known particles $u$ and $i$ with the particles at, gét, gē't, q. v. Cf. also tchúi, tchúyunk.

- $\mathbf{- 1 \prime} \mathbf{i} \boldsymbol{\chi} \mathbf{i}$, see -oízi.
-ui'na, see -wína.
-llish, compound suffix simultaneously verbal and nominal, and always pointing to something performed or achieved in the past. The first comdonent $-\mathbf{u}$-is the particle $\mathbf{u}$, hu, which refers here to distance also, but to distance in time; the second component -ish forms nomina acti, sometimes nomina instrumenti (cf. -ish No. 2). Though often pronounced -wish, -uish is distinctly dissyllabic in its origin.

1. Verbal inflectional suffix -uish forms the verbal preterit, which is not inflected for case: hémkankuish the act of having spoken; from hémkanka to spcuk. Cf. Verbal Inflection.
2. Nominal derivational suffix -uish, sometimes contracted to -ōtch, forms nomina acti, some of which possess parallel forms in -ish, as pálkuish and pálkish, q. v. The nouns in -uish all designate inanimatc things, inflect for case, and the -u-of some of their number can be rendered by previous, former, early. This dnes not always imply that the object mentioned does not exist any longer.
gutékuish aperture, passage-way.
hémkankuish speech delivered in the past.
mbákuish broken pieee; from mbáka to smash.
mulinuish stub, stubble; from mulína to mow.
sha'hmálzuish, contr. sha'hmáľōteh beginning of autumn.
sháktakluish scar; from sháktakla to wound by cutting.
tcheloluish peeling; from tchelobla to peel.
wetékuish earth caved in; cf. wetóla.
3. There is a limited number of nouns in -uish in which the $-u$ - has no temporal function, but signifies above, on upper part of the animal or human body. Some are derived from verbs in -ua or -ui:
láktcluish, contr. láktchūsh adhering-place; from láktchui. .
shakpáklaluish and shélaluish plait of males on temple bone, Mod.
shúkatuish napc-plait.
wakáluish, apher. káluish leg below lnee; shin-bonc.
wámèlhuish, kshéluish, élhuish and shuámsltchakluish mane of horse.
To these we may add shlélahiush cream of milk.
-nya, -huya, verbal suffix of a minuitive function, and not always accented. It is the particle híya near, elose to, agglutinated to verbs, and etymologically connected with wika, wigáta low, near the ground, the original neaning of the particle being shown in tníya to stand below the levcl of. Huya may stand also as a separate word in the sentence; as a suffix, it refers to space, time, and to degrees of intensity. In shahamúya, -úya stands for -wi, -ui, and nánuya is derived from nánui, q. v.
4. Suffix -uya, indicative of limited space: near, near by, close, elosely. geluipkúya to approaeh close to.
kshéluya to lie elose to the eamp-fire.
teluak'húya to pursue closely.
5. Suffix -uya, referring to a limited lapse of time: for a while, for a time, not very long.
keko-úya to attempt for a short while.
shenotank'híya to skirmish for a while.
shkuyushkuya to part one from the other temporarily.
tchutanhúya to treat for some time.
6. Suffix -uya, indicative of a smaller degree of intensity or stress: somewhat, partially, not seriously. In a few verbs it may be replaced by -kslika (q. v.).
élkuya, élk'luya Mod., to attempt to give a name; for Kl. él $\chi$ akshka.
'mutchíya to try to imitate one's parents (kmútchish, "elders").
ngéshe-uya to wound but not to kill.
shiukńya to have a small fight, scufle.
shlíuya to inflict a shot wound not fatal; from shlín.
shlúihuya to trot on horseback
-11'la, see -óla.
-u'li, see -óli.
-upka, see -pka.
-ñpka, see -ōpka.
-й̄sh (vowel long); see -ōsh.
-11'ta, -óta, verbal suffix of a durative meaning, and almost always emphasized on the penult. It is either inflectional or derivational, and composes the suffix -otkish and others; it forms transitive and intransitive verbs from verbal, not from nominal, bases. The form -úta is more frequent tlıan -óta.
7. Inflectional suffix -úta corresponds to our during, pending, while, whilst, sometimes to after, and forms the verbal durative, which undergoes no inflection.
gukenúta while climbing; sta-óta while fasting, starving.
8. Durative verbs in -úta. They indicate that an act or condition lasts during a certain time, or that it lasts while something else is performed or occurring.
il $\chi$ бta to bury along with.
shnigóta to send by mail.
shkiúta to owe a debt.
tchúta to treat for sichness; contr. from tchi-úta.
winóta to accompany in singing.
9. Usitative verbs in -úta, descriptive of personal habits, of customs, occupations, as-
ledshnúta to be in the habit of knitting.
pashúta to be a cook; to cook for a time.
shiyúta, sheniúta, heshelióta to follow the bartering trade.
10. Instrumental verbs in -úta. They refer to the use of a certain article, tool, instrument for áccomplishing an act. The suffix -ótkish is a compound of the ending -úta when used as an instrumental suffix.
yuwetúta to kick with both feet.
kawúta to catch, get hold of what is thrown.
spukliúta to use during or for the sweating process.
stina-ota to build lodges with.
shulóta to dress oneself with.
vukúta to scrape by means of.
-u'tkish, see -ótkish.
-ū'tch, see -ótkish.
-utchna, -ódshna, a combination of the verbal suffix -tchna, q. v., with the particle and suffix -u, -o (in -ua, -wa etc.), which points to a motion away from, performed either in the distance or at an elevation above the ground. The verbs in -utcluna have all been entered under -tchna.
-wa, see -ua.
-wal, see -wála.
-wa'la, -uála, a compound verbal suffix which, after vowels, often contracts into ${ }^{-}{ }^{\prime} l \mathrm{la}$ or $\bar{u}^{\prime} \mathrm{l}$ la (with long $o, u$ ), and is usually accented on the penultina. When the accent recedes, it often abbreviates into -wal, -ual. This suffix points to a position or motion at the head or end of, above, or upon an object, and is composed of the pronominal particle u, hu up there and the suffix -ala. It composes other suffixes, as -ualza, -waliéga etc., and appears as a radical syllable in wálish rock or cliff standing upright. It forms transitive as well as intransitive verbs.
hashátuala, háshtual to place upright upon somebody's head.
hashlwála to place a blanket or sleet over one's head.
húnūla to $f y$ on the top of.
huwála (in huwaliéga) to run, rush uphill.
kshawála to tie to the top of a pole standing upright.
ktíwal to full and to stritic on the top of the head.
ktiwála, ktíwal (and ktiwálza) to lift, post upon, above. mákuala to encomp upon or in the mountains.
shampatuála to nail or fasten one object to another to make it longer.
shupatchuála to put one foot before the other.
sté-ula to put one cover or sheet over another.
tga-úla, tka-bla to stand upon the top of.
-walie'ga, see -wála and -éga.
-wa'l$\neq \mathbf{a}$, see -ualza.
-wash, uash, nominal suffix of various functions.
11. Tribal names in -wash, calling the Indian tribes after their residence, country, or point of compass. Here -wash is derived from the verb wá to live, to exist, stay, remain, a plural verb always accompanied by the locality or medium where the subjects are staying: kia'm ámputat wá fish live in the water. The nouns in -wash are adjectives and synonyms of those in -kni, which are adjectives also; in some of these names the Klamath Lake dialect prefers -kni.

E-nkshiwash Indian living on Klamath Marsh.
Kúmbatuash Kümbrtuash Indian on Modoc Lake; K1. Kúmbatkni.
Móatuaslı Pit River Indian; lit. "southern dweller."
Wálamswash Rogue River Valley Indian; cf. wálish.
2. To these may be added the following generic nouns, in some of which the -wash is derived from wá to stay:
katogíwash (1) hill-spur ; (2) Sacramento Valley Indian.
kiliwaslı red-headed woodpeeker.
p’laíwasl gray eagle; lit. "living on ligh."
pshe-utíwash human beings (archaic term).
teíniwash young woman; from teíni young.
3. Nouns, adjectives as well as substantives, derived not from wash dueller, but from verbs in -wa, -ua. Some of these are being used as names for persons.
gukíwash one who goes up hill.
hushtéwash portrait; in Kl. hushtétish.
skakáwash bomy, raw-boned.
shlélaluash upper eyelid; lit. "the coverer."
vuipeliwash, species of forest bird; lit. "the flutterer."
4. To these add the contracted form of • wash (- $-\overline{\mathrm{u}} \mathrm{sh},-\overline{\mathrm{s}} \mathrm{sh}$ ), of which I gave numerous instances under -ōsh, q. v.
-we'la, see -kuéla.
-we'ta, -uéta, verbạl suffix occurring in intransitive verbs, and pointing to motions observed upon straight, long, or elongated articles, as the arms, a swing etc.; the long shape of these is indicated by -ta.
knéta (for kuwéta) to make signs, to beckon.
kiwewéta to ridé upon a swing, Mod.
ndshakwéta to drop down, be suspended, as wax, curtains.
sxinueta to ride on a swing.
shulakuéta, shulakuawéta to ride upon a swing.
-wi; see -ui.
-witt, suffix of uncertain origin, occurring in a few verbs only and probably connected with -ui, -wi, q. v. It points to the idea of uniting, gathering.
galdsháwia to come close to, approach.
skíwia to let the hair hang down.
skútawia to tie, fasten together; from szúta.
wi'za, -wiza, suffix of intransitive and transitive verbs, composed of the locative $u$-, the locative - i , and the verbal factitive suffix -ga, -ka. The import of this suffix is that of being within, inside of a receptacle or vase,
which, as the particle-u-indicates, is standing or erect. Cf. -í í, oízi. This suffix appears also in the substantive stiwizútkish baby-board, Kl.
iwíza and iwízi to fill up, as sacks; cf. íwa.
m'háwiza, máwiza to put a little of something into a vase.
tkiwíza, luiluiza to stand within, as in a pit.
tchiwíxa to fill a vase about half up
tchléwixa to place something flexible or soft into a vase.
-Wi'na, -uina, a verbal suffix, composed of -wi, -ui and the suffix of motion -na. It points to a motion at short distance toward or along the ground, and occurs in transitive as well as in intransitive verbs. Iwína to place inside and its derivatives (kslawina etc.) have to be classed with verbs in -ína.
gawina to join, rejoin; to meet again.
kinuina to go single file, or in zigzag line.
shiwína to move or stir about.
shuawína to look over, to examine.
tchawína to live among, to mix with; from tchía.
u'hlutuina to trail on the ground while walking.
-wish, see -uish.

## RECAPITULATION OF THE SUFFIXES.

The large number of simple and compound suffixes of the Klamath language requires it broad and comprelensive classification of them. It will be best to subdivide them into inflectional and derivational suffixes and to make two classes of each-verbal suffixes and nominal suffixes.

> A.-Inflectional suffixes.

Verbal suffixes.
Mode in verbs: -a, -t (-at).
Tense in verbs: -ólank, -uápka.
Suffixes forming verbals: -ēmi, -i, -ola, -sh, -slıt, -ti, -tka, -tki, -úga (-uk, -ok).
Suffixes forming participles: -n (-an), -nk (-ank) ; and -tko (-tku, -tk).

Nominal suffixes.
Case-suffixes: -am (-lam), -ant, -ash, -ēmi, -үēni, -na, -sh, -tat, -ti, -tka. Case-postpositions: -i, -ksli (-gishi), -ksaksi, -tala, -tana.
Tense in nonn: -u-.

## B.-Derivational suffixes.

Verbal suffixes.
Gramatic classification--Considered from a purely grammatic point of view, a part of the suffixes may be subdivided as follows:

Suffixes which are verbal and nominal simultaneously: -a, -ăga, -i, -tana.
Suffixes made from verbs; they become agglutinated to the other component part of the compound verb, and some change their last sound: -kakiámna, -kakna, -ki (-gi), -kídsha, -tímna.
Suffixes stating the number of the object: -ta, -yua.
Suffixes forming denominative verbs: -ăla, -ála, -alsha, -shla.
Suffixes used for verbifying varions nominal forms of the verb: -alsha, -anka, -ansha, -insha, -kánka.
Suffixes forming factitive verbs: -ăga, -ága, -ăla, -ála, -éga, -íga, -ka, ttka No. 6.

Fuxctional classification.-For this mode of classifying the verbal suffixes of derivation, their material functions have to be considered mainly under the categories of mode of action, motion, or rest. These categories are visible, and therefore of more importance to the Indian than tense and mode. They also form a contrast to the form categories expressed by the prefixes of the language. We present the following list of them, while recalling the fact that many suffixes are used in more than one finnction, and therefore may occur in more than one place below:

## 1. Suffixes describing motion.

a. Motion in a direct line, or motion to a short distance: -n, -na, -tcha, -tclına, -wína.
b. Motion toward the ground, soil: -hi (-i), -ípa, -ui.
c. Motion toward some other object, or toward the subject of the verb: -lii (-i), -ía, -ípa, -ípka, -pa, -ta, -tpa, -ni, -uya, -wía.
d. Motion away from, or separation: -ansha, -ína, -ípa, -íta, -na, -óla, -slika, -telha, -tclına, -utchna.
e. Motion upward, or above something: -íxi, -lalóna, -ualza, -wála.
f. Motion in a level plane: -ína, -lalína, -ľa, -ma, -na, -tchna, -ui, -wína.
g. Circular motion: -éna (indoor), -kídslıa, -kīma, -títana (outdoor).
h. Motion of going around some object: -amna, -kakiánnıa, -mění.
i. Serpentine or winding motion: -kídsha, -ma, -mění.
j. Swaying, vibratory motion: -kakua, -wéta.
k. Motion downward : -ína, -knéla, -lalína, -lұa, -óli, -tki (cf. also b).
l. Motion in the water: -ua.
2. Suffixes descriptive of staying or resting.
a. Staying indoors, within a lodge, or other limited space: -áya, -éla, -éna, -úga, -wíxa.
b. Staying outdoors, outside of certain limits: -íta.
c. Staying upon, on the top or surface of: -amna, -ha, -i, -ixi, -xiéa, -lalóna, -líga, -m'na, -sza, -wála.
d. Staying around, about something: -amua, -líga, -m'na, -ua.
e. Staying below, underneath: -tíla, -tka.
$f$ Staying between:-sza.
g. Staying away from, at a distance: - íta.
h. Staying in the woods, cliffs, marsles:- -áya, -ui.
i. Staying in the water: -ua.
j. Staying around, near the water: -líga.
3. Suffixcs describing the mutual position of two objects to each other in space, when in motion or at rest.
a. Close contact: -lalóna, -páta, -ša, -tana.
b. Nearness, proxinity: -amna, -lála, -líga, -m'na, -p'na, -sza.
c. Distance, so as to be visible or not visible: -ampka, -ápka, -ípka, -ōpka, -tcha, -tclıka, -tchna, -u, -ua, -wála.
4. Suffixes describing acts performed by animate beings or by parts of their bodies.
a. Frequentative suffixes: -anka, -pěli, -tchna.
b. Iterative suffixes: -kínka, -pěli, -támna, -tchka.
c. Usitative suffixes: -ǎla, -alsha, -ōpka, -pěli, -pka, -hita.
d. Act performed while moving, going: -kakiámna, -kánka, -kídsha, -támna.
c. Act performed on the outside of:-títa.
f: Act performed on the inside of: -éna (-iéna), -liga.
g. Act performed on the top, surface of: -ha, -ízi, - $\sim i c i a,-s \chi a,-t c h k a,-u ́ g a$.
h. Act performed below, underneath: -tíla.
i. Act performed with a tool, instrmment: -úta.
j. Act performed with or on one's body: -éa, -ua
k. Act performed with the mouth: -takna, -taknúla, -taktana, -takıa.
l. Act performed with the back: -lamna.
$m$. Act performed near or in the fire: -lála.
n. Act of removal from: -íta, -6la, -shka, -íga.
o. Act indicated by gesture : -ía.
p. Act performed in somebody's interest: -éa, -gien, -ía.
q. Act of calling by name: -alpka.
$r$. Suffix of desiderative verbs: -ōpka.
$s$. Acts considered in regard to degree of accomplishment:
aa. Inchoative suffixes: -ăga, -ăla, -éga, -támpka.
bb. Continuative suffixes: -kánka, -tínına, -tclına, -uya.
cc. Act accomplished only in part: -kshka, -uya.
dd Completive suffix: -óla.
ce. Durative suffixes: -anka, -úta.
Nominal suffixes will be discussed in separate sections on derivation, under "Substantive", "Adjective", and "Numeral", q. v.

> III.-INFLECTION.

The process of thinking is the application of the rational principles of logic in considering concrete or abstract matters. Logic is a principle presiding also over the formation of language, but it is not the only principle. If langnage embodied nothing else but logic expressed by sonnd, then all languages would be embodiments of the same logical or metaphysical principles; or, in other words, all languages and dialects would agree in their
morphology, or, at least, in their syntax. Changes in language throngh historic development, would then be excluded; there would be no distinction between languages poor and rich in affixes, or between the varions kinds of verbs which now differ so much morphologically.

In language as a product of nature, we can distinguish the effects of physical (phonetic) laws and of psychological principles; what is created or formed by these is finally subjected to rational logic, or the principles of reasoning, by which grammatic categories are established. The degree in which human intellect succeeds in molding the sound-groups, words, or conventional signs of language to suit requirements, differs with every people inhabiting the globe, and also with every successive period of the development of its language. Thus we have, outside of the logical or reasoning principle, other principles in language, all of which we may comprehend under the name conventional.

The logical principles at work in forming languages are clearly put in evidence in the various degrees in which we see the various parts of speech differentiated among themselves. The more precisely the subject is made distinct from the predicate or from the attribute norphologically, the better we can at once recognize each of them, and also the object, by the granmatic form or position in the sentence. The most lighly organized of all, the Aryan family of languages, clearly distinguishes not only the verb from the noun and the substantive from the adjective, but also the different uses of the noun by suffixes indicating number and case. In the inflection of its words, affixes of a relational import are prevailingly employed, while the agglutinative languages use both, relational and material, almost indiscriminately, and by many of them the inflections are overloaded with additions of a concrete, material nature, which by other languages are relegated to separate parts of speech. Exactly the same may be said of the mode of deriving words from other words; in some languages this mode is a simple and sober one, in others it is cumulative, holophrastic, and so polysynthetic as to obscure the sense.

In the following pages I intend to show the method which the Klamath language of Oregon has followed in its morphologic aspects As to grammatic terminology, many new terms had to be invented to do justice to the
peculiar laws groverning this language and its idiomatic features. Comoissemrs will readily acknowledge that for certain forms in American languages, especially the verbals, it is exceedingly difficult to invent new terms satisfactory in every respect. The best method would be to establish terms taken from the language itself.

The noun-verb, which I call verb for the sake of brevity, has the most varied inflection of all the parts of Klamath speech, combining nominal with verbal forms. A sketch of the verb will, therefore, most appropriately stand at the head of the inflectional section of Klamath morphology.

## THE VERB.

## Structure of the verb.

The verb is a word of the language which predicatively amounces an act performed or a state or condition mndergone by its subject. It is composed of a basis or stem, and of one or several affixes. The naked basis by itself possesses no distinct nominal or verbal claracter; the affixes generally determine its quality as nom or verb in the sentence. Bases or stems are composed of a radical syllable and of affixes, mainly of a pronominal origin, which are intended to form derivatives from the radix. The final syllable or syllables of the verb are made up of inflectional affixes. The radix and its qualities and changes are described at length on page 247 sq . Examples of the mode of connecting affixes with the radix are given under each of the prefixes and suffixes, and also page 280 sq .

Some verbs, formed without any suffix of derivation, will be found muder snffix -a; the larger part of them show thematic roots.

In Klamath, no formal or phonetic distinction is made between the inflection of transitive and of intransitive verbs. Not only is the passive voice like the active, but in the noun the direct object has the same suffix as the indirect object, viz., -ash.

The root, connected with its affixes of derivation, constitutes the simple form of the verb; to this are appended the inflectional suffixes to form tenses, modes, verbals, etc. The simple form of the verb terminates more frequently in consonants than in vowels. The enormous majority of all
verbs end in the inflective ending -a, which I call the suffix of the declarative mode; it is the universal verbifier, and most verbs of the Dictionary appear with it. This a is dropped in a few verbs only, which terminate in -la (ăla) and in -na, and even of these the large majority preserve the full endings -la and -na. A limited number of verbs end in $-\mathrm{i}(-\mathrm{e})$ and $-\mathrm{u}(-\mathrm{o})$, which are derivational affixes; some of these were slrortened from ia, -ua, and some are emphasized upon the last syllable."

From all these various phonetic processes result five varieties of inflection in the Klamath verb, which differ little from each other. From the final sound of the verb, I have named them as follows:

1. The A -inflection.
2. The U-inflection.
3. The I-inflection.
4. The L-inflection.
5. The N -inflection.

By appending a nominal ending to the simple form of the verb nomina verbalia are formed. Cf. "Substantive."

INFLECTION OF THE VERB.
Compared with the lengthy paradigms of other North Anerican languages, especially of those spoken east of the Mississippi River, the inflection of the Klamath verb is very simple and poor in forms. It has no special form for the passive and impersonal voice, does not possess the category of number except in intransitive verbs, and a few transitives, has no real personal iuflection, possesses tivo tenses only, and a quite limited number of modes. It incorporates neither the pronominal nor the nominal object into the verb.

The conjugation of the finite verb, viz., the verb connected with a pronominal or nominal subject, is brought about by a personal pronoun standing usually before the verb and separated from it. The two participles can also become connected with separate personal pronouns, but when the verb appears as a verbal it comects itself with possessive pronouns. Participles

[^50]and verbals, again, connect with the auxiliary verb git to be, to exist, and thus form a quite extensive array of forms constituting a periphrastic conjugation. Finally, the large majority of verbs possess a distributive form, the use and meaning of which differs essentially from that of the absolute form. The same tenses, modes, and verbals exist here, being formed by the same phonetic processes as in the absolute form.

## TENSE INFLECTION.

Tense, as a distinct grammatic form, is very little developed in Klamatl. Here, as well as in many other languages, there are only two tense-forms, one for the completed and the other for the incompleted act or state expressed by the verb; and in Klamath both forms, whether appearing in the verb or in some substantives (cf. -uish, suffix), originally lad a locative character now pointing to distance in time only.

The tense of the completed action usually terminates in -a, and stands for the present as well as for the past or preterit of other languages. I call it the present texse in the following pages, and in the Sioux-Dakota, where it also occurs, the grammarian Srepien R. Riggs has maned it aorist, which means unlimitecl, indefinite in regard to time. When the Klamath Lake or Modoc Indian places no temporal adverb before or after the verb to specify the time of the act or state, it is supposed to occur at the present time, or at the time being; when he adds to it hû'nk, ûnk, liûn, in Modoc liû, the actois placed in the past tense, and the verb may then be called a preterit. This particle may also be replaced by some other temporal adverb, or the context may unmistakably point to an act performed in the past, and then no temporal particle is needed. The language possesses a large number of these particles to express the distance in time, corresponding to our to-day, now, recently, a while ago, years ago, etc. To the verb in the present tense the Northern dialect sometimes prefixes the particle: a, now, which can be identified with há at hand, in hand; whereas lhûnk, though intranslatable, corresponds best to yonder, then, and is often coalesciug with tchini then: tchinyuk, tchúyunk for tehúi hûk, telnui hûnk. This particle lunuk, ûnk laas to be kept clearly distinct from the pronoun demonstrative liûnk, liûn, lî̂k, and also from ûn, úna (for ûn háa), also a temporal particle, "sometime from
now", which we often meet after verbs in the present and the future tenseform. Hûnk, hûn has entirely lost its former nature of an objective pronoun that, for it connects itself with intransitive as well as with transitive verbs:
nû tiï'ma, nû a tiä'ma $I$ am hungry.
nû hînk tiä'ma $I$ was hungry.
î a shuáktcha you are weeping.
i unk shuáktcha you were weeping.
nāt shléa, nād a shlä'a we see.
nāt hûnk shléa hûnk, we saw Him.
The tense-form of the uncompleted act or state terminates in -uápka, in rare instances contracted into -öpka, -ūpka (which is a homonymous suffix distinctly differing), and is called by me the future tense. Its functions are not always strictly temporal, for nî genuápka may stand for $I$ shall go, I will go, I have to go, I must go, I could go. If a verb in the future tense stands in a principal clause preceded by an incident clause, the future act is expressed, though more in Modoc than in Klamath Lake, by the present tense followed by tak, taksh.* Hûnk, hûk may also accompany the future tense, as it does the conditional mode, but then it points to distance in future, and not in the past. Cf. 105, 8. Tchēk, tche often precedes the future tense, frequently only for the purpose of emphasis; ûn, ûna does so too, but more in Modoc than in Klamath Lake. The future in -uápka is inflected through all verbals like the present form; and, as far as form is concerned, can be considered as a derivative of it. Its ending is composed of the verb wá to live, exist, grow, sit, and of the distancial suffix -pka. Cf. the suffixes -ápka, -pka.

The Klamatl language has no means of distinguishing clearly between the tenses called in Greek Aorist and Perfect, or between the French Passé défini and Passé indéfini, nor can it express the Second Future by a separate form The Iatin and Greek Imperfect, when referring to length of time or to the continuance of an action or state while another act is performed, can often be expressed with accuracy by the suffixes -kánka, -támna, -úta. The

[^51]participial ending -olank, -úlank corresponds pretty closely to our pluperfec tense when introduced by the particle after: pa-ólank after having cuten; fromı pa-ola to quit eating, pán to eett. In the verbs of noving, going, thaveling, a circumscriptive form for this same tense exists in the suffix -tha: gínkanktkank after returring from the chuse, after having huuted; from gáukauktka to return from luntiny, gánkanka to humt. But the past-present tense is used just as often to express the pluperfect, e. g., spunín I had given, 20, 18. For other means to express that tense, cf. Syntax.

A list of senteuces embodying the circumscriptive temporal inflection of the verb ruus as follows:
nû pán, nu a pán I am eating.
at a nû pán I am eating now, or was, had been cating at the time.
nû a hû́nk pán I did eat, I ate, I have eaten.
nía a nû pán I ate reeently, a few clays ayo, this week (Mod.), sometime ago (Kl.).
ùna nu pán $I$ ate a while ago.
mā'ntchaga nu pán $I$ ate a good while ago.
mā'ntch a nû pán I ate several months ago, or last year, long ago.
tánk, mā'ntchtoks, níatoks mā'ntch nû pán I ate at a remote period.
nû pa-uápka, nû a pa-uápka I shall or will eat or have to cat.
nû a ûn pa-uápka I shall cat by and by.
tchē'k nû a pa-uápka I shall ent after a while.
nu a pán tak, pántak I shall then eat (Mod.).
MODAL INFLECTION.
In contradistinction to the "Nominal forms of the verb", the infinitive, verbals, and participles, I call modes only the inflected forms of the finite verb. Modes are not inflected here in tie same mamer as in European languages for person and number; but, like the tenses and verbals, they assume the reduplicated or distributive form. Only one of the verbal forms, the verbal indefinite, can take one of the modal forms ( -t ) observed in the finite verb.

Three modes exist in this language: (1) the declarative mode; (2) the conditional mode ; (3) the imperative mode.

1. The declurative mode is the simple form of the verb; it usnally terminates in the declarative particle a, which now beenmes an inflectional suffix. In the future tense, this mode terminates in -uápka. Its functions nearly correspond with those of our indicative mode.
2. The conditional mode appends - t to the simple form of the verbs following the A-inflection, and -at to those following the U-, I-, L- and N-inflec tion. Some verbs in -na will syncopate the vowel between $n$ - and $-t$, as shuina to sing, pi shuint he may sing, for sluinat. Sometimes the ending :t becomes nasalized, as in kókant hûk, for $\underline{k} \underline{k}$ kat he maiy bite. One of the nominal forms of the verb, the verbal indefinite, forms a conditional by suffixing -t (not -at) to suffix -sh: k’léka to die, k'lékslı the act of dying, k'léksltt for having died, after dying, when dying.

This mode wholly differs from our subjunctives or optatives; it expresses by one term a whole conditional sentence, which we would introduce by such conjunctions as when, if, after, on account of, for The suffix -t is nothing but the abbreviated: at, now, then, at the time being; and if it had to be paraplirased, -t as a suffix would correspond to "under these circumstances." The whole of its functions will be developed in the Syntax. The same particle is sometimes appended to other words than verbs, exactly in the same manner as we see it done in the conditional mode: kakó bělat nothing but bones now: 101, 10 , which stands for kak 6 pîl at.

The future in -uápka has no conditional mode, for here the declarative mode itself is often employed in that sense. Readers should take care not to confound the conditional mode with the second person of the plural in the imperative : lúelat may kill, and lúelat! kill ye !
3. The imperative modé, or mode of compulsion, appears in two formsthe imperative proper and the exlortative node.
a. The imperative proper, jussive, or mode of behest, command, is formed of the simple form of the verb, or base, increased in the singular by $\mathrm{i}, \hat{\mathrm{i}}, \mathrm{ik}$ ! thou! and in the plural by āt! ye! These personal pronoims of the second person áre loosely connected with the verb, and may stand before or after it; they never form a part of the verb itself, and are ofteu pronounced separately.

The verb can even preserve its usual ending in -a , when the pronoun stands before it. Examples:
shápa to say:
sháp’î! shápi! shápa ik! say thou! say!
sháp'āt! shápat! say ye!
shnúka to hold fast :
i shnúki! ̂̂î shnúki! shnúki! î shnúka! shnúka i! hold thou fast ! āt shnúkat ! shnúkāt! āt shnúka! hold ye tight!
shuína to sing:
shuịn î! shuíni! î shuín! sing!
shứn' āt! shuinat! āt shuín! sing ye!
Sometimes, by addressing one representative person, as a chief, a whole multitude is addressed sinultaneously; then $\hat{1}, \mathrm{i} k$, $\mathfrak{i k} \overline{\mathrm{e}}$, $\mathfrak{i k i}$ thou may be used instead of āt, à ye: íshuin! sing ye! Cf. $90,12-14$.
b. The exhortative form in -tki, tgi is identical in form with the verbal intentional to be considered below; it puts the command in a mild, affable form, and sometimes stands for the imperative proper, and so does the future in -uápka. The exhortative often nasalizes the final -t, and throws off the -ki, -gi for the sake of brevity, as huhátchantki they should run on, 54, 8, or huhátchant. Cf. 40, 4. In this mode -tki is contracted from -tko gî and a finite verb of command, desire etc. is omitted : shaná-uli nû luuhátchantko gî I want (them) to be running on. The exhortative goes through all three persons of the singular and plural, and in the first and third persons may be rendered by húdshantki nû let me run, húdshantki hûk let him, her run. The future in -uapka has no exhortative form, because that function is enibodied in its declarative mode.

The three modes just discussed are also reproduced in what I call the periphrastic conjugation with the auxiliary gì to be .

A potential mode is formed by adding the particle ak, ák a, ka to the finite verb-a process which properly belongs to the Syntax.

## NOMINAL FORMS OF THE VERB.

What I call the nominal forms of the verb are all inflected for severalty, but not all for case. They are: (a) participle; (b) verbals. Two of the latter can form a periphrastic conjugation with the auxiliary verb gî, also both participles.

## a. Participles.

The language forms two participles, which in their functions correspond somewlat to our participles in -ing and -ed, -t. They occur in every verb, and end in-
(1) -n (Mod.), -nk (Kl.).
(2) -tko, -tk (Kl.), -tko, -tku, -tka, -tk (Mod.).

1. The participle in -n, -nk I call, for short, the participle of the present, although it is indefiuite in regard to tense and only applies to the time referred to by the finite verb of the sentence or clause to which it belongs. Thus it may be said to refer to the time being. When appended to verbs in $-a$, the suffix is -an, -ank; to verbs in -u, either -ūn, -ūnk, or -uan, -uank. The other three inflections in $-\mathrm{i},-\mathrm{l},-\mathrm{n}$ run as follows:
gì to be, exist, Mod. gían, Kl. gíank.
titkal to pick, up, Mod. itk(a)lan, Kl. ítklank.
shlín to shoot, Mod. shlían, Kl shlíank.
The participial suffix -n, as it appears in Modoc, is more archaic than the -nk of Klamath Lake, in which the -k is probably the agglutinated verb gí to be. But even in Klamath Lake the -n form occurs frequently enough:
tclakáyan staying in the bush, 24, 1. Cf. 23, 21.
taluálzan lying on his back, 24, 14.
shulatchtilan tchélza to be on one's knces.
Pálan E-ush Dry Lake, and other local names of both dialects.
This participle is not susceptible of inflection, except through reduplication. The phonetic irregularities occurring in the participle of the verbs in -n, -na will be considered under the heading of the N -inflection.

When joined to the personal pronouns nu $I$, î thoo etc., this participle also forms a sort of a finite verb, which occurs but seldom in our Texts, and lias to be considered as a usitative form. Cf. kiukiyank is in the habit of sticking out obliquely, 71,2 ; also $87,2,3$. In some instances this form in -ank may be an abbreviation of the verbal suffix anka, q. v.
2. The participle in -tko, abbr -tk, in Modoc -tko, -tkn, -tka, -tk, is not so indifferent in regard to tense as that in $-n$, $-n k$, for it refers mainly to the past. Through its inflection and position in the sentence it is invested with the qualities of an adjective noun, and as such it describes quality, ownership etc. acquired in the past. When formed from transitive verbs, it usually assumes passive functions, though there are many exceptions to this. The concrete and abstract nouns, verbal adjectives, and other words formed by -tko have all been considered under Suffix -tko, q. v.

There are many instances when participles in -tko refer not to the past, but to other tenses, especially the present.

Instances where intransitive verbs have formed participles in -tko are: gítko been, or possessed of ; géntko having walked, 125, 1; tsízatyant(-ko), 179,6 and Note; suạ́wedsh wénuitk a widow, 82,5 ; shashámoks-lólatko who have lost relatives, 82,5 and Note ; guli'tko having crept into, etc.

In the conversational form of language, the ending -tko is sometimes cut off, and what remains is the verb with the last syltable emphasized: kewá for kewátko broken, pahá for pahátko dried, k’leká for k’lekátko deceased.

The auxiliary gî to be connects itself in all its forms with the participle in -tko: nû lólatko gî I am a believer, 44, 22; wē'tko gíug for being frozen.

This participle is formed by appending -tko, -tk, in the oblique cases -pkash, -pkam etc., to the full, suffixed form of the verb, as mbakatko, d. mbambákatko broken down, from mbáka to break down. Verbs euding in -ala, -la, -ana, -na, however, elide a after -l and -n iuto -altko, -antko; for which process cf. List of Suffixes. The suffix -tko inflects for case and severalty just like any other adjective, and a full paradigm will be given below. The various forms in that paradigm can be well understood only after a thorongh study of the nominal inflection.

## b. Verbals.

For want of a better term, the nanie verbal is used here to comprehend a second class of nominal forms of the Klamath verb, containing: .(1) the infinitive, (2) the verbal indefinite with its case-inflection, (3) the verbal conditional, (4) the verbal preterit, (5) the verbal causative, (6) the verbal durative, (7) the verbal intentional. The verbal forms corresponding to these in English are the infinitive and the participles in -ing and -ed, -t when connected with various conjunctions and prepositions. In Latin they correspond to the infinitive, the gerund, gerundivum, supinum, and to some of the participles. The English infinitive is expressed by the simple form of the verb in -a; sometimes and more frequently by the verbal indefinite and other verbals. No verbal, except tlie verbal in -sh, has any nominal inflection; when verbs in -tki, -úta, -úga, -óga are inflected, they are real verbs, and not verbals.

## 1. The infinitive

Is formed of the simple form of the verb, with the declarative -a usually suffixed. It resembles in its function the English infinitive, but differs from it by its rare occurrence in the spoken language. Still, in quoting a verb for itself or for insertion in a vocabulary, the Indian always uses this grammatic form. The Latin and German infinitive is originally a dative of an inflected verbal, but in Klamath this form shows no inflection except for severalty. The following examples may give an idea of its functions :
slıā't'la káyaktelıa he employed to pursue (them), 44, 2.
sha gén' a mat slilaiá they then went to see, as reported.
kák’ ûn ítklan tpéwa shewána pátgiuga he told (her) to pick up bones and to give them (to others) to eat.
kn-ishéwank shlä́pěle rejoicing to meet (him) again, 96, 5 .
mā'shishtat slí-îsha shátělakish salve to rub on sorcs.
tídslii häk (for hä gî) túměnank if 1 hear (thenı) to be good, 93, 9.
shahamúyank slmúntatka sending for somebody to act as interpreter, $66,15$.
hî laláki hémkank kshaggáya the judges ordered to hang them, 44, 6 .

It has long been disputed whether Indian languages liave a real infinitive, and therefore I have given a number of passages refering to the question. Some of these infinitives could be explained by the principle of co-ordination of sentences, others by apheresis of -tki, as in the first sentence: káyaktcha for kayaktchátki, because the verbs embodying an order, message, announcement usually have the verbal in -tki or -sh after them.* But, nevertheless, the form exists as a verbal distinct from all other verbals.

## 2. The verbal indefinite.

This verbal ends in -sll,-s, and is the only verbal undergoing inflection for case in the absolute and distributive form Like the other verbals, it is dependent on some finite verb (predicative personal verb), and the sentence in which it is embodied would be expressed in English by an incident clause. The verb on which verbals depend is either gî to be or some other temporally inflected verb; if it is gî, this gî is often suppressed for brevity.

When the logical subject of the verbal indefinite of a transitive verb is a noun, it sometinues stands in the possessive case in -am; if a pronoun, it is expressed by the possessive and not by the personal pronoun. Thus we have to say: máklaksam shishúkash the fight of the Indians, gé-u gé-ish $m y$ departure; lit. "the warring performed by the Indians", "the going away by me." These verbals indefinite have hence to be understood in a passive sense, and the same holds good of the preterit verbal in -uish, which does not inflect for case unless it turns into a substantive noum.

But when the subject stands in the subjective case and the pronoun in the personal form, the transitive verb is in the active voice, and has to be translated as such. Examples of both constructions will be found below.

There are two verbals indefinite: (1) one in -ash, referring to the act expressed by the verb, the action in abstracto in present or past; (2) another in -isl, referring to a person as grammatic or logical subject of the act expressed by the verb in the present or past. On account of rapid pronunciation, slurring over, or syncope of the vowels -a- or -i-, both verbals often become indistinguishable, and are easily confounded. Many verbs

[^52]have only one of the two forms, especially those ending in -i. Thus we have:
shléa to see, to be seen; shléash, contr. shlésh, slē's the aet of seeing, having seen, being seen, vision, the "looks of something"; d shléshlash the uct of seeing each objeet; shlé-ish, contr. shlésh one who sees or has seen, is seen; d. shléshla-ish eaeh of those seeing or having seen, being seen.
kédsha to sprout, kédshash the fuet or aet of sprouting, present or past; d. kéktchash (of each plant); kédshish the sprouting of it, the having sprouted, d. $\underline{k}$ éktchish (of each plant).

These two endings, -ash and -ish, occur again in the nominal derivatives from verbs or nomina verbalia, and are discussed at length in the list of suffixes. The verbs in -n usually drop the -n in forming them: pán to eat; pásh, pā̃'sh for pá-ash and for pá-ish.

The mode of rendering these verbals in English is very different, and generally a dependent clause has to be formed. We thus obtain two parallel inflections of the two verbals indefinite:
(1) shléash the act of seeing, having seen, being seen, having been seen.
shléasham the seeing by others than the subject of the sentence.
shléashti for seeing, on aeeount of seeing, being seen.
shleashémi, shleashä'm at the time of seeing, being seen.
slikéashi while, when seeing, being seen at a certain spot.
shleashtka going to see, on the point of seeing, being seen.
(2) shlé-ish one who sees, saw, is seen, or has been seen.
shle-isham others seeing, or being seen by others than the subject of the sentence.
shlé-ishti for, on account of one seeing, being seen.
shle-ishē'mi at the time of seeing, being seen.
snié-ishi while, when one is seeing, being seen at a certain spot.
shlé-ishtka one going to see, or on the point of being seen.
The above paradigm, compared with that of a substantive, shows that the objective and several of the locative cases are not represented, and that the idea of time is prevailing.

It will be seen that these two parallel inflections of the verbal (-ash, -ish) coincide almost entirely as to their function or signification in the oblique cases, and materially differ only in the subjective case. At any rate, the difference in the oblique cases is too slight to be kept up by the natives, and thus they use only one form for the oblique cases, which is formed either from -ash or from -ish, but more commonly from the latter. When the suffixes are appended to vowels contraction usually takes place, as shlē'sh for shlé-ash and for shlé-ish.

Subjoined are a few examples of verbs standing in the subjective case of the verbal indefinite: (a) intransitive verbs, then (b) transitive verbs, in the active and passive voice.
(a) máklaks léwitchta ké-îsh, or gē'slı, the Indians refused to go, 34,$9 ; 36$, 14. Cf. 165,9 .
kíuks ká-i shaná-uli gémpeclîsh the conjurer did not want to return, 34,8 . túnepni nûtísh having kinulled fire five times, 70, 3.
kii'shgug gû̀tgapělîsh for being unable to climb back, 95, 6.
sha nánuk shîkî̀'lki-uapk kshî'ul $\mathfrak{i s h}$ they will all assemble to dance, 140, 3.
(b) nû k'léwi shislıû̀kàsh, shú-utank(a)sh shaná-uli I quit fighting (and) wish to parley, 14, 1. 2.
nai'paks nû shatashtat î'sh the disease $I$ am removing from $m y$ mouth, 153 ; 4.
Mō'dokni ktaktanapátko shítko shlé-ish the Modocs look sleepy; lit. "the Modocs sleepy-alike to be seen", 91, 7. Cf. 73, 6.
pû'ks ónions-shîtko shlénsh camass is like onions to look at, 148, 13. Cf. 113, 17.
snawédsh kíuksam siuks (for shiúkish) the woman killed by the conjurer, 69, 2.
wiulágalam sliapíyash upon the message sent by the antelopes, $122,10$.
wíudsish k'läk'á the beaten one died; lit. "he died after having been beaten", 134, 10 .
kí-i hukî' tsutísh gíntak gî in spitc of being doctorcd she gets worse, 68, 7. ndáni Bóshtin lákiam ne-ulkíash three contracts having been made by the American Government, 36, 14.

E-ukshikísham ktchínksh těméshkash the rails having been abstracted by the Lake Indians, 35, 10.
mî hu gé-u stíntish you are dear to me; lit. "yours is the being loved by me."

A combination of two of these verbals in one sentence is found in: sha nen máshish gîsh shápa they say he has become or is diseased, $140,5$.

The verbal indefinite in -sham represents the possessive case. But the -am is not simply appended to the -sh of the verbal; it is a combination of the pronoun sliam, sam of them and the verbal indefinite. This will be shown more at length in the Syntax, and I consider it sufficient to give here one example to show that the subject referred to by sham (-am) always stands in the plural number and differs from the subject of the main sentence: P'laíwash shléa spû̀nsham (for spunísh sham) túpakshash m'na the Eagle saw that they had lidnapped his younger sister; lit. "the Eagle saw the act of theirs to kidnap his younger sister."

The verbal indefinite in -shti, -sti is not often used, but is originally of a locative import, and hence can be used in an additive function. Cf. Syntax. It is used in a causative sense in the following sentence taken from a Modoc text: vudópka sha û'nk Kě́nushash nánuk ûnk tchulísh Aíshisham tútashti they beat Këmush for having taken away all the shirts belonging to Aishish.

The verbal indefinite in -shēmi, -shäm is purely temporal; will be discussed in Syntax.

The verbal indefinite in -shi, -si is temporal and local simultaneously; will be discussed in Syntax.

The verbal desiderative in -shtka (or -shtkak) expresses a tendency toward, a wishing for, a "going to be", a "being on the point of" the act or state embodied in the verb, and occurs in intransitive as well as transitive verbs. Grammatically speaking, it is the instrumental case of the verbal indefinite. It is generally connected with the auxiliary gî to be, exist; gî either stands separately after it, or becomes affixed to it in the shape of $-k$, or is omitted altogether. Thus we can say: nû a puluáshtka gî $I$ want to drink, or nû a punuáshtkak, or nû a punuáshtka, all of these forms being equivalent to: nû a punuash shanahóli. The verb gî is necessary to com-
plete the sense of the verbal; and when gî or inflectional forms of it are omitted, this has to be considered as an irregularity.

To the examples to be found in Syntax, I add here:
Wakaí lálap shápash a hîn shnekúpkashtkak î? why do you want to have two moons going to shine up there (simultaneously)? 105, 10; from shnéka to be lit up, to shinc; shnekúpka to shinc from a distance, or from abovc, up there.

## 3. The verbal conditional.

The verbal conditional in -sht is formed from the verbal indefinite by appending the suffix $-t$, which is also the mark of the conditional mode in the finite verb. Its function is to indicate the condition or supposition under which the action or state expressed by the finite verb of the sentence may become a reality. In most instances we have to express it by a clause dependent on the principal clause, and its subject has to stand in the objective case, whether it be a noun or a pronoun. Though in its temporal function it is indefinite like the verbal in -sl, -s, it refers more frequently to the past than to any other tense. Unlike the two forms of the indefinite in -ash and in -ish, there seems to be one form only for each verb, either the one in -asht, or that in -isht. The subject of the verbal conditional is always another than that of the principal clanse; and this verbal, if not always strictly conditional, sometimes expresses possibility, supposition, conjecture. More concerning it will be found in Syntax.

This verbal is formed:
patádsha to strain, stretch out; patádshasht, d. paptádshasht for having
stretchcd out; when, after, on account of having strained, stretched out. shapíya to tell somebody; mîsh shapíyasht because, after you said or told; mîsh shashapíyasht on account of your saying or telling at various times or sundry places.
tchúka to perish; tchúzasht, d. tchutchózasht when, after perishing.

## 4. The verbal preterit.

This verbal is constructed from the simple form of the verb by appending -uish. It is not susceptible of inflection like the verbal indefinite, or like the substantives in -uish, but always refers to acts performed or states
undergone in the past or preterit tense. According to the contents of the sentence, it may stand for our pluperfect, and in English rendering has, in most cases, to be expressed by a dependent clause. It forms no conditional verbal in -uisht, because the form in -sht is most frequently found to express a preterit tense, which makes a form in -uisht unnecessary. Examples:
géna to go away; génuish the having gone, retreated; after going.
hémkanka to speak; gé-u hémkankuisl, d. hehámkankuish, "my having spoken", the fact of my speech or specehes having been delivered.
shnápka to flatten; shnápkuish the former flattening process, the past aet of flattening; d. shnásh'npkuish each of the above acts.

## 5. The verbal causative.

The primary function of the suffix -óga, -úga, -ok, -uk is a causative one, being appended to the simple form of the verb to state the physical cause or the reason why the act or state expressed by the finite verb of the sentence is, has been, or will be performed. Modocs prefer the full forms -óga, -úga; Klamath Lake Indians, -ok, -uk (with accent receding). Forms in óga etc. are not periphrastically conjugable with gî to be, nor do they show any inflectional change. In English, this verbal has to be often circumscribed by a sentence; its subject is the same as that of the principal clause.
shápa to declare, tell; shapóga, slápuk for the purpose of telling; d . shashpóga.
shléwi to blow, as winds; shle-úyuk because the wind blows or blew; d. shleshlíyuk because every one of the winds blew, or because the wind blew at different times.
wenóya to be or become a widow: wenóyuk on account of having become a widow.

A secondary function of -oga is that of forming a verbal with a temporal signification, resulting from the causative one and expressed by our conjunction when:
núka to be ripe; núkuk when ripe; lit. "becanse ripened."
táměnu to travel, march; tíměnug î when you go or travel.

Readers should take care not to confound the verbal -óga, -úga with derivative verbs formed by the homonymons suffix -oga, implying the idea of location inside, within, and other meanings; nor with the enclitic pronom lhûk, ûk this one, he, she, or the adverb hûk (for hûnk) which points to the past tense, as in léwatkuk after playing, 109, 15, for léwatko lû̂k. In some instances huk, uk even stands for ak, hak only, but; cf. 83, 1, and Note.

## 6. The verbal durative.

It is formed by appending -úta, -ota to the simple form of the verb, a suffix which corresponds to our while, whilst; or, if the verbal is rendered by a noun or participle, to our during, pending. So this verbal intimates that the action or state which they express lasted during the time of the act expressed by the finite verb of the sentence. When the act or state expressed by the verbal continues longer than that of the main verb, the suffix -úta, -óta corresponds to our after. This suffix is neither conjugalule witl gî to be, nor susceptible of inflection ; it has therefore to be kept distinct from -ńta forming derivative verbs as we find them in 35, 4. $83,2$. 185 ; 43. Cf. List of Suffixes, under -úta.
géna to go, walk; genúta while walking.
gúkna to elimb; gukěnúta while climbing up, $95,3$.
gulí to creep into; kule-óta while ereeping into.
hémkanka to speak; hemkankóta during (his) speech.
stáwa to starve, fast; sta-óta while fasting.

## 7. The verbal intentional.

This verbal ends in -tki, -tgî, which is sometimes mispronounced -tka, -tga, and gives the purpose, aim, or intention by which the action of the finite verb, from which the verbal depends, is performed. Thus it answers to our in order to, for the purpose of, and in its form does not differ from the exhortative form of the imperative mode. More frequently than Modoc does the Klamath Lake dialect comnect it with forms of gí to be, especially with its cansative form ginga, gíug. In this connection the infinitive is often substituted for the form in -tki. In a few instances -tki is found to
stand for -tko gî; for instance: tchēks nû gatpántki I shall come very soon; then, of course, it is not the verbal intentional.
lúela to kill; luéltki, luéltki gíug, and lúela gíug in order to kill.
tchútna to go and treat; tclútantki gíug for the purpose of treating, doctoring, for medical treatment, 65, 18.
gé-upka to ascend; ge-upkátki gíug on account of (their) ascent, 105, 2.
It is important to observe that the combination -tki gíug is often contracted into -tkiuga, -tgíug; luéltki giúga becomes luéltkiug; meyátki gíug: meítgiug, pátki gińga: pátgiug.

## PERSONAL PRONOUNS CONNECTED WITH THE VERB.

The personal pronoun, whether used as subject or object of a verb, is not incorporated into the body of the verb. At the choice of the one speaking these pronouns may be placed before or after the finite verb, separated or not separated from it by particles or other words intervening. Most pronouns, especially when monosyllabic, are accentless, and therefore either proclitic or enclitic ; but, in spite of such deceptive appearances, the body of the verb does not incorporate these pronouns within itself, and a genuine verbal inflection for person does not exist. This analytic feature greatly facilitates the acquisition of the Klamath language, and distinguishes it clearly from many other languages of North America.

## The subject-pronoun.

The subject-pronoun can either precede the absolute form of the verb, which generally terminates in $-a$, or follow it, and in both instances the declarative particle $a$, though it is in the verb already, may be inserted between pronoun and verb. When the pronom follows the verb, and the verb stands in the present tense, the particle $a$ is generally inserted between them; but when a preterit tense is intended, it is usually replaced by hûn, hı̂nk, hî'nk, unk. Thus we obtain four modes of conjugating the subjectpronoun with the absolute form of the verb, A fifth one is added to these, which is produced by omission of the particle $a$, retrograding of the accent, syncope, apocope, or other phonetic causes, and extends over the plural arid first person of singular only. Except in the first person of the singular,
this fifth mode occurs very rarely. In all these five series ídsha may be accentuated also on the ultima: idshá. The intercalation of the declarative particle $a$ is more frequent in the northern than in the Modoc dialect.

The series of subject-pronouns will be fully discussed under "Pronouns." The first persons are nû, nî, and nāt; the second, î, ăt; but for the third persons, various pronouns are in nse which in reality are demonstrative pronomis (sha excepted), expressing the degrees of distance from the speaker at which the objects spoken of are supposed to stand. For the third person singular, I have selected for the paradign $p i, p \hat{1}$, which points to a he, she, or it at some distance. No inclusive and exclusive forms for we are in existence, nor is there a dual for any of the pronouns.

The above will give us the following paradigm for the past-present declarative form of ídsha to remove:


The distributive form í-idsha, i-îdsha to remove many objects individually, severally, or at different times follows the same paradigm:
nû í-idsha nû a í-idsha í-idsha nu í-idsha a nû í-idshan etc.
The same may be said of the conditional in -t, as far as the four analytic series are concerned. For phonctic causes, the synthetic series is not in use in this mode, and in the declarative mode it is used only in rapid conversational speech.

In the second and fourth analytic form, the declarative particle $a$ is often replaced by a more emphatic one, like a-i, ha-i, haí, haítch. Like a, these are also particles of actuality, and moreover show that the act is or was performed in the presence of the speaker, or of the one spoken to.

The imperative observes another method in forming its two persons, as shown above; the exlortative shows the uniform ending -tki.

## The object-pronoun.

The same freedom used in placing the subject-pronoun before or after the verb exists concerning the object-pronoun, and in combining the objectpronoun with the subject-pronoun, or separating both by interposing the verb or other terms. Here a good deal depends on the importance of both as parts of the sentence.

The object-pronoun of the direct object is identical with that of the indirect object, and often becomes syncopated, or otherwise shortened, in rapid speech. If both pronouns are placed after the verb, they often combine into a synthetic phrase, and the object-pronoun of the second person then precedes, invariably, the subject-pronoun of the first.

Paradigms of these pronominal combinations will be found under "Pronouns."

In reflective and reciprocal verbs, the object-pronoun is expressed synthetically by the prefix h-sh of the verb. See "Voices of the Verb."

## VERBAL INFLECTION TO MARK SEVERALTY.

'To the observing mind of the primeval Klamath Indian the fact that sundry things were done repeatedly, at different times, or that the same thing was done severally by distinct persons, appeared much more important than the pure idea of plurality, as we have it in our langnage. This category of severalty impressed itself on his mind so forcibly that he rendered and symbolized it in a very appropriate manner by means of the distributive reduplication of the first syllable. As will be seen by referring to the chapter on Reduplication, this grammatic feature is made thoroughly distinct, as far as phonetics are concerned, from the iterative reduplication, which serves for word-formative or derivational purposes only.

From what is said in the chapter referred to, the grammatic irnportance of the distributive reduplication may be studied in all its details. It extends over all parts of speech-not only over the finite verb, but also over all temporal, modal, participial forms of the verb-over all the verbals and voices of the verb and their derivatives. All its various functions are related to each other, whatsoever may be the form we may select in translating thent into English or other languages.

Only a few verbs and nouns are exempted from reduplicating, and they are so from purely phonetic causes. It is easy to understand that words like shnikshokshuka to smell around can not reduplicate, on account of their unwieldiness appearing even in the absolute form; and the delicate sense for linguistic proprieties of the Klamath Indians refrains from phonetic impossibilities, as well as that of other nations. Cf. also what is said on page 267. With snch terms, severalty has to be indicated by a circumscriptive sentence, or by tími many, tím much, nánuk all, nánukash everywhere, etc.

## THE VOICES OF THE VERB.

While the modern languages of Europe choose the analytic method for expressing such voices of the verb, or genera verbi, as the passive, causative, reciprocal, and reflective forms, the classic languages of antiquity, the Semitic dialects, and a large number of the American languages prefer to express them in one word. The single and comprehensive terms which they use are derivatives of the active form of the transitive verb; some languages add to this a medial form, purporting that an act is done with reference to or in the interest of the verbal subject. All these comprehensive forms are true expressions of the incorporating principle innate to those languages.

For deriving the voices, the Klamath language uses prefixes, either sounds or whole syllables. They are placed before the active verb, or before the intransitive verb, wherever it can form derivatives of this kind (causative and medial verbs). This change is attended with vocalic anathesis (q. v.) in some of the voices. Every one of these derivatives is inflected like the primary verb from which it is derived, though there may occur a difference in the accentuation of the two. We have seen that prefixes form derivatives only, not forms of verbal inflection.

Here the inflection of the transitive verb does not differ from that of the intransitive, as it does in sn many other languages, and it is only on account of the peculiar formation of duals and plurals that I made a separate voice of the intransitive verb. The passive form is identical with the active form. In many instances the same verbal derivative serves as a reflective and reciprocal verb, and cansative verbs show the same prefix, h sh-. 'I'hese three usually differ from the medial form, a voice which is character-
istic for this upland language. The impersonal verb is usually without prefix, and inflects, like the other voices; some of their number also occur in the active form.

We reserve to the verb gî to be, exist, which answers to our verb to be when used in periphrastic conjugation, the last place in this chapter, and enumerate the cight voices of verbs in the following order:

1. Active voice.
2. Causative voice.
3. Passive voice.
4. Intransitive voice.
5. Reflective voice.
6. Medial voice.
7. Reciprocal voice.
8. Impersonal voice.
9. The verb gî.

## 1. The active voice.

Transitive verbs, in their active voice, have with them a direct object or complement, either animate or inanimate, upon which the act performed by the subject of the verb is directed. There are, however, many objectless verbs, which do not require constant mention of their object in distinct words, e g., to ride, to pay; here the adding of to ride a horse, to pay moncy, is unnecessary in most cases. But with others the sentence becomes defective if the object is not named, as with to smash, to throw, to press. The direct object stands in the objective case, whether nominal or pronominal : nû a shulótish shmukátana I am wetting a garment. A number of verbs can add an indirect object to the direct object, the objective case in -sh being the same for both: knúks îsh hûn né-i! hand over that string to me! In this volune the objectless and the objective active verb are both classed as transitive verbs. The natural position of the object is after the subject and before the verb, which, in declarative and interrogative clauses, usually concludes the sentence.

## 2. The passive voice.

Active verbs turn into passives when the sentence is reversed so tha the direct object of the active verb becomes the subject, and the former subject, losing the quality of grammatic subject, becomes its logical subject, and is pointed out as such by some preposition. Thus the sentence : Titak
lúkash shlin Titak shot a grizzly bear, becomes, when turned into a passive sentence, lúk slilin Tîtakam a grizzly bear was shot by Títak.

The English language usually resorts to the auxiliary verb to be when expressing passivity, but in Klamath the active verb remains unchanged. The same grammatic form exists for the active and for the passive voice; when no logical subject is added, it is impossible but for the context to find out which voice was intended. Cf. the following examples:
máklaks E-ukak idsha the Indians brought or were brought to Fort Klamuth.
máklaks ngē'shtka shiúka an Indian killed (somebody) or was killed by an arrow.

The different modes of expressing the logical subject of the passive verb will be discussed in Syntax, and it may be added now that the transitive verb is not very often used in a passive sense.

Another mode of expressing passivity is to connect the past participle in -tko with the auxiliary gî, and to inflect both through all tenses, modes, and verbals of the latter:
ktúka to strike with fist:
nû a ktúkatko gî I am struck.
nî a ktúkatko gí-uapk I shall be struek.
kóka to bite:
nû a kokarko gî $I$ am bitten.
i a k kokatko gít you may get bitten.
kókatko gíuga in order to be bitten.
In forms where gî is found, and not an inflectional form of it, as gīt, gitki, gíng, gísh, gî'slıt, this auxiliary is frequently dropped: nû kókatko $I$ am bitten.

There are some verbs in the language which can not be used in another but a passive signification, e. g.: slalzíta to be bewitehed, to lie sick under the tamánuash-spell, from shifla to be chronieally siek; but it is more logical to consider verbs like these as intransitives.
3. The reflective voice.

In reflective verbs, the direct object is also the subject of the verb. To express this relation the English language has no means but that of adding myself, himself, oneself, etc.; but in Klamatl prefixation of sh-or of $\mathrm{h}_{1}$-sh is resorted to, so that the reflective voice is formed synthetically. If peculiar stress is laid upon the myself, himself, nútak, pítak etc. may be added. Some grammarians call these verbs pronominal verbs. The function of the prefix sli- as a reflective pronoun is to form reflective verbs with a direct object (reflective verbs properly so-called), and other reflective verbs with an indirect object (medial verbs). The latter are now formed exclusively by this prefix, while the former show shl- and its compound $l_{1-s h}$. The pronoun sha they, now used in the plural only, gave origin to this prefix, for it must lave once signified oneself and themselves. Examples :
shaláktcha to eut one's throat; from láktcha to eut another's throat.
shataláka to rub oneself; from taláka to rub.
shuptóga (lák) to pull out one's hair; from putóga to tear out.
And several others mentioned on page 278.
The compound prefix $h$-sh-also forms reflective verbs, and some of these are reciprocal at the same time, like histánta. Besides the verbs given on page 279 we mention:
histánta to love oneself; from stínta to love.
líshlan to shoot oneself; from shlín to shoot.
láslitza to perforate one's nose-wall; from slıtúka to pieree.

## 4. The medial voiee.

Transitive and intransitive verbs assume the form of what I call the medial voiee by prefixing sh-, s- when the act embodied in the verb is done upon or for the subject by or in reference to this same subject of the verb. It is in fact a reflective verb, but a special kind of it. To the reflective verb proper the verbal subject serves as a direct object, and therefore only transitive verbs can give origin to this verb; but to the medial verb the verbal subject serves as an indirect object, hence this verb may originate from intransitive as well as from transitive verbs. The medial verbs of

Klamath may be most fitly compared in their functions, not in their external form, with the media of Greek; those which are formed from intransitive verbs correspond exactly to the French s'en allcr, sc mowir, and to the Spanish irse, morirse.
a. Medial verbs derived from transitives:
shakiha to miss the mark while shooting; from kar'hha to miss the aim. shálamna to carry on the back; radix a- in ána to carry off. shálgia to plaee, dcposit against for oneself; from lákia to place against. sháměni (for sh'háměni) to claim for oneself; from hámĕni to desire. shámpatuala to nail, fasten one object to another to make it longer; from mpáta to pin fast to.
shikita to make a false report; from kíya to tell a lie. shlánkua to spread out over the water; from nákua to dam up. shuyéga to lift up for oncself; from uyéga to lift a long object.
b. Medial verbs derived from intransitives:
shaktila to take under the arm; from gutila to go below.
slalaggáya to ascend, elimb up (spiders); from laggáya to hang down from. shalála to seratch, rub one's sides; from lála to slope downward. shâáma to call saucy names; from láma to be wild, bewildered. shetálpéli to look back at; from télha, téla to look upon, on. stúnka to pass, run through, as ropes; from tínka to come out.

A special kind of verbs, which should be classed with the medial verbs, are those in which a consonantic or vocalic change indicates some relation to the subject itself. Not many instances of this are on hand, but we may mention:
kilxántko humpback, when imitated by children etc.; from kíla (not kilza) to become humpbacked.
pä'dsha to simulute siekness; cf. pā'dsha to beeome dry (originally), to fall sick; to beeome blind.
pé'lpela to work for one's own or somebody's benefit; from pélpela to work. txia'lya to rise upon one's feet (emphatic; ia is long); tgellya to stand up.
5. The reciprocal voice.

Verbs expressing a mutual act, done by each to the other, are called reciprocal verbs, and presuppose a donble subject, which is usually expressed by pronouns. Either these pronouns are added to the verb as separate words,* or they are represented by some affix appended to or incorporated into the verb. In the language of the Maklaks this latter synthetic mode is alone in use, and reciprocal verbs are able to form nominal derivatives also. Like the reflective voice, the reciprocal voice is formed by the medial prefix sh- or its compound h-sh-, and attended by vocalic anathesis:
(a) Reciprocal verbs with prefix sh-. This form of the voice is not so frequent as the one to be given under (c).
shakíha to miss each other; from kaihha to miss the aim.
shatáshta to touch each other; from táshta to touch by hand.
shétui to fire at each other; from téwi to shoot.
shenōlqa to compact, agree; from né-ulqa to arrange.
(b) Reciprocal verbs with prefix sh-, formed by the distributive form of medial verbs. This mode of deriving reciprocal verbs is only accidental.
shashálgia to quarrel; from slálgia to lay something against.
shashtáshta to touch each other; from táslita to touch by hand.
(c) Reciprocal vcrbs with prefix $h$-sh-. Some verbs formed in this manner are simultaneously reflective and reciprocal, and the original active form of others no longer exists in the language.
heshamkánka to tell, order each other; from hemkánka to speak.
hushintanka to meet each other secretly; from hútanka to run up.
liushpántchna to walk arm in arm; from spúnshna to take along.
hushtíwa to scratch, stab each other; fron téwi to pierce, stab.
hıslitchóka to kill each other; from tclı́ka to perish.
And many others on page 279.
(d) Reciprocal verbs in -yua. Modoc verbs of this terminal have been discussed under Suffix -yua.

[^53]
## 6. The causative voice.

This is a form of verbal derivation which adds to the transitive or intransitive verb the idea of prompting, causing, or compelling to perform the act or enter the state or condition expressed by the original verl). The Klamath language forms them by means of vocalic anathesis, and by prefixing sh- or compounds of it: shn-, sp-, st-, h-sh-. In the Germanic languages, causative verbs are frequently formed also by a vocalic change, here called "Umlaut"; so we have in English to drench, to fell, to raise derived from to drink, to fall, to rise.
a. Causative verbs formed by the medial prefix sh-:
shkálkěla to hurt, injure; from kálkěla to fall sick.
shnélqa to set on fire; from nélka to be burnt up.
shuénka to kill, slay, plur. of obj. (Mod.); from wénka to die.
shúka to drive out from; from húka to run at.
$b$. Causative verbs formed by compound prefixes of sh-:
shnáhualta to cause to sound, to ring; from wálta to sound.
shnékshita to save, deliver; from kshíta to escape (Mod.).
shníkanua to let ripen; from nóka, núka to ripen.
spídsha to drag behind; from ídsha to carry along.
spika to draw, pull out; from fika to remove from.
stópěla to peel the bark off, lit. "to make dry above"; from u-above, pála to dry up.
hashtáwa to starve out; from stáwa to be famished.
héshla to exhibit, show; from shléa to see.
hushnóza to bake, cook; from shnúza to parch.
More examples will be found under "Anathesis", pages 278. 279, and List of Prefixes.

## 7. The intransitive voice.

Verbs which carnot take a direct object or complement, and therefore are not susceptible of being used in a passive sense, are called intransitive. In this langrage they are inflected in the same manner as transitive and other verbs as to tense and mode, and some can assume a causative and a medial
voice. There are a number of verbs which are transitives and intransitives at the same time, as k'lekala to lose children and to be at the point of death.

The distributive form of intransitive verbs may refer to severalty or repetition of the act, state, or quality expressed by the verb, but it does also, and much more frequently, refer to verbal acts performed or states undergone by a plurality of subjects, and in this latter case it corresponds to the plural of the English verb.

A special class among the intransitive verbs is the attributive verbs which indicate some quality or attribute of the subject, and in the languages of modern Europe are generally circumscribed by the substantive verb to be, accompanied by an ädjective noun. In a large number of agglutinative languages attributive verbs are a prominent feature, since they make a predicative verb of what we consider to be simply an adjective or attribute joined to the verb to be, and express by a single term what we can render only by a combination of two or three words. What we call an adjective is, in those languages, a verbal or participle of that attributive verb. So, in the Creek, the grass is green, páhit lánis, is, literally, "the grass greens", or "the grass is greening"; while green grass is páhi láni, which comes nearest to a term like "grass greened," or "grass greening." Here the adjectivé, whether used predicatively or attributively, is always a form of a verb; but in Klamath there are true adjectives, recognizable by their endings (-kni, -li, -ni, -ptchi, etc.), and liable to become connected with the verb gî; and, besides, there are attributive verbs of the sort just pointed out by an example from the Creek language. These attributive verbs appear in a verbal finite form when used predicatively, and in the participial form in ttko when employed attributively.

The two classes of the intransitive verb present themselves in the following manner:
A.-The non-attributive intransitive verb describes an act performed by an animate subject, or a state undergone by, a quality belonging to an animate or inanimate subject. If connected with an object, this object is always an indirect one.
kédsha, d. kék'tcha to grow (plants).
k'léka to reach, to turn into; to die.
nóka, d. nónuka to ripen, mature.
tiai'na, d. tetiii'ma to feel hungry.
B.-The attributive or qualitative intransitive verb of the Klamath language corresponds to the English adjective connected with the verb to be, though it can be rendered in other ways. Some of this class even conbine a transitive with an intransitive signification, as ginka to be hollow and to perforate something. Examples:
tcháki mā'sha the boy is sick.
$\mathrm{ma}^{-1}$ shitko tcháki the, a sick boy.
tcháki mamā'sha the boys are sick; boys are sick.
mama'sliitko tcháki sick boys.
ktá-i yúta the, a stone is heavy.
yútantko ktá-i a heavy stone.
kélpka ámbu the water is hot, boiling.
á-ambu kekálpka waters are hot, boiling.
Adjectives, accompanied by the verb gî, can drop this verb whenever no doubt can arise through its absence about their meaning; in that case the adjective is predicative, just like the attributive verb. K K $\delta$-idshi wásh the mischievous prairie-wolf; wásh $\underline{k} \delta$-idshi gî, or wásh $\underline{\underline{k}}$-idshi the prairicwolf is mischievous.

When indicative of location or position, attributive verbs can fulfill the office of postpositions: i-utíla to be, to lie under; Mod. yutílan; postp. below, underneath.

The subjoined sniall list of attributive verbs goes to slow that many of their number have other significatious besides, which are sometimes transitive and more original.
gimpka, ginuala, gínsza to be empty, vacant, hollow.
gúhua, guhí to be swollen and to swell up.
kuánka to be lame; kuankátko lame, halting.
kíla, nyilla to be augry, strong, and to make haste.
mā'sha to be sick, smarting, and to taste like.
ndshóka to be deaf and not to understand.
nóka to be ripe, to ripen, and to cook, boil, stew.
pála to be dry, and to dry up.
slípnn to be full of air, wind, and to be haughty.
skúya to be erooked, humpbaeked, and to mash, bray.
8. The impersonal voice.

Impersonal verbs have for a formal subject the indefinite, neuter pronoun $i t$, for which no equivalent exists in Klamath. Here the impersonal verb is, therefore, expressed by the simple form of the verb, which inflects for terse, mode, verbals, and severalty. There are two distinct series of impersonal verbs-such as take no direct object, and such as possess a direct or indirect personal object.
A.-Objeetless impersonal verbs chiefly refer to phenomena of nature, to the changes in the atmosphere, of the seasons etc.
yéwa the north wind is blowing; lit. "it is howling."
lěména it is thundering; lit. "it is rolling."
lúa it is foggy, misty, hazy.
múa the wind blows from the south (múat)
paisha, tgíwa it is sultry weather.
páta it is suminer, it is hot weather.
sha'hlmálza the fall of the year is at hand.
shgû'mla, Mod. tchgî'mna it is freezing, frost is forming.
skóa it is spring-time ; lit. "it is sprouting."
shvâ'ntka, Mod. tchvíntka hoar-frost is forming
we'n iee is forming, it is freezing or frozen.
The following objectless verbs are compounds of gî to be, exist, and do not indicate natural phenomena. They may connect with an indirect personal object:
$\underline{k} e^{\prime} g i, \underline{k} a^{\prime}$ gi there is nothing, it disappears, it is searee (Mod. kä'gi and kä'ka).
láki (for lē há gî) it is gone, it is missing.
B.-Impersonal verbs with personal objeet cliefly describe bodily sensations of temperature, hunger or thirst, health or infirmity, and a few also refer to mental or moral qualities. A few also simultaneously appear as
intransitives, with the personal pronoun in the subjective case, especially in Modoc, while the majority have the personal pronoun or noun preceding or following them in the objective case.
ámbutka nû, î; ámbutka n'sh, m'sh $I$ am, thou art thirsty.
lúshlta nû; húshlta n'sh $I$ am in good health.
kë̀'dshika nû ; kaídshika nîsh I feel tired.
mā'sla nû ; mā̀sha nûsh, n'shı I am siek.
tiii'ma nû ; tiä'ma n'sh I am hungry.
Other verbs seem entirely confined to the impersonal form:
guhuá nish, mislı I am, thou art swollen.
kéľa a nîsh, kélza ansh $I$ am in the habit of.
kátka uûsh, kátgans I am cold.
lushlúshki nîsh I feel warm.
n $\chi$ ánka nîsh it aehes, hurts me.
ndá-iti an's my hands or feet are cold.
ndshóka mîsh thou art deaf.
panō'pka nûsl $I$ am hungry; lit. "I want to eat."
pä'ka nish, pä'kansh I am thirsty; lit. "it makes me dry."
púpa nûsh, púpans I bleed from the nose.
taps\%oyá an's my fingers are numb from cold.
tchäkélíla an's I bleed (elsewhere than from the nose).
Compare also the following sentences:
kú-i an'sh húshlta paíshuk sultriness oppresses me.
kä'gi a n'sh tchō'ksh I am lame in one le.g ; lit. "to me a leg is deficient."
9. The verb git то ве.

The Klamatl verb gî corresponds in a certain measure to our substantive verb to be, but besides this it is used in a much wider signification. It unites the functions of an intransitive to those of a transitive and substantive verb, forms with some verbs what I call "periphrastic conjugation," and in its various forms also enters as a component into the formation of words. This verb gî is, in fact, the demonstrative pronoun gē, kē this one, this here
in a verbified shape; and, having assumed the verbal form, it came to signify to be here, to be at this or that plaee, to be at this time or at such a time.

Thus the original verbal signification of gî is that of accidental exist-ence-to cxist, not by nature, but by chance: to happen to be. In this function it is comparable to the Spanish verb estar, to be accidentally; but it soon assumed also the function of designating real, essential existence, like the Spanish verb ser: to be by nature, to be essentially, in reality, and not by chance or accident. Outside of these, the verb gî has taken other significationsto become, to have, possess, to do and to say-all of which will be treated in their respective order Gî is often abbreviated into -g , -k , and its shorter forms are used enclitically.

I have elsewhere discussed this verb at lengtl,* and have here extracted some of the examples given there. More examples will be found in the Dictionary, pages 44. 45.

Presented in their order of grammatic evolution, the six different functions of gî are as follows:
(a) To be here, to be at this or that place, to be at such a time, then. In this function, gî points to casual or accidental existence, occurrence by chance, and, like the pronoun gē, generally implies close proximity to the grammatic or logical subject of the sentence. It comes nearest to our verb to exist. Examples:
kaní gî he, she, it is outside, outdoors.
lápi gì there are two (of them).
tídsh gî to feel well; kí-i gî to feel unwell.
kúmmětat gíank staying in the rocks.
gítì sluyéakēks gi-uápka here shall be a leaping-plaee, 142, 3.
To this definition must be traced the gî composing some of the attributive and impersonal verbs above mentioned, as käági, láki, lushlúshgi, p’laiki, shā'tki, etc.
(b) To become, to begin to be. This definition appears, e. g., in the following example: káti nî a kúkamtchîsh gí-uapk I would never become old, 64, 13.
""On the Substantive Verb iusome North Anerican Languages;" Proceedings of the XVIth Anual Session of the American Philological Association, July, 1884, pages $26-33$.
(c) To be really, essentially, intrinsically; to exist by its own nature. In this definition gî represents the substantive verbs to be of English, être of French, sein of German, and, as an auxiliary verb, is employed in conjugating verbs periphrastically through their verbals (in -tki, -shtka) and their participles.
nítakam lúk kallkali gî the seed of the nútak-plant is round.
î a tála gî youl are right.
î a kú-i gî you are wrong.
It appears as an auxiliary verb:
p'laikishtka gî sháppash the sun was near the noon-point.
nî nánukash shlla'sh ki $I$ can see everyiohere, $22,17$.
(d) To be possessed by, to belong to, to be provided, endowed with. When used in this sense, gî takes the owner or proprietor in the possessive case (to be somebody's), and the object possessed in the subjective case. If the owner is expressed by a possessive pronoun, this pronoun stands in the subjective case. Gî appears very frequently in the participle of the past: gitko possessed of, with the object in the objective case.
tánna ì wewéash gítk? how many children have you?
kínam kēk i-amnash gî? whose beads are these?
kánam gē látchash gí? who owns this lodge?
tunépni gé-u wélwash gî $I$ have five water-springs, 157 ; 46.
kókuapkash lúlp gítko having swollen eyes.
kailálapsh gítko dressed in leggings.
túma tuá gî'tkuapka î you will possess many things, 182; 7.
(e) To do, to act, to perform. Here the verb gî becomes a transitive verb, though there are no examples on hand of its being used in a passive sense also. Evolved from gî, signification (a) of casual existence: to be at something.
tidsh gî to do right, to aet well.
kni-i gî to act wickedly, to do evil, to be obnoxious.
wák î gén gîtk? what are you doing here?
húmaslit gíulank after having acted thus.
tuá î wák gí-uapkug tēbl shánahōli? what do you want to do with the table?
Gî to act also composes some verba denominativa, as nkā'kgî, nkáshg̣î, mentioned above.
( $f$ ) To say, to speak. Gî is used in this sense (instead of hémkanka) only when the spoken words are quoted either verbatim or in part. This use of gî has evolved from gî to do, to act, viz., " to do by words", and in French we often hear il fit instead of il dit.
ná-asht gî, nā'slitk, nā'shtg so I say, said; so he said etc.
tsí sha hûn gî so they said; hátaktk there he said.
nû gítki gî I say they must become.

## INFLECTION FOR NUMBER.

There are some grammatic categories which lave remained in a state of rudimentary development in the mind of the Maklaks Indian, and seem to lave been too abstract for him. Anong these is the category of number, or what we call, grammatically, the singular, dual, and plural; for these do not exist here in the sense expressed in European tongues. As to verbal inflection, this would necessitate the incorporation of the pronoun into the body of the verb, or of particles marking plurality. This we observe in many American languages, but not in Klamath, where only a faint commencement was made toward incorporating personal pronouns into the verb. But this language uses several other means to express number in a more indirect manner. One of these is the use of a different radix when the subject or object changes from the singular to the dual or plural; but this is not verbal inflection for number, for the term inflection implies rule and regularity extending over all verbs, whereas here the choice of the radix is sometimes arbitrary. Such a change in the radix always implies also a change in signification, however small; and if this change is no longer perceptible, it was so in the earlier history of the language. Moreover, the assumed term for dual does not mean here two subjects only, as with us.

At an early period the genius of this upland tongue seems to have left unnoticed the expression of number in verbs, as well as in nouns, and found no more necessity to define it than to define sex. Only a little more attention was paid to the categories of mode and tense, for what was done in all
these belongs to later periods of linguistic development. Concrete categories alore were then accounted of importance, for all relations bearing upon locality, rlistance, and individuality or severalty are distinguished with superior accuracy, and even tense is marked by means of particles which were originally locutive. Nowhere is the female sex made distinct from the male by linguistic forms, although several Columbian and Oregonian languages exhibit this distinction, some in the pronom only, as the Atfálati, of the Kalapíya stock, some in the verb also, as the Chinook.

In order to make our subject-matter clear, I have divided this chapter moto two parts:
I. Number in the transitive verb.
II. Number in the intransitive verb.

## I.-THE CATEGORY OF NUMBER IN THE TRANSITIVE VERB.

In the languages of Aryan and Semitic stock, all verbs are governed exclusively by their grammatic subject. But it is different in the agglutinative languages. Here the intransitive verb is governed by its subject, this being the grammatic and logical subject of the sentence; but the transitive verb, or rather noun-verb, is governed for number by its direct object, and not by its subject. The subject remains in its quality as grammatic subject, but the grammatic object becomes the logical subject of the sentence, and as such it rules the noun-verb.* Example:

Lelékash wátch shíuga Lelékash killed a horse.
Lelékash túma wátch lúela Lelékash killed many horses.
In a few transitive verbs a distinction is made in the number or quality of the verbal object, one form being employed when a few only are concerned, and another when many objects are acted npon.

When the direct object of a transitive verb is plural, it will be expressed in the verb under certain circumstances When the subject of this verb is plural, the verb is usually not affected by it. If the plurality of the object

[^54]is indicated through the verb, the object itself is not required in all instances to bear the mark of plurality. Iterative reduplication of the verb may also at times imply a plurality of the object, though it is only intended to mark frequency or repetition of an act. More about all this will be seen in the Syntax.

Plurality of the direct object evidences itself in the transitive verb : (1) by distributive reduplication ; (2) by change of prefix; (3) by change of the radical syllable ; (4) by change of suffix.

1. Distributive reduplication is the means most frequently resorted to for the purpose, but only when the action of the verb is repeated or performed specially for every one of the objects. There must be action in severalty by one and the same individual, or one act performed by each individual separately upon the objects or each object; whereas the absolute form will be used when the act is performed by one or more subjects, collectively or at once upon the object, or objects.
î a élza shéshash you give a name.
î a eálza shéshash you give different names to one or various objects.
skítash sha wáldsha they spread a blanket over.
skútash sha wawáldsha they spread blankets over different objects.
2. Change of prefix is observed in certain transitive verbs when there is a change from a single direct object of a certain exterior or shape, as round, long, flat, to a plurality of direct nbjects. Here the signification of the verb lies more in the radical and in the suffix than in the prefix, and each of these verbs has also its distributive form.

As may be inferred from the List of Prefixes, a- refers to one long object; kslı-, ks- to ome long object, to a bunch of long articles, or to one animate object that can be carried on the arm or arms; sp-, sce "List of Prefixes"; t -, ta-, te- points to one long or auimate object standing upright; u - to a long object direct or indirect. All these prefixes are generally changed to i -, iy-, $y-$, yi- when the object of the verb is placed in the plural number. To the examples mentioned in the "List of Prefixes" we add the following:
átpa to carry, to bring; pl. of obj. itpa.
kshalála to place near the fire ; pl. ilála (also intrans.).
ksháwala to fix or tie on the top of; pl. of obj. íwala, iluála.
kslıémpěli to carry back, bring home; pl. émpěli.
kshíwiza to put, place into; pl. íwiza.
kshúyamna and úyamna to take alony ; pl íamna.
kshyéga and uyéga to lift up, raise; pl. iyéga.
spúlhi to place inside, lock up ; pl. ílhi.
tméslika, těméshga to austract; pl. yiméshka.
udnka to beat with a stick; a few objects, idúyua; many, idúka.
udshípa to take off from, strip; pl idshípa.
uyéga to lift up a long object; a few, yaniéga; many, iyéga.
The verbs with l- or lu- prefixed, referring to one object of round, rounded, or bulky exterior, exchange this prefix for p -, pe-, or pe-u- when more than one object is spoken of, sometimes with alteration of the suffix also. In the examples below the prefix syllable also serves as radical syllable.
likla to deposit; pl. pé-ula.
lúya, lúi to give, hand over; pl. péwi, pï'wi.
luyéga to lift, gather up; pl. pe-uyéga.
The verbs kéwa, ukéwa to break to pieces also use the prefix pe- (pekéwa) when a plurality of objects is spoken of.

Verbs with prefix shu-, when referring to the driving of many objects, as horses, cows etc., assume the prefix n- ; when only a few objects are concerned, the prefix tp- is used, at least in the Modoc dialect.
shū'dshna to drive off, chase; a few, tpúdslına; many, níudslına.
shukídsha to drive in a circle; tpukídsha; niukídsha.
shúli to drive into; tpúli, Kl. kpúli; ní-uli.
shuí-uza to drive out of an inclosure; ní-n\%a.
shúwa (for sluúiwa) to drive into water; tpéwa, tpúa; níwa.
3. Change of the radical syllable is resorted to only in verbs of a certain class, like those of giving, breaking, cutting, killing, digging, etc. 'This grammatic process stands outside the limits of any law or rule, and a slight difference of signification can usually be discovered through careful aualysis
of the terms used for one object and for many. This feature is common to many North American languages of the West, especially for the intransitive verb. Cf the Latin verbs ferre, tollere and the English to be in regard to their tenses.
kéwa to break, smash; pl. ngáta, ngúldsha.
kshúya to transfer a long or aninate object; pl. shewána.
néya, né-i to give one thin object; pl. shewána.
shézkanka to take along; pl. ímnega or í-amua.
shiúga to kill; pl. húela, Mod. héela, shuénka (lúela "to lay low a crowd").
shlín to shoot, wound; pl. yúta, i-ō'ta.
spuní to transfer one person ; pl. shewána.
téwa to run one post into the ground ; two posts, stálya; mamy posts, tetálza.
ukáta to chop, split ; pl. ulódsha, vulódsha; ugúltcha.
4. Change of suffix, to indicate the change from one to two or more objects, occurs chiefly in such verbs as adopt the ending -yua to point out that the action of the verb extends over a few objects only.
ktúka to strike by hand; a few, ktúyua.
stúka to stab, wound, eut; a few, stíyua.
shúka to drive out ; a few, shíyua.
shúkanka to run after; a few, tpúyamna.
The verb méya to dig roots differs entirely from the above by forming stá-ila "to fill up (the root-basket)" when many subjeets, not objects, are referred to. It can be considered as an intransitive verb.

```
II.-THE CATEGORY OF NUMBER IN THE INTRANSITIVE VERB.
```

The four modes observed in forming this category in transitive verbs also occur in the intransitive verb when there is a clange from one to many subjects, though with some restrictions. A large number of verbs substitute one radical syllable for another, with or without change of the formative suffix. Most of these verbs possess three numbers, instead of two, like a majority of the others. Of these three numbers,

The singular is used when the verb has one subject;

The dual is used when the verb has two, three, sometimes four subjects; The plural is in use when the verb has over three or four, or a multitude of subjects.
Perhaps the term dual is not quite appropriately selected for a grammatic number which points to very few; but in the majority of cases when this form is employed two subjects only are meant. Those wishing to convey the idea that not more than two are meant, have to add to the subject the numeral lápi, líp two, or lápiak two only, or lápuk both.

1. Distributive recluplication is the means to show plurality in the majority of intransitive verbs. It is used wherever more than one subject governs the verb, and thus exactly corresponds to the plural of verbs in Etropean languages.
tídsh nû tchía I live contented; tídsh nāt tchítchia we live contented.
shiwága a ktána the girl is sleeping; shiwága or shishuága a ktákta the girls are sleeping.
2. Change of prefix only is chiefly resorted to in verbs which are transitives and intransitives simultaneously:
kshalála to be or lie near the fire; pl. ilála.
kshíkla to be or lie within; pl. íkla.
kshutila to be or lie underneath; pl. i-utíla.
3. Change of radieal syllable without change of suffix occurs extensively in verbs embodying the ideas of standing, sitting, lying, running, and leaping, falling and rolling down, hiding, going, coming. A majority of these verbs have three numbers-singular, dual, and plural-each one marked by a special radix, mostly formed from pronominal roots, which are distinctly recognizable as such, and also enter into the formation of prefixes. In some of the verbs the two dialects differ considerably in the formation of their duals and plurals. The new terms introduced in the list below, which are not found in the Dictionary, are all taken from the Modoc dialect, and most of them are intelligible to the Klamath Lake Indians as well, and used by them. It will be seen that the distributive form of some verb representing one of the three numbers is sometimes used as the dual or plural of that verb. The radix hu-, which forms the largest number of verbs in this list
(ef. Dictionary), and tu- (in the dual form tush-), are pronominal roots pointing to distance; the radix tin- occurs also in words referring to one subject only: tínuash, tinkućla, tinóla etc The radix lu-, lui-, and lin- is derived from líwa to form a cluster, crowd, and the prefix l- points to the circumference of a standing, sitting, or lying crowd or multitude, as it does also in klush-, found in some of the plural verbs. These latter refer to aggregation or gathering in a row, line, or file, which is indicated by prefix k - pointing to lateral action. In the verbs of standing, $t$ - points to persons in an erect position; in those of sitting, tcha-, tch- embodies tchía to sit, wa- to sit or exist in a certain place or medium. The radical kish-differs from ksh-, which also appears in some dual verbs as kshu-, and are probably used as plural verbs also. Verbs with the radix ga- are extensively used as duals for the verbs of the radix hu-, of which the regular dual form begins with tuslı-. But there is a difference in signification between the two, for the verbs in huand tush- refer to the quicker motion of rumning, while ga- points only to valking, going. Examples:
Verbs of going, walking, coming:
gakī'ma to go around; du. gag'kíma, pl. ginkíma, ginkéma.
galála to reach a place ; du. gakalála, pl. kilála.
gálampaga to go behind; pl. kínlampaga (Mod.).
géna to go away, depart; du. géka, pl. (Mod.) tchéna (in Kl. géna for all).
gépka to come toward; du. gegápka, pl. (Mod.) tchépka.
géwa to go into wateer; du. gékwa, gékû, pl. tchéwa.
goyéna, (Mod.) kishiéna to walk around indoors; du. (Mod.) goyéna, pl. lukanhićna.
gulhí, gúhlili, gulí to go into, enter ; pl. kílhi.
kishgiúladshna to disappear by going out; du gakiúladshna, pl. kingiúladslna.
kishtítana to walk along the lodge on its outside; du. gutítana, pl. lukantítana. telízi to go up, to ascend; pl. lukanízi.

## Verbs of running, leaping, flying:

huikinsha to run uvay from ; du. tushíkinsha, pl. tinikinsha.
huyá-edsla to run past; pl. gayá-idsha.
lnúyiki to run out from water; du. tushíki, pl. tutashíki.
lukḱmpěli to run, leap out again; du. tû'shkampěle, pl. tínkampěle.
hulála to rush, run into fire ; du. tushlúla, pl. tilála
hu'nua to fly into the water; du. túshua, pl. tínua.
hutitgíla to run away from under ; du. tuslititgúla, pl. tintitgúla.
húwa to run, leap into water; du túshua, pl. tínwa.
Verbs of falling, rolling down:
nde-ulína to fall down, as from a wagon; du wetělína, pl. helína.
ndí-ule to fall or roll down; du. wetóle, pl. hätóle and hé-ule.
ndí-ulza to fall or roll down from; du. wetélza, pỉ. hélza.
ndí-utze to fall or topple over; du. wetńtze, wet't\%e, pl. hétze.
ndíwa to fall into the water; du. wétwa, pl. héwa.
ndíwanka to fall or roll from a standing or sitting attitude; du. wétwanka, pl, héwanka, klúshwanka, or lıéwankan klúshtchna.
tílantye to roll down; pl. híhaktye.
Verbs of lying, sleeping:
kshikla to lie in bed, on the ground; da. kslıúila, pl. lúkla, íkla.
kshítchya to lie on, upon something; pl. lińtchza.
púka to lie on the ground; du. yámpka, pl. wétpka.
sqolұóka to lie, sleep indoors; du. kluslıóka, pl. lul $\chi$ óka
squltíta to lie, sleep outdoors; du. ksluitíta, pl. lutita.
Verbs of hiding:
húyaha to go and hide; pl. gáyalıa.
shuílpka to lide behind; pl. wiwámpka.
Verbs of standing:
tgatíta to stand outdoors; du. luatíta, pl. lualutíta.
tgélqa to stand, stop short; pl. lueluál $\chi \mathrm{a}$, (Mod.) lualō'l $\chi \mathrm{a}$.
tgizóga to stand indoors; du. luizóga, pl. luiluzóga.
tgútga to stand; du. lěvúatka, pl. lúkantatka.
tkiwíza to stand inside of; du. liuzóga, pl. luilu-íza.
Verbs of staying, sitting :
tclıalī'lsha to stay at home; du. wawalā'lsha, pl. liulā'lsha.
tchálanına to sit on or aguinst; du. wawálamıa, pl. liúlamna.
tchalíga to sit on the calge of; du. wawaligga, pl. liuliga.
tchía to live, stay; du. and pl. wá to live in a certain medium.
tchi'pka to live with others; du. wawápka, pl. liupka.
tchutíla to sit or bc underneath; du. wawatíla, pl. liutíla.
4. Change of the radix and suffix occurs but in a few verbs, of which has already been mentioned tkiwíza (see its dual).
k'léka to die (not in the other definitions of this verb); pl. kalína, lúli;
(Mod.) kalína, wénka.
skû'lpka to lic on something, or in bed; pl. lólua, lólumi.
tchawína to live, dwell among; pl. shúkla.

## VOCALIC AND CUNSONANTIC INFLECTION. PARADIGMS.

The evidence contained in the previous pages suffices to show that there is no external distinction perceptible between the inflection of the active, passive, or intransitive and other voices of the verb, their modes and tenses Still we observe some few inflectional differences, all of which are of a phonetic origin, and are caused by such figures as ellipsis, syncope, or synizesis. These are always observed upon the point of contact of the basis with the inflectional suffixes, and depend on the question whether the vertbends in a consonant or in a vowel, and on the quality of that terminal sound. This gives us two different kinds of inflection-

1. Verbs ending in vowels: Vocalic inflection.
2. Verbs ending in consonants: Consonantic inflection.

The vocalic inflection appends the bare inflection-endings to the verbal ending -a, -u (or -o), -i (or -e). Thus the participle in -tko is formed for hémkanka, hemkankátko; for táměnu, tamenútko; fở gulí, gulítko. Verbs in -a, in which this -a is preceded by a vowel, present some alterations, and synizesis often takes place. Some of the verbs in -na will lose the consonant -n . We thus obtain three vocalic inflections:

1. Inflection of the verbs in -a, or $A$-inflection.
2. Inflection of the verbs in $-\mathrm{u}($ or -0$)$ : $U$-inflection.
3. Inflection of the verbs in-i (or -e): I-inflection.

The consonantic inflection appends the bare inflectional suffix to the basis by placing -a- between the two, though there are exceptions to this. Among the consonants there are two only that can terminate a verb. - 1 and $-n$. While the former often elide the vowel before the $-l$, those in $-n$ (and -na) frequently transpose it by metathesis, so that -na becomes -an. Hence we have two consonantic inflections:
4. Iuflection of the verbs in -l, or $L_{\text {-inflection. }}$
5. Inflection of the verbs in -n , or N -inflection.

More special points on the phonetic side of these five modes of inflection will be given below.

PARADIGMS OF VERBS.
The substantive and auxiliary verb gî to be, to exist, which by itself belongs to the I-inflection, being of frequent occurrence and a factor in the periphrastic conjugation of every verb, I prefix a suceinet paradigm of it to those of the other verbs. The form gî is more frequent than ki or $\chi \mathrm{i}$. The abbreviations of gî will be found in the Dictionary.

The verb gî to exist, to become, to be, to have, to do, to say.
Declarative mode.
Present tense: nû a gî, kî $I$ am, $I$ exist.
Preterit: nû hûnk gî I was, I have been.
Future: nû a gí-uapk $I$ shall be, exist.
Conditional mode.
Present tense: nû a gì't, gît I would be, may be.
Imperative mode.
î gî! be thou! gî àt ! be ye!
Participles.
Present tense: giank, gínk, kink, Mod. gían, gin, kin being, existing; having been.
Preterit: gítko been; done etc.; oblique cases: gípkash etc.
Pluperfect: gíulank after having been, done etc.
Verbals.
Infinitive: gî to be, to exist etc.

Indefinite: gísh, kīsh the fact of being, existence; inflected: gíslam, gíshi, gishtka, etc., the latter being the desiderative verbal, on the point of becoming, being; also gíshtka gî, gíshtka gíug.
Conditional: gisht, kîsht on aecount of being, for having been.
Preterit: gí-uish, giwish "the having been."
Causative: giúga, gíug for being, because (he, it) is, was.
Durative: giúta while being (rare).
Intentional: gítki in order to be, become, exist; periphrastically : gítki gi, gítki gíng, gítkiug.
The verbals of the future tense are as follows:
Infinitive: gi-uápka.
Indefinite: gi-uápkash, gí-uapksh the fact of "going to be"; inflected: gi-uápkshi, gi uápkshtka (gíng) etc.
Conditional: gi-uápkasht for beconing at a future time.
Causative: gi uapkíga, gi-úpkug beeause (he, it) is going to be .
The preterit, durative, and intentional verbals do not exist in this tense; instead of the latter, gítki, gítki gî is used.

## PARADIGM OF THE A-INFLECTION.

This paradigm being typical for all the various inflectional forms of the Klamath verb, I present it in all its details, and shall often refer to it in treating of the other inflections, which are to a great extent reproductions of it Some verbs in -na follow the N -inflection. Many forms of the paradign, especially of the distributive, are not in use on account of their length and unwieldiness, but for the sake of completeness all of them had to be presented.

The transitive verb ktúka to strike or hit with the hand, to strike with the fist or elenched hand, which was selected to serve as a paradigm, becomes in its distributive form ktúktka or ktúk tga to strike, hit with the hand each object separately, the full formı ktúktaka being syncopated into ktúktka. For the sake of brevity, the addition "with the hand" is omitted. When pé'tchtka, the instrumental case of pētch foot (distr. pépatch) is added to ktíka, it means to kick. The paradigm of ktúka combines throughout the above active
signification with the passive one of to be struck, hit with the hand, though for want of space the latter was inserted in a few places only. The form ktúkan, ktúktkan shows the synthetic modus of connecting the subjectpronoun with the verb.

## active and passive voice of ktúka.

Declarative mode.
Present tense, absolute form :
(Personal pronouns connected analytically and synthetically.)
I am striking or struck nû ktúka, nû a ktúka, ktúka nû, ktúka a nû, ktúkan.
thou art striking i, îk ktúka, î a ktúka, ktúka i, ktúka a î.
$h e$, she, it is striking pi ktúka, pi a ktúka, ktúka pî, ktúka a pî.
we are striking nāt, nād ktúka, nāt a ktúka, ktúka nāt, ktúka a nāt, ktúkna.

- ye are striking āt ktúka, āt a ktúka, ktúka āt, ktúka a āt, ktúkat.
they are striking sha ktúka, sha a ktúka, ktúka sha, ktúka a sha, ktúkash or ktúkatch.

Present tense, distributive form:
I am striking or I struck severally or each nû ktúktka, nû a ktúktka, ktúktka nû, ktúktka a nû, ktúktkan.
thou art striking severally i, îk ktúktka, î a ktúktka, ktúktka î, ktúktka a î. $h e$, she, it is striking each pî ktúktka, pî a ktúktka, ktúktka pî, ktúktka a pî. we are striking each nāt ktúktka, nāt a ktúktka, ktúktka nād, ktúktka a nād, ktúktkna.
ye are striking each āt ktúktka, āt a ktúktka, ktúktka āt, ktúktka a āt, ktúktkāt.
they are striking each sha, pāt ktúktka, sha a ktúktka, ktúktka sha, ktúktka a sha, ktúktkash or ktúktkatch.
Present tense, usitative form:
I strike habitually nû ktúkank, nû a ktúkank (as above); Mod. nû ktúkan.
I strike each habitually nu ktúktkank, nû a ktû'ktkank, etc.
Present tense, simultaneous or inmediate form:
I am striking just now nû ktuká, nû a ktuká, etc. (as above).
I am striking each just now nû ktuktké, nû a ktuktká, etc.

Preterit tense, absolute form:
(ll., abbreviation of hî, hûn, hûnk.)
I struck, have struck nû hû̀nk ktúka, nû a hûn ktúka, ktúkan hûn.
Preterit tense, distributive form:
I struck, have struck severally or each nû hûnk ktíktka, nî a h. ktúktka, ktúktkan hûn.
Other particles than hû, hûn, hûnk may be inserted to point with accuracy to the time of the act

Future tense, absolute form :
I shall strike nû ktúkuapka or nû ktúkuapk; nû a ktúkuapka, ktúkuapka nû, ktúkuapka a nû, ḳtúkuapkan.
Future tense, distributive form :
I shall strike severally or each of them nû ktúktkuapka or nû ktúktkuapk, nû a ktúktkuapka, ktúktkuapka nû, ktúktkuapka a nû, ktúktkuapkan.

## Conditional mode.

Present tense, absolute form:
I may strike, I may have struck nû ktúkat, nû a ktúkat, ktúkat nû, ktúkat a nû, ktúkatn'.
Present tense, distributive form:
I may strike, I may have struck sererally, or each of them nû ktúktkat, nû a ktû'ktkat, ktúktkat nû, ktúktkat a nû, ktúķtkatn'.

Imperative mode.
(a) Imperative proper.

Present tense, absolute form :
strike thou! ktúk' î! ktúkî! i ktúka! í ktúki! î-î ktúki!
strike ye! ktúk' āt! ktúkāt! āt ktúka! āt ktúkāt ! á-at ktúkāt!
Present tense, distributive form:
strike thou severally! ktúktk' i ! ktúktki! î ktúktka! i ktúktki! î̀î ktúktki! strike ye sevcrally! ktúktk' āt! ktúktkāt! āt ktúktka! āt ktúktkāt! á-at ktúktkat!
(b) Exhortative.

Present tense, absolute form:
I ought to strike nû ktúktki or ktúktki nû, abbreviated also into: nû ktúkat, nû ktúkant, ktúkant nû.
thou oughtest to strike î ktúktki or ktúktki î, etc.
he, she ought to strike pî ktúktki or ktúktki pî, hûk.
we ought to strike nạ̀d ktúktki or ktúktgi nād.
ye ought to strike āt ktúktki or ktúktgi āt.
they ought to strike pāt ktúktki or ktúktgi pāt.
Present tense, distributive form:
I ought to strike severally nû ktúktktgi or ktúktktki nû, abbreviated also into:
nû ktúktkat, nû ktúktkant, ktúktkant a nû̀.
thou oughtest to strike severally î ktíktktki etc. (as above).
he, she ought to strike severally pì ktúktktki etc.
$w$. ought to strike severally nād ktúktktgi etc.
ye ouyht to strike severally āt ktúktktgi etc.
they ought to strike severally pāt ktúktktki etc.
(a) Imperative proper.

Future tense, absolute form :
thou shalt strike! ktúkuapk' î! î ktúknapk! î-î ktúkuapk! ye shall strike! ktúkuapk' āt! āt ktúkuapk!

Future tense, distributive form:
thou shalt strike severally! ktíktkuapk' 1 ! $\hat{1}-\hat{1}$ ktúktkuapk! ye shall strike severally! ktúktkuapk' āt! āt ktúktkuapk!
(b) Exhorlative.

The future tense shows no exhortative form, but its declarative mode nay be used in that function.

## Purticiples

Present tense, absolute form:
striking, having struck, being struck ktúkank and ktúkan, Mod. ktúkan.
Present tense, distributive form:
striking, being struck severally ktúktkank, ktúktkan, Mod. ktúktkan.

Future tense, absolute form:
going to strike ktukuápkank, ktukuápkan, Mod. ktukuápkan.
Future tense, distributive form:
going to strike sevcrally ktuktkuápkank, ktuktkuápkan, Mod. ktuktkuápkan.
Preterit tense, absolute form :
having struck; trausitive verbs mostly used passively: struck, hit, having been struck.
ktúkatko the onc struck; pl. the ones struck.
ktukápkash the one struck and to the one struck.
ktukipkam of the one struck.
ktukípkamti about or on the one struck.
ktukápkatat, contr. ktukápkat in, on, upon the struck one (inanimate).
ktukapkamkshize'ni toward or at the lodge of the one struck.
ktukápkamkshi whcre the one struck lives.
ktukapkamksáksi right where the one struck is.
ktukapkashtála toward the one struck.
Preterit tense, distributive form:
having struck scverally; more frequently having been struck severally, or hit singly, but at different times or by different individuals:
ktuktkatko the one struck; pl. the ones struck severally.
ktuktkápkash the one struck, or to the one struck $s$.
ktuktkápkam of the one struck s.
ktuktkápkanti about or on the one struck s.
ktuktkápkatat, contr. ktnktkápkat in, on, upon the one struck s. (inanimate).
ktuktkapkamkshize'ni toward or at the lodge of the one struck s.
ktuktkapkámkshi where the one s. struck lives.
ktuktkapkamkstaksi right wherc the s. struck one is.
ktuktkapkashtála toward the ones struck severally.*
Pluperfect tense, absolute form:
after having struck (and passive), ktukólank, ktukúlank, ktukólan, ktukúlan,
Mod. ktukólan, ktukúlan.

[^55]Pluperfect tense, distributive form:
after having struck severally ktuktkólank, ktuktkúlank, Mod. ktnktkólan, ktuktkúlan.

The form -ólank, -úlank with its proper meaning-"ceasing, or having ceased"-is of more frequent use than the form -tkank, Mod. -tkan; cf. Suffix -tka.

## Verbals.

Infinitive, absolute form:
to strike, to be struek or hit ktúka.
Infinitive, distributive form :
to strike, to be struek or hit severally ktúktka.
Verbal indefinite (past-present) in -ash, absolute form:
the aet of striking ktúkash, syncop. ktúksh, ktúks.
the father's striking p'tísham ktúkash.
my striking gé-u ktúkash, or ktúksh ké-u.
thy striking mî ktúkash, or ktúks mî.
his, her, its striking ktúkash m'na, p'na.
our striki::g nálam ktúkash, ktúksh.
your striking málam ktúkash.
their striking m'nálam, p'nálam ktíkash.
the striking by others than the grammatic subject of the sentence: ktúkasham,
syncop. ktíksham.
for, on aeeount of, about striking ktíkashti, ktúkshti.
at the time of striking ktukshē'mi, ktúkshäm.
while, when striking ktúkashi, ktúkshi.
going to, on the point of striking ktúkashtka, ktúkashtka gî.
Verbal indefinite in -ash, distributive form:
the act or aets of striking severally ktúktkash, syncop. ktúktksh.
the father's striking sev. p'tísham ktúktkash.
my striking s gé-u ktúktkash; ktúktk'sh ké-u.
thy striking s. mî̂ ktúktkash.
his, her, its striking s. m'na, p'na ktúktkash.
our striking s. nálam ktúktkash.
your striking s. málam ktúktkash.
their striking $s$ m'nálanı, p'nálam ktúktkash.
the striking severally by others than the grammatic subject of the sentence: ktíktkasham.
for, on account of, about striking s. ktúktkashti.
at the time of striking s. ktuktkashē'mi, ktúktkashäm.
while, when striking s. ktúktkashi.
going to, on the point of striking s. ktúktkaslıtka, ktúktkashtka gî.
Verbal indefinite (past-present) in -isl, absolute form:
(The syncopated forms are identical with those of the verbal in -ash.)
one who strikes or is struck ktúkish, syncop. ktúksh, ktúks.
others striking than the subject of the sentence: ktúkisham.
for, on account of, about one striking ktíkishti.
at the time of one striking ktukishe'mi.
while, when one is striking ktúkishi.
one going to strike ktúkishtka, ktúkish tka gî.
Verbal indefinite in -ish, distributive form :
one who strikes severally ktúktkish, syncop. ktúktksh.
others striking s. than the subject of the sentence : ktúktkisham.
for, on account of striking s. ktúktkishti.
at the time of one striking s. ktíktkishē'mi.
while, when one is striking s. ktúktkishi.
one going to strike s. ktíktkishtka, ktúktkishtka gî.
Verbal conditional in -sht, absolute form :
when, after, on account of striking, having or being struck ktíkasht, sync. ktúksht.
when the chief has struck lákiash ktúkasht.
when, after I have struck nûsh (nîsh) ktúkasht, ktúksht.
when thou hast struck mîsh ktúkasht.
when he, she, it has struck pîsh ktúkasht.
when we have struck nálash ( ${ }^{-1}{ }^{\prime} 1$ shh, nā'sh) ktúkasht.
when ye have struck málash (mā̄lslı) ktúkasht.
when they have struck shash ktúkasht.

Verbal conditional in -sht, distributive form :
when, aftcr, on aceount of striking, having or being struck severally ktúktkasht.
when the ehief has struck s. lákiash ktúktkasht.
when, after I have struek s. nûsh (nîsh) ktíktkaslit.
when thou hast struek s. mîsh ktíktkasht.
when he, she, it hus struck s. pîshı ktúktkasht.
when we have struek s. nálash (nā1sh1) ktńktkasht.
when ye have struck' $s$. málash (mā'lsh) ktúktkasht.
when they have struck s. shash ktíktkasht.
Verbal preterit in -uish, absolute form:
the fact of having struck, the past act of striking or being struck ktíkuish.
Verbal preterit in -uish, distributive form:
the fact of having struek severally; the past act or acts of striking severally ktúktkuish.

Verbal causative in -oga, -uk, absolute form :
for striking, in order to strike, beeause striking ktíkuga, ktúkug, ktúkok, ktúkog, ktukóga, ktúkuk. Future tense : ktukuapkúga, etc.

Verbal causative in -óga, -uk, distributive form:
for striking, in order to strike, because striking severally ktuktkúga, ktúktkuk, ktúktkug, ktuktkóga, ktúktkog, ktúktkok. Future: ktuktakuapkúga. For forms like gítkiug, meítgiug, see Verbal intentional.

Verbal durative in -úta, absolute form :
while striking ktukúta, ktukóta.
Verbal durative in -úta, distributive form :
while striking severally ktuktkúta, ktuktkóta.
Verbal intentional in -tki, absolute form:
in order to strike, for the purpose of striking ktúktki, ktúktgî; when pronounced indifferently, ktúkikă, ktúktk.

Verbal intentional in -tki, distributive form:
in order to strike severally ktúktaktki, ktúktaktgî.

The absolute as well as the distributive form undergoes periphrastic conjugation through the addition of the auxiliary gî in all its inflectional forms: gî, gińga, gíank, giúla, gîsh, gîsht, etc.
in order to strike ktúktkî gî, d. ktuktáktki gî.
in order to strike ktúktki gíug, d. ktuktáktki gíug; in the contracted form, ktuktgiúga, ktúktgiug etc.

Although the passive voice is in form identical throughout with the active voice of the transitive verb, there is a periphrastic conjugation which has exclusively a passive signification. It is the participle in -tko connected with the auxiliary gî. Thus we have nû a ktúkatko gì I am struck; literally, "I am the struck or hit one"; "I am the one who was struck." The striking subject, whenever mentioned, is added in the possessive case, as with all other passive forms: î a kilo'sham ktúkatko gî thou art or hast been struck by an angry (person), or is expressed by a possessive pronoun. The paradigm for the past-present tense is as follows:
nû a ktúkatko gî I am struck.
î a ktúkatko gì thou art struck.
pî a ktúkatko gì he, she, it is struck.
nād a ktúkatko gî we are struck.
āt a ktúkatko gî ye are struck.
sha, pāt a ktúkatko gî they are struck.
Thus the periphrastic conjugation goes on through the distributive form, ktúktkatko, and through all the tenses, modes, participles, and verbals of gî (gít, gíank, gíug etc.) :
nû a hûnk ktúktkatko gî I was struck at different times.
pî a ktíkatko gí-uapk le will be struck.
ktúkatko gî'sht on account of leing struck.
The medial, reflective, reciprocal, causative voices are inflected just like the active voice.

## THE INTRANSITIVE VOICE.

Its inflection differs from that of the active voice only by the fact that the subject standing in the singular number governs the absolute form of the verb, the subject in the plural the distributive form, which performs the same function here as the plural of our verbs. Of course this applies only to verbs on which the dual and plural are not formed by a radical syllable differing from that of the singular, as in húwa, túshua, tinua. It is sufficient to give the present tense of one intransitive verb as an example:

| I sit in a circle nû a líupka | líupka nû | líupkan |
| :---: | :--- | :--- | :--- |
| î a líupka | líupka î |  |
| pî a líupka | líupka pî |  |
| we sit in a circle nād a lílupka | lílupka nād | lílupkna |
| āt a lílupka | lílupka āt | lílupkāt |
| sha a lílupka | lílupka sha | lílupkash |

## THE IMPERSONAL VOICE.

The impersonal verbs, as seen above, are either verbs with personal object or objectless verbs. It will suffice to show the inflection of the former only, since it is identical with that of the latter with the object omitted. The object, if a personal pronoun, is usually placed after the verb. I have selected the verb tiii'ma nûsh I feel hungry, which shows only one irregularity, that of forming its distributive as tetiai'ma instead of tita-ii'ma. The plural is formed as in the intransitive verbs, and although the distributive form is more expressive tiä'ma nálash, málash, shash may be used also.

## Paradigm of tiäma nûsh Ifeel hungry.

## Declarative mode.



| nûsh a tiä'ma mîsh a tiaí'ma | tiä'mansh tiai' mamsl |
| :---: | :---: |
| pîsh a tiii'ma |  |
| nā'lsh a tetiaíma, tiaíma. |  |
| málsh a tetia'ma shash a tetiai'ma |  |

Preterit tense:
I was, have been hugry tia'na nûsh hînk; tiai'nansh hîn.
we were, have been hungry tetia'ma, tia'ma nā'lsh hûnk.

## Future tense:

I shall be hangry tiaimuápka nûsh.
I shall be hungry tiä'na tak nûsh (Mod.). we shall be hungry tetiiimuápka, tiiimuápka nálash. we shall be hungry tetiï'ma tak, tiai'ma tåk nálash (Mod.).

## Conditional mode.

I may be hungry tiä'mat nî'sh. we may be hungry tetiai'mat, tiä'ınat nálash.

Imperative and exhortative mode (wanting).
Participles and Verbals (used in the sense of an active verb).
tiä'mantko, tetiai'mantko hungry or hungering, 90, 12.
tiii'mash, tetiai'mash the condition of being hungry.
tiai'mashit, tetia' masht having been hungry etc.
tiä'muk, tetiä'muk for being hungry, $95,13$.
A few verbs in -a, like ma'sha to be siek, are using forms derived from verbs in -i. Cf. the "I-inflection."

## THE U-INFLECTION.

The vowel -u, which terminates these verbs, alternates in almost every instance with -0 ; and there are two classes of these verbs: (1) such as show -u, -o as a constant terminal vowel; (2) verbs in -na, -wa, which occasionally suppress the final -a , though it re-appears in some forms of conjugation. The first class shows but a small number of verbs, but there are several verbs which are apt to substitute -u (and -i) for -a whenever the meaning of the verb is required to undergo alteration: gaitpna to arrive; gaítpnû to arrive at a distant place. Cf. Suffix -u.

Verbs following the U-inflection add the usual inflectional suffixes, as -úga, -óta, -tki, -tko, -ash, -ank, -an, -uish to the verbal stem, which ends in $-u,-o$. When the suffix begins with a vowel, this vowel forms synizesis
with the u foregoing in the No 1 class of verbs; but in the No. 2 class it is optional for the speaker to contract the two vowels or to pronounce them separately.

Class No. 1: gátpnî to arrive out there: gaitpnûnk for gátpnuank; támenî to travel; tamenótka to return from travel; táměnug for tíměnu-ug, verbal causative.

Class No. 2: mémuatko or mémītko camped in the prairie; héslıkuank or héshkunk betting with each other; shai'tuank or sia'tuık' comiting.

A full paradigm seems unnecessary.

## THE I-INFLECTION.

There are several classes of verbs following the inflection in -i or ee: (1) verbs having no other suffix but -i , -e, which is the suffixed pronominal particle hí, lî́ ; (2) verbs ending in the compound suffix -ia, -ea (not the emphasized -ía, -íya, -éa), of which the final -a is sometimes suppressed in the absolute form to re-appear in other forms of inflection; cf. alahi and aláhia, spúkli and spúklia; (3) verbs in -i, which have a parallel form in -a, as kíki and kíka; (4) verbs in -a, of which some inflectional forms show -i , -e, where -a is expected.

The verbs in -i subjoin to themselves the inflectional endings in the usual way; and when the suffixes begin with a vowel, synizesis takes place but exceptionally, as in gīnk, gín for gíank, gían existing. The -i is elided, however, in the verbs ending in -úli (-óli) and in -pech ( (-plí, -plí), as follows:
gatpámpěli to return home; gátpampalank, not gaitpampěliank.
wetóli to fall down; wetólank, not wetóliank or wetólink.
Of classes 3 and 4 the following instances may suffice:
mā'sha to be sick; máshitko, máshetko siek, suffering.
míta, v . intr. to burn; mutísh the fact of burning.
slminta to dry by the fire; shmutétko parched, dried.
spekpéla to squint; spekpelítko squinting.
slmawakítko wearing a necklace, from sluawáka, has to be explained as a contraction of its longer form, slnawákash gítko.

TIIE L-INFLECTION. PARADIGM.
The verbs following this inflection terminate in -al or -la, and were originally verbs in -ăla (not -ála). 'Their paradign differs from that of the verbs in a only by the occasional dropping of the short a before or after the l, which dropping is cansed by the shifting of the accent, and this by the length or bulk of the suffix appended. The verbs in -al inflect as follows:

Declarative mode.
nî a pátkal I rise from bed or sleep.
nû a papátkal I rise at different times.
nû patkaluápka, Mod. nû pátkal tak I shall rise.
Conditional mode.
nû pátklat (for pátkălat) I may rise.
Imperative morle.
pátkal î! arouse! pátklāt! arouse ye! get up!
Partieiples.
pátklank rising; páklatko risen.
Verbals.
pátkalsh gé-u my rising; nûslı pátkalsht after I had risen; pátkaluish gé-u my previous risiny; patkălúga, pátkěluk, pátkluk in order to rise; patkalóta while rising; pátkaltgi for the purpose of rising; patkalshtka on the point of rising.

The distributive form is inflected in the same manner.
The verbs in -la, -shla re-instate the short a before -l when suffixes beginning with a consonant are appended, vocalic suffixes producing no change from the paradigm of the verbs in -a. Example: spíklishla to erect a sweat-lodge.

Partieiples.
spuklisháltkn a sweat-lodge having been ereeted.
Verbals.
spúklishalsh, spúklishalsht, spuklisháltki, spuklishálshtka.
THE N-INFLECTION. PARADIGM.
This mode of inflection embodies the verbs in -n and those in -na (formerly -ăna); the same phonetic laws control it as the previous inflection.

The only difference from this lies in the circumstance that in some verbs in -n, -na the 11 is deciduons, while in others it maintains itself through all the verbal forms. To these latter belong those verbs which have a simple form besides the form in -na: hídshal to rm, hídslina to run to some distanee; gríka to elimb, gúkna to elimb some way up, etc.; also the verbs originally ending in -ina, as gasáktchna to follow.

1. The verbs in -n. They are very limited in number and terminate in -an or -in (utchin to fish with net, and others on page 357); they preserve the -n in the declarative mode of the absolute and distributive form, present tense, but drop it in the future tense, the conditional mode, the participles and verbals of both forms.

We subjoin the paradigm of pán to eat, d. pápan to eat at different times or to eat various kinds of food, as characteristic of this class of the N-inflection:

## Deelarative mode.

nû a pán I eat; nû a pápaıl.
nû a hûnk pán $I$ ate, have eaten; nû a hûnk pápan.
nû a pá-uapka $I$ shall eat; nû a pápa-uapka.
Conditional mode.
nû a pā̄t, pát; nû a pápat.

## Imperative mode.

pán î! pán āt! d. pápan î! pápan āt!
Partieiples.
pá-ank, pā'nk Kl., pá-an, pā̀n Mod.; d. pápānk, pápān.
pátko eaten, consumed; d. papátko.
Verbals.
pā'sh, $^{\text {ºs }}$ pásh; d. pápash.
pā'sht ; d. pápāsht.
pá-uish; d. pápă-uish.
pá-uk, pa-íga; d. páp’uk, pap’úga, papúga.
pa-óta, pa-úta; d. pap'óta, pap'úta, papóta.
pátki, pátgi; d. papátki, papátgi.
pā’shtka; d. pápashtka, papáshtga gî.

2 The verbs in -na with deciduous suffix retain the -n in the absolute, but drop it in the distributive form. Except for this small difference, their inflection is regular, and follows the A-inflection.
ktána to sleep; d. ktákta and kákta.
kshéna to carry on the arm; d. kshéksha.
sqéna to row, paddle; d szésza.
wína, shuína to sing; d. wíwa, shuíshua.
Even in the derivatives of the verb sluuina the dropping of the -n occurs: shuinála to sing repeatedly; d. shuishuála.

The inflection of the verbs retaining the -na, -n throughout does not differ from that of the verbs in -la, but for the change of this consonant. A few verbs show both forms, e. g., kléra to hop on one leg; d. klékla and kléklana.
3. Derivatives of verbs in -na, which are formed by means of suffixes beginning with $-p$, as -pka, -pëlí, and also the oblique cases of the past participle of verbs, which retain their -11a, change $n$ into $m$ before the $-p$ following:
géna to go: gémpka, gémpěle, gémpkash (for génapkash).
hútna to run some distance: hutámpka, hútampěle.
stíltchana to report: stíltchampěli, stiltchámpkam etc.
This nasalization is also observed in the inchoative verbal suffix -támpka and in the oblique cases of many participles in -ntko, -antko, which cannot be derived from any existing verb ending in -na. Thus we have tínzantko obtaininy by chance, obj. case tinxámpkash; tilluántko flooded, obj. case tilhuámpkash (with others to be found under suffix -antko), although there are no verbs tín $n a$, tilhuána, but only tínұa, tilhua. Facts like these have to be ascribed to a certain tendency prevailing in the language to nasalize explosive sounds, surd and sonant, especially when they stand at the end of words.

## PARTICLES USED AS VERBS.

In the previous pages I had no opportunity of mentioning an extraordinary method of forming verhs observed in the Klanath language - that of using particles as verbs. Particles used in this way are not susceptible of
inflection, and participate of the nature of the verb on.y through their connection with personal pronouns. We are almost compelled to assume ellipsis of gî or some other verb; but if we do so, why are not many other particles used in the same way? These particles are as follows:
gétak, gii'tak, at kia'tak so far, enough, in Modoc kínktak; used as a verb in the sense of to stop, eease, quit. Tsnii nat at gii'tak ufter this we ceased (fighting), 24,3 ; tchín at nat at gia'tak ndáni táměnotk so 1 , when we quit (fighting) I had returned (from there) three times, 25, 2. kánktak slápěle ktetég' ì! stop cutting bread! Cf. kénktak gîn wawálkan sitting down quietly, 34,13 ; lit. "doing just so much as sitting."
hí-itok down, on the ground (emphatic); verbified into: to sit or lie down. In 34, 11, hi-itók āt corresponds to the Englishı "down with ye and be still!"
kátak, d. káktak truly; kátak and kátak gì to tell the truth. At káktak pila! tell ye nothing but the truth! The Modocs have kána, katchán, and kána tchēk for truly, certainly, surely.
lé wak, lé wak ka-á, lia' uk ga-í to be undeeided, irresolute about something; tsúi nat lê wak ka--́́, or tsúi lä a nat wák ka-á then we were quite undecided what to do, 21, 18; lia nat wak galdsawiá-a! we do not know whether we should approach or not! 2!, 2; lé hai ně mish nen $\hat{\mathrm{u}} \mathrm{k}$ ! I do not know how to call you! (Mod.) where nen stands for to call and $\hat{u}$ 'k for wak. The Modocs also say: káa wak, kádi uk gá-a, or simply uk gá-a, wak ká-a. These particles are placed in connection with a verb (né-ulza) in 22 , 12; 65, 1, 2.
nen, oral particle referring to what is or was said or heard, is sometimes ased instead of shéshatko tlus named, or shésha, élza to give name: nen Aíshish tché ha? shall I eall you Aishish? nént nént (for nen át)! call me thus! right so! (Mod.)

## IV.-DERIVATIUN.

Although the Klamath language can be considered to be built up rather upon analytic than upon syuthetic principles, there are two departments in
it in which it is not only synthetic, but polysynthetic-the inflection of the noun and the derivation of verbs by prefixes and suffixes.

The great complexity perceptible in the derivation of verbs and verbal nouns is sufficiently apparent from the long lists which I have devoted to prefixation and suffixation, to both kinds of reduplication, to vocalic anathesis, and other contrivances for verb-deriving. It would be useless to repeat this here; and all I can do is to give some general points of view upon the synthetic powers of the language, and to refer readers to the derivation of the substantive, adjective, and numeral noun, where cognate matters are spoken of:

In our Klamath Lake and Modoc texts short words are the rule and polysynthetic words the exception. But the mere fact that these can occur forces us to consider them, and to account for the laws presiding over their formation. Prefixes aggregate only to the number of three, and suffixes to the number of five, thongh this number of derivational suffixes may be increased by inflectional suffixes. Prefixes either indicate the voice of the verb, or the number or external shape of the verbal object or subject. Suffixes are either of a material or a relational character, as pointed out on page 280. Those of a material function chiefly point to location or different modes of motion, and are much more numerous and polysynthetic than the relational ones; their great number being largely due to the circunstance that what we express analytically by certain adverbs and prepositions these natives express synthetically by suffixation to the verbal base. In the inflection of verbs suffixes only, no prefixes, are employed.

Verbal derivatives are formed from all the four species of roots discussed on page 250 sqq.-onomatopoetic, interjectional, pronominal, and predicative, although the two first-named occur in very few verbs only. In some verbs it is difficult to distinguish between the sounds forming the prefix and those constituting the radix, as may be gathered from the List of Prefixes, under e-, i-, yan-, yu-, ma-, and others.

In intransitive verbs we meet initial syllables, like hu-, tush-, tin-, he-, we-, klush-, kish-, lu-, luk-, which cannot be considered as prefixes, but must be taken for roots employed to distinguish number. The signification of the verbs formed by these often differs somewhat from that of parallel verbs
formed with roots pointing to another number of the verb. Thus wénka, e. g., when applied to more than one snlbject, means to die, like k'leka (used for one subject), but its real meaning is to stretch the leys.

A few suffixes, like -oga, -tka, -íta, are used for both derivational and inflectional purposes, but these may be easily distinguished from each other, as the former necessarily precede the latter. Both kinds of affixes may be studied in their variety of conbination from the Dictionary, and in their simpler forms and true functions from the "Recapitulations" contained on pages 302 and 303 (Prefixes), and pages 395-398 (Suffixes).

Nothing can give a better idea of the Indians' vivid and natural mamer of considering objects or phenomena of nature and acts of man than the study of these affixes and their combinations. A motion performed in a straight line is referred to differently from another done in a zigzag, curvilinear, or interrupted line, or from a motion performed sidewise or obliquely or at a distance from the one speaking, circumstances which it would seldom occur to us to express in European langnages. A large number of instances could be adduced to show the pictorial tendency of the language in expressing form or appearance, the conditions under which an act is performed, ete The description of the exterior of the verbal subject or object is an especially graphic and interesting feature, and as this feature has been dwelt upon at length in the chapter on Prefixes, it will suffice to give some examples taken from the northern dialect:
nā'sh nû mish ué-i tála I pay you one dollar (in the form of one note). nû mish pápkash úya I give you a club.
léwash nû lúya hû́nkiěsh I give him a play-ball. túma nû mish ánku yáni I give you many sticks or clubs.
lāp léwash nû nû̂sh péwi I give you tevo play-balls.
wátsag nû kshúya mālsh I give a dog to you.
lû̀gs nû hûnk spuní luî'nkiash I gave or transferred a slave to him.
ámpî î tchíya nîslı you give me water.
tchulē'ks nû́ tchiléya hû'nksh I give him meat.
íwam nû skáya mîslı I give you whortleberries in a basket.
pála-ash nû shúi málsh I give you bread on a plate.
shewánà nû mā̀lsh tála, wátsag, lû̀gs, ámpû, telulē'ks, íwam, pála-ash I give you money, dogs, slaves, several eups or pails of water, several pieees of meat, a quantity of berries, bread.

Form or exterior is described not only in the verb, but in the noun also in the sentences following:
lutísh nû lútza I piek a berry, round fruit. utísh nû útzaa I piek a lony-shaped fruit.
hiash luy:i'ga the foy lifts.
luash lúdshna the foy is moving.

## THE SUBSTANTIVE.

The substantive belongs to that division of speech which we call the noun, and is the most important representative of it. Outside of the substantive noun, the other nominal forms are the adjective noun, which in the Klamath language also embodies the indefinite verbal in -sh and the past participle in -tko, the numeral noun, and the pronoun. A few postpositions are also formed by means of nominal cases. The Klamath verb, which is a nomn-verb, partakes more of the quality of a noun than the noun does of the nature of the verb. In fact, only a limited number of Klamath substantives (no adjectives) can assume a temporal character through the suffix -uish; these are all derivatives of verbs, nomina verlalia, and we are free to consider them as verbal forms or as nouns, though, in English, substantives will render their meaning more accurately than any verbal form. In the substantive of the Algonkin languages the verb-character is more apparent.

The grammatic categories which we distinguish in the Klamath nom are case, gender, and number (in the form of severalty). But gender becomes apparent only in the substantive and a few pronouns; severalty is not distinguished in a portion of the pronouns and substantives. Case alone appears in all the four species of the nom.

In regard to the classification of the varions kinds of substantives, I intend to use the same terms as the English grammarians. Substantives are either concrete or abstract; the concrete are cither generic or specific.

Proper names and names of species will be included in the specific class; collective noms mainly belong to the class of generic terms.

As regards derivation, a majority of the substantives are derived from the same bascs which form verbs, by means of the universal nonn-making suffix -sh (-ash, -ish ctc). The prefixes occurring in substantives are identieal with those occurring in the verb.

I shall consider the morphology of the substantive under the following headings: (1) Gender; (2) Absolute and distributive form; (3) Inflection for case; (4) Derivation.

## 1. ANIMA'LE AND INANIMATE GENDER.

The language makes a general distinction betwcen what I call animate beings and inamimate objects of nature, but docs not draw the limit between the two with accuracy. Both classes show the same affixes in the subjective and in most of the other cascs, and resemble each other largely, the main point of distinction being in the objective case. To form this case, the animate gender appends -ash to the sulbjeetive ease, while the inanimate forms it like the suljeetive ease. Other points of distinction are that the animate gender lacks the suffix -tat, -at as a locative suffix, and seldom uses the suffix -tka.

The animate gender is made up, grammatically speaking, of the following classes of substantive nouns: Generic terms for and proper names of men and women, quadrupeds, the genii and miraculous beings of Indian mythology, and many inanimate objects when mentioned in mythic tales. Terms of relationship ending in -p do not assume the mark of the objective casc.

The inanimate gender includes the generic and specific names for birds, fishes, and the lower animals; for all plants, as trees, weeds, bulbs, etc.; for the objects of inorganic nature; for the portions and limbs of the human and animal body; as well as all collective nomus, whether applied to inanimate objects or not, and the abstract nouns.

Wher adjectives, numerals, or participles are joined to substantives to qualify them, their ending -sh remains the same in the objective case, whether the noun they qualify represents an animate or an inanimate object.

Some exceptions to the above rules occur, to be mentioned under the case-ending -ash, which are not easily accounted for. The more general
use of the suffix -aslı in the mythic stories nay be explained by a sort of personification, or, in poetry, by the requirement of the rhythm. Plí forms plú in the objective case when it signifies fut, grease ; but used as the proper name of a person, it forms Plúash; shlóa lynx, though a quadruped, has no form shlóash, neither has yulnú luffulo: hû tím yuhít luelólislı gì he killed mamy buffaloes, though both belong to the category of quadrupeds, which is inflected like that of persons. Here the reason may be that these nouns were made from finite verbs without change or suffixation, and finite verbs being unable to take nominal endings, these substantives remained as they were.

The inflection of the Klamath verb contains no forms relating either to animate or inanimate objects or subjects by making distinctions between the two, as we see it done in Nahuatl by the oljective incorporated particles te-, tla-, tetla-. The prefixes relating to shape, as ksh-, i , $\mathrm{ta}-(\mathrm{t}-)$, $\mathrm{n}-$ and others, refer to one or several long objects or subjects without discriminating between animate and inaumate.

I lave called the two genders by the names animate and inanimate, but leave it to others to invent more appropriate desiguations, if any can be found, as "noble and ignoble", "personal and impersonal", etc.

Neither the Klamath pronoun nor the verb or substantive distinguishes between the male and female sex by grammatic forms. Klamath does not belong to the sex-denoting languages, and, indeed, the class is rather surall upon the Western Continent. Wherever a distinction of this sort is made in the substantive, it is made by agglutinating some sexual distinction (ef. $95,14)$ to the nom, as is done in some Tiuné and Maya languages and in the Tonica. The Carib alone seems to lave a real suffix for the feminine.

## II. ABSOLUTE AND DISTRIBUTIVE FORM.

Like the substantive of many other agglutinative languages, the Klamath substantive possesses no special forms to iudicate number, either for the singular or dual and plural, and the plural number requires to be pointed out by special words, as pronouns, adjectives, or numeral adjectives. When the sulstantive is the subject of an intransitive verb, its dual and plural
number can be declared by the distributive form of the verb. The same may be done when it is the object of a transitive verb, in case each one of the objects is acted upou separately.

With a few exceptions, to be pointed out below, the distributive form of substantives marks severalty, not plurality, as shown by several instances on page 262 sq . It follows from this that the absolute form of the substantive points to the singular no more than to the dual or plural, and that the distributive stands also either for the siugular or for the dual or plural. Thus tút is one tooth or many teeth, d. titat eaeh of the single teeth or eaeh colleetion of teeth; pétch the foot, a foot, one foot, or the feet, feet, mamy feet, d. pépatch each foot, each pair of feet, each pair or lot of pairs, or lot of feet; tápax leaf or leaves, d. tátpa\% caeh leaf, cvery leaf for itself, each lot of leaves.

Connected with this is another peculiarity of the language-the lack of any term that could be construed as representing our definite and indefinite article. Only the run of the sentence can teach us whether a thoth or the tooth, whether squirrel or the or a squirrel is meant, but usually there is no doubt about this matter. Thus the very use of the distributive form points to certain objects held in view or mentioned in the context, and suggests the use of our the; demonstrative pronouns and particles also point to definite objects. The numeval nā'dsh, nā'sh means one, d. nánash every single one, and sometimes corresponds to our indefinite article. If quantity or number has to be specified, a numeral or adjective will serve the purpose. Thus duality is indicated by lápi, làp two, lápuk both; plurality by any numeral above two, or by túmi many, tumiága a few only, nánuk all, ceery one, nánka some, a few.

Among the almost countless number of substantives in the language, there is a class which does not reduplicate at all, another that appears only in the distributive form, another embodying the names of relationship, etc. All these special classes will be discussed hereafter.

We can distinguish the following different modes of reduplication in substantives:

1. The regular form occurs in substautives of an abstract as well as of a concrete signification: ánku tree, d. a-ánku; búnuislı drinker, d. bubáunuisl; kishı untruth, lie, d. kíkish.
2. Substantives occurring in the distributive form alone are few in number and unite both functions-that of a real plural and that of indicating severalty.
hílp, contr. for lúlap eyes; nā'sh lúlp one eye, though húlp is used for one eye also.
mii'mäkli, generic term for wild ducks and geese.
múmuatch ears, both ears, the hearing apparatus; ná-ighstani or násh múmuatch one ear (Mod.).
tatáksni, obj. case tatákiash children; wéash one child.
wéwanuish, contr. wéwansh women; snáwedsh one woman.
3. Substantives which occur in both forms and in the distributive may be used as well as real plurals for all forms marking severalty. This class is composed of such terms for persons as most frequently occur in conversational language.
hílashuaks men, husbands, and each man or husband.
laláki chiefs of a tribe, and each chief.
shashámoks relatives and each relative.
shishuága girls and each girl.
titsga-ága old parents and each old parent.
wéwanuish women and each woman.
4. Substantives occurring in one form only, either the absolute, or the distributive form. Some lack the latter form for several causes, chief of which is the difficulty or impossibility of pronouncing a reduplication of the initial syllable, or the iteration of which would be repugnant to the native ear. Many of these nouns are the products of iterative reduplication. Thus we have: áha-ash species of crows, lұel $\chi$ atánash harness, nánashgish butcher, nkánkatuish fetlocks, shtchishtehággědshnish trotting-horse, shtoshtótish gopher, vushú chest, waitch horse. With these and many other terms severalty has to be indicated by an adjective or numeral serving as an attribute, or by the verb of the sentence, plurality by adjectives like tími many, etc.

Collective nouns, generally speaking, do not reduplicate distributively, but prefer syntactic means to express severalty and large number. There are, however, some which do so reduplicate, and in fact there is no strin-
gent reason why they should not. Terms adopted from foreign languages make no exception. Kiä'm fish rarely takes the d. form kékiaim, and such terms as kṑl, a species of bulb, íwam berry, shmáyam bristle rarely use their distributive form as collectives. To this series belong terms like kshukshiéxash grease of animals, lúk seed and marrow, kēlá-ıslı sand, lózash roe, múshmush cattle, pála-ash flour (pála-ash líklatko loaf of bread), shápěle four, shígga-i sugar, tellikěmen netal, iron, copper etc., wē'sh ice.

Some nouns indicating a homogeneous solid or liquid mass, like ámpu water, kēslı snow, shtíe pitch, resin form a-ámbu, kékēsl, shtíslitie.
4. The terms of relationship in $-p$ (-ap, -ip) for the larger part reduplicate only the suffix iuto -ishap to indicate severality; only a few of them show both modes of reduplication. The whole process is spoken of at length on pp. 275. 276.
5. Nouns adopted from foreign languages. No rule can be established determining which of these will reduplicate and which will not, although the Klamath language has a considerable faculty of transforming foreign terms according to its own phonetic rules and forming derivatives from them. Terms exhibiting the distribntive reduplication are the following: ádak salt, d. á-adak; etchmúna purple salı,on, d. i-atchmína; ipshúna swamp-dogberry, d. i-apshína (all from the Shasti language); Bóstin American, d. Bobóstiu; kápo coat, dress, d. kákpo; mítash leggings, d. mímdash; stíkshui shoe, boot, d. stíshakshui; tála dollar, money, d. tatála.

## III. INFLEOTION FOR CASE.

Klamath may be counted among the languages of America which have reached the most extensive development in regard to case-inflection. Many relations of the noun, expressed in other languages through the verb, are rendered here by a supply of nominal cases, and thereby a thorough-going differentiation is brought about between the noun and the verb. Like the Basque language, Klamath possesses the faculty of forming compound or polysynthetic suffixes in its inflection. This profusion of cases forms a striking contrast to the entire lack of case-iuflection observed in many of the agglutinative families, especially when we consider the circumstance that every noun has a double inflection on account of being inflected also
distributively. The inflection of the adjective and numeral adjective is not quite so rich in forms as that of the substantive.

## CASE-SUFFIXES AND CASE-POSTPOSITIONS.

The numerous forms of nominal inflection, called cases by grammarians, may be divided into two categories: (a) the purely grammatic cases, expressing mere relation of one noun to another, and leing only three in number, the subjective, direct-objective, and possessive case; (b) all the other cases, as instrumental, inessive, adessive. They are either locatives or take their origin in some locative relation of the noun to the verb.

But this purely logical division of cases does not always work well ${ }^{-}$ when practically applied to existing languages. It cannot be rigidly applied in a grammar of the Klamath language, for here the case of the direct object is also that of the indirect object, and the possessive case is also that which corresponds to the Latin ablative when connected with $a$, $a b$ and a verb in the passive voice.

It is best to divide the cases of Klamath inflection into cases formed by case-suffixes and cases formed by case-postpositions. The former I call, for convenience, suffix-cases, the latter postposition-cases.

Suffix-cases are formed by nominal inflectional suffixes having no independent meaning for themselves as words. They are usually unaccented, and only two of them arc dissyllabic in their unabridged form. Bcsides the subjective case, which is not al ways made distinct by a suffix, there are the cases in -ash, -am (-lam), -ti, -tka,, -tat, - $\chi \overline{\text { enni, }}$-na, -ēmi.

Postposition-cases are formed by means of particles having an independent signification for themsclves as words of the language, but when connected with a noun are never placed before it. They are all of a locative import, and frequently take the acceut. Their list is: - i , $\cdot \mathrm{kshi}$, -ksaksi, -tala, -tana.

The function of some of the case-suffixes is of a very general nature, and should be illustrated by a large array of quotations to be made clear. No nom of both dialects will be found which is in possession of all the case-suffixes and case-postpositions, and of the fourteen found in the paradigms laadly ten can be said to be in constant use. Temporal suffixes, for
example, can be affixed to some of the abstract substantives only; i- and -na are of rare occurrence, -tka, -ksaksi etc. will be found chiefly in substantives of the inanimate gender.

Klamath shows a large number of other postpositions than case-postpositions, mainly of a locative signification, which are connected with substantives. They differ from the case-postpositions, because (1) they keep their accentuation and thus appear as independent words, and (2) they can be placed, at the speaker's option, before or after the noun they govern. They never coalesce into one word with the noun.

The only direct case, or casus rectus, is the subjective case, otherwise named "nominative"; all others are oblique cases. A vocative case cannot be said to exist, and the subjective case intonated on the last syllable will answer for it, especially when followed by the interjection $\bar{e}$ : tidsí mukā$\overline{\mathrm{a}} \mathrm{k}$ ! or tidsí mukā'k ē! O that nice baby!

Many words taken from English or other languages foreign to Klamath inflect like those of Klamath origin for case and for severalty: Bóshtin, ipshúna, lám, mítash, shō ${ }^{\circ}$, táa-uni.

Up to this point we have considered only the simple form of nominal inflection, by which a case is formed by one suffix or postposition only; but Klamath also possesses a composite inflection of the absolute and distributive noun, since some of the cases can assume the functions of the subjective case and form inflections for themselves by means of other casesuffixes and case-postpositions. These polysynthetic nominal forms do not exceed the number of three suffixes or postpositions, and thus the inflections may be classified as binary and ternary ones. The case-suffixes capable of forming new substantives in this way are: -ash, -am, -ti, -ēmi; and the case-postpositions, -i, -kshi, -ksaksi. The suffixes which each of these can append, and a further discussion of the composite case-inflection, will be found below.

FORMATION OF THE CASES.
According to the nature of the final sound of the substantive to which the case-endings are joined, all modes of inflection may be divided into two classes, which, however, do not largely differ among themselves: (1) Consonantal inflection, and (2) Vocalic inflection.

A majority of all the Klamath substantives preserve throughout their case-inflection the fimal sound which they possess in the subjective case. Those which do not conform to this rule are some nouns in -sh ( -s ) and -p (-ap, -ip); they drop this final consonant, or place a vowel between the ending and the case-suffix. Substantives ending in $-\mathrm{ul}(-\mathrm{o})$ and in $-\mathrm{i}(-\mathrm{e})$ frequently insert the semivocalic w or $y$ between the two. Substantives whose subjective case ends in -am, -lam have this ending unchanged through all cases, except those mentioned on page 476.

Instances of these changes are as follows:
pé-ip daughter, obj. péya, poss. péyalam.
p'tishap father, obj. p'tisha.
édshash milk, breast, poss. édsham.
látchash lodye, house, poss. látcham, ef. 77, 4; loc. látchashtat, 83, 3. paíshash cloud, poss. paísham.
túpakship younger sister, obj. túpakshash, poss. túpaksham.
tcháshish skunk, poss. tchásham.
kálo, kálu clear sky, loc. kalówat and kalówashtat.
ktá-i stone, rock, instr. ktáyatka and ktá-itka.
káko bone, instr. kak 6 watka.
lépuinsh (for lépuinash) frying-pan; instr. lépuinatka.
nép hand, instr. népatka (as if from népa or népash).
pétel foot, instr. pétchtka and pétsatka.
shū̄ $p$, shō ${ }^{\prime} p$ soap, instr. shúpatka.
In the possessive case, the nouns terminating in $-\mathrm{a},-\mathrm{i},-\mathrm{e}$ assume the suffix -lam instead of -am, while the others, following either the vocalic or consonantic inflection, take -am. Thus all the diminutives in -ága, -ak, -ka, $-k$ show -lam in their possessive case, and this is even found exceptionally in kailiu feather-mantlc, fur-dress, poss. kailiulam. Thus we inflect:
$\underline{k} \delta-\mathrm{e}, \underline{\mathrm{k}} \underline{\sigma}^{-a}$ tond, poss. $\underline{\mathrm{k}}$ óalam.
skúle, skúli lark, poss. skúlelam.
tála dollar, money, poss. tálalam.
watchága, wátchag dog, poss. watchágalam.

Nouns in -wasl, -watch show in their oblique cases a synizesis of the -wa into $-\bar{o},-\overline{1}$ aside of the regular form:
páwatch tongue, poss. páwatcham and pá-ītchan.
waíwash white goose, poss. waíwasham and wayō'sham.
Abbreviations of case-suffixes and of case-postpositions are rery frequent, especially in rapid conversation. This we observe -tk, -t for -tka,
 -tala, -tan, -ta for -tana. In the inflection of the adjective the deterioration of the endings las progressed still further, and in the composite nominal inflection as far as in the simple case-declension.

Suffixes occurring only in the inflection of topographic terms and proper names of localities are -i, -na.

## LIST OF NOMINAL CASES.

Before entering into details concerning each of the suffix- and postposi-tion-cases, I give a list of all the fourteen case-endings, reserving their abbreviations for their special headings. All the cases of a locative character or origin follow each other in immediate succession. Some of these, even of the monosyllabic ones, are composite, the second pronominal element being formed by the demonstrative radicals $-\mathrm{i},-\mathrm{la}$, -na.

> I.-Suffix-cases.
subjective: (-sh, -s).
objective: -ash.
possessive: -am.
partitive: -ti.
instrumental: -tka.
II.-Postposition-cases.
inessive: - i.
adessive: -kshi, Mod -gishi.
emphatic adessive: .ksaksi.
locative: -tat.
illative: - xēni.
transitional: -na. temporal: -émi.
directive: -tala. juxtapositive: -tana.

There is probably no substantive in the language which forms more than ten or eleven cases. Thus nouns designating persons, animals, or
plants cannot form the transitional and the temporal cases, and the locative, instrumental and adessive are wanting with niany of them also.

## 1. The subjective case.

The subjective and only direct case most frequently terminates in -sh, -s, the universal noun-making suffix, which we have found to occur also in the nominal forms of the verb. The vowel usually preceding it has frequently been elided, as in terminals like -ksh, -lsh, -ntch, and others. The identity of this most frequent of all nominal suffixes with that of the verbal indefinite conclusively proves that the majority of all substantives are but the nominal expression of the verbal idea that they are either nomina actoris and agentis, or nomina actionis and acti. Cf. Suffixes, pages $323,339,362,368$.

But there are many other suffixes than -sh capable of terminating substantives, for almost every sound which can close a word can also terninate a noun in its subjective case. We have seen that the nouns in -p and a few of those in -sh drop these endings when they become inflected; a few nouns, as páta, mpátash mill, show two forms, the one with and the other without the -sh. All this testifies to their immediate derivation from verbs. These same suffixes are also dropped before certain affixes of an adnominal or participial nature agglutinated to them, e. g.:
shúks crane, Shúk-amtch Old Crane of mythic fame.
p'tishap father, p'tísh=lúlslı deceased father.
2. Objective case in -ash.

The direct object or complement of the verb, as well as its indirect object, is expressed by the objective case in -ash, abbr, -ish, -ěsh, -'sh This case therefore corresponds to the accusative and to the dative case of the classic languages, sometimes to others of their cases besides. In its origin it is nearly identical with the suffix of the subjective case -sh ( $-s$ ), and in this regard we may recall the fact that some of the Romanic languages have formed their subjective case from the Latin accusative: homem (Portuguese) from hominem man, rien (French) from rem thing; in German we have Namen, Samen, together with Name, Same, the former representing in fact an objective case. In the Klamath a remnant of this sort is found in
the circumstance that the southern dialect has híshuakshash man, husband, suawédshash wife in the subjective and objective cases, while the northern or Klamath Lake dialect oftener shows híshuaksh1 ${ }^{1}$ and snáwedsh, appending the -ash in the objective case only. The same can be said of the two verbs to marry, which are derived from these terms.

But -ash, as pointed out above, forms the objective case of such substantives only as designate persons and quadrupects, and in rapid conversation or narrative is sometimes dropped even in these; cf. wítch for wátchash horse, 127, 9; híhassuaksh Móatuash, for híhassuakshash Moatuáshash l’it River men, 20, 2. The objective case is identical with the subjective case in collective and in abstract terms, and in the names for birds, amphibians, fish, and the animals inferior to these; in the names for plants and their organs, for inanimate things, for limbs of the body, human or animal. Nevertheless frequent exceptions to the rule here established may be met with in the more archaic form of speech noticed in mythic stories and in song-lines, in which the rhythm of the verse at times produces them. The form tchípshash in 146, 3 (instead of tchípash) is exceptional.

Diminutive nouns of the animate class, except when designating persons, do not append -ash in the objective case, whether mentioned in archaic texts or 1 not, ${ }^{2}$ nor do the terms for relationship ending in -p (-ap, -ip). As instances we mention only mantchákash old man, múkaksh (also múkak) babe, to which may be added: watchágash dog.

Túpakship younger sister forms thipakshash, because it is usually abbreviated to túpaksh in the subjective case. The regular form for these nouns in -p is: p'gishap mother, p'gislaa (obj) the mother and to the mother. Wáshla chipmunk does not change in the objective case, though we would expect wáshlash, $110,8.9$.

Examples of direct object expressed by -ash or its abbreviations:
a. Persons and quadrupeds:

Títak máklakshash ktúpka Titak slapped an Indian. mû'tchga nû hûn hishuákshash I hate that man.

[^56]nā'shı nî lúgshla snáwìidsh $I$ eaptured one female, 20, 1; cf. 95, 8.
wéwanuish kaíxema K'mukámtchish the wives did not recognise Kmúkamtch, 95, 10, and Note.
tchéwash îdúpka he kicked an antelope, 126, 7.
Shû'kamtch Sháshapamtchash shnindû'wa ámbutat Old Crane doused Old Grizzly in the water, 123, 3. 4.
hä' tchilloyága lō'k shiúka ámka táslatch if a young man killed a grizzly bear or a cougar, 90, 19.
b. Objects of the inanimate order:
nép húshnqa to shake hands.
kiii'm ítkal, yulıú lúela to seoop up fish, to kill buffaloes.
wudû'pka Shū'ksham tchû́ksh she struck Crane's leg, 123, 2.
pî unk shnóka yúkiak he eaught a mocking-bird.
slinepē'mpemuk vunaká m'na in order to begnile his son, 94, 10; ef. $95,8$. Aíshisham shulótish shnúka he took away Aishish's garments, 95, 7.
shuína slia tutíks m'nálam they sang their dream-songs, 65, 20.
wéwanuish nû'tak stï'-ila the women gather nutak-seed, 148, 6.
tchíkěmen=mpámptish blacksmith, lit. "iron-beater."
nû'sh=tilansnéash, species of owl, lit. "twisting the head."
c. Objects of the inanimate gender when occurring in songs and mythic stories:
né-ulya páplishash gî'tki gíug he eaused a dam to come into existence, 94, 5. käílash shutólan after creating the earth, 125, 1.
kóshash ká-a nû pîupîutánna I am pecking hard along the pine-tree, 162; 2. shléwishash nû tilutaknúla breath I am emitting, 157; 45.
lu'luksash nû shkutíya I wrap flames áround me, $154 ; 8$.
Examples of indirect object expressed by -ash or its abbreviations:
a. Persons and quadrupeds:
shápi mi lákiash! tell your general! 40, 3.
E-ukshikís slıash pělpelíash ké-i shaná-ulì he did not want to work for the
Klamath Lake Indians, 35, 18; cf. 35, 11.
Bóshitinash shítko tchía to live after Ameriean eustones.
tcheléya nû luîn mantchíkash shípěle I give bread to this old man.
shapíya m'na p'gisha she said to her mother.
nû a wátchash ámbu húshpanua I give water to the horse to drink.
kál-i kaishuûli'at lû̀lxagsh they would not uneover (the lodge) for the beareubs, 120, 17.
Mō'dokishash ktchínksh papalla they stole the rails from the Modoc Indians, 35, 21.
b. Objects of the inanimate order:
páwash kédshar aitzáměnash $\underline{k} \bar{o}^{\prime} 11$ the páwash-root grows smaller than kī̀l, 148, 7.
stíya nxi'-ulìga láki pitch triekled down on the forehead, 97, 1.
nä'poks ai nû tashulû'la I pass my hand over the disease, 155, 21.
spúlhi lápni illoblash to imprison for two years.
túnepni waitash wóksalsha they gather lily-seed for five days, 74, 7.
fewalues sha skéma they row over to the island, 74, 14.
a n'sh p'laíwash shtilta he sent me after the eagles, 101, 15.
e. Objects of the inanimate gender when occurring in songs and mythic'stories:
hûk lalī'ga Tûhû'slash it remained sticking upon Mudhen, 97, 1.
pî táplalash tpia'wa he gave orders to the loon, 132, 2.
yénash a-i ni slléwish wíta I, the wind, am singing about the yén-fish, 165 ; 6.
mo-ówe ktchidshuash hư'tnan the mole leaping upon the bat, 127, 5.
Tchékaksh mbî'shaksh yíyuxoga lólpat to Blaekbird they pushed arrowheads into the eyes, 113, 16. Cf. 114, 9. 122, 9.

## 3 Possessive ease in -am, lam.

This suffix is always pronounced short (-ăm, -lăm), and it takes the accent in composite cases only. In Modoc it is often pronounced -ěm, -lĕm, or still shorter, -'m, -l'm. The longer form, -lam, is the original one, but nccurs only in nouns terminating in -a, -ii, -e, though there are a few instances of other vocalic suffixes taking -lam also: kailiu, poss. kailiulam feather mantle, as if derived from a term kailiwa. The suffix was originally
locative, as may be inferred from its being related to the suffixes -ăla and -lamma, q. v., and from the syntactic use often made of it, which proves that about it, around it was its original meaning. When the Indians speak rapidly they often drop the -m of -am: wásha wéka the young of the coyote, kō'lta wéas the otter's offspring, nī'l wéksa the down of the mallard duck. ${ }^{1}$ When words in -am become independent nouns, with -am in the subjective case, this -anı also drops the -m in some instances: s⿲íba a bird species, widslíba laeustrine reed, for šípam, widshípam (in Modoc also widshípi).

Anong the substantives which show an elliptic form, besides the full one, we mention:
klípa mink, poss. klípalam, more frequently klípam, 177, 13.
$\mathrm{ko}^{\prime} \mathrm{l}$ ta fish-otter, poss. $\mathrm{ko}^{-1} \mathrm{ltalam}$ and $\mathrm{ko}^{\prime}$ ltanı.
watchága dog, poss. watchágalam and watchágam.
Cf. also wáwa=tutúksh ear-wax, instead of wawákasham tutúksh.
A curious fact worth noticing is that the Mólale language of northern Oregon marks the possessive case by the same suffix, -am, and so does also the Pit River language of northeastern California. The possessive suffix -nmi, -mi of several Sahaptin dialects of the middle course of Columbia River seems related to it. The Maidu dialects of the Sacramento Valley mark this case by the suffix -ki.

1. The possessive case in -am, -lam corresponds to several of our English case-prepositions Usually it has to be rendered by our of of the genitive (or, better, genetive) case [ $\dot{\eta} \pi \tau \varpi \sigma \iota 5 \quad \gamma \varepsilon v i x \eta$ ] , and then forms a possessive case corresponding to the Saxon case, - 's, in the father's work, the mother's care, which is sometimes turned into an adjective. Examples:
kókelam palkuish former bed of the river.
máklaksam wákshna Indian moecasins.
tálalam wázokslı money-purse.
Pámpiam, Látsam pé-ip the daughter of Pámpi, Látchash, 77, 1. 4.
tchéwam (or tché-uti) tóke the antelope's horn.
From these examples it will be gathered that when a substantive in the possessive case qualifies another. substantive attributively, it is placed
before the noun qualified. But since the position of words is rather free in Klamath, anteposition of the possessive is usually but not universally observed. Cf. nī'l wéksa (above), tchililiks skútelan the young of a lark, 100, 8; cf. 100, 5. 9. 18.
2. The case in -am, -lam corresponds to our for, to the benefit of, and is then intended as a dativus commodi, answering sometimes to a possessive, sometinles to a dative case.

Skä'lam î'-amnash wewilína beads were left over to Marten, 111, 2, 3. kia'kitak kshín wúshmusham there will be no grass for the cattle.
3. When comnected with a passive verb, frequently represented by the participle in -tko, it corresponds to our by, through. Several examples of -am connected with passive verbs are given under Passive voice, pp. 421, 422, 451; many others are found in the "Texts", e. g., 35, 10. 17; 36, 12. 15. An instance is also contained in the proper name of Scarface Charley: Tchíktchikam-Lupatkuelátko, lit. "scarred by wagon wheels."

The possessive case of substantives often becomes a subjective casethat is, a noun independent of others and capable of forming an inflection of composite cases. These have been fully treated under the heading of Suffix -am. The case-endings which they can take are -ti (-at), tka, -tat, $-\chi e^{\prime}$ ni, -kshi Among the nouns whicl assume this suffix to form composite inflections are: terms (a) for fruit-bearing trees and shrubs, sometimes of other plants also and of their parts; cf. pû'shxam. Here the possessive case must be considered as an elliptic form, cansed by the omission of ánku, tchélash, tkáp, or some other noun designating a plant. Plants bearing no eatable fruit or bulb usually do not show this terminal. (b) for natural phenomena, the seasons; (c) for a few articles of manufacture.

## 4. Partitive case in -ti.

This suffix bears many analogies to -am and -tat, and has several syntactic functions; from one of the more important of these I lave called it the suffix of the partitive case. It is but another form of the prefix ta- (in -tat), and originally both referred to objects standing erect, as men, animals, trees, etc., the suffixed - i pointing to location on, upon something. Nouns
in the -ti case usually precede the substantive which they qualify. By rapid or neglectful pronunciation, -ti often becomes -'t, -ăt: tatákiamti and tatákiam't, tatákiamăt about children, padsháyamat made of the manzanita bush.

The various uses of this suffix are:

1. It refers to a location on, upon, at; a sticking upon, resting on or against, a connection with, a belonging to. It is often used interchangeably with the case in -an, -lam; but the difference is this, that -ti points to something sticking or sitting upon an object, but not necessarily connected with it, -am to an object essentially belonging to some other object, or considered as a product of it.
ánkuti or ánkuam tchikass the bird of the forest.
yaínati or yaínalam tiggága mountain quail.
yákiti stílash basket-string.
yákiti wókash stáni (gî) lily-seed fill the basket.
lqalzamníshti lulínash poncl-lily seed put in long sacks.
nánuktua shtináshti pálla to steal cverything in the house.
shaigati, d. shashiágati shlápsh flower on the prairie.
2. It refers to the substance or material of which an object is made or manufactured, and thus represents a real genetivc case, exactly corresponding to French de bois, de fer, d'or, etc.
pápkashti box shútank thcy makc a coffin of lumber, 87, 2.
tókiti mídsho horn-spoon, horn-ladle.
On account of this "genetive" function, the -ti case may also be used adjectively, as in: pókshti, tupéshti, which correspond to our turbid, muddy; ámpu tupéshti muddy water. Either -ti or -tat figures also as -t in the adjectival suffix -tkni, q. v.

When used in this acceptation, substantives in the -ti case can become subjective cases and form inflected nouns. Thus wáti thorn, spine, from wá to grow upon, also means knifc, and from this signification wátiti, or "knifematerial," has finally come to signify iron, stcel, metallic substance, wire, mrtal. ${ }^{1}$

[^57]Póko bucket has likewise formed pókoti bucket-metal, tinncd shcet-iron; ánku tree, ánkuti wood-substance.
3. In the phrases and sentences following, a purely partitive function is found inlerent to the case in -ti:
ndshiklza ámputi a drop of water.
ḱá-i gitánish ámputi búnui! do not drink of this water!
nảlam āt hîn kaílati ktchínksh papálla yc have abstracted rails upon our land, 35, 10.
lû'k shewána sháplashtiti stáyanti to givc away sceds from a full seel-paddlle. kudshá shliushlíwa kiä'lanti the mole throws up earth; lit. "some of the earth."
4. This case-suffix las an additive function in the following instances:
kē'ktoks topíni kià'm gé-u slnukshtí gî this is the second fish I caught.
snáwedsliga gíulza léluidshishti a girl born after the futhcr's death.
Although these are instances of verbals, they may illustrate the use which is made of this suffix in substantives also. Cf. the numeral tinepanti in 111, 1, and Note to it, p. 116.
5. The suffix -ti may also correspond to our preposition about, concerning, on account of, and then assumes a causal function in verbals as well as in substantives. It is then often replaced by -tat, q. v.

Sháslıtiamti húdslia slashálkia they quarreled about a Shasti Indian. welékshti î hémkanka you spcak about an old woman.
6. We find it occurring in some local names of the Klamath country, as in Kí-uti, Ktá-iti, Luyánshti, Shuawáti, Súnde (Súmti), perhaps also in Kúmbat, Túilkat, and some others. A purely locative signification is probably not the only one inlerent in these names.

## 5. Instrumental case in -tha.

This case-suffix appears in several forms, as -tha (the most common), -tga, -tk, -atka, -átka, -at, and when nasalized, as -ntka: túmi many, tumantka through or by the many. In the "List of Suffixes" -tka also appears as a terminal forming verbs.

1. The primary function of -tka, which is also the most characteristic and most frequently occurring, is that of forming an instrumental case, thus corresponding to with, by means of, by the aid or help of, through. All the other functions of -tha are reducible to the idea of instrumentality. Its use is almost entirely restricted to nouns of the inanimate order.
pákshtga lákpeks shuyéga le lifted ashes with (his) pipe, 14, 6.
shikeníkishtka yutetánpka they began to fire with pistols, 14, 6.
wátchatka (and wátclat) hushō'tchna to ride on horseback.
kaḱótk sáktatk skä'ntsna to sew with a bone-awl.
Connected with a passive verb, it stands for -am in :
tumántka shute-uápka lakí the chicf shall be elccted by the many, by the majority, 90, 3.
2. A locative meaning, resulting from the instrumental one, appears in sentences like the following:
núshtga túpka to stand on, upon one's head.
gatchéshtka géna to pass through the brushwood.
shtútka wátch níukna to drive horses on the road.
nû géna ámputka I go into or through the water.
3. A temporal function corresponding to that of the case-suffix -émi, which is more of a verbal character and is chiefly appended to verbals, appears in the following nominal forms:
yámashtka while the north wind blows, 155; 16. 24.
gełóla sha shewátyastka they dismounted at noon, 19, 10.
gáptsatka, ťópowatka in May, June (and in the other month-names), 74, 1. 6.

## 6. Locative case in -tat.

We begin the long series of locative case-endings with that which has the most comprehensive bearings, and is also the most frequent. The suffix -tat is an abbreviation of táta where, there, and this is a reduplication of the pronominal radix' ta, as tû't, túta is of tú; cf. táta, tú in Dictionary. It also appears in the form of -ta, -t, -at, -ut, or is suppressed altogether, as in
kaíla, for käilatat upon the ground, earth. When -tat appears as -ta, it is not always easily distinguished from the abbreviated -tala, -tana; when as -at, it will be remembered that-ti and -tka, -atka abbreviate in the same mamer. The form -ut may be a trausposition of -tu, or an abbreviation of -utat; in each case the -u- marks either distance from the speaker or height above the ground. Some subjective cases are formed by -tat, -at, especially in local names and in such terms as kä'mat baek. The somed -t in the adjectival suffix -tkni is, as remarked previously, a remnant either of the casesuffix -ti or of -tat. As will be gathered from the List of Prefixes and Suffixes, the t - in -tat originally referred to something standing erect, either animate or inanimate ; but tat is now referring almost exclusively to things of the inanimate world, and rarely to persons. In the nasalized form of -ant, -nt it appears in adjectives, pronouns, postpositions, and adverbs.

The functions to which this suffix may be applied are quite varied and numerous.

1. It marks a stay within, a resting inside of, or on, upon, by something; it implies no motion, and corresponds exactly to the Latin in with the ablative case.
págashtat mûlk wá worms live in wet ground.
welwáshtat nû tchalika I sit here by the water-spring, 173; 5.
ktáyat gitko staying in the roeks
kii'sh méya shaígatat they dug ipo-bulls on the prairie, 109, 1.
kaluáshtat nû tchutchún I am croaking up in the sky, 162; 4.
kládshat tché-u gshíkla an antelope lay in the elearing, 126, 6.
sué-ushtat takeléas gì there is cork on the fish-line.
pákshtat tulish stem of tobaeeo-pipe, lit. "handle in the pipe."
We observe it also in postpositions, like ginátant on this side of, guníkshtant on the opposite side of.

In several proper names of localities -tat has assumed the function of a subjective case:

E-ushtat Tule or Modoe Lake.
Koketat Lost River; any large water-course.

The form -ut we find in:
lû'lpût p'gishap kikannéga the mother applies (the hands) to the eyes, 91, 6 . pánût a wákinsh kédsha red paint grows on the pán-tree, 150, 6.
2. The suffix -tat marks a motion into, towarl or upon, on some object, and then corresponds best to the Latin in with the accusative case. We see it frequently connected with all verbs referring to locomotion : going, pushing, driving, and also regularly with the verbs of paying, selling, trading.
mo-ówe wā'shtat húlhe the mole ran into (its) den, 127, 5.
ktíyatat (or ktáyat) tpulí he drove (them) into the roeks.
wátch ktchínkshtat nî̂le he drove the horses into a corral, 127, 9.
gä'mpčle látsashtat he returns to his lodge, 83, 3.
wetóli lalì'shtat nád we slid down the slope, 21, 15 .
käíla (for käilatat) kîwalapáta to push sidewise over the ground, 190, 11. tchpinnû'tat ítpa they bring (the corpse) to the burying-ground, 85, 4.
skiulakshtat shewán' ì pay what you owe! lit. "pay into, upon (your) debt!"
tánk î wátchtat pä' wi? how much didl you pay for the horses?
sésatui tchî'k wátchat they sold them out there for horses, 20, 19.
nû wátch spuní kítchakluk tálatat $I$ gave a hor'se to repay the noney $I$ owed.
In the passage 60,11 we find snawä'dshash where we would expect $\hat{i}$ skû́ktanuapk snawä'dshtat you can give in payment for a wife. Cf. page 482.
3. Our suffix further stands to mark a motion out of or from an object, a driving or going, moving, throwing away from, a falling, rolling or dripping down from.
tû́shkansha kúmětat (two) ran out of the eave, 122, 4.
käilatat gatpámpěle he returned down upon the ground, 101, 20.
sluhhî'lulea látchashtat to jump down from the lodge, 118, 10.
sllittclgapěle kō'shtat to unhiteh from a pine-tree.
puäkímpěle ladshéshtat he threw (them) out of the lodge again; 109, 9.
ámpu a tilya látchashtat water drips from the house.
tchékěli ntû́lsna psî'shtat blood fows from the nose.
wî'txi hû'k kō'shtat he fell down from the pine-tree.
31

Very frequently the direction of the act from, out of, away from is expressed by the verb itself and its suffix, and in that case other cases than the locative in -tat may be joined to the verb as well. Cf. luikínsha to run away from, ktulódshna to push, force away. The same applies to the function through, across. (No. 4.)

4 The suffix -tat may be used also to express a passing through, a going aeross or through the midst of. In this function it approaches nearest to the one mentioned as No. 2, of going or moving into.
tinua wéshtat to fall through the iee.
wéshtat yíkashla to spear through an ice-hole.
kobetat gákua to cross or ford a river.
shápash nû lúashtat slléa I see the moon through a fog.
5. There are a few instances where -tat is used in a temporal sense. In these we find -tat appended to derivative nouns, in which the former concrete signification is still apparent as well as the abstract one. The few examples are as follows:
guizakshä'migshta(t) at the home-leaving season, 148, 19.
smauyofleshtat ivhen the rain is over.
tinoluléshtat at sumset.
6. The suffix -tat occurs also in the sense of our preposition about, coneerning, on account of. In this acceptation it is entirely like -ti, No. 5, and can alternate with it.
génta käílatat shashapke̋lía to narrate myths about this world, cf. 94, 2.
ká-i i î gîtá spû̀kle-uapk suawédshtat, hishuákshtat, wéashtat you shall not sweat there (in mourning) for a wife, musband, or child, 142, 16.

## 7. Illative case in -xēni.

The suffix of this case is $-\chi$ ēni, which frequently becomes abbreviated into - $\chi e \bar{n} n e,-\chi \ddot{n} n,-\chi{ }^{n} n,-k i u l$, and usually has the accent upon the syllable - $\chi e \bar{e}$. This composite suffix contains gén, gîn, or kén, a demonstrative pronoun and adverlb, referring to objects in close proximity to the speaker, the pronoun referring to inanimate things in preference to animate beings, and the particle i , hi here, right here, here on the gromnd, or in the lodge. The
initial $g$ of the suffix was changed into $\chi$ or $\underline{k}$ for the parpose of referring the noun, to which - $\chi$ eni is appended, to that suffix more closely than the mere g (in gén) could do it. The suffix also shows analogy with the verb géna to go away, start, because $-\chi \overline{\mathrm{e}} \mathrm{ni}$ and géna are both formed from the same basis, ge, kē.

The suffix marks as well (1) a motion or direction toward an object or into a place or conntry, as (2) a stay or rest at or in a place, region, country. It is more frequently used in the former sense, and hence I have called the case the illative case. It differs from -kshi, -ksi by being connected nuch more frequently with inanimate objects, while -kshi, Mod. -gishi, is appended as a rule to nouns of the animate class: at the home of, or in the habitations of men.
(1) Suffix - $\chi^{-\quad}$ ni, - $\chi$ än employed in the sense of to, toward, into:
nāt Shást $\chi$ ēni géna we went to the Shasti country.
shiáshna tinōlishخéni, tinēzish $e$ éni he removed them to the west, to the east side of $, 39,17$.
shiulkish $\bar{e}^{\bar{e}}$ ni idshna to remove somebody to the reservation.
nā ne-ulakgîshøéni grátpa we went to the council-yround, 33,5 .
sa saikän (for saigazēni) géna they went to the field, 107, 2.
(2) This suffix marks stay, rest, sojourning, or location at some place, in a tract or country:
kléwidshnank wewéash tchī'sh $\chi$ ēni leaving her children in the lodge, 118, 3. awaluashze'ni on, upon, at the island.

It also enters into the composition of the adjectives nákushzēnkni living near a log-dam, 132, 6; 'Tchak $\chi$ énkni, etc.

The suffix forms a large number of local names, which assume the function of subjective cases, and thus form composite inflections. Thus we have Kawamxḗni Eel Spring, Laláwashyēni at the Slate Roch, Shástzēni the Shasti country, Tchak $\overline{\text { énini }}$ at the Service-berry Grove, Saikäı Thomıson's Marsh, Waptash $\chi$ éni Pond Outlet.
(3) An instance of a temporal function of $-\chi \bar{e} n i$ is found in the songline: i-unēks $\overline{\bar{e}}{ }^{\prime}$ ni a yulína after sunset, 182, 2.

## 8. Transitional case in -na.

This locative case-suffix occurs but in nouns of the inanimate order, as in the parts of the human or animal body, in terms of topography, in local names, and in a number of particles. It corresponds to our to, toward, into, in, and is of the same origin as the verbal suffix -na, which is found in verbs of motion, and points to short distances reached in succession, or to spots reached on the passage to other places. It enters into the composition of composite case-suffixes, as -tana, -ksaksína, and then is ofter shortened to -n. It also stands in the subjective case of a few nouns, as lermúna bottom etc. Cf. List of Suffixes, under -na.
kaítoks nîslı tû̀-nna Lěmaikshína, káái Yainakslína káyaktgi slápī! tell them not to pursue me around Shasta Butte (nor) toward Yáneks! 40, 3. 4.
kädsûksaksína lï'kshktsa gï'-ish hû'k right upon his chin that ball took the skin off, 30, 5.
nzak-ksaksina slì'ksga they came near wounding him on the skull, 21, 17. nxashksaksina shlín he was shot in the bowels.
kidsa ámbutat lěmunána to dive to the water's bottom.
The suffix -na occurs, e. g., in the particles: hátaktna by that spot, mína down below, p’laína upward, túna, tú-una around, tuána, tuán Mod., at all times, tína once, txalamna to the west.

## 9. Temporal case in -ēmi.

The suffix -ēmi, -ämi, -hämi, abbr. -em, -äm, is usually emphasized, when the final $-i$ is not retrenched, upon the penult. Like the final $-i$ which composes it, it has temporal functions only, and can best be rendered at the time of, during. We find it appended chiefly to nouns indicative of time and seasons of the year; also to indefinite verbals pointing to acts or performances belonging to certain periods of the year only. While the temporal suffix -i appended to verbals refers to incidents occupying a short lapse in time only, -emi points to periods, epochs of some length, seasons,
etc. This suffix can also stand as a subjective case in the sentence and form a composite inflection, as appears from the following instances:
átu lulalkshémi gî now it is time to go to bed.
guizakshémigshta at the home-leaving season, at exodus-time, 148, 19.
This temporal suffix is observed in:
i -umä'mi, í-umäm in the whortleberry season; from íwam whortleberry.
kishēmi, kíssäm at sunset.
kshune'mi in the haying season.
kolalshe'mi, vuksalshe'mi in the kōl, in the pond-lily season.
mehiäshé'mi, contr. méssäm in the trout-fishiny season.
shishukshe'mi during the fight, battle, war.
skó-ēmi and skóhshēmi in spring-time.
tánkt gatpanuapkshémi at a future time.
temololä'mi after the wild-plum season; from temolola to finish collecting wild plums.
tsiäls-hä'mi at salmon-time, 16, 16 ; from tchiálash salmon.
10. Inessive case in $-i$.

As the first of the five postposition-cases, I have placed the one formed of the pronominal element $i$, hi, which has been discussed several times before. It occurs in nominal inflection as a case-terminal by itself, and also enters into the composition of several others, as -ti, - $\chi \bar{e} \mathrm{ni}$, -ēmi, -kslii, -ksaksi; besides this it forms verbal suffixes mentioned in List of Suffixes. From its primary signification upon the ground have developed those of within, at home, in the lodge, for one's or another's benefit or disadvantage, and the temporal one when, at the timc when. In rare instances -i alternates with -e.

1. Used in a locative sense, -i means inside of, in, within, at, when appended to substantives designating cavities or hollows (the floor of the Indian lodge often forms a cavity), inclosures, and also to names of localities. It is found suffixed to inanimate nouns only, and to the pronouns gúni, huní, lukí.
stékishi at the door, entrancc.
tchī'shi inside the lodge, habitation.
wáshi in the hole, cavity, den, lodge.
Yámsi (for Yámash-i) at the North Wind's lodge, home.
Yaúkělam=Láshi at the Eagle's Nest.
Lggím=Ä-ushi at Coal Lake.
Wálamsi at Rogue River Butte.
Witimantchi where the old Black Bear was.
A-ushmi, an island in Upper Klamath Lake, is also pronounced Á-ushmē; cf Sumdè for Shímti, Súunti, in Dictionary.
2. Used in a temporal sense, -i occurs only when appended to the verbal indefinite, and will be discussed in the Syntax under the heading of the Verbal indefinite in -shi. Shewat $\% \bar{n}^{\prime}$ lsi in the afternoon shows the -i appended to a nomen verlale also. The suffix -i in lityi, litze in the evening has to be regarded as a locative, not as a temporal suffix, since litzi is originally a verb to hang down to the ground, earth, or horizon, which refers to the sun. It is comparable in every way to hínui, ndé-uli etc.

## 11. Adessive case in -kishi.

The terminal -ksli, -ksi marks the residing, staying, or presence at some spot or locality, is appended to substantives of the animate and inanimate gender, and occurs in the simple as well as in the composite caseinflection. In the latter we usually find it appended to nouns designating persons or personified beings.

This case-postposition is a compound of kish, gish, ksh home, resilence (cf. Aíshishamksh Aishish's lodge, 96, 23) and the postposition -i. This word kish is also the verbal indefinite of gî to exist, to le, ${ }^{1}$ and we alsn find it, though in various functions, as a nominal derivational suffix. In Klamath -kshi appears in various forms, mostly unaccented: -kshi, -gshi, -ksh, -gsh, -ksi, -ks, -gs; in Modoc as -kíshi, -gishi, -ksi, -gshi, -gsi.

This case-postposition frequently assumes the function of the subjective case, in local names especially, and with the adnominal suffix -kni appended forms tribal names or nomina gentilitia: E-ukshikni máklaks Klamath Lake Indian, and others. It is found to fulfill two functions only-that

[^58]of marking (1) a rest or stay at some place, and (2) a motion toward an object. This latter function is not real, only apparent. Cf. also -ksaksi.
(1) -kshi marks rest, existence, sojourning, dwelling, living at a certain spot, locality, in some district or tract of land. When appended to a person's proper name, or to a generic term for person or man, it points to the lodge, house, or dwelling of; it is then appended to the possessive case in -am, -lam, and closely corresponds to the French preposition chez, which also represents a word for house, home, residence (casa).

Cámbiamgshi in General Canby's tent, 39, 11; cf. 38, 6, 7; 41, 8.
K'laushálpkash Yaina-ága-gîshî shéllual thcy fought upon the Sand-covered IIill, 43, 12 (Mod.).
$\mathrm{k}^{\prime}$ 'shkshi by or close to the pine tree.
ktaíkshi, ktaíks by the rock, at the rock-ledge.
lákiamkshi at, in the chief's lodge.
ne-ulákshgîshi hushtánka he met them upon the council-ground, Mod. (contr. from ne-ulákgish-gì'shî; cf. Dictionary, page 239); 33, 2.
watságaksi where the dog lives.
welékamksh at the old woman's lodge.
Names of locatities formed by -kshi :
E-uksi the country east of Upper Klamath Lake; Yaínakshi Yáneks; Mělaíksi Mornt l'itt ; Moatuashamkshíri kóke Pit River in California ; Na'wapkshi Goose Lakc, Wúksalksh Pond-lily place; also the two mythical places Aíshishamksh and Lěmé-ishamksh, in the form of a subjective case.
(2) -kshi apparently marks in some passages a motion toward, in the direction of, a going or coming to an object, as if standing for -tala. But in the mind of the Indian -kslii indicates not motion, but rest only, and a sentence like shuldshámkshi gátpa he came to the soldiers' camp, 40, 12 (cf. 40 , 22) must be interpreted as "he went to the place whore the soldiers' camp or home is or was." Other instances are:
shûshotankishámgshî gatpámpělan having returned to the Pcace Commissioners' tent, 40, 6.
maklăkshámkshî gatpántki to come to the Indian camp, 40, 23.

A parallel to this grammatic structure are the Latin verbs of placement (ponere, collocare etc.), which are construed with in and the ablative case, although they are verbs indicating motion.

## 12. Emphatie adessive ease in -ksaksi.

This case-postposition is the result of a reduplication of the foregoing terminal -kshi, with a change of vowel. It corresponds to the English right there, just where, and usnally refers to a spot more limited in extent than -kshi. It does not refer to the residence of persons, for lakiánkshi means in or at the chief's lodge, but lakiamksáksi just where the chief sits or stands, sat or stood. Used as a subjective case it may append postpositions, though we have only the instance of the case-suffix -na. The accent usually rests upon the syllable -ksa-. The terminal -ksaksi appears chiefly in connection with parts of the animal body, terms of topography, local names, and other narrowly circumscribed areas. While -ksaksi, -kshakshi, -ksaks seems confined to the northern or Klamath Lake dialect, the form -ksiksi, -kslíksh, occurring in loeal names, appears in the Modoc dialect as -kshi gíshî in the same function. Another form with -u-in the first syllable embodies a temporal relation to the past ; cf. Grammar, p. 255.

Instances of the -a- form:
ktaiksaksi, kō'shksaks right by the rock, pine.
nî tchî'wîshksaksi p’léntant gì I was above their former campingplaee, 22, 1.
kělá-ush îsh íktchi e-ushksákssli! ! get me some sand at the lake!
sa shnikshō'ľa maklaksksáksi they made them danee in the presence of the
Indians, 20,10 ; cf. 20, 11. Cf. also 21, 17; 30, 5.
A walokáksaksi at the Little Islund.
K $o \underline{k}$ áksakshi, $\underline{\mathrm{K}} \mathrm{ok} \mathrm{ka}^{\prime} \mathrm{ks}$ saks at Little River, 19, 7; 20, 13.
Tchpinúksakshi at the Burial Ground.
Welékag-Knûkleksáksi at the Stooping Old Woman.
Instances of the -i-form :
Yaínakshi-gíshî' at Yánelis, Mod., 36, 9.
Kawamkshíksh at the Eel Fishery.

# Nakósksiks at the Dam or River Barrage. <br> Vulálkshi=gîshî' at Cottonwood Creeh, Mod., 38, 6. 7. 

Instance of the - u - form :
Slankoshksû'ksi at the Old-Bridge site.

## 13. Directive case in -tala.

This case-postposition, abbr. -tal, -ta, is a combination of the two pronominal elements ta and la, which we find to be the components of a large number of affixes. It is most generally connected with verbs of motion, and corresponds to our to, toward; the name directive, which I have applied to it, referring only to direction in space. It is connected with the names of the cardinal points of the horizon, and also with names of tall or largesized objects, and the original use made of this particle seems to have been that of pointing to objects visible at long distances. Herein it differs from $-\chi \bar{e}^{-}$ni and -kshi, which refer more frequently to objects upon the ground. It also forms adverbs and postpositions. Nouns inflected with it may be used as subjective cases, especially when they become the names of districts or countries, and then they can form derivatives. Tála, in the d. form tatála, also occurs as a word for itself: right ahead, straight out, and, correctly. A derivative of it, tálaak, d. tatálāk, las the same adverbial signification. The adjective p'laitalantni is formed from the locative case of p'laítala upward, skyward. The substantives múat south and yéwat east are originally abbreviations fiom múatala and yéwatala.
ámputala kayáhia to cut off from water; ellipsis for "to preclude from going to the water", 42,20 .
E-ukshitala toward the Klamath Lake settlements.
hátaktala toward that spot; túshtala? in what direction?
yámatala northward; contr. from yámat-tala.
ktaítala wigá géna sha they went a short way into the rocks.
lalálashtala on, through both flanks, 156, 32.
lupítala eastward; cf. lupitaláni eastern.
t $\chi$ álamtala westward; the west portion of Oregon.

## 14. Juxtapositive case in -tana.

This terninal is frequently abbreviated into -tan, -ta, and occurs more in pronouns, postpositions etc. than in substantives, being also a verbal suffix. It is a combination of the pronominal roots ta and na, both being short syllables; -tana generally remains unaccented, and has to be rendered by along, alongside, on the side or sides of, beside, by. Instead of classing -taua as a case-suffix, since it does not occur as a separate word, I have set it down as a case-postposition on account of its great analogy with -tala. As a subjective case it occurs in mû̂'ntana drawers.
gé ${ }^{\top}$ kshtana, abbr. gékshta on this side or part.
gúnitana, abbr. gúnitan, gûníta on thc opposite side.
ktaitana on the side of the stone, rock.
m'nátamtana látchash close to their lodges, $90,9$.
Na'wapksh yámakstan along the north bank of Goose Lake, 31, 7 and Note. pipélántana from opposite sides, on two sides. wáshitana beside the den, by the cxcavation.

## COMPOSITE NOMINAL INFLECTION.

Many of the agglutinative languages possess the faculty of forming composite cases by using oblique cases as subjective cases and appending to them the other case-suffixes. Transformed in this manner, these newformed substantives can be inflected like other nouns. The Klamath language is able to form composite iuflections of this kind, in other nouns as well as in the substantive; but here and there this sort of inflection does not go through all cases, but is rather incomplete. Some of these binary casecompounds can be used again as subjective cases, and in this quality they may form ternary compounds, which of course do not occur very frequently, but follow entirely the laws of this language. This polysynthetism in case-suffixes seems quite extraordinary to those accustomed to languages with simple case-suffixes, but it is in no way stranger than the polysynthetism of the verbal derivational prefixes and suffixes. Instances of a quaternary case-compound I have not met with.

The case-endings traceable in the binary composite nominal inflection are as follows:

The objective animate case in -ash (not to be confounded with the derivational suffix -ash) connects with -tala: tuhusháshtala toward the coot; rarely, if ever, with -tka.

The possessive case in -am, -lam most frequently of all turns into a subjective case, and connects itself with more case-endings than others. The possessive ending is supplanted by -ti, for -am could not stand twice in the same noun. When used of persons and things, -am becomes connected with all the purely locative case-endings except -i .

The partitive case in -ti connects itself with -am, -tka.
The temporal case in -ēmi connects itself with -ksli.
The inessive case in -i connects itself with -tala, -tana.
The adessive case in -kshi is found connected with -tat, - $\chi \bar{e} n i,-n a$, -tala, -tana.

The eniphatic adessive case in -ksaksi may append the suffix -na.
The locative cases in - $\chi$ ēni, -tala, -tana do not append any nominal endings, except derivational suffixes, whenever they form adjectives: nakoshðénkni staying near a river-dam; tutashtalikshíni one going ceverywhere.

Speeimens of the binary composite declensions will be presented among the inflectional substantive paradigms.

A few instances of the ternary composite declension are as follows:
k'mutchapkamkshixé'ni at, toward the old man's lodge.
gnizakslia'migshta (for -tat) at the time of the unnual exodus, 148, 19.
Shastiamkshtíla toward a Shasti Indian's lodge.
p'léntant tchîwî'shksaksam above their former eamping-plaee; perllaps for -ksáksi sham ; cf., 22, 1.
wewalekslamkshxē'ni where the old squaws live.

## PARADIGMS.

CONSONANTAI, INFLECTION OF SUBSTANTIVE.

Absolute form.
Subjective case: pshísh, psî's nose.

Distributive form.
pshípshash eael nose.

Objective case: pshî'sh nose.
Possessive case: pshísham of the nose.
Partitive case: pshishti about the nose.
Instrumental case: pshíshtka by, through the nose.
Locative case: pshíshtat in, on, upon, from the nose.
Illative case: pshish $\chi$ éni at, toward the nose.
Transitional case:
Temporal case:
Inessive case: pshishi (?) at the nose.
Adessive case:
Emphatic adessive

Directive case: pshishtála toward the nose.
Juxtapositive case: pshishtána along the nose.
welekash old squaw. túhush mudhen, coot. sháplash seed-paddle.

túhuslitat
túlushtka túhushzēni túhushamksi tuhushksáksi $\left.\begin{array}{l}\text { tuhusháshtala } \\ \text { túhushtala }\end{array}\right\}$ túhushtana

Distributive form.
tút'liush (not in use.)
pshípshash pshípshasham pshípshashti pshípshashtka pshípshashtat pshipshashyếni

pshípshashi(?)
pshipshashksáksi pshipshashttála pshipshashtána
welékshtka weleks ééni $^{\prime}$ weléksamksli
weléksksaksi $\left.\begin{array}{l}\text { welékshashtala. } \\ \text { welékshtala }\end{array}\right\}$ $\left.\begin{array}{l}\text { welékshashtala. } \\ \text { welékshtala }\end{array}\right\}$ welékshtana wewalékshash wewaléksham

## welékshash <br> weléksham $\left.\begin{array}{l}\text { welékshamti } \\ \text { welékshti }\end{array}\right\}$ $\left.\begin{array}{l}\text { welékshamti } \\ \text { welékshti }\end{array}\right\}$

## wéwaleksh

case: pshishkshákshi just at the nose. Absolute form.


$$
\log
$$

or

$\left\{\begin{array}{c}\text { sháplashti (used also for } \\ \text { poss. and loc.) }\end{array}\right.$
sháplashtka

shaplashksáksi
sháplashtala
sháplashtana
sháshaplash, sássaplash sháshaplash
$\left.\begin{array}{l}\text { wewalékshti } \\ \text { wewalékshamti }\end{array}\right\}$

## wewalékshtka wewaleksh $\chi \overline{e ́}^{\prime} \mathrm{ni}^{1}$ wewalekshamksh $\chi$ éni $^{2}$ \} wewaléksamkshi wewaleksksáksi wewalékshtala

Absolute form.

| wā'sh, wásh excavation. wásh | shéllualsh war. <br> shéllualsh | wâtch horse. wátch |
| :---: | :---: | :---: |
| wásham | shéllualsham | wátcham |
| wáshti | shéllualshti | wátchti |
| wáshtat | shéllualshtat | $\left\{\begin{array}{l} \text { wátchtat } \\ \text { wátchat } \end{array}\right.$ |
| wáshtka | shéllualshtka | $\left\{\begin{array}{l} \text { wátchatka } \\ \text { wátchetka } \end{array}\right.$ |
| wáshna (\%) |  |  |
| wash $\chi$ éni | shellualsh $\chi \overline{e ́}^{-}$ni shellualshē'mi | - |
| wáshi |  | - |
| washksáksi | shellualshgíshi (Mod.) ) <br> shellualshksáksi (Kl.) | watchksáksi |
| wáshitala <br> wáshitana |  | wátchtala <br> wátchtana |
|  | Distributive form. |  |
| wáwāsh | shéshălualsh | wáwatch |
| wáwāsh | shéshălualsh | (inflected like the abso- |
| wáwasham | shéshalualsham | lute form, but rarely |
| wáwashti | shéshalualshti | used.) |
| wáwashtat | shéshalualshat |  |

\{sássaplashti (used also for poss. and loc.)
sassapláshtka
sassaplashksáksi sassapláshtala
wátch horse.
wátch
wátcham
wátchti
$\left\{\begin{array}{l}\text { wátchtat } \\ \text { wátchat }\end{array}\right.$
$\left\{\begin{array}{l}\text { wátchatka } \\ \text { wátchetka }\end{array}\right.$
wáshna (\%)
wash $\chi$ ēni
wáshi
washksáksi
wáshitala
wáshitana

[^59]At the place where the old squaws live.

wáwashtka<br>wáwashna (?)<br>wawash $\chi \overline{e ́}^{\prime}$ ni wíwāshi<br>wawashksáksi<br>wáwashitala

shéshalualshtka
sheshalualsh $\chi^{-\quad}{ }^{\prime}$ ni
sheshalualslgishi (Mod.) \} sheshalualshksíksi (Kl.) $\}$

Absolute form.

| tút tooth. <br> tút | lák hair. lák | nép hand. <br> nép | ptéwip son's child. ptéwa |
| :---: | :---: | :---: | :---: |
| tútam | (lákam) | népam | ptéwam |
|  | lákti | népti | ptéwa |
| tútatat <br> tútat | láktat | néptat |  |
| tútatka | lákitka | népatka | ptéwa |
|  |  |  | ptewam $\chi \overline{e ́}^{\prime}$ ni |
| tutksáksi | lák'ksaksi | népksaksi | pte-uksáksi |
| tut'tala | láktala | néptala | ptéwamtala |
|  |  | néptana |  |

Distributive form.

| tútat | lálak | nénap | ptéwishap and | pteptéwip |
| :---: | :---: | :---: | :---: | :---: |
| títat | (not in use.) | nénap | ptéwisha | pteptéwa |
| tútatam |  | nénapam | ptéwisham | pteptéwam |
|  |  | nénapti | ptéwisha | pteptéw: |
| tútatat |  | nénaptat |  |  |
| tútat'tka |  | nénapatka | ptéwisha | pteptéwa |
|  |  |  | ptewisham $\chi \bar{e}^{\prime}$ 'ni | pteptewam\%és ${ }^{\text {en }}$ |
|  |  |  | ptewishámkshi | pteptewámkshi |
| tutatksáksi |  | nenapksáksi | ptewishksáksi | ptepte-uksáksi |
| tútat'tala |  | nénaptala | ptéwishamtala | pteptéwautala |
|  |  | nénaptana |  | - |

vocalic inflection of substantives.
Absolute form.

| $\begin{aligned} & \text { ámbu,ámpu } \\ & \text { ámbu } \end{aligned}$ | káko bone. káko | ktáti, ktaí roter ktá-i | Shásti Shasti <br> Shástiash |
| :---: | :---: | :---: | :---: |
| ámpuam | kákowam | ktáyam | Shástiam |
| ámputi | káko-uti | ktá-iti, ktaíti | Sháshtiamti |
| ámbutat | kákowatat | $\left.\begin{array}{l} \text { ktáyatat } \\ \text { ktá-itat } \\ \text { ktáyat } \end{array}\right\}$ |  |
| ámbutka | kákowatka | $\left.\begin{array}{l} \text { ktáyatka } \\ \text { ktá-itka } \end{array}\right\}$ | Shástitka |
| ampu\%è'ni |  | kta-ixé ${ }^{\prime} 11$ | Shasht $\bar{e}^{\prime}$ ' $\mathrm{i}^{1}$ |
|  |  |  | Shashtiamksi |
| ampuksáksi | kákoksaksi | ktá-iksaksi |  |
| ámbutala | kákotala | ktaítala | Shastiashtála |
| ámbutana | - | ktaítana | - |

, Distributive form.

| á-ampu kákgo ktákti | túmi Shásti <br> á-ampu <br> á-ampuam | kákgo | kákti |
| :--- | :--- | :--- | :--- |

Absolute form.
skúle, skúlä lark. käilla earth. $\quad\left\{\begin{array}{l}\text { watchága } \\ \text { watcháka }\end{array}\right\}$ dog. tía large seed-paddle.

[^60]| 496 | GRAMMAR OF | KLAMATH LA | AGE. |
| :---: | :---: | :---: | :---: |
| skúle | $\left.\begin{array}{l} \text { kïíla } \\ \text { käílash } \end{array}\right\}$ | $\left.\begin{array}{l} \text { watchága } \\ \text { wátchagsh } \end{array}\right\}$ | tía |
| skúlelam | kiiílalam | watchágalam | tíalam |
|  | käílanti $\}$ <br> k:iílati | watchág'ti | tíati |
| skúletat | $\left.\begin{array}{l} \text { kiaílatat } \\ \text { kiálant } \\ \text { kiálat } \end{array}\right\}$ | watchágătat | tiatat |
| skúletka skule $\chi \overline{e ́}^{\prime}$ ni |  |  | tiatka |
|  | käilazéni | watchag $\chi \mathrm{e}^{-\prime} \mathrm{ni}$ |  |
|  | käílaksi |  |  |
| skuleksáksi | käilaksáksi | watclıágksaksi | tiaksíksi |
| skińletala | käílatala | watchágtala | tíatala |
|  | käílatana | - | tíatana |

## Distributive form.

| skúskle, shkúshkellä käkäila | wa-utchága |  |
| :---: | :---: | :---: |
| skúsk'le . (rarely used.) | wa-utclıága $\}$ | (not used.) |
| skuskle | wá-utchagsh $\}$ |  |
| skúsk'lelam | wa-utclágalam |  |
|  | wa-utchág'ti |  |
| skúsk²letat | wa-utchágartat |  |
| skúsk'letka | - |  |
|  | wa-utchag $\chi$ éni |  |
| skusk'leksáksi | wa-utchagksáksi |  |
| skúsk'letala | wa-utchágtala |  |

## IV. DERIVATION.

There is considerable analogy between the derivation of the substantive and that of the verb, although that of the latter is more complex. Indeed, the most frequent of the substantive-forming suffixes are also found in the nominal forms of the verb, like -ash, -ish, the preterital formative -uish, and various forms of the verb gî: -kish (-gish, -kslı etc.). Four principal modes of forming the substantive may be set down, as follows:

1. Derivation from a verh with all its prefixes and derivational suffixes, adding to it only a substantive-forming suffix. Ex.: látchash and látchaksh from látcha.
2. Derivation from a noun through addition of a substantive-forming suffix. Ex.: käílaslı from kaíla.
3. Derivation from a radical syllable, or a thematic radical, through addition of a formative suffix which is not of an exclusively nominal nature. Ex.: vún from wúa, vúa.
4. A verb becomes a substantive without any other change save that of assuming case-suffixes. Ex.: vumí.

Of these different modes of derivation, the first is the one which forms nomina verbalia, the origin of which need not be discussed here at length, as it would be a mere repetition of the derivation of verbs. Some of the longest substantives belong to this class, as hishtilankanke-ō'tkish hoop as a plaything ; shuashulaliámpkish watchman. The verbs to which these nouns belong are either traceable in the language as spoken at present, or, if they have disappeared from it, they can be reconstructed without difficulty; but while doing so, students should always recall what is said on page 253 of this Grammar concerning the formation of verbs and nouns.

The second mode is of less frequent occurrence in Klamath, or in any other language, than the first. We may classify under this heading the substantives formed by secondary inflection, as wátiti metal, from wáti knifcblade; all the names of plants and trees in -am, -lam, the diminutives in -aga, -ak, -ga etc; also a number of tribal and local names.

The most primitive substantives, as far as their form is concerned, are those formed by mode No. 3, and, but for their case-suffixes, many of them could not be discerned from verbs or other words by their exterior shape. We find among them many nouns that end in $-k,-l$, $-t$, or in vowels, -a , -ii (-e), -i, -u, for which instances can be seen in our List of Suffixes. They are all of a concrete signification, a circumstance which testifies to their antiquity. We may classify under this heading also the nouns formed by abbreviation of some verbal basis, unless we choose to make a special class of these. Ex. : $k i^{\prime}$ k male organ, from kéka; ktchák mother of pearl shell, from ktchálk, ktchálұa; shké gray hawk, from skédshatko; skē'l marten, from
skélza to beeome dusky; shleédsh wild hemp, from slléds\%a; stáp fint-stone, from stápka; tchák serviee tree, from tchaggáya.

The substantives formed according to mode No. 4, which cannot properly be called derivation, owe their existence to an apocope mainly due to careless pronunciation, and they have a parallel in the particles which are used as verbs, page 457. In many instances the form in -sh exists simultaneously with thé abbreviated form. Examples are as follows: gínslika slope, îl'lika seraper of stone, iwála top or end, ísha funeral, kinyátp'na angle, corner, néwisht remains, pála and pálash liver, páta dry seuson (pátash is spleen, milt), skó, skóa and skō'slı spring season, vumí and vumíslı eache.

## DISTINCTION BETWEEN ABSTRACT AND CONCRETE NOUNS.

All substantives are either abstract or concrete in their signification, and abstract nouns are all derived from concrete terms of verbal or nominal origin. No language is devoid of abstract nouns, but in the languages of primitive nations there is a perceptible scarcity of them when compared with their plenty in languages of mentally-developed populations. Many primitive peoples prefer to express abstractions by the verb and adjective rather than by the substantive ; in the lexical and morphological portion of their grammar the tendency toward specializing prevails over that of using purely abstract forms. Our intention is to speak with precision, that of the Indian to speak graphically; the Indian individualizes, while we classify; he often expresses by circumlocution an abstraction which we express by one single term. But the power of abstraction varies greatly in degree among the different tribes or nations of uncivilized races in both hemispheres.

## 1. Abstraet substantives.

What is said above is well exemplified by some characteristics of the Klamath language of Oregon. The idea contained in many of our more abstract substantives cannot be expressed substantively; but can be expressed by verbs, adjectives, or adverbs. That language possesses no terms for time, hope, health, haste, friendship, justiee, thanks, thankfulness, greediness, vindietiveness, vision, feeling, intelleet, sense, learning, mamner. These are, however, rendered witl accuracy by some finite verb, or an adjective or adverb, so
that no doubt can arise about their correct rendering. Thus time is expressed implicitly by klikuga nû $I$ have no time, and a host of other expressions to be found in the English-Klamath part of the Dictionary; health is expressed by tídsh nû híshlta I am in good health; haste by hurried, hurriedly or to be in a hurry. The sensitive, moral faculties or feelings of man are all expressed by steínash heart, his perceptive and intellectual powers by húshkanksh thought, mind, or by tídsh shepelpelátko, sháyuaksh sagacious. For soul and life there is but one term here and in many other Indian tongues: breath (húkish) like Latin spiritus, from spirare "to breathe." Friendship, would be expressed by to be friendly, to be or become friends. Absenee and presence are rendered by the pronouns $\underline{k}$ éliak or nég, Mod. nā'g, absent, kéku the one standing before me or you, láki to be gone, etc. Our idea of substanee can be expressed by tuá something, by the verbs gî, wá to exist, or by special terms for each substance, as enumerated in Dictionary, page 671. Color has to be replaced by the adjectival name of the color referred to, as the language has no other substantive but slnéluash, which means dyestuff, coloring matter.

The abstractions which this language can readily express are mainly of that kind which we call sensations, and form the nearest approach to concrete terms. Thus we have:

| háshtaksh perforation. | slalatelıguálash junetion. |
| :---: | :---: |
| kpápshash taste (of tongue). | shenólakuish promise. |
| ktchálshkash splendor. | túmĕnash noise. |
| lushlúshlish warmth. | tiai'mish hunger. |
| ndétchkish blushing, shame. | tclmû́ksh obseurity. |
| netnólzish government. | txútzash ill-omen. |
| -ulaksh law, rule, sway. | wétish laughter. |

Many English abstract terms lave to be expressed in Klamath by adjectives or verbal adjectives, which then assume the function of substantives:
aishishtchi beautiful and personal beanty.
yámkamptch lazy and laziness.
kátagsh coll, ehilly, and low temperature, frost.
kélpoksh hot and heat, fever.
litchlitchli powerful and power, strength.
nkillitko powerful, strong and power, strength.
It appears from what precedes that wherever abstract terms are rendered in substantive form, as nomina actionis, they are formed by the ending $-s h,-s$; when rendered in adjectival form, either by the terminals -li, -tko, or by -ptchi and its abbreviations.

## 2. Conerete substantives.

Generic nouns, or nomina appellativa, is the name given to substantives comprehending all the species or kinds of one class or family of animate or inanimate objects. In regard to their origin, we can establish two sorts of generic nouns: One class, generally traceable to a verbal origin, became restricted from a more comprehensive to a more specific meaning, like English bird, which originally meant brood, the young of any animal; the second class includes terms which formerly stood for certain definite objects or natural species, but afterward advanced to a wider signification, like English butterfly. In Klamath, nouns of this second class are more frequent.
híshuaksh, in Mod. hishuátchzash husband, then male, man; originally "one who associates, consorts with."
\{wam berry, juiee-berry; originally "whortleberry."
ktchák marine and fresh-water shell; originally "mother-of-pearl shell." stinā'sh lodge, house; originally lodge made of bent willow-rods, which signification it retains in the northern dialect.
wáměnaksh snake in Kl., really applies only to the black spotted snake, the most frequent snake-species in certain localities.
welékash female, woman in Mod.; originally "old woman."
wíshink, often used in Kl. for snake; real signification "garter-snake."
It is a consequence of the specifying tendency of the Klamath language that many generic terms occurring in European languages find no equivalents in it. 'There is, e. g., no generic term for fox, squirrel, butterfly, and frog, but each species has its own name. For bird a distinction is made between forest-birds, tchfkass, and aquatic birds, ma'makli, which are called after their color mixed from blue and gray; but kia'm is a truly generic
term for $f$ ish. No real term exists for animal, quadruped, and plant. Trees are called únku by Modocs and Klamath Lakes, kō'sh by Klamath Lakes (really "pitch pine"); shrubs are ánku also; weeds, and other plants growing near the soil, tchélash, "stalk"; all the grasses tchélash, and kshū̀n "what is carried on the arms." Various terms are used to describe fruits by their form: íwam, lbúka, lútish, útish, etc. Generic terms exist for moantain, river, and plain, but none for our term valley. Cf. also the Table on page 145 (Texts).

The collective nouns of this language present nothing of special interest, neither are they formed by any special mode of derivation, except those exlibiting the adjectival suffix -ni: "referring to", or "all that kind of", mentioned elsewhere. This suffix reduplicates as -nini, and is a specimen of the brevity of expression so often met with in this language.

Diminutive nouns are derived from other nouns by the special suffix -aga, which appears under varying forms, and in a restricted number of substantives is found duplicated: vunákaga little son; ${ }^{1}$-ia is possibly another diminutive suffix. No special suffix forms exist for the formation of augmentative, intensive, or enhancive substantives.

## 3. The names of persons and personified beings.

These are not sex-denoting, and if sex must be pointed out, it-is done by adding the terms for man, boy, woman, girl, etc. Neither is the gender marked in the pronoun by special pronouns, and Klamath has this feature in common with many other North American languages. In regard to derivation several classes may be distinguished, some of which possess special suffixes.
a. Substantives naming a person as engaged in some act at the time being: nomina agentis. Derived from verbs by means of -slh, sometimes by - ank, -an, and standing in the absolute, unreduplicated form.
b. Substantives naming a person represented as the performer of an action, generally of a repeated or habitual action: nomina actoris. Derived from verbs by -ash, -ish, -otkish. Nomina agentis, when changing from the absolute to the distributive or reduplicated form, become nomina actoris.

[^61]c. Substantives indicative of provenience, nativity, tribal descent, or origin of persons or persouified beings: nomina gentilitia. They are originally and sinultaneously adjectives, with the endings -kish, -kni, and -wash.
d. Substantives expressing the degrees of relationship by blood or marriage, in the descending and in the ascending line: nominu affinitatis Formed by the prefix p-and by the suffix -p (-ap, -ip), a few by -sh; they exhibit two modes of forming the distributive or plural number. They are in fact verbs, and this explains it why in some of the oblique cases they are not inflected; only the subjective, the possessive and the postpositional cases have the case-suffixes of substantives.
e. Proper names of persons, male and female: nomina propria. No special mode of derivation exists for deriving these names from their parents or some other appellation, though the name of the father is placed after that of the child (e. g., Wawáliks-Skaititko) in exceptional cases. Mixed-blood descent is indicated by tyilamni half, or by the suffix -aga. Steamboat Frank was called so after his mother, and the children usually get no names before they are able to speak. Many male Indians have more than one nane-one given in early years, the others referring to their occupation or to some other circumstance. The personal names of the two tribes often depict the bodily qualities of their owners very drastically, and would make an interesting subject for a separate treatise. Some of them are diminutives, others binary and ternary compounds or embodying whole pluases, and a few are borrowed from languages foreign to Klamath.

## 4. The names of animals.

Though often difficult to trace to their true origin, these are frequently nomina agentis, as ndúkish, a species of hawk, from ndúka to lit; or they are nomina actoris, and then are often formed by distributive rednplication, as munáną-tatámnuislı a mole-species, from táměnû. 'The numerous onomatopoetic forms which occur in so many bird-names, as túktuknash, waiwash, may be classed as nomina actoris also. Butterflies are mostly called by reduplicative names, as képkap, walwilékash, wékwak, from the motion or position of their wings, and it will be observed that in the majority of lan-
guages the names for these insects are formed by reduplication. Names of some burrowing, animals are formed with initial mu- (cf. múna deep down): múi woodchuek, múkuaga field-mouse, mû-úe mole, mî́nk generic term for mice and the other smallest quadrupeds. The suffix -aga, -ak designates the young of animals, but often applies to specific animals on account of their diminutive size: washla-ága, walðátchaga, watchága, etc.

Male animals are distinguished from female animals by a separate term indicating their sex, which is placed before or after the animal's name, and hence must be regarded as an attribute, not as an adjective Male is lakí; male dog, lakí wátsaga; male dog pup, lákiag wátsaga; male horse, lakí wáts; male deer, lakí wîhle; young male deer, lákiaga wi’hle or wi’hlag lákiag; male eayle, lakí yaúzal. For the female two terms are in use, one of which, ndsilo, is applied to the domesticated quadrupeds only: female horse, or mare, ndsilo wáts; female dog, ndsílo wátsag; female puppy, ndsíluag wátsag. The following are either names of birds or of wild quadrupeds: female eat, ngúlo, kúlo púshish; female deer, ngúlo wíhle; female eagle, kúlo yaíyal; female llack bear, witä'm kúlo; her young, witia'm kúhuak; shai\%ísh gúlu (cf. 163; 16); female lizard, kía kúlu; the female káls-bìrd, kálsam kúlo; female wolf, kï'utchish gúlu. We also find, in 163, 9: kú-e welékash the old female frog or -toad, and tikága for the male of the mountain quail, q. v.

There are very few animals whose males have a name differing from the females. The female of the shke-hawk is called spit'm, and the term Sháshapsh, Sháshapamtch applies chiefly to the female Grizzly Bear with her two young in mythologic stories, and not to the male. Compare, also, the terms for ox, steer, cow.

The terms young, eub, pup, brood are rendered either by wéash offspring, wéka (for wé-aga) little offspring, or by appending the diminutive suffix -aga (-ak, -ka etc.) to the name of the animal. In a few instances the young has another name than the parent animal: colt is txá-ush, not watchága, for this means dog; wi'hlaga stands for young antelope, instead of tchéwaga, and in fact means young deer, young fawn; cf. wi'hla in Dictionary, page 485. Táwalsh young quadruped refers to certain animals only: vúnam táwalsh elk one year old. When the offspring of animals is referred to whose names end in -aga (cf. above, this page), an adjective for little (ndshékani, kitchkáni) is
placed before the name. Lelédshi and its diminutive leledshiaga refer to the young of mammals only. Cf. Kllhanksh, in Dictionary.

To the names of personified animals, occurring in the mythic stories of the two tribes, is appended the adjective ántchiksh, abbr:-antel, -auts, old, ancient, bygone. In the conjurer's song-lines, in which the same animals are frequently mentioned, I have not met with this adjective.

Certain animals are known to these Indians under two or several names; one of them is the usual one, the others are mere predicates or epithets referring to individual peculiarities of the species. This sort of polyonymy recalls the fifteen names for the elephant and the twenty appellations for the sun formerly in use in Sanskrit literature; also faniliar terms of European languages, like Master Bruin for bear, Reginhart, renard for fox, Isengrim for wolf, Raminagrobis (French) for cat, etc. Terms of this description, which I have found to exist in Klamath, are all more or less mythological, as follows:
lúk grizzly bear: Sháshaph, Sháshapamtch, Lúkamtch; lúkaga grizzly bear cub: shashápka.
wanáka little silver fox: mbaubáwash (the "howler"), kenkatílatuash, kenkapshlä̀li, ndundótatuash.
tiggága quail: takága.
yaúzal white-headed eagle: shkû'slki.
With these we may fitly compare pshe-utíwash, the archaic term for máklaks people, human beings, which occurs in mythic stories only.

## 5. The names of plants.

Trees, shrubs, grasses, and all vegetal growths bearing edible fruit or berries, are very generally named after their products, and the names are derived from them through the suffix of the possessive case: -am, -lam. The noun to be supplied after this suffix, to make the phrase complete, ánku, tkáp, tchélash, is, except in a few cases, elliptically omitted, so : kpókam gooseberry bush, for kpókam ánku, kpók being the gooseberry Even the white oak, húdshnam, is called after its acorn, húdsla.

Terms deviating from this rule are, e. g., kō'sh pitch-pine tree, which is not named after its fruit, ktai'lo pine-nut, though this is eaten by the Indians. Wókash, nû't, nû'tak, designate the plants as well as their seed. Welé'li barberry bush does not show the ending -am. Edible bulbs, roots, etc., generally exhibit some other ending than -am, -lam, and even -ash, -ish is not very common among them. Cf. Texts, pp. 146-149.

Among the terms in -am, íwam designates the whortleberry as well as the bush npon which it grows, and lé-usham, distr. lelé-usham, does not designate a plant, but a flower, blossom.

Vegetal growths not producing edible fruits, berries, or seeds have names formed by a great variety of suffixes from nouns or verbs; cf. gúlkmaks, kĕnáwat, néwal, skáwanksh, shle’ dsh, vńlalksh, etc.

## 6. The names of inanimate objects.

These are difficult to classify as to their derivation, on accomnt of the large number of affixes occurring in their formation. Therefore the list below attempts to give only indications for the classification of some of their number.
a. Nouns expressing the name of the material or substance from which an object is manufactured, or of which it consists, are often formed by the partitive suffix -ti, q. v.
b. Nouns indicating the tool or instrument by which something is manufactured or 'performed are formed by appending -ō'tkislı (-ítkish, - $\bar{u}^{\prime}$ tch) or -kish, q. v.
c. Parts of the human and animal body are formed chiefly by means of the suffixes -ash (-atch), -p, -11 ( -0 ).
d. Topographic nouns-viz., terms for rivers, hills, prairies, woods, districts, sites, lakes, settlements, towns, etc.-are formed by -sh (-ash, -ish) and -kish, -lyish; proper names of places, sites, hills, etc., by -kslii, - $\chi_{e}{ }^{\top} n i$, -na, -i and other suffixes. Yaina mountain is au instance of a noun originally formed by the suffix -na, and inflected through all cases.

## THE ADJECTIVE.

The attributive relation in the sentence is indicated by the adjective more than by any other part of man's speech. Adjectives may be divided
into numeral, indefinite or pronominal, verbal adjectives, and into adjectives desiguating quality. Only the two latter classes will be considered under this head; the indefinite will be treated under "Pronoun", and the numeral adjective under a separate heading, since numerals are used not only as adjectives, but also as adverbs.

Adjectives qualify substantives in a similar manner as adverbs qualify verbs. In the language of which we treat the adjectival inflection is not so multiform and elaborate as that of the substantive noun, though this does not impair the clearness of sentences. The suffixes -na, -i, -émi do not appear in the inflection of the adjective, and it also lacks special grammatic forms to indicate gradation.

## I. GENDER.

Gender, animate and inanimate, is not distinguished in the adjective, for its principal distinctive mark, the objective case, does not differ in its suffix -sh, as the following sentences will show:
múnish wúshmûsh shińga sha they kill a large ox; cf. 42, 2; 112, 21.
atínsh kō'sh guká hûk lie climbell a tall pine tree.
wâtsag mû́ménish wawákash gítk fox-lound, lit. "dog having long ears."
yánanish pil má-i pán they cat only the lower (part of the) tule reed.
pálpalish (or pálpalsh) shlápsh gítko having a white flower.
litchlítehlish steínash gítko strong-learted.
If a distinction was made between the two genders, the above adjectives would, except in the first example, appear with the suffix -ni, -li. But another suffix, appearing in this and in other cases, is $-a$ : tinma tuá gítko possessing many things. It will be considered further on.

## II. ABSOLUTE AND DISTRIBUTIVE FORM.

The distributive form derives itself in the same manner from the absolute as in the substantive and the verb. It is applied in the same manner and inflected by the same case-suffixes and case-postpositions as the absolute is, under stated restrictions. Whenever reduplication occurs, it may occur in the noun and in the adjective, or only in one of the two; in the latter case, it is usually the adjective which assnmes the distribntive form.

Even among the enclitic, unaccented adjectives there are some that will assume the distributive form; they resume their accentuation whenever they become joined to a noun showing this grammatic form.
lû́k pûpashpúsh=tkani (gi) the seeds are blaekish, 146, 3.
kěládsh mämätchmii' tchlil lalkáya the keládsh-berries grow blue, 146, 9.

## III. infleotion for case.

The adjective inflects for case in a shape not very different from that of the substantive, and in both we find forms of the simple and of the composite declension. Some of the cases do not occur in every substantive, and still less so in every adjective; the paradigms will clearly show this. The linguistic principle effecting alterations like these is that of agglutination.

Klamath has a double inflection of the adjectives in -ni, which may be compared in some respects to the one observed in German. Of this donble inflection the shorter one is an abbreviation of the longer, showing the syl. lable -än- or -én- before the case-suffix, and both are used almost indiscriminately, althongh the longer one is more expressive. The adjective, when used predicatively, does not differ from the one used attributively, except sometimes by the position in the sentence, and in our texts the use of the adjective in either quality is rather frequent. The following examples will show the position of adjectives used predicatively:
p'gishap t'shíshap ketchkaniénash $\bar{o}^{\prime}$ gîsht wéngga (Mod.) mother (and) father died when he was young, $55,20$.
nā'slı shuī'sh sáyuaks hû̀intcha kálak a song having pointed him out as relapsed; lit. "one song having discovered that he is of the kind called relapsed", 72, 3.
yámnashptchi lû'loks Aíshisham, Wanákalam käkä'kli lû'loks the fire of Aishish was purple-blue, that of Silver Fox was yellow, 99, 3.
láp shúlshesh mû̂'meni, szútash tchîsh lápi ndshekáne of gaming sticks
there are two thick ones, of skin-covered stieks two slender ones, 79, 2.
Not in every instance does the principle of argglutination unite the adjective closer to the substantive than the English language does; but
when this occurs one or the other loses its case-sign, and in a few instances both will lose theirs.
A.-Both nouns retain their suffixes in the following instances:

K’la-ushílpkash Yaina-ágaa gishî at the Sand-covered Hill, 43, 12; cf. 56, 4.
kédsha ntchékayant kshî̂'nat it grows on small grasses, 148, 5 .
lúk shewána sháplashti stáyanti to give away seeds from a full seedpaddle.
nulidshí ko-idshántala kiailítala kiai-ilpákshtala $I$ am descending to the wretched, the buming land, 173; 2.
ndannéntch wéwanshîsh yámnash shéwana to three (of his) wives he gavo necklaces, 96, 9.
ká-i gitánish ámputi búnui! do not drink of this water!
pûka a sha ktíyatat kélpokshtat they roast them with heated stones, 148, 16. 17. Cf. 90, 18.
13.-The preceding term, which is usually the adjective, retains the suffix, while the term standing last loses or abbreviates it:
tidshantála käíla into a good country, 39, 2. 40, 15.
skétigshta vushó shlín he shot (him) in the left breast, 42, 10.
keá-i pupashpû'shlish gúshî líela they do not kill black hogs, 128, 2.
C.-The term standing second retains its case-mark, while the one standing first loses or abbreviates it through attraction:
gé-upgan mû'ui é-ushtat ruming into the great lake, viz., "the sea", 127, 14.
kínkan' smō'k gî̀tk they have a sparc beard, 90, 5; cf. 90. 17.
únîpni waítash during four days, 75, 14; cf. 88, 4.
génta kaílatat about this world, 94, 2.
pálpal:tchî̂leksh gítko por'son having a white skin. 55, 4.
pálpali watsátka upon a whitc horsc, 183; 22.
múni lákiash neásht gì to agree with the grat ruler, $40,9$.
Truncated case-endings occur more frequently in the adjective than in the substantive. This abbreviated form is a consequence of agglutination to other terms to which they become intimately joined, and adjectives showing this form may be joined to substantives with an apocopated form or with a full form. Substantives joined to aljectives or numerals do not always
show the same case-suffixes as these, so that, e. g., -tala in the noun need not correspond to -tala in the adjective, but just as well to -sh, -11t, -ă. The most frequent of these adnominal suffix-abbreviations are -a (-a) and -nt (-nta, -ta).
$-a$ (pronounced short) occurs in some oblique cases of the adjectives in -ptchi, -mtchi, -tchi, in some adjectives like tídshi good, kú-idshi bad, and in the numerals. We have also found this terminal in the substantives ending in $-p$ (-ap, -ip).
-nt, case-suffix abbreviated from -tat, -ta, the locative-case terminal, and subsequently nasalized. The same nasalizing process is observed in -utka for -tka, and in -nti for -ti. It is frequently uscd as an adjectival suffix whenever the substantive belonging to it stands in one of the locative cascs. It also appears as -anta, -ant, -ta, the latter occurring oftener in the southern than in the northern dialect.

The inflection of the adjective is effected by ease-suffixes only. When in the composite inflection a substantive assumes a case-suffix to which a case-postposition is added, its adjective-attribute shows the same case-suffix without any case-postposition, sometimes another; cf. Numeral.
atiy:̈'nam welékshamkshi at the tall old squau's lodge.
atiyä'n'sh welékshashtala toward the tall old squaw.
To render the study of theso correspondencies between the inflected adjective, numeral and substantive easier, I have laid them down in tabular form as follows, in the order of their frequency:

Terminals of substantive:
Terminals of adjective:
correspond to:
-ash and obj. case without suffix
-am (-lam)
-ti, -ăt
-tat, -at
-tka, -tk

- $\chi$ ēni, -amðc̄ni
- $\bar{e}^{\prime} \mathbf{m i}$
-amkshi
-ksaksi
-tala

$$
\begin{aligned}
& \text {-sh (-ash, -ish), -ă, -anta, -ant, ta. } \\
& \text {-am (-lam), -nti. } \\
& \text {-nta (-nt), -ntka, -nti, -slı (-ash, -ish). } \\
& \text {-nta (-ant, -nt), -ntka, -tat, -sh. } \\
& \text {-ntka, -ntk, -tk. } \\
& \text {-sl, -nt, -̆̆-, am (-lam). } \\
& \text {-ntka, -ntk, -tk. } \\
& \text {-am (-lam), -̆̆. } \\
& \text {-sh, -nt, -九̆. } \\
& \text {-sh, -nt, -九̆. }
\end{aligned}
$$

Some rules bearing upon the mechanical part of the adjectival declension are as follows:

1. Adjectives, numerals, and indefinite pronouns in -ni show a double inflection; one of these inserts the syllable -än-, -en-between the stem and the case-suffixes, while the other inflects the word without this insertion. Examples of this are:
ketclkáni small, young; obj. ketclıkaniénashı and kétchkan'sh.
lápukni (abbr. lápuk) both; obj. lapukénash and lápuksh.
míni large, great; obj. muyä'nash (for muniénash), múnish, múatch.
ndíni, ndánni three; obj. ndannénash and ndínash.
náuuk (for nánukni) all, whole; obj. nanukénash and nánuk.
tunépni five; obj. tunepä'nash and túnipa.
The longer form may stand without any substantive accompanying it; cf. húnkiăsh tunepii'naslı five of them, 44, 2. The short form exists beside the longer one, and has apparently been formed from the latter by contraction. The word atíni long, tall forms atiénash and atiyénash, the eybeing inserted only for euphony, and so with others ending in -ini.
2. Adjectives in -kini nsually drop the $-n$ - in the oblique cases. These are formed as if the adjective ended in -gish, -kish, and this suffix also appears in the subjective case of many of their number.

É-ukshikni, obj. case E-ukshikíshash.
Mō’dokni and Mṑdokish, poss. case Mōdokísham.
Wálamskni and Wálamskish, obj. case Walamskíshash.
3. Verbal adjectives (and participles) in -tho, -ntko. For the formation of their oblique cases, cf. -tko in "List of Suffixes" and "Verbai Inflection."

Before we pass over to the paradigms, it will be of use to observe a few other examples, largely taken from our 'Texts, to illustrate further the working of the rules established upon the preceding pages, under $A, B, C$. They are arranged after the cases observed in the substantive, commencing with the objective case, and include adjectives and pronouns.
kii'liant wáshash in the absence of the prairie-wolf, 105, 3.
mû nkî'llipsh (for nkillipkash) tî'wîsh the quickly-rushing waters, 94, 5. gémptcha máklakshash persons of that deseription; cf. 186; 54.
kó-idsha skî'ksh a wicked spirit, 127, 13.
palpálish shîl k'hì'ulĕzan hoisting a white flay, 14, 2.
túma nénuktuan gisháltko rich in all kinds of property.
lîwátkal shnúlaslitat húnkant they raised himu up in that nest, 101, 13.
keliánta ké-ishtat when no snow was lying on the ground, 37, 21; cf, 41, 10.
wí-ukayant këládshanat on the low kelátlsh-bushes, 146, 8.
taktaklánta kiaílatat upon level ground, 43, 29.
náyant waitaslitat on one and the same day; cf. 56, 7.
géntka lúldam this winter; géntka páta this summer.
gaptchétka tyalampáni about the middlle of May, 36, 7.
géntka skoshē'mi during this spring.
niàddshash shelluálshgîshì on one of the battle-fields, 56, 6.
CONJUGATIONAL PARADIGMS.
As I lave remarked previously, both nouns, the adjective and the substantive, may be inflected, or only one of the two. In the latter case, the endings -li, -ni may remain throughout unchanged: -ptchi, -dshi usually change into -ptcha, -tcha, -dsha in the oblique cases, and when used distributively both may be reduplicated or one may remain in the absolute state. Paradigms of both kinds of inflection are presented below.

Objective rases of adjectives in -li, -ni may be syncopated into -l'sh, -lsh, -n'sh, -ns, just as it is done in the substantive.

Following are completely-inflected paradigms of adjectives:
Adjective in -Li.

Absolute form.
taktákli shlápsh red flower or flowers. tataktákli shláshlapsh eaeh red flower. taktáklish shlápsh taktákliam shlépsham taktáklanti shlápshti taktáklantk shlápslitka taktáklant shlápshtat taktáklish shlapsh $\chi \overline{\text { éni }}$ taktáklant shlapshksáksi taktáklish shlápslitala
tataktáklish shláshlapsh
tataktákliam shláshlapsham
tataktáklanti shláslllapshti
tataktáklantk shláshlapshtka
tataktáklant shláshlapshtat
tataktáklish shlashlapshyḗni
tataktáklant slılashapshksáksi
tataktáklish shláshlapshtala
(or tataktáklant shláshlapshtala)

## Adjectives in - NI .

Absolute form.
atíni kō'sh tall pine tree.
atí-iin'sh, atinish, atî'nsh ko'sh
atiyai'nam, atiénam ko'sham
atíyanti kō'shti
atíyantka kō'shtka
atíyant ko'shtat
atīnsh kōsh $\not \subset \bar{e}^{\prime} n i$
atì'ush kōshksáksi
ati'nsh kō'shtala

Distributive form.
a-atíni ko'sh each tall pine tree.
a-atínish, a-atínsh ko'sh
a-atiya'nam ko'sham
a-atíyanti ko'shti
a-atíyantka $k$ óshtka
a-atíyant ko'shtat
a-atínsh kōsh $\bar{e} \bar{e}^{\prime}$ ni
a-atínsh kōshksáksi
a-atínsh kōshtala

The distributive form of the adjective is here conjugated with the absolute of the substantive.

The cases omitted in the following paradigm are the locative in -tat, -at, which does not occur in names of persons except when used instead of -ti; and -ksaksi, which in personal names must be affixed to other case-endings.

Absolute form.
míni laki great chief, head chief. muyä'nash, múnish lákiash muyä'nan lákiam mmyiánanı lákiamti mnyia'ntka lákitka
mnyä'nam lakiam $\chi$ éni muy:i'nam lákiamkshi
muyä'n'sl, múnish lakiashtála

Distributive form. mímeñi laláki each great chief. múmiän'sh, múmĕnish lalákiash mumiaínam lalákiam mumiia'nam lalákiamti mumiä'ntka lalákitka
mumiai'nam lalakiamøéni
mumiä'nam lalakiámkshi
múmiän'sh lalakiashtála
inflection of tidshi good, and of kiúidshi bad.

Absolute form.
tídshi pgíshap good mother.

Distributive form.
tídshi or titádshi pgishishap each good mother.

Absolute form.
tídshă pgísha
tidsha pgísham
tídsha pgísha
tídsha pgísha
tídsha pgisham $\chi \bar{e}^{\prime}$ ni
tídslıa pgíshamkshi tídshả pgishamksáksi
tídslıa(nt) pgíshătala

Distributive form.
tídslıă pgíshisha
tídsha pgíshisham
tídsha pgíshisha
tídsha pgíshisha
tídsha pgishishamzéni
tídsha pgishishámkshi
tídsha pgishishamksáksi
tídsha(nt) pgishishatála

The absolutc or distributive form in the adjective and the distributive form in the substantive; cf. $107,8.10 .11$ with 107,7 :

Absolute form.
kú-idshi watsága vicious dog.
kú-idsha watságash and watsága ku-idshä'nam and kú-idsham watságalam
kú-idsha watságti
ku-idshántka watsígatka
kú-idshtat (and kú-idsha) watsága-
tat, watságat
kú-idsha watsag $\chi \overline{e ́}^{\prime} n i$
kú1-idsha watságaksi
kú-idsha watsagksáksi
kí-idshant watsagtála

## Distributive form.

kú-idshi wí-utsag each vieious dog (or kukídshi wa-utsága).
kú-idsha wa-utságash and wa-utchága ku-idshï'ínam wa-utchágalam
kú-idsha wa-utságti
ku-idshántka wa-utsígatka
kú-idshtat, kú-idsla wa-utságatat, wautságat
kú-idsha wa-utsag $\chi$ éni
kú-idsha wa-utchágaksi
kú-idsha wa-utchagksáksi
kú-idshant wa-utchagtála

The second column contains the absolute form in the adjective and the distributive form in the substantive.

Although the suffix - dshi in these two adjectives is not identical with the suffix -ptehi, -mtchi, -tchi, the adjectives and pronouns with this ending are inflected exactly in the same manner, and thus no new paradigm is required.

Adjective in -sh.
Absolute form.
kélpakshı ámbu hot, boiling water. kélpakshash, kélpokshash áunbu kélpkapkam ámbuan kélpakshti ámbuti or ámbu kélpakshtka ámbutka or ámbu kélpakstat or kélpoksh ámbutat
kelpakshyéèni ámbu, or kélpaksh ambu\%éni
kélpaks ambuksáksi, or ámbu kélpkaksaksi
képakshtal(a) ánbutal

It will be seen that some of the above forms are derived from kélpkatko, and not from kélpaksl, kélpûks.

Distributive form.
Kekálpaksh, kekálpoks is not in frequent use, the language preferring to substitute for it kekalpkátko, the participle of kélpka. For its inflection see Participles, and -tko in List of Suffixes.

Adjective in -A.
Absolute form.
kuáta ktá-i, ktaí hard rock, hard stones. kakuáta ktaí cach hard rock.
kuáta ktaí
kuátanti ktíyam
kuátanti ktaíti
kuátantk ktáyatka
kuátant ktaítat, ktáyat
kuátant ktaixḕni
kuátant ktaíkshakshi kuátant ktaítala
kakuáta ktaí
kakuátanti ktáyam
kakuátanti ktaíti
kakuátantka ktáyatka
kakuátant ktaítat
kakuátant ktaixḗni
kakuátant ktaíksaksì
kakuátant ktaítala

The conclusions to be drawn from these various conjugational specimens are that some case-suffixes of the substantive (-na, -émi) and all the casc-postpositions, -tala excepted, are not employed in the inflection of the adjective, but that others are substituted for then; that the language rather seeks differentiation than similarity in the endings of both, and that the
inflection of the adjective is rather a matter of convenience than a process following strict rules or observing regularity. It adapts itself much more to the sense of the sentence or phrase than to the exigencies of grammatic rule, and diligently evades combinations obstructing rapid enunciation or injurious to euphony.

## iv. RADICAL STRUCTURE. DERIVATION.

In regard to the structure of their radices, the adjectives subdivide themselves into two classes easily distinguishable from each other. Class $A$ embodies all adjectives with a simple, mostly monosyllabic radix, while Class $B$ comprehends all the adjectives formed by iterative reduplication and the suffix -li. Both classes possess a distributive form derived from the absolute by what I call distributive reduplication.

The adjectives of Class $A$ with a simple radix, as tidshi good, stáni full, kélpoksh boiling, hot, take every ending occurring in adjectives save -li. The sound preceding the derivational suffix is usually a vowel, which sometimes is elided; diminutives take the ending -aga (-ak, -ka, -ga). Their function is to express qualities inferred from observation and of an abstract and immaterial order.

The adjectives of Class $B$ with a radix formed by iteration of the whole radical syllable are very numerous, and end in -li without exception. The sound preceding the suffix -li is usually consonantic, and then the radix belongs to the class which I call thematic roots. In pálpali white this sound has coalesced with the suffix, the original form being pálpal-li. The function of this class is to express qualities perceived on objects of nature by the sense of vision (colored, striped, angular, in motion, etc.), by that of touch (smooth, rough, furry, level, etc.), of smell and taste; thus their signification is always of a material, concrete nature. The diminutives of this class append -aga and -tkani to the radical instead of -li:

## lushlushága a little warm.

ketchága rather small; from ketchkáni small.
lúk pûpashpúshtitkani each seed is a little black, blackish, 146, 3.
käkï'ktkani tchikass a yellowish bird, 180; 8 .

Some of the adjectives in -li can drop this suffix. The remaining radix then serves for forming compound words, or it represents the adverb corresponding to the adjective:
metsmets-sáwals (for metsmútsli sháwalsh) obsidiun arrow-head; lit.
"dark-blue arrow-tip."
pushpúsh=uk shle'sh (uk for hûk) it is black to look at, 73, 6.
The radix of the adjectives of Class B is, in some instances, found to occur in its simple, unreduplicated form, especially in compound substantives and in verbs. Analogous to this is the fact that the adjectives of color in the Sahaptin dialects occur regularly in both forms, the simple and the duplex, as in the Warm Spring dialect lä'mt and la'ntlaimt for yellow. In Klanath we have:
kál-kma half-spherical skull-cap, for kálkali kmá.
lítchtakia to try hard, contains litchlítchli strong.
pä'z tgî $^{\prime}$ to dawn, lit "to turn gray", contains paikpai'kli gray.
Push=kíu "Black-Posteriors", nom. pr. mase, for Pushpúshli kíu.
tā' $\chi$ tki to become red, to blush, contains taktákli red.
This is observed in some other verbs in -tki, -t i , and is true even of some adjectives of Class $B$, which revert to their adverbial form withont losing their adnominal signification: mû-lakí headchief, kétcha=lakí subchief.

The following table will show the grammatic relation in which almost all the adjectives in -li, and a large number of those in -ni, -kni, -kani etc., stand to their corresponding adverbs. Verbal adjectives in -tko, -ntko of course do not form adverbs. Examples:
lítchlitch strongly, forcibly; litchlítchli valorous, powerful.
kétcliketch roughly; ketchkétchli rough to the touch.
mû strongly, much, a great deal; múni large, great.
atí far, high up; atíni tall, distant; atíkni stranger.
mà'ntch long ago; mā'ntchni belonging to the past.
tánk then, at that time; tánkni belonging to that period.
tí over there; túkni coming from there.
gitú here; gitákni comina from here, there.
$\underline{\mathrm{k}} \delta-\mathrm{i}$ badly, wrongly; $\underline{\mathrm{k}} \delta$-idshi bad, wretched, wiched:
kétcha a.little, somcuhat; ketclkáni small, little, young.

## derivation of adjectives.

The more important points on this subject laving been previously stated, short references to these are all that are now needed for our purpose.

Adjectives are derived from radicals and bases by suffixation exclusively. There exists no prefix especially devoted to the formation of these nouns.

As to their derivation from the different parts of speech, the adjectives may be classed as taking the following suffixes:

Adjectives of an adverbial, etc. origin: -ni, -kni (sometimes, as in numerals, abbreviated into -ni).
Adjectives of a verbal origin and nature, verbal adjectives, etc: -tko, -a.
Adjectives of a substantive origin: -sh (-ish, -kslı, -gs), -ni, -kni, -aga, -ptchi (-mtchi, -tchi).
Adjectives of pronominal origin: -kani, -kni, -kianki, -ptchi.
Adjectives derived from other adjectives: -ptchi.
Adjectives proper: -li, -i.
With respect to their signification, the formative endings of adjectives may be subdivided in suffixes conveying a concrete, material meaning ( -li ); an abstract meaning (-ni, -kianki, -kani); while all the others, even -ni sometimes, form adjectives belonging to both classes.

In the enumeration of aljcetival suffixes here following, it will be appropriate to distinguish between those ending in -i and those showing other terminal sounds. While the former are of the more genuine adjectival type, the latter are in fact substantives. Compound suffixes are not infrequent, and are often formed from oblique cases of a noun.
$-a$, an exceptional suffix, occurring in wikí (for wikáni) low, in kuáta harl, which are in fact an adverb and verb.
-aga, -ak forms diminutives like tumiága a few, and is mentioned in List of Suffixes. Some of the adjectives in -ak are formed by ak only, $b u t$, and are not really diminutive adjectives: kéliak dcprived of, péniak unclothecl, tánkak a few only.

- $i$ appears separately as a suffix only in a few adjectives, as kú-idshi bad, tídshi good, túmi many. Ḱti is abbreviated from atíni, like wénni from wemníni.
-kani appears in a few adjectives only, as yánakani, ketchkáni, ntelcékani, tyálampankani ; in the following it points to an uncounted, undetermined number or quality, and is equivalent to our some: túmikani máklaks a number of persons, some people; kínkankani a few. It also forms the suffix -tkani, q. v. Cf. page 343.
- Kianki, -gianggîn; "for oneself", in List of Suffixes.
$-k n i$ forms adjectives marking provenience or origin from, and hence frequently occurs in tribal names. In oblique cases the $-n$ - is usually dropped after the k-: yámakni northern, olj. case: yamakíshash, for the oblique cases are formed from a suffix -kish. The suffix is a contraction of -kani, although it differs now greatly from it in its function. Adjectives in -kni lave often to be rendered in English by the corresponding adverb:
tû'kni p’lia'ntankni sa sllinn they shot from clove in the distance, 23, 21.
lunkeělímskni lúgs, guikaga the slave ran away from this man's house.
Several adjectives in -kni are derived from the oblique, especially locative cases of substantives and pronouns, and from adverbs or postpositions: kókagtalkni, Lókuashtkni, Slíkueshtkni, nakushzénnkni, p’laitalíntni (for p’laitalántkniq), 173 ; 1.
- $l i$ forms concrete adjectives descriptive of surface-quality, or of intensity of motion. Their radical structure and the affinity of -li with -ăla (-la) and the prefix l- have been hinted at elsewhere. This suffix forms no compound suffixes.
- $n i$ forms adjectives, most of which are of an abstract or immaterial import; it also forms compound adjectival suffixes, often having an adverbial signification when translated into English. The ending may be preceded by a vowel, as in atíni tall, ké-uni slow, txé-uni first, or by a consonant, as in tunépni five and the other numerals, tzálamni middle, konû̂'slni wild, etc. The insertion of -iin-, -en- in the oblique cases, and the forming of collective nouns by appending -ni, distr. -nini, was mentioned above. Suffixes
composed with -ni are found in shuidshashksaksíni, tutashtaliksini, vushoksáksini, yántani, tatzělampánkani.

The suffix -ni, used in an adverbial sense, occurs in the adverbial numerals: lápni twice; in tchúshni always, túměni often, and is not inflected then, as may be seen 112, 7. 10, where we find kátni to those inside the kayáta; if it was inflected as an adjective, we would expect kátuiash, or kayátniash.
-ptehi, abbr. -tchi, -tch, -mtchi, -mtch, marks likeness to, similarity in appearance, and is comparable to our suffix -like, $-l y$. It forms adjectives from substantives, adjectives, pronouns and adverbs.
$-s h,-s$ composes adjectives having the nature of substantives, some of them referring to temperature: kélpaksh hot and heat, kátags cold, etc. They appear either with the suffix -ish, -ěsh, or with -kish, -gish, -ksh, -gs ; cf. List of Suffixes.
-tkani. Mentioned under -kani and elsewhere.
-tko (-tk, -ltko, -ntko) forms verbal adjectives, as spúgatko gray-cooored, nkillitko strony, foreible, etc.

To the above list we add a few adjectives of a rather general signification. Many of them become so closely agglutinated to the substantive to which they belong as to lose their accent, and the shorter ones of them are postpositive, whereas the common adjective has its regular position in the sentence before the nown qualified. The distributive form, which a few of them have, is scarcely ever used.

Ámtehiksh abbr. -antel ${ }^{\prime}$, old, is transposed from mā'ntch gî'sh, māntch; the definitions may be gathered from the Dictionary, page 21. When -amtch refers to ancestral belief, it is appended to all mythic beings of the Indian religion, as in Shúkamtch Old Heron. It may refer also to old people, and then shows a derisive admixture incident to old age, like the Italian suffixes -accio, -uccio: Wákěnamtch, nom. pr., Old Fellow changing his voiee. In the sense of used up, or good for nothing, it is said of articles of household or daily use, as in shō'pamtch bad, miserable soap. Nouns ending in -sh, -s lose this suffix before -amtch.
gitko, abbr. gitk, being, existing, doing, but much more frequently possessed of, haviuy, and then construed with the objective case of the object possessed. This term is treated more in full elsewhere, but it may be remarked that through attraction it often changes into the participle in -tko of another verb; cf klína pálpalish sllápshaltko the klína has a white flower, 146, 14, when the correct expression would be: klạna pálpalish shlápsh gítko.
yálank alike to, similar to; partic. of yálha to lay upon, viz., "to make congruent": Bóslitin yálank after the fashiou of the Amerieans, 59, 20.

- pani is an enclitic adverb, up to, reaching as far as (páni in Dictionary), which occurs in some adjectives, as txálampani half, middle, lit. "up to the middle", and with -kani forms -pankani, -pankni: tzálampankani forming one-half.
shítko, Mod. shútka, distr. shishátko, shushátka; enclitic: shitk, sitk comparable with, looking like; cf. List of Suffixes. Differs from -ptchi by giving comparisons of a more reflected, abstract nature. Modocs usually construe it with the objective, Klamath Lake Indians with the possessive case.
-t uá, enclit. -tua, refers chiefly to inanimate objects: a thing, something, some kind of; obj. case tuálash; poss. tuálam. Lakí túma tuá gitk a rich man, lit. "a chief many things possessed of"; nánuktua cverything.


## V. GRADATION.

The Klamath of Oregon belongs to those languages which resort to circumscriptive methods for expressing gradation; for it does not possess any suffixes to express with exactness our particles nore, the most, less, or our suffixes -er, -est. Hence this subject belongs more to syntax than to morphology; but we shall see that the means of expressing gradation by particles are not entirely wanting.

Couparatives are expressed as follows: "This boy surpasses lis brother in strength", or "this boy is strong; his brother is not"; "this boy is strong; his brother is weak."

Superlatives. For the sentence, "my child is the oldest of these children", they will say "my child is old; the others are not"; or "my child surpasses the others in age."

Minuitives are rendered: "The elk exceeds the deer in size"; or "the elk is large, the deer is small." All this instead of our "the deer is less in size than the elk."

The ideas of excelling over, surpassing, exceeding can be renderea by several verbs differing from each other in their radicals and prefixes according to the form and number of the subjects and objects compared. For the selection of these, the Dictionary may be consulted. Kshúizi, partic. kshuízitko to surpass (one animate subject), lúizitko (round subject), wyé-义itko (tall subjects), winí $\chi$ i, Mod. vúi $\chi i$, partic. winí $\chi$ itko, Mod. vuí $\chi$ itko, are the most common terms employed to indicate gradation. When speaking of bodily size or strength, terms designating these qualities are generally omitted, but when objects are compared for other qualities, this quality is added to the verb, generally in the form of an adjective. The objects compared to the subject of the sentence generally appear in the objective case.
kō'slı múni uyéxitk kípka the piteh-pine is taller than the kípka-pine (uyézitko literally means "lifted up", "raised").
géku a kū'sh ké-i winíxitk hû'nu this pine tree is smaller than that one; lit. "this pine tree not surpassing-is that."
gé-u a kitchkíni io'puls, mîtoks múni my apple is smaller than yours; lit. "mine is small apple, yours-but large."
páwaslı a kédsha aitđáměnash $\underline{k}^{\circ}$ 'l the páwash-root grows to less height than $k \overline{o p}^{\prime} l, 148,7$.
luízitko kápiunksam lúk tchipshash the seed of the kápiunks-plant is larger than that of the tehipash (l-, prefix of luizitko, points to the round shape of the seed), $146,3$.
î a n'sh winị $\not \hat{\text { in }}$ you are taller than $I$; lit. "you surpass me."
wátch kshuizitk tyi-ushash the horse is larger than the colt; lit. "horse is conquering colt."
nû a túma gitk winízi mish I have more than you; lit. "I much-laving exceed you."
nánka pupashpúshli máklaks, nánkatoks ká-i some Inulians look darker them others; lit. "some dusky Indians, some not."
lû̂t a híshuaksh atíni, uínuken'slı hak nálsh wimixì this man is the tallest of us ; lit. "this man is tall, all of us just he surpasses."

When an adjective is enhanced by our very, quite, strongly, exceedingly, this gradation is rendered in Klamath by mu, mû prefixed, or by toks, ká, ká-a, ga-á, ka-á prefixed or suffixed, sometimes proclitic and enclitic; taks, toks refers to something mentioned previously.
mû nkillitko very rush, strong.
ka-á ḱó-idsli very bad or mischievous, loathsome.
ga atíni very tull.
tídshi toksh, tídshi ka-á very goor, quite good.
ká-a kitchkáui, mû kétchkani very small or young.
Outside of these syntactic means of gradation the language knows of some particles producing the same effect; but their use is rather limited, and this seems to show that their function is not exactly the same.

For the minnitive no particle exists, but comparatives may be expressed by suffixing the enclitic ak only, but to the adjective. It becomes so closely fused to it that even case-suffixes are placed after it. The signification only, just, nothing but enables this particle to express also the enhancive particles very, quite, greatly:
kitchkáni small, kitclkḱniak very small, ká-i kitchkáni not so very small, not so small.
slikánii strong, shkániak stronger, very strong; obj. case shkániaksh.
To express a superlative, one of the vowels of the adjective is protracted to a length which is thought to meet the case in question. Mí'ni is large, mú-uni prettyl large, mī-ūni very lurye, and mu-u-u-úni colossal; túmi many, túmi-i-i a large number of. This very effective grammatic feature is observed in the majority of American languages.

In the Modoc dialect, .-ptchi, -tchi when appended to some adjectives effects gradation : tídshi good, llear; tidshitchi pretty goorl, or the ilearest; atíni tall; atimitchi (or -tcha) î tcháki that loy is very tall.

The particle -la, -lá expresses our superlative, but only in adjectives referring to certain objects extending in length, as plants, trees etc.: kitchganlá the smallest (of them).

## THE NUMERAL.

The numeral is either a numeral adjective or a numeral adverb. While in the Klamath language the latter is of two kinds, one in -ni and the other in -ash, the numeral adjective, when in its complete form, shows but the ending -ni, though an apocopated form exists for all the numerals. A distributive form exists for all the four forms just described. The numeral adjective answers to our cardinal numeral; an ordinal numeral corresponding to our numeral in -th, as fifth, ninth, does not exist in Klamath, but has to be rendered in a circumlocutory manner by some term of the four numeral series existing. An ordinal series is represented in the Maskoki, Algonkin,* Iroquiois, and Dakota dialects, but in the Pacific coast languages it is not universally met with. A distributive series, as we find it in Latin, is rarely mat with in the languages of the Eastern hemisphere, but in America is not infrequent; and we find it also anong the languages which make an extensive use of syllabic reduplication. As an appendix to the numerals we may consider the classifiers, which consist of verbal forms or particles, and are appended to the numeral to indicate the shape or exterior of the objects counted. They seem to belong almost exclusively to illiterate languages, and according to what G. Gibbs and H. de Charencey have written upon the subject, occur in the Polynesian languages, in the Selish and Nalua dialects, and attain their most extensive development in the Maya dialects. Multiplicative numerals generally coincide with the adverbial numeral expressing times, and so do they in the Klamath language; other modes of expressing them to be described below.

## I. THE NUMERAI SERIES.

The first table contains the series of the first ten numerals in their complete form ending in -ni, which expresses the cardinals when inflected

[^62]like an adjective, and the adverbial series when not inflected. It can also be used to express onr ordinals, and instances of this use are mentioned below, the numeral then being iuflected like an adjective, and consequently placed before the noun which it qualifies.

The short or apocopated form of the numeral without the -ni represents the cardinal only. It mostly serves for counting, for rapid figuring, and for forming compound numerals above ten, and is represented in the second table. The distributive form in both tables corresponds to our seven to each, or seven times for each, and embodies the idea of severalty or apportionment.

EXPLICIT FORMS OF TIIE NUMERALS UP TO TEN.
Absolute form.
ná-igshtani, Mod. nan'gshtani
$n^{-1}$ 'dsh, nā'sh, nā's
lāpečni, liáp'ni, lápi
ndánui, ndáni
vínepni, wínipni
túnepni
nādshkslıaptánkni
lapkshaptánkni
ndaukshaptánkni
nādshskḗkni (Klamath Lake)
shkékishkni (Modoc)
tá-ınepni, té-unepni
one-half.
one (ouce, tina).
two, twice.
three, thrice.
four, four times.
five, five times.
six, six times.
seven, seven times. cight, cight times.
nine, nine times.
nine, nine times.
ten, ten times.

Distributive form.
nánigshtani nánash lā'lap’ui, lálapi ndándani vú-unepni tútěnepui nanashkshaptínkni
lalapkshaptánkni ndandankshaptínkni namadshskē'kni
sұes $\chi$ ćkishkni tetúnepni

APOCOPATED FORMS OF THF NUMERALS UP TO TEN.
ná-igslita, Modoc nā'gshta
nā'sh, nás
láp
ndán
vúmep, ī'nip tínep, túnip nādshkshápta, nā́sksajpt lāpkshápta, lápksapt ndánkshapta, ndánksapt
one-half.
one.
two.
three.
four.
five.
six.
seven.
eight.
nán'gshta
nánash
lálap
ndándan
ví-mep, í-unip
títěnep
nánashksapt
lálapksapt ndándanksapt

| nā'dshskēksh, nā's $\chi$ ēks (Klamath Lake) | nine. |
| :--- | :--- |
| shkénkish, skḗ,ks (Modoc) | nine. |
| tá-unep, té-unip | s $\chi$ es $\chi$ ékish |
| ten. | tetúnep, tetúnip |

THE NUMERAL SERIES FROM ELEVEN UPWARD.
Indians speaking the language correctly never omit adding a classifier to the units of the compound numeral. I have therefore added to each decad a different classifier, thus giving successively the whole series of classifiers in use, with their distributive forms. The classifiers and the special uses made of them will be explained below. To show the different ways of pronouncing each numeral I have varied their mode of spelling:

11 ta-unepánta nā̀dsh líkla; d. lilákla
12 ta-unepánta láp pé-ula; d. pépula
13 ta-unepánta ndán pé-ula
14 ta-ınepánta vúnep pć-ula
15 ta-unepánta túnep pé-ula
16 ta-unepánta nádshkshapt pé-ula
17 ta-unepánta lápkshapt pé-ula
18 ta-unepánta ndánkshapt pé-ula
19 ta-unepánta nādshs $\chi \overline{\mathrm{e} k} \mathrm{ks}$ pé-ula
20 lạ̄pĕni tá-ınep; d. lálap tá-unep
21 láp'ni ta-unepánta nā dsh líklatko; d. liláklatko
22 lā'p’ni ta-unepánta lã'p pé-ulatko; d. pepúlatko
23 lāpni ta-unepánta ndán pé-ulatko
24 lā’pni ta-unepánta vúnep pé-ulatko
25 lā'pni ta-unepánta túnep pé-ulatko
26 lāpui ta-unepánta nā'shkshapt pé-ulatko
27 lā’pni ta-unepánta lāpksapt pé-ulatko
28 lā́pni ta-unepánta ndánksapt pé-ulatko
29 lā'pni ta-unepánta nā'ds $\chi e k s$ pé-ulatko
30 ndáni tá-unep; d. ndándan tá-unep
31 ndáni ta-unepánta nā'sh kshíkla; d. ksiksákla
32 ndáni ta unepánta láp íkla; d. i-ákla
33 ndáni ta-unepánta ndán íkla

39 udáni ta-mepáuta nāds\%eks ikla
40 vunépni tri-mep; d. vu-unépni tá-unep
41 vunépni ta-muepánta nādsh kshíklatko; d. ksiksáklatko
42 vunépni tet-mnepáuta láp íklatko; d. i-áklatko
47 vunépni ta-unepánta lípgsapt íklatko
50 tủnepni tá-unep; d. tútěnepni tá-mep
51 túmepni ta-uneprínta nadsh nékla; d. nenákla
52 túnepni ta-unepánta láp níkla
60 nādshkshaptánkni tá-unep; d. nanadshaptánkni tá-unep
61 nadslıksaptánkni ta-unepánta nā̀dsh nćklatko; d. nenáklatko
62 madshksaptánkni ta-ınepánta láp níklatko
70 lapkshaptánkni tá-unep; d. lalapksaptánkui tá-unep
71 lapksaptánkni ta-unepánta nādsh shlćkla; d. shleshlákla
72 lapksaptánkni ta-unepánta lā’p shlékla
80 ndanksaptánkni tá-unep; d. ndandanksaptrinkni tí-unep
81 ndanksaptánkni ta-unepánta nā̀sh shlćklatko; d. shleshláklatko
82 ndanksaptánkni ta unepánta láp shléklatko
90 nadshskéksni tá-tuep; d. nanads $\bar{e}^{\bar{e} k s n i ~ t a ́-u n e p ~}$
91 nads $\chi e^{\bar{e} k s n i ~ t a-ı n e p a ́ n t a ~} n^{-1} s h$ yála or yálatko, i -álatko
92 nads $\%{ }^{\bar{\prime}} \mathrm{ksni}$ tã-unepánta láp yála
100 ta-unépni tá-mıep; luúndred; tína húndred
101 ta-ınépni tá-unep ( $p \bar{e} n$ ) nā̀sh kshíkla
200 l'ípěni ta-ınépni tá-unep; láp'ni húndred
300 ndáni ta-mnépni tá-unep
400 vunépni ta-unépni tá-unep

1000 ta-unépni ta-unépni tá-unep; tína toúsš九n
1889 tína toúsăn pen ndankshaptánkni húndred pēn ndankshaptánkni táunep pia'n nā'ds $\chi$ ēks pé-ulatko

Concerning the mechanical side of the three series just enumerated, a fow remarks are necessary.

In the first series, the -nkni of six, seven, eight is often abbreviated into -ni: lāpkshạptánkıi into lāpksháptani; cf. 44, 6. Lā'pi is the original form
of the numeral for two, and lápěni means twice; ef. the Dictionary, page 181. In the list of the numerals above ten, the ending -anta, -ant in ta-unepánta is a locative case, nasalized from what would appear in a substantive as -atat, or-ata, -at; and ta-mepanta has to be interpreted as upon the ten, vunépni ta-unepánta upon the forty. Every numeral has its distributive form, corresponding exactly to to the septeni, deni of Latin; it is inflected and abbreviated exactly like the absolute form, and shows the same functions, though in a distributive sense. When two or more numerals form a compound numeral, and no classifier is added, as is done in the numbers divisible by ten, the first one, not the following, is reduplicated whenever the whole number is spoken of distributively. Thus when I say, Give me thirty eggs every day, this will be rendered by ndándan'sh té-unip nápal nánuk waítash nîsh lúi; not by ndándan'sh tetúnip, nor by ndánish tetúnip nípal.

The same principle of incorporation of several terms, which are intimately connected together into one phrase, we observe when a classifying term is added distributively to the numeral. It then suffices to reduplicate the classifier, though it would not be incorrect to do the same also with the first numeral of the number in question. The additive particle pēn, pain again, and, should be used after tá-unepni with its multiples only (or after tá-unep, if this is abbreviated from té-unepni); but some Indians insert it ungrammatically after ta-unepánta and its decadic multiples as well. In the numerals above one hundred, only the units are inflected by case, not the liundreds nor the decades or tens; cf. the tá-unep standing for ta unepánta, in the numeral series, under 101, 434, and 1889. When units are added to ten and its multiples, the smaller number can also stand first, followed by pän, pēn or not. Forty-three may thus be expressed in different ways:
vunépui ta-unepánta ndán pé-ula vunépni tá-unepni pēn ndán pé-ula
ndán pēn vunépni tá-unep pé-ula
ndán vunépni tá-unep pé-ula
The fraction one-kalf, ná-igsltani, nā'gslita, is usually placed after the classifier: ta-unepánta láp pé-ula nágshta tála nû pévi I paid twelve dollars and a half.

## II. INFLECTION FOR CASE.

Like the adjective in -ni, the numeral adjective possesses a long form in -i'n-, -en- and a shorter one. The longer form appears only in a few cases, however, and instances will be given below.

The numeral may be used attributively, and then usually precedes the noun which it qualifies; or it may be used predicatively, and then its position in the sentence ís more free. In both instances the mumeral is inflected by case, like the adjective, but may at any time exchange its suffix with the uniform ending -ă, which occurs in so many adjectives and pronoms in their oblique cases, and in rapid speech is dropped altogether. Only case-suffixes-and of case-postpositions only -tala and the inessive -i (in ná-i on one side)-are employed in its inflection.

The noun tatáksni in the paradigm following means children, and occurs in the distributive form only, though in the sense of a true plural:
ndáni. ndánni tatáksni three children (subj.).
ndannénash, ndánna tatákiash three children (obj.).
ndannénanı tatákiam of three children.
ndánnantka tatákiamti or tatákiamat about three children.
ndánnantka tatákiashtka by means of three children.
ndánna tatakiam $\chi \overline{e ́}^{\prime}$ ni, tatakiamksh $\chi e^{\prime}$ ni where threc children are.
udánna tatakiámkshi where three children live.
ndánna tatakiámkshtala, abbr. tatakiámshtala toward the place where three children live.

Another paradigm contains a combination with a substantive, in which the possessive case is impossible or unusual, and is therefore replaced by the partitive case:
té-unipni shishílaga ten shreels. té-unipantk shishílagtat te-unipénash, té-unip shishílag(a)
te-unipánti shishílagti té-unipantk(a) shishilagátka
té-unipant(a) slishilagksáksi
té-unipaut slisliliagtála

- The case-ending -tka, -ntka, -ntk frequently becomes connected with substautives standing in the locative case.

Other examples of inflection :
tû̀nipnish wéwau's gitk Aíshish Aishish had five wives, 99, 9.
ndannē'ntch wéwanshîsh to three (of his) wives, $96,9$.
nû té-unip willi'shik iwì'za I have filled ten sacks, 74, 12.
lápni tá-unepanta pä'n túnep pé-nla nî sia'tu I have counted twentyfive, $70,8$.
wû́la sa hû'nkiast tû'nipäns they asked those five (meri), 17, 6 ; cf. 17, $13 ; 44,2$.
tû́nipni hak máklĕka Nílaksknî five (men) only from Nilatishi were encamped, 17, 2.

The numeral one, nā'dsh (radix na-), shows a large number of different forms, which necessitate a special paradigm. Besides the meaning one it also signifies other, another, somebody, and then usually has the longer form, náyentch:
subj. nā̄dsh, nā̀sl, nás one; náyents another.
obj. nā` $d s h$, nā'sh, 72,3 ; nayä'nash, náyen'sh, né-änts, náyäns, $72,1$.
poss. nā'dsham; nayénam, na-ä'nam.
partit. ná-iti.
instrum. náyantka, ná-änt, náyant, 66, 10; ná-ent, $66,2$.
locat. náyantat(?), náyant, ná-ỉnt.
illat. na-ityé'ni on one end; on the other side (for na-iti- $\chi \bar{e}^{\prime}$ ni).
iness. ná-i on one side (in ná-igshta half, ná-iti etc.).
direct. nā̀dslitala, ná-itala (cf. ná-ital-télshna).
From lá pi two, many cases of which were given in the Dictionary, is formed lápukni, abbr. lápuk both, which is inflected like other numerals.

For the numerals from eleven to nineteen a shorter form exists besides the four forms mentioned above; it consists in omitting the number ten, and the classifier appears to be sufficient proof that the number spoken of is above ten, for numerals below ten never assume classifiers. Thus we have:

12 láp pé-ula, instead of : tá-unepanta láp pé-ula; cf. $40,1$.
18 ndánkshapt yála, instead of: tí-unep pēn ndánksapt yála.

What we call an ordinal numeral is rendered in Klamath by the adjectival, inflected form of the numeral in -ni. The chief nse made of this numeral in -ni is that of a cardinal, and thongh it is exceptionally used as an ordinal, it is not probable that the Indian considers it in these instances as an ordinal in our sense of the term. If his mind was susceptible for such a category of the numeral, he would probably have established a special grammatic ending for it. Examples:
ishnúla a sha hûnk ndánant (or ndáni) waitashat they buried him on the third day.
lapkshaptánkiant waítashtat guikaka he started on the seventh day.
The only ordinals existing in the language are fulfilling other functions besides. They are: lupíni for first, tapíni (topíni) for second (in rank, order, time, etc.); txalamni: the second of three, or the middle one; tyérl: the first in age, the oldest ; dimin. tyewága; ťé-u a húk pēp túma wewéash gitko her first daughter has many children.
lupini kiä'm gé-u shnúksh the first fish that I caught.
tapíni kia'm gé-u shnûkshtí gî it is the second fish that I eaught.

## THE ADVERBIAL NUMERAL.

When numerals are serving to qualify an act or state expressed by a verb, not being joined to a substantive or other noun, they assume the adverbial endings of -ni, -tka, -ash, or the ubiquitous adjectival ending -a.

The most frequently used of these suffixes is the terminal -ni, when indeclinable. We have seen it used in the general list of numerals as composing the tens (decades), hundreds, etc, in the form of multiplicative numerals: vunépni tá-unep forty, lit. "four times ten." It closely corresponds to our times, and to the Latin -ies in decies, etc. It is especially frequent when used with verbs referring to sections of time, as waita to pass a night and a day, etc.
túnepni sá-atsa sa nishta they dunced the sealp-dance during five whole nights; lit. "five times they scalp-danced all night long", 16, 11. hûk ndà'ni kéko-nya three times he attempted, 55, 10.
nashkshaptánknitoks nû tamĕnō'tka I have been there as often as (-toks) six times.
ndáni a nû shuć-utka éwakatat gēn waítash three times I went fishing to the pond to-day.
lápěni, ndáni wäitólank after three days, viz, "laying over three times." tutěnépni waitólan (Mod.) after five days in every instance, 85, 1.
The only numeral differing in its root from the corresponding cardinal ( $n a{ }^{\top} d s h$ ) is tína once, tināk (for tína ak) only onee; d. títna and títatha on various occasions, repeatedly, more than onee; cf. the Spanish phural mos. Tināk shniwátchna to swallow at one gulp; tína súndē kíulan a little over one week.

Adverbial numerals expressing instrumentality show the instrunental case -tka, -11tka, -ntk, which in the numeral adjective is often found to occur in a temporal and locative function.
lápantka hû' shlín he was shot twiee, lit. "by two (shots)."
hû'k nî'sh lápukantka shlatámpk they drew their bows at me both simul taneously, $23,17$.
The suffix -ash of the objective case is used in adverbial numerals to express the locative idea: at so many spots, places; nádshash or madsháshak at, to another plaee; lápash, ndánash at, to a second, third plaee: cf. nánukash at any place, everywhere. The same form is also enployed in a special kind of multiplicatives, to which is added some term pointing to repetition, as folding, being together, etc.
lā’psh, lápash pákalakslı twofold.
ndánash, ndānnsh pákalaksh tlireefold.
vúnipsh pákalaksh fourfold.
A parallel to this is formed by the following phrase, in which the abbreviated numeral is used:
láp shantchaktántko twofold, lit. "two growing together."
ndán shantchaktántko threefold, lit. "three growing together."
The term pair is rendered by lalápi each two; bunch by nánash s sō'sxatch "united, bound into one." Lápiak means two only; tunepántak or
tunepántok five only; lápok, lápuk both las, in the objective case, lapukayä'nash; lapii' yala, lápeala to bear twins, lapai'yalsh twins.

When eases of the ummeral inflection appear abbreviated, in the form of the short $-a$ in adverbial phrases, this mainly occurs when arithmetic fractions have to be expressed, and a term indicating separation, division, etc., is subjoined to the numeral, as follows:
udána shéktatzatko one-third part.
vinípa shéktatzatk one-fourth part.
lápi tínipa shéktatzatko two-fifths.
tá-unepa shéktatzatk one-tenth.
nádszēks tá-unepa shéktatzatk nine-tenths.
But there are also other ways to express fractions:
ná-igsshtani ktíshkuish one-half, lit. "one-lalf slice."
lápěni ta-unepánta ndán tála pé-ula pēn nágshta twenty three dollars and a half.
vunipáshat shaktpaktzátko cut in four quarters (as an apple), Mod.
The fraction eleven-fourteenths was rendered in the sonthern dialect in the following clumsy mamer: vúnip pé-ulatko nánuk nû slnókatko, ndán kéti slnóka; lit. "having taken all fourteen, I do not take three."

Cf. also vúnip kikanyatpátko four-cornered, Mod.

## III. NUMERAL CLASSIFIERS.

The custom of appending classifying terms of various descriptions to simple and compound numerals is often met with in foreign langnages. The six classifiers of the Aztec language describe the exterior of the objects mentioned or counted, as -tetl is appended to round, -pantli to long articles, etc. In other languages, as in the Penobscot of Maine, the various terminations of the numeral adjective act as a sort of classifiers. Among the Maya languages, the Kiché seems to be the most productive in attributes of this kind, and they are not at all limited to numerals.* Other languages ex-

[^63]clude them altogether from the numeral, but add them to certain substantives. But all of this largely differs from the mode in which classifiers are applied in the Klamath of Oregon, which is probably unique.

In this language the classifiers are applied to numerals only. They are not suffixed adjectives or particles, as elsewhere, but verbs or their past participles, descriptive of form, shape, or exterior of the objects mentioned, and invariably standing after the numeral, usually also after the name of the object. They are appended only to the numerals above ten, and not to the Decadic numbers, or numbers divisible by ten This gives the clue to their origin and use. These suffixations are intended to classify only the unit or units after the decade, and not the decade itself. Indeed, the unit following inmediately the decade in counting, as $11,31,71,151$, is in some instances qualified by other classifiers than the units between 2 and 9 , as 32 to 39,72 to 79 , etc, because the former can be applied to single objects only, whereas the latter refer to a plurality of objects. When I say: láp'ni ta-unepánta nā̄sh lutish likla twenty-one berries, this literally means, "upon the twenty berries one I lay (or you lay) on the top"; and when saying: lápěni ta-unepánta nā'dshkshapta lutísh pé-ula twenty-six berries, I suggest by it "upon twice ten berries six I put (or he, she puts) on the top or lay down"; or "after twice ten berries six I lay down." Líkla and pé-ula both refer to roundshaped articles only; but the twenty berries previously counted are not referred to by the classifier, only the units mentioned with the number. The classifying verb may be rendered by the indefinite term counted, numbered; before it, some subject-pronoun, as $I$, you, he, she, is elliptically omitted, but not before its participles líklatko, pé-ulatko.

The verbs serving as classifiers differ according to the shape of the counted objects, but all agree as to their common signification of depositing, placing on the top of. The simple verbal form, absolute or distributive, is employed when the speaker or other person is just engaged in counting the articles; the past participle laid down in its direct or oblique cases, absolute or distributive forms, is used when the articles were counted previously and a statement of their number is made. A majority of the classifiers are formed from the verb ikla by means of various consonantal prefixes.

The fact that the units from one to nine are not accompanied by these terms must be explained by some peculiarity of the aboriginal mode of counting. We may assume, from the original meaning of these verbs, that the first ten objects comnted, as fisll, baskets, bulbs, arrows, etc., were deposited on the ground in a file or row, or aside of each other, and that with the elerentl a new file was commenced, or when the articles were of the proper shape they were piled on the top of the first ten articles.

These classifiers, which to us appear to be an umecessary and burdensome addition to human specel, are not always applied correctly by the Indians, and are frequently omitted by them. Thms pe-ulápkash is omitted . in 54,13 ; ksliklápkash incorrectly put in 55 , 11, instead of pe-ulápkasl. Pé-ulatko is unnecessary in 90,2 , but should stand instead of pé-ula in 90,3 .

Likla, part. liklatko, with their distributive forms, as seen in our numeral series, are appended to numerals above ten embodying the single unit after the decade, as $21,91,241$, etc, and mentioning articles of a circular, globular, amnular slape, or objects of a bulky, heavy-looking form. The prefix l- referring to rounded things only, the meaning of likla is "to lay down one rounded thing." We find it used of beans, sceds, fruits, berries, balls, eggs, coins, thimbles, bottles, knives, watches, rocks, stones, boxes, wigwams, and similar objects
$P e ́-u l a$, part. pé-ulatko, with their distributive forms, are appended to numerals over ten made up of more than one unit after the decad, as $22-29$, 92-99, etc., and mentioning articles of the same description as given under likla, and in addition to these, persons, animals, and divisions of time. Pé-ula is derived from péwi "to give or bestow many rounded objects" by means of the completive formative suffix -óla, -úla.

Kshikla or ksikla, part. kslíklatko, with their distributive forms, are appended to numerals over ten enibodying a single unit only after the decade, as $31,81,441$, etc., and mentioning a person, an animal or a long object: Kslikkla is another derivative of the verb ikla, "to lay down one single animate being or a long object."

Ikla, part. iklatko, with their distributive forms, are placed atter mumerals made up of two or more units after the decade, as 32-39, 42-49, and mentioning a plurality of inanimate objects of a tall, lengtly, or elon-
gated shape, as sticks, logs, trees, poles, boards, fence-rails, rifles and pistols, boots, lead-pencils, etc. The verb properly means, "to lay down or deposit many tall, inanimate objects."

Nélil a or nikla, part. néklatko, with their distributive forms, are appended to numerals made up of units from one to nine after the decade, and introducing objects of a thin, filiform, smooth, and level surface or texture, as sheets of cloth or paper, kerchiefs, shirts, mats, and other tissues, excluding hlankets, also ropes and strings. The verb shúkla, which we would expect to introduce single units after the decade, is not in use for this purpose.

Shlélil a, part. shléklatko, with their distributive forms, is found appended to numerals made up of units from one to nine after the decade, and referring to blankets, bedcloth, skins, and other large articles of dress serving to envelope the whole body or parts of it.

Yála, yálha, yéla, part. ýálatko, yélatko, with their distributive forms, are appended to mumerals made up of units from one to nine, descriptive of long, tall, inanimate objects, and therefore analogous to íkla in their use. For single units, neither f́la, which is the absolute form of the distributive i-ála, yála, yéla, nor another form kshéla, is actually used. Examples:
wewánuish tátoksnî nā'sh taúnep kshíkla shuénka they killed eleven women and children, 37, 15
tunépni ta-unepánta nā'sh máklakshash kshîklápkash î'-amnatko commanding fifty-one Indians.
ta-unepánta túnep pe-ulápkash Modokíshash hî shléa he found (there) fifteen Modoc Indians.
Tchimä'ntko lápěni ta-unepánta lāp pé-ula illōlatko gî Steamboat Frank (then) was twenty-two years old, 55,8 ; cf. 19 and the passages in Dictionary, pages $264,265$.
tiná liundred pēn láp pé-ula látchash (there are) one hundred and two lodges, 90, 3.

## ORIGIN OF THE NUMERALS.

The quinary system is the most frequent of all the systems occurring in the numerals of American languages; its origin lies in counting objects by means of the fingers of both hands. When counting on their fingers,

Indians always begin with the smallest finger of the right or left hand, counting the fingers with the hand left free; after counting the thumb, they contime with the thmmb of the other hand, and proceeding further, bend over the fingers of this other land as soon as counted. That Klamath numerals have the quinary counting system for their basis is apparent from the repetition of the three first numerals in the terms for six, seven, and eight, while nine is formed differently.

One and two are etymologically related to the corresponding numerals in Sahaptin and Cayuse dialects, and all must have a common origin. Lä'pi, láp two is but another form of nép hand, which appears also in the numerals vínep four and túnep five, which are compounds of nép and the prefixed particles n- and tu-. Thus four means "hand up", and five "hand away", indicating the completion of the count on the four long fingers. Kshípta is abbreviated from kshapáta to bend backward, to lean, recline upon; as the component of numerals, it indicates the bending over of the digits named, as ndán-kshápta for ndán nî kshapáta, "three I have bent over", on the second hand. Núdsh=székish nine is in Modoc abbreviated into skékish, which signifies "left over", one digit only being left over to complete the ten; cf. skiei'kish, in the Dictionary. 'Té-unep ten, the original form of which appears to be tí-unep, is probably a dissimilated repetition of túnep five.

If the origin of the Klamath numerals is thas correctly traced, their inventors must have counted only the four long fingers without the thumb, and five was counted while saying hand away! hand off! The "four", or hand high! kand up! intimates that the hand was held up high after counting its four digits; and some term expressing this gesture was in the case of nine substituted by "one left over", skékish, which means to say, "only one is left until all fingers are counted."

## THE PRONOUN.

The pronominal roots, which, as we have seen in the preceding chapters, form a large number of verbal and nominal affixes, become of still greater importance in the subsequent chapters of the Grammar. The task which these roots have to fulfill in the organism of language is to provide it
with relational affixes, and with words expressing relation, as conjunctions, postpositions, and adverbs. As to the pronouns, they are all derived from this kind of roots, if we except a few so-called "indefinite pronouns", as túmi many, nánuk all. Originally, all true pronominal roots were of a demonstrative or deictic signification, whatever their signification may be at the present time. I shall therefore treat of them before I treat of the other pronouns.

The class of pronouns in which the pronominal radix las not altered, or has but slightly altered, its demonstrative power is the demonstratice pronoun. Interrogative pronouns, formed from the deictic roots ka and ta, differ from the relative pronoun in their suffixes only, and form the intermediate link between the demonstrative and the relative pronoun, which, as it appears in this language, is simultaneously a demonstrative-relative. The demonstrative, interrogative, and relative pronouns referring to animate beings often differ from those referring to inanimate things. The indefinite pronoun is lialf pronoun, half adjective, and most pronouns of this class are lerived from pronominal roots. The personal pronoun contains a demonstrative radix applied to persons specially, and the possessive, reflective, and reeiprocal pronouns are derivatives of the personal pronoun. This and some of the demonstrative pronouns do not reduplicate distributively, as the other pronouns do, but forn real plurals like these.

## I. DEMONSTRATIVE PRONOUN.

Indians and other illiterate peoples point out with graphic accuracy the degree of proximity or distance in space separating the speaker from the one spoken of or spoken to by means of their demonstrative pronouns or particles, by the third person of the personal pronomn, and by some verbal forms. This well-known fact is stated liere once for all; it is one of the more prominent peculiarities of our upland language also.
'The roots which form demonstrative pronouns in Klamath are pi, hu, ku (gu), ka (ga), and kē (gē). Ke marks close proximity, and reappears in ké-u, gé-u mine, my; hu marks distance within sight and beyond sight; ku distance beyond sight or far off; while ka forms a transition from the demonstrative to the indefinite pronoun, and also gives origin to interrogative pronouns. Pî, pl. pät, sha will be spoken of nuder Personal Pronoun.

The demonstrative pronomis formed from the roots ne and to may as well be considered as indefinite pronouns.

The suffixes appended to the above radices mark the degree of distance, and in many instances distinguish the animate from the inanimate gender, which in the following list are presented in separate columns. 'Two other pronouns pi and sha were added for comparison, pî being used (in the northern dialect chiefly) for persons and animals standing in the singular, pāt for the same in the plural number, sha for persons only.

List of demonstrative pronouns in the subjective case.

|  | Animate. | Inanimate. |
| :---: | :---: | :---: |
| this (so near as to be tonched) | ké'ku | ké'ku |
| this (closo by, "right here") | kēk; gè ${ }^{\prime} \mathrm{k}$ hank ; gee , kee, pl, kè'ksha | gēn; gē, kē ; gén hûnk gétnu, génu |
| this (standing, being before son) | ha't, pl. ha'dsha | ha'mu |
| this (present, visible, within sight) | hu'uk, pl hńdsla, sha | húu, hímu, hank |
| that (visible, though distant) | ha't, pl. ha'dsha; guus; sla | hôn, hat, hímu, géu |
| that (absent) | luikt, pl. húktsha; p1, pl. pāt, sha | hn'nkt |
| that (absent, departed) | nê'g, pl, nê'gsha ; Mod, nág, pl. nā'gsha |  |
| that (beyond sight) | hư' $k, \hat{n}^{\prime} k, h 0^{\prime} k t a, ~ p l . ~ h u ́ k s h a ; ~ h n^{\prime} n k t, ~ p l . ~$ hánktsha; gnni; pi, pl. pat, sha | hnk, $\mathrm{n}^{\prime} \mathrm{k}, \mathrm{h} \mathrm{n}^{\prime} \mathrm{kta}$ |

Where the Klamath Lake dialect has hî̀k, hûnk, hû't in the singular, the Modoc dialect ordinarily uses hî instead. The suffix -ta, abbr. -t, refers not only to persons, but also to inanimate things standing upright, while inanimate objects seen upon the ground are indicated by the transitional particle -n (-na, -nu), forming no plural.

Some of these pronouns are easily confounded with demonstrative andverlus of local or temporal import, as both are pronounced alike (hû, hî̀k, hînk, etc.).

Demonstrative pronouns do not form all the cases of the nominal paradigm. I therefore present here all the forms heard from the natives speaking both dialects, and beg to observe that all these forms also correspond to our personal pronouns he, she, and, when impersonal, to it.
$\mathrm{k} \bar{e}$, gē this here; Latin: hicce, hocce; poss. kélam, kélem; dir. gétala.
 the second vowel being apocopated; Lat. hic, hoc; Gr. ovizogiObj. case kē̉kish, gékish, gē̉ksh; poss. kékělam, kékělem. Pl.

gé n, gēnu this thing; loc. génta (for géntat); instr. géntka.
$h \hat{u}^{\prime} n \mathrm{k}$, ĥ̂, Mod. hî, hú-tı, $\bar{u}, \bar{o}$ this one; obj. case húnkĕsh, hínkish, hû'nksh, hû̀nk 24,5 ; poss. húnkělam, húnkiam; partit. húnkanti ; loc. húnta, hû́nkant; instr. hî̂'ıkantka. Hûnk may become abbreviated into ûnk, hak: túla hak with him, with her. Pl. of persons: húdsha (preferable to hî'nksha), sha; obj. húnkiash, abbr. hî̀'nksh, hû̀nk; poss. hû'nkělamsham, hû'nkiamsham; abbr. into sham, $108,4.122,17.132,5$. Hunk occurs but seldom in the subjective case ; hû̀nkt forms obj. hû'nktiash in a Modoc text.
h $\hat{u}^{\prime} \mathrm{t}$ that, Mod. hû, anim. and inan.; Lat. iste; pl. of persons: hintsha, húdsha.
h $\hat{u}^{\prime} \mathrm{k}, \mathrm{Mod}$. hû that; iness. : hukí by or within him; pl. hû'ksha. Cf. - Dictionary, page 74.
$\mathrm{h} \hat{⿲}^{\prime} \mathrm{k} \operatorname{sht} \bar{o}^{\prime} \mathrm{ksht}$ that absent, far off, or deceased one, 192; 7. obj. hû́nksht. h $\hat{\mathrm{n}}^{\prime} \mathrm{k} \mathrm{t}$ that absent one, anim. and inan.; obj. of sg. and pl. hî'nkt; pl. of persons hîtktsha.
$\mathrm{h} \hat{\mathrm{u}}^{\prime} \mathrm{n}$ this thing (visible), also referring to persons; humí, hunítak in his or her own mind; instr. húntka for this; loc. húnta thus (conj.).
g u n í, gúni, kone the one over there (visible); also adverb. Forms particles like gunígshtant, gunítana etc., and is derived from radix ku- in kúi, guhuáshka etc. Cf. List of Prefixes, page 289.
The following demonstrative pronouns show no inflection for case: g $\overline{\mathrm{e}}^{\prime} \mathrm{t}$, kä't, Mod. kánk, abbr: ka, so great, so large, and so much, so many. The cases formed from it lose their pronominal siguification and become adverbs: gétant to the opposite side; gètzéni at this end, etc.
kánni, gánni, abbr. kán, so many, so much; used when pointing at objects or counting them on the fingers. From this is formed the above kánk so much; contr. from kínni kē (as kánt is from kánni at) and correlative to tánk.
tá n ni, abbr. tán, d. tatánni, so many, so much; ka tánni so long. Correlative to kínni, and more frequently used interrogatively.
tún k , d. tátank, so many, so much; contr. from tánni kē. More frequently used as interrogative pronoun and as adverb: tánk and tā'nk。

Diminutives are formed from the above demonstrative pronouns as follows : húktaga this little onc; pl. húkshataga ; double diminutive, húktakag; pl. húkshatakaga; nég that one absent, nékaga, nï' $k a g$, and others under Suffix -ĭga No. 2.

## II. INTERROGATIVE PRONOUN.

Interrogative pronouns are derived from the demonstrative roots ka and $t a, t u$, which also form the interrogative particles or adverbs. There is a distributive form for all the interrogative pronouns, except for tuat.

K aní or kíni? who? which person? is more properly applied to persons (and animals) than to inanimate things, though it can be used for these also: which thing? Kaka? is the distributive form; and káni also figures as pronoun indefinite.
kíni hût gî? who is he ? who is she?
kánî lakí! what (sort of a) husband! 186; 55.
kaní ánku shlia'a î? which tree do you sce?
Not to be confounded with the adjective kíni, kani being outsidc, one who is outdoors 'The pronoun kaní is inflected as follows:

Absolute.
kíni? kaní? who? which?
kánash, kán'sh, kánsh, kánts? whom? to whom? inan. káni? kani? what? which? to which?
kúlam? Mod. kínam? whose? of which?
kálamkshi? at or to whose houst?
kalamkshxéni? kalamkshtála? etc.
Distributivc.
káka? who? which persons or things?
kákiash? whom? which persons or things?
kakiam? whose? of which things?
kikiamkshi? at whose houscs?
kakiamkshyéni ! kakiamkshtála ? etc.
tuá? which? what thing? is an indefinite pronoun as well as an interergative, and has to be considered as a derivative of tho out there, pointing
to a distance. Its real meaning is: what kind or sort of? and so it has passed into the function of a substantive: thing, artiele, objeet, as in túmi tuá many things. Cf. Dictionary, page 415. It is inflected, like the pronoun tuá, as follows:
tuá? encl. tua? which thing? what sort of?
tuálash? whieh?
tuálam? of which? aud forms the particles:
tuánkshi? at which plaee? tuatála? why?
This pronoun often appears in an enclitic and proclitic form. Tuá kî, coutr. tuák? what is it? occurs in : tuá kî luû kóga? what is it I suek out? 155; 17; cf. 153; 4.159; 58. Compare also the Klamath Lake and Modoc songs $154 ; 13.156 ; 35.158 ; 56.173 ; 3.174 ; 8$., and the instances given in the Dictionary. Sometimes it is used of animate beings.
tánni, abbr. tán, tan, d. tatánni, how mueh? how many? to what amount? in Lat. quot. 'This pronoun is not inflected, and, when in the full form, is always pronounced with two $n$. Tánni mî wátch gî? how many horses have you? lit. "how many horses are yours"? tán a ̂̂ wewéash gîtk? how many ehildren have you? Cf. Dictionary, page 389.
tánk, abbr. tán, abbr. from tánni kë; d. tátank, is used interrogatively in the same function as tánni, q. v.
wa k, wák, d. wáwak, is in fact a particle: how? but in many instances has to be rendered in English by an interrogative pronoun: what? E. g. in : wák ma? what do you say? the literal rendering of which is: "low do I hear"?

## III. RFLLATIVE PRONOUN.

The relative pronoun $k$ a $t$, proclit. kat, is of the same origin as the interrogative pronoun káni? who? Kát is not only a relative pronoun, but simultaneously a demonstrative-relative pronoun, corresponding to il quale, lequel in Italian and French, the real meaning of which is that who, that whieh, the one which. The demonstrative prouloun hû'k, hû'nk, hûn, ete, which should always accompany kat to make the phrase or sentence complete, is not found with it every time, though we meet with it in 97,1 : kát hûk hû't tchúi lalī'ga Tûhû'shaslı which thing then remained stieking upon Musdhern;
lit. "that thing which then remained", etc. The Lord's Prayer, in 139, 1, has kát only: Nálam p’tíshap, kát p’laí tchía Our Father who lives on high. Cf. also 61, 12. 17.

The relative pronoun is sometimes abbreviated into ka, ga.
The distributive form, kíkat, inflects almost like that of káni? who? Absolute.
kít, kat who, what, which; that who, the one which.
kántana, kándan, kánda (kánt, 65, 18) whom, to whom; whieh, to whieh.
kálam whose, of which, 68, 9.
kálamkshi at whose house; kalamkslitála etc.
Distributive.
kákat, abbr. kák, those who; eaeh of whom or whieh.
kákiash (objective case).
kákiam (possessive case).
kákiamkshi etc.
Where it is feasibee to avoid incident clauses, the language likes to replace them by verbals or participial constructions, and this accounts for the scarcity of the relative pronoun. A student of the langnage may stay many weeks among the natives before he becomes aware of its existence.
hû'ksa, kák (for kákat) at tinì' $\chi^{i}$ tsa those who had just gone up the hill, 23, 13.
né-ulêkka nû húnkiaslit kíkat hûk sissóka I punish those who have engaged in a fight, 61, 18.
 cut off; lit. "to whom I cut the tail off."
hîk mat mbushéla, kálankshi tak nû tánk mák'lěqa the man at whose house I stopped is married, they say.
kándan hû'nk shlín the one whom I had shot, 23, 20.
kánda nat liû'nk a'na the one whom we brought, 24, 9 .

## iv. indefinite pronoun.

Adjectives, the signification of which is so generic and indistinct that they can replace substantives, are called by the above term. Most of them undergo inflection.
g $\overline{\mathrm{e}}^{\prime} \mathrm{t}$, gät, küt so much, that much, Mod. kánk; may be classed as well among the denionstrative pronouns, with tánk, túnni etc.; giat î n's skû'ktantapk so much you will have to pay me, 60, 10.
li ú k a k, húnkak, hútak, pl. húksliak, the same, the itentical one. Inflected like the simple pronouns; húkak híshuaksh the same man. Same is, however, expressed in many other ways, for which cf. Dictionary, page 646.
k áni somebody, some one. Is used in counting, and often accompanied by gestures. Abbreviated in ka, ga, and figuring also as an interrogative pronoun (kaní).
nû ûn ḱá-i kánash shapítak I shall not divulge it to anybody, 40, 8; cf. 40, 11.
ntchálkni káni a young man; lit. "somebody young."
kánk, abbr. ka, ga, so many, so much, that much; a contraction of kánni ke , and serving as correlative to tánk, q. v. For examples, see Dictionary, page 117. Kánk is also used as adverb. Ka táni so far, that much; ka táni ak, Mod., only so far; that is the end. Not inflected.
kánktak, the emphatic form of kánk, adj. and adv. It also stands for enough, and serves as an exclamation; cf. Dictionary, page 117. More frequent in Modoc than in the northern dialect.
k án ni, gánni, abbr. kán, so many, such a number of; used, e. g., when pointing at objects or counting them; the correlative to tanni.
$\underline{\mathrm{k}}$ á - it u a (1) nothing, (2) nobody; see under tuá.
n á y e nt ch other, the other, another one, next. Cf. na'dsh, in Numerals.
n á n uk (1) all, every one of, Lat. omnis; (2) total, entire, whole, the whole of, Lat. totus. Abbreviated from nánukni, and inflected regularly like the numerals in -ni, though without distributive form. Some of the cases have adjectival, some adverbial signification, while others combine both.
nánuk all, whole.
nanukénash, nánukän'sh; inan. nánuk (obj. case); nánukash, adv., everywhere.
nanukénam of all, of the whole.
nánukanti, adj. ; and when adv.: cverywhere.
nánukant (for nánukatat), adj.; abbr. nákanta, nákant.
nanukintkis, adj. and adv.; abbr. nákantka.
nanukénamkshi at everybody's house.
nánuktua cevery kind of thing; obj. nanuktuálash etc.; see under tuá.
pánani, d. papánani, as lony as, to the length of.
píla, d pî́pil, alone, none but; see tála.
tala, d. tatíla, in the sense of alone, none but, may be appended to any pronoun and also to substantives. Being in reality an adverb, it undergoes no inflection, but the noun or pronoun comnected with it is inflected. Cf. Dictionary, page 385, under No. 3. The Klamath Lake Indians use more frequently pila, píl, $d$. pípil, in this function, and with them it also means bare. Cf. Dictionary, page 266. Gétak is used in the sense of alone in 97, 1.2.
tán iani, d. tatániani, as large in size, so large.
tán k , d. tátank, so many, so mueh; not inflected for case, because it is in fact a particle. Cf. kánk. Tánkni in an adverbial signification, ef. 43, 4
túnkak a few, some, not many; emphatically tánkakak.
tán ni, d. tatánni, abbr. tan, tátan, so many, so much; correlative to kámni.
tura, enclit. tua something, some article or object, is inflected in the same manner as when used as an interrogative pronoun. As an indefinite prononn, it is used also in a personal sense: somebody, some people; e. g., kai-i tuálam shlékish $I$ am controlled by nobody; cf. Note to $192 ; 8$, and the passages in the Dictionary, page 415, and Texts, 112, 1. 2. 5. 7. 8. 12. 16. Compounds of tuá are:
kí-itua (1) nothing, (2) nobody; poss. ka-ituálam etc ; here the two components may also be found separated by other words: kéti nálsh î tıá shutétki kú-idsha let us do nothing wieked, 139, 6; káli shash tuá none of them, 20, 7.
nánuktua (1) every kind of thing, (2) everything Inflected like tuá.
t ú m i many, much, has no distributive form, but a diminutive : tumiága few, a little of. The locative case is tumianta, the instrumental tumiintka, tumantka, the other oblique cases túma. Before $m$ and some other consonants the final -i of túmi is dropped: túm Módokni gátpa many Modocs
arrived, 13, 14. Túmi also means sufficient, enough of, and too many, too much; it forms the adverbs túm and túměni, q. v.
tumiág a a few; see túmi.

## V. PERSONAL PRONOUN.

We now pass over to another series of pronouns, called personal, and representing other pronominal roots than the ones heretofore considered. The three persons are, in the subjective case, all represented by monosyllabic terms, and in the plural the terminal -t may represent the affix -ta, often used for persons. No distributive form exists here; the case-endings are the same as those in the adjective. The personal pronouns exist in a full, in an abbreviated, and in an emphatic form, to be discussed separately. The pronouns of the third person are used as demonstrative and as personal pronouns. The synopsis of the personal pronouns in their subjective cases is as follows:

First person, singular, nû, nî $I$; plural, nā't, nād we. Second person, singular, î, ik thou; plural, $\bar{a} t, \bar{a} y e$. Third person, singular, pî he, she; plural, pät, sha they.

In regard to inflectional forms, the Modoc dialect sometimes differs from the other, as will be seen by this table:

INFLECTION OF THE PERSONAL PRONOUNS.
Singular.

1. nu, nû, nûtî̀; ni, nî $I$.
nûsh, uîsh, n's, îsh me, to me.
núshtala, nuslitála toward me.
núshamkshi at my home or lodge.
nûshðé'ni toward me.
2. i, î, i-i, ik, ike thou.
mish, mîsh, m'sh thee, to thee.
míshtala, mishtála toward thee.
míshamkshi at thy home.
3. pi, pî he, she, it (absent or invisible, unseen).
pish, pûsh; pash him, her, it; to him, to her, to it; for him, etc.
p'ná Mod., m'ní Kl., of him, of her, of it ; his, hers, its.
p'nátant, p'nata, p'nat Mod.; n'nátant Kl., on, upor him, her, it.
paní, maní, nıní on him, on her, on it; by himself, etc.
p'nálanıkshi Mod.; m'nálamkshi Kl., at his, her house.
(For hû, hûk, hû'nk, see Demonstrative Pronoun.)

## Plural.

1. nā't, nād, nat, nā we.
nā lash, nā ${ }^{\prime}$ lsl, nã'sh, in Mod. also nāa l, nāl us, to us.
nálam of us ; nálamtant on, upon us.
nálamkshi at our house, lodge, home.
nálshtala toward us.
2. $\overline{\mathrm{a}}$, at, $\overline{\mathrm{a}} y \mathrm{e}$.
málash, mā ${ }^{-1}$ lsh, in Mod. also mā ${ }^{\prime} \mathrm{l}$ you, to you.
málam of you.
málamkshị at your lodge, home.
málslıtala toward you.
3a. pāt, pát, pat they.
p'nálash, p'nálsh, p'nā̄sh, pā’ntclı, pash, pösl, Mod.; m'nálash, m’nálsh, pā'ntcl, pash, K1., them, to them.
p'nálam Mod., m'nálam Kl., of them, theirs; rarely abbreviated into p'na, Kl. m'na.
p'nátant, Kl. m'nátant, on, upon them.
p'nálamkshi, Kl. m'nálamksi, at their houses, homes.
p'nálshtala, Kl. m'nálshtala, toward them.
3b. sha, sa they (animate, present or absent).
shash, sas them, to them.
sham, sam of them, about them, by them.
Sha forms compounds with many demonstrative pronouns, by which they are turned into plurals, as húnktslia, kē ${ }^{\prime}$ ksha ete.

In perusing this list of inflections, we find that a considerable number of case-suffixes and case-postpositions met with in the substantive and adjec-
tive are not represented here, but that the existing ones coincide with those inflecting other nouns.

The pronouns of the singular all end in -i, and nî has a parallel form nut ; in the plural all end in -at, with long $\bar{a}$; the plural objective case ends in -lasl, the possessive in -lam, though sha they, which is not represented in the singular, and probably was once a reflective pronoun, forms an exception.

A majority of the monosyllabic pronouns is unaccented, and therefore used proclitically and enclitically. Subject-pronouns are often placed twice in the same sentence, another term intervening.

Nû, nî of the first person is etymologically related to nāt we, and pî he, she to pāt they; the oblique cases in the second person make it probable that the original forms of î and $\bar{a} t$ were mî and māt, and that they took their present forms to distinguish them from mî thine and the particle mat, naa. Apparently, no difference exists between nû and nî $I$; but the objective case nûsh, nîsh abbreviates in îsh only, not in ûsh, and the emphatic forms nútoks, nútak, nû tála are much more frequent than nítoks, nítak, nî tála. In a few instances we find nû used for the plural we, for we includes also the first person of the singular:
lápi ai nû witä'mak here we are two young black bears, 177; 2.
lápi ai nî gì'wash here we are two squirrels, 177 ; 14.
I thou appears sometimes in a componnd emphatic form : ik, ikē, Mod. $\left\{\mathrm{ki}, \bar{e}^{\prime} k i\right.$, the second part being the demonstrative pronoun ke, kē, gè, gi this one, or the demonstrative adverb kē, ki right here. This compound form is chiefly used in imperative and interrogative sentences. I and ik , $\mathrm{ik} \bar{e}$ are often used for the plural at $y e$, because when in a meeting one is addressed, the others are addressed also. Examples:
î lápuk both of you, 60, 6 .
gépke î tul' íslı lushōkank ík a wátchatka! come and ride wath me on horseback!
nā's pēn lû'ktch' ik shánkish-pakísh! bring me one more watermelon!
wák lîsh îk lời a nen Tetěmatchíslash? why, then, do ye believe what Tetěmátchish says? 64, 10. Cf. ibid., 11. 15. 59, 7.

## INFLECTION OF THE ABBREVIATED PERSONAL PRONOUNS.

The position of the full-toned, vocalic personal pronouns in the sentence is before as well as after the verb, but the position of the abbreviated personal pronouns is usnally, though not necessarily, after it. These become enclitic or proclitic syllables, and are pronounced so rapidly that, after losing the word-accent, many of them also lose the vowel through syncope or apocope. Subject-pronouns suffer abbreviation as well as object-pronouns and dissyllabic forms. A single instance of aphæresis is observed in ish for nîsh me, to me. Pronouns of the second person stand before those of the first when one of them or both are abbreviated.
a- before a pronoun is the declarative particle a. Initial i , as in insh for nîsh, results from vocalic metathesis. The abbreviated subject-pronoun -n can disappear altogether.

Compare with all this our conjugational specimens given above (pages $240-243,418$ ), in which the abbreviated pronouns are seen muited almost into one word with the verb. No real incorporation of the pronouns into the verb takes place, however, for the same pronouns can in every instance be pronounced separately and with their full accentuation.

```
nû, nî: n, -n, an.
nish : îsh, ansh, insh, n's, ns, -sh.
nûsh: n'sh, ansh, n's, ns, -sh.
mîsh: m'sh, m's, msh, ms.
p'ná: p'na, m'na.
p'nátant: p'natá, p'nat; m'nátant: m'nat.
nāt: nā, -nt, nût.
nā'lash: nā'lsh, nāsh, nātch, nā̀ts, nads, nas; Mod. nā'l, nál.
\(\overline{\mathrm{a}} \mathrm{t}\) : át, \(\overline{\mathrm{a}}\).
málash: mā́lsh ; Mod. mā'l, mál.
p’nálash: p'nā'sh, pā'ntch; m'ıálash: m'nálsh.
sha, sa: -sh, -s, -tch.
```

Instances of the above abbreviations appear in the following sentences:
láp sû̀ndin lapukáyïns ilhí I lock both up for two weeks, 61, 19.
ká-i tchin wák $\bar{o}^{\prime}$ skank $I$ do not think much about it, 65, 1.
shnäkelui uápkan I will remove (him) from office, 59, 18.
tchín nā'sh sháppash spúlhî $I$ lock him up for one month (tchín, for tclıúi nî) $61,10$.
nî nä'-ulłan I command, I order.
hunkantí ms ni shetcháktanuapk $I$ shall get angry with you (ms) on that account, 58, 15.
tsûshnì' m'sh nî skuyâ'shkuapk I shall separate you forever (from lier), 60, 20.
nä̈-ulakuapká m's ni $I$ shall punish you; 59, 3. 4.
tû̀nep î' n's tála skû́ktanuapk you must pay me five dollars, $60,8$.
i insh íxak! you win me! sa shewána'slı they gave me.
ámbush tchíktchî! go and fetch water for me! (for ámbu îsh.)
tála îsh vúlxi! lend me money!
ísh shlā't ! shoot at me! 41, 5 .
ká-i hûk wátch spuní-uapka m'sh she need not give a horse to you, 60,15 .
illi-uapka m's $I$ will have you imprisoned, 59, 7.
shíuktak mish nā ûn! then we shall kill you! 41, 3.
shúdshank á nût shnépka we have a fire near the lodge.
nat ká-i káktant we did not sleep, 31, 8. 9.
nā'sh nā'ds Búshtin tû̀la an American was with us, 19, 7.
nā'sh sē'gsa sa they commanded us, 20,9 .
t'shíshap nāl shgúyuen (Mod.) the father has sent us, 40, 15; cf. 41, 3.
māl shûtánktgî in order to treat with you, 40,15 ; cf. 41, 5 .
gepgapělissa and gépgaplish, for gépgapěli sha, they returned home.
tsúi géna, tû' pē'n máklĕqash then they proceeded, and encamped again (for: máklĕ $\neq$ sha), $19,10$.

## vi. POSSESSIVE PRONOUN.

This pronoun has not assumed the form or suffix of an adjective, but it is simply the possessive case of the personal pronoun corresponding, with the exception of the two first persons of the singular. It inflects through a few cases only, the locative among them. When used attributively, like our my, thy, its natural position in the sentence is before the noun qual:fied,
like that of the possessive case and the adjective. When used predicatively, like our mine, thine, its position is more free, and it may occupy the place in the sentence which emphasis may assign to it.

The list of these pronouns is as follows:
gé-u, ké-u my, mine ; loc. gé-utant; instr. gé-utantka.
mi, mî thy, thine; loc. mitant ; instr. mítantka; me for mî, cf. 142, 7.
húnkělam, abbr: húnkiam, his, her (hers), its, when present or visible.
m'na, m'ná, Mod. p'na, his, her (hers), its, when absent; loc. m'nátant, 119, 11 ; pénna, Mod., his, its own.
nálam our, ourrs.
málam your, yours.
húnkělamsham, abbr. hínkiamsham, húnkimsham, their, theirs, when present, visible.
m'nálam, Mod. p'uálam, their, theirs, when absent; m'na stands for m’uálam in 29, 16. 101, 8.
sham, sam their, theirs, absent or present; to be regarded here as an abbreviation of húnkělamsham : p'tíssap sam their father, 101, 11. It sometimes stands for m'nálam, p'nálam ; cf. 107, 13. 108, 4.

Some instances are found in the Texts, where the possessive pronoun, though used attributively, occupies the place after its noun, instead of preceding it: ízaks mî thy gain, 59, 22 ; shéshatuish m'na his marriage fee, 58, 16. Cf. also $54,4.59,12.94,8.10 .109,3$.

## VII. REFLECTIVE PRONOUN.

When the act of the transitive verb has for its object the subject of the verb, this is expressed by a reflective verb. The object of the reflective verb is either a pronoun standing separately for itself, called reflective pronoun, or it is expressed synthetically in the verb itself by means of a prefix or suffix. This synthetic mode of forming reflective verbs has been discussed previously (cf Prefixes h-sh-, sh-); but in Klamath another mode is in use, which applies only when the pronominal object is the indirect object of any active verb. Gíank, gînk takes the locative case-suffix -i, which alsó occurs in the pronouns huní, hukí, paní, and forms the following series of pronouns,
when appended to the emphatic pronoun in -tak in the sense of for oneself, in the intercst of me, him, etc. Cf. Emphatic Pronoun, pages 552, 553.

First person, singular,
Second person, singular,
Third person, singular,
First person, plural,
Second person, plural,
Third person, plural,
This ending is also found appended to the oblique cases of the sane pronouns; its origin is explained under Suffix -gien, q. v.

In the third persons of the singular and plural, the change of k and $\underline{\mathrm{k}}$ in húnkelam his, her, húnkish him, her, húnkiash them, renders these pronouns reflective The different cases of pî, pāt, sha they can serve as reflective pronouns without undergoing any change or suffixation; this is the case with pîsh, pash, pûsh, pö'sh, p'na, p'nálam; m'na, m'nálam; shash, sham. Thus we have: Aíshish túměna shtû'tXishalsht pîsh hlikúka Aishish heard that his wives had wept for him in mourning. Cf. also, in Modoc war, pi 38, 10 ; pû́slı $36,15.16$; pîsh 36,16 ; p'nálănı 38,17 , etc.; in the northern dialect, $\mathrm{p}^{\prime}$ 'sh 71,2 . The change from k to $\underline{\mathrm{k}}$, as observed in verbs, has been referred to previously (pages 292.424), but even in substantives it is sometimes observed. When these natives speak of other Indians than themselves, they pionounce: máklaks Indian; but when of themselves, máklaks.

The most frequent way of expressing the reflective pronoun is that of appending -tak, -tok to the personal pronoun:
kitita pîták nkésislı her (the femąle wolf's) belly burst, 105, 16.
shläbópk hû'nitak he himself perceived; lit. "he observed in his own mind", 108, 5.
ánku piták (for pîshták) vulódshan gî he is splitting wood for himself tcháshěsh nánuk wátch tchlålıa, pitakmaní the skunk drowned all the horses, itself also, 127, 12.
mulínank itagiánggi!cut some hay for yourself!
nátak shiúlagien, shiúlagin or shiiúla giánggin we collect for ourselves.
nátak hî'shlan we shot people of our own party, 24, 4.

## VIII. RECIPROCAL PRONOUN.

This class of pronouns is not represented by special forms, and the relation of reciprocity can be expressed only by means of the medial prefix sh- or its compound, h-sh-, although shash, sham is sometimes used as a reciprocal pronoun; cf. 58, 10.13. 61, 14, and Note. There exists an adverb, or adverbial phrase, referring to reciprocity : shipapělínkshtant against each other, amony each other. Personal and emphatic pronouns are often added to reciprocal verbs to complete the sense by showing in which of the three persons the object stands, as we saw it done also in the case of the reflective pronouns.
shishúka pösh ka-á they fight hard among themselves, Mod.
pátak huhashtápkuak stabling each other themselves, 114, 3.
pā't háshtaltal they disputed among themselves, 104, 3.
gē ${ }^{\text {h }} \mathrm{k}$ shash shíushuak pepéwa these girls washed each other.

## ix. EMPHATIC PRONOUN.

When the run of the sentence causes the speaker to lay emphasis upon pronouns, this is usually done by subjoining tak, tok to it; or when a close connection exists with preceding words or statements, taks, taksh, or toks. This chiefly applies to pronouns contained in adversative sentences: hútak, hútoks but he; he however, and other terms expressing contrast. Cf. kánktak, tánktak.

Placed after the possessive pronoun, tak, tok means one's owon: gé-utak tcluyésh hûn gì this is my own hat ; p'nátak käílatat tehía to live in one's ourn country, 39, 7; pítak (for píshtak) shí-ita to daul one's own body over. For the third person Modocs possess a special form of p'ná: hû pē'na shē'shash slúmǎluash that he had written his own name, 34, 6; cf. péniak, in Dictionary. Another Modoc form is pitakmăní, of a reflective signification.

Personal pronouns having this particle suffixed may be rendered in English in different ways, according to the sense. Thus nútak, nû'toks is myself, noxe but me; I, however, I at least, etc. Ex.: keá-i hûnk, nútoks wâsh shlin not he, but $I$, shot the prairie-wolf. In most instances, lowever, mítoks stands for myself, ítak, í-itok for thyself, and so the others: pítak, nátak
(for nát-tak), $\bar{a}^{\prime}$ tak (for $\bar{a}^{\prime} t=t a k$ ), pátak (for pát-tak). This particle is also appended emphatically to some other pronouns, as kánitak? kánitoks? who then? kē'tok, kē lish tok she certainly, 189; 7. An emphatic form is also ikē, éki for thou; lit. "thou here."

Another series of emphatic pronouns is formed by the suffixed particle tala, abbr. tál, tal, which expresses amazement, surprise, and is not always translatable in English. Thus we find: tuátala? what then? what after all? $158 ; 56.173 ; 3$; which kind then? 112, 2. 5. 12; ka tal (for kaní tála)? who then? 139 ; 7. Appended to an adverb, it occurs in 110,10 ; hî̀'-îtak táta! none but he, or it was himself! 173 ; 3. When tála follows personal and possessive pronouns, it means alone: nû tála I alone; gé-u tíla p'tíshap your father alone ; mítala steínash only your heart. This definition "alone" is only a specific application of the more general function of this particle : but, only, solely.

## THE POSTPOSITION.

The postpositions correspond, in regard to their signification, to the prepositions of Germanic languages, the separable as well as the inseparable, but differ from these as to their position in the sentence. They are usually placed after, and not before, the noun they govern; hence their name. Their natural position is after their complement, although it is neither incorrect nor unfrequent to place them before it, here as well as in other languages of America. The cause of this is that many of them are in reality verbs, or derived from verbs, the usmal position of which is at the end of the sentence, unless for reasons of rhetoric another position be assigned to them. Through the law of analogy, the other postpositions which are not of verbal descent have assumed the same subsequent position, a circumstance justifying the appellation of postposition given to these parts of Indian speech in preference to that of preposition.

Although the derivation of some postpositions is uncertain, many are undoubtedly derived from pronominal roots and formed through nominal case-endings. Their number is considerable, and this has prompted me to place the chapter on "Postpositions" just after that on "Pronouns." It is chiefly this class of postpositions whicl is as frequently found standing before its complement as after it, especially when their length does not
exceed the measure of two syllables. Many of the verbs which figure as postpositions are built up of pronominal roots, as ginhiéna, i-ukakiámua.

Those of our prepositions which are of an abstract nature, as about, in behalf of, for, concerning, etc., are expressed in Klamath by inflectional suffixes appended to the verb or nom, and all the postpositions we meet are of a concrete, locative signification. Even the few temporal postpositions are locative at the same time. In their purely locative aspect, postpositions bear the strongest analogy with the case-postpositions -i, -kshi, -ksaksi, -tala, -tana ; -tana, abbr. -tan, -ta, is their most common affix; -kslis another, and in fact the use of postpositions is nothing else but a further extension of the nominal inflection. In gunígshtant beyond, e. g., the pronoun guní is inflected just like a noun by the postpositions -kshi, -tana, -tat or -ti. Muatíta southward of is composed of múat south, -ti suffix of partitive case, -tala, -ta toward, and these inflectional terms of the secondary or ternary stage mostly occur in an apocopated form.

The nominal complements connected with the postpositions derived from verbs stand in the same case which they would occupy if these postpositions were verbs governing nouns-either in the objective case, which in inanimate nouns cannot be distinguished from the subjective, or in the locative case (-tat, -at) if rest, and not motion, has to be expressed. Modocs frequently use the terminal -an of the present participle where Klamath Lake has -a. The majority of the postpositions assumes distributive reduplication.

Adverb postpositions are those postpositions which are sometimes used adverbially without a complement, as ginhiéna, kuíta, pélui, etc.

In the following list of postpositions I have marked those terms which appear as verbs and postpositions at the same time. For a better study of each of the postpositions, readers will do well to consult the Dictionary.

## LIST OF THE PRINCIPAL POStPOSITIONS.

ginágshtant, ginákshta and ginátant, gináta this side of, on this side, in front of: ginatan kō'sh in front of the pine tree; correlative to gunigslitant.
ginhiéna, d. gigganhiéna inside of, within; said of a plurality of subjects; also verb and adverb.
ginkakiamnawall around, when the surrounding body is hollow, spherical; also verb.
giúlank, Mod. giúlan, past, after; a temporal postposition, derived fromı giúla to be over, past. Cf. the names of the week-days.
gunígslitant, guníkshta; also gúnitana, gúnitan, kunitan, gunî'ta on the other side of, opposite to; gunî'ta mîsh beyond you, your house, 183 ;17; correlative to ginágshtant.
lintila, d. hihantila, underneath, under, below; said of one subject that has fallen under sometling; also verb.
inotíla underneath, under; lit. "placed underneath"; also verb.
i-ukakiámna around, in the neighborhood of.
i-ukuk and i-ukúkag inside of, within; said of lodges, etc.
i-utámsza and mettáms\%a among, amid, between; the latter referring to something excavated; also used as verbs.
íwahak, íwa-ak in the midst of water, Mod.
íwutit farther off than, beyond.
yamatitana northward of.
yuhiéna inside of, within; also verb.
yulalína alongside of, along the brink of, as of rivers; also verb.
yutíla, i-utílan under, underneath; lit. "placed underneath"; used when speaking of long objects; also verb.
kanítant, kaníta, kántan outside of.
kíi and kúitit on this side of, as of a river, hill, ridge.
kuitana, kúita in the rear of, back of.
lípia and lupítana, lupítan (1) in front of, before, this side of ; (2) earlier, sooner than.
lúpian on the east side of, eastward of.
lutíla inside of, within, speaking of round objects; also verb.
muatitala, muatita southward, to the south of.
páni, paní, d. papáni, as far as, reaching up to.
pát to or of the size of: tzópo pát as thicle as the thumb.
pélui down below; farther off than.
pipělángshta and pipělántana on both or two sides of, from opposite sides.
p'laítana, p'laíta above, higher than.
p'le'ntant, plia'ntan on the upper side or top of some object.
tálaak directly toward; tálaak nats toward us, 29, 15; also adverb and adjective
tapí, tápiak luter than, posterior to.
tapítana, têpita, topíta after, behind, in the rear of.
txálam, KI. tatžとlam in the midst of;' between, among, when all are on the same level.
txalantana through the midst of; to the west of. The latter may be expressed also by tzálmakstant and tyalamtítala.
tû́gslitanta, túgshta on the opposite side of, across, beyond; chiefly refers to rivers, waters.
túla, tulá, tóla with, in company of, along with; tulāk (emphatic); káli túla without ; túl' ish with me. The verb is túlha or túla to form a party or swarm.
túna, tin'-una, d. tutana, around; the d. form also means beyoul, on the other side of, and is chiefly used of mountains.
tunki'ma all around, when following the line of the horizon; also verb.
tchē'k, tsík until, till; pitchash tchē'k until the fire went out.
tchutila, tsutila undcr, below; refers to one subject sitting or lying below, utila referring to one long subject; both are used as verbs also.
welítana, welítan at a distance from, away from.
wiĝ́tana, wikíta close to, aside of; wiggíta kúmětat near the cave.

## THE CONJUNCTION.

Conjunctions, or conjunctive particles, are links necessary to bring about certain sequential or logical relations in human speech by establishing a connection between single terms, phrases, or whole sentences. The true function of these particles can in every language be understood only after a thorough study of its syntax. They are the nost fanciful and arbitrary, often intranslatable, parts of human speech, and the literary culture of a tongue largely depends on their development and judicious use. The classic languages of antiquity and the modern languages of Europe would
never have attained their ascendency in the oratorical, historical, and didactic prose style without their abundant and most expressive assortment of conjunctions.

We distinguish two principal relations in connecting together words or sentences-the co-ordinative and the adversative, Languages of primitive culture possess as many of the latter as of the former, becanse they feel the same need for them. Klamath can enumerate but very few conjunctions connecting co-ordinate parts of speech, either nouns or verbs, to each other: ámka, pēn, tchî'sh, tchkásh; but the number of conjunctions co-ordinating co-ordinate and adversative sentenees is much larger. Being a synthetic language, Klaniath expresses many causal, temporal, and modal relations by participles and verbals which we would express analytically by distinct sentences introduced by a conjunction. This is not a deficiency in the language, and moreover it is largely counterbalanced by a wealth of conjunctions introducing subordinate clauses to the principal sentence.

All modes are expressed by conjunctions, as ak, am, ya, and even the -at, -t of the conditional mode is the conjunction at, at the time being, agglutinated to the verbal stem. Our and has no exact equivalent, but is rendered by also or again; our then (temporal) by afterward, subsequently, the particle tchúi corresponding accurately to the French puis, from Latin postea. No Klamath term corresponds exactly to our that, though, although, but the language has two distinct "oral particles" to render our as reported, as I hear or heard, as they say or allege.

All true conjunctions are formed from pronominal roots, and though they do not reduplicate distributively, the majority of them appears under two forms-the simple conjunction and the conjunction with suffix -sh (-s, $-\mathrm{ds},-\mathrm{dsh},-\mathrm{tch},-\mathrm{ts})$. This suffixed sound is nothing else but a remnant of the conjunction tchî'sh, tsís also, too. So we have Líluts for Lílu tchísh, Lilu also; núds or nû tchîsh $I$ also; nats for nāt tchísh vee also 29, 18; hä î kí-uapkats also if you should tell lies; tchē'ks for tchē'k tchîsh and then. In nost instances the additional idea of also, too, and disappears, and what remains of it is that this enlarged particle poiats to a closer connection with the foregoing than does the conjunction without the suffix. This suffix also appears with other particles.

Many of the conjunctions are unaccented, and these may be used proclitically as well as enclitically. Some conjunctions also have adverbial functions.

Details of the functional peculiarities of the conjunctions are reserved for the Syntax. The alphabetic list now following only quotes the principal conjunctions and their suffixed forms, without mentioning all of the compound ones, as átenen just now, as alleged, and readers are refurred to the examples given in the Dictionary.

```
LIST OF THE PRINCIPAL CONJUNCTIONS.
```

a, the declarative particle.
a, -á; see ha.
a, abbr from at, q. v.
ak, ák a, aká, ka, kam, ak ya, suppositive and potential, optative particles: "perhaps, possibly, likely."
ak appended to verbals in -sht and other verbal forms; e. g., pā ${ }^{〔}$ ksht ak as soon as or after it is dried.
anı; see kam, útch.
ḱmpka, ámka (1) or; the Latin vel; (2) lest, unless, or else.
at, abbr à, a, at the time; now, just now, then, at that time. Coalesces with some words and grammatic forms, as in bĕlat for píla at, illólat for illola at, gû̀tzîtkt for gátzitko at, 112, 9 Composes: at a, atěnen, átch, átui.
átui, Kl. át yu, átiu, adverb, interjection, and conjunction, just now, just then. Cf. gétui as to the ending.
gintak, generally postpositive, thereupon, hereafter; though, in spite of.
ha, há, a, -द́, interrogative particle, mostly postpositive ; lā'k, Mod. for lē há ak? is it perhaps so?
hai, a-i, a-í; in Mod. also kaí, $\chi a i$, with suffix: haitch apparently, bvidently, as yon see, as I see or hear, of eonrse. Cf. Dictionary.
hiï, hä', he if, when, supposing that; enlarged : hï'tch, hai'ts. Its correlative is tchai', tché: hä. . . . . tchä, if. . . . . .then.
húmasht, d. humámasht, adverb and conjunction, so, thus; húmasht giug hence, on that aceonnt, therefore; húmasht sháhunk gíug for the same reason, and other combinations. Cf. Dictionary
húnkanti, hunkantchai', hintala therefore, for that reason.
ya, yá, í-a, indeed, surely, really.
kam (from ak, am) adverb and conjunction, expressive of desire, hope, probability ; cf. our adverb fain.
káyutch, káyudsh, Mod. kí-iu, adverb and conjunction: before, prior to. ḱá-i not, the usual negative particle, is sometimes used as a conjunction, and may even stand at the end of a sentence.
$\underline{k}^{\prime}$ 'éwiank, partic. of k'léwi, is used in the sense of subsequently
lish is used as a particle of asseveration and interrogation, answering to our "is it not so?" It is derived from le, lē, the putative adverb not, being its enlarged form.
lúpiak before, prior to, carlier than.
mat, apoc. ma, it is said, as they say or allege, as reported; refers to facts or deeds spoken of 'Tuá ma? what is it? Mat mostly stands after the first word of the sentence.
ná-asht, nā'sht, nāsh, nā̄, Mod. né-asht, thus, so, as follows; when somebody's words are mentioned verbally; often used as adverb.
nen, abbr. nē, ne, -n, oral particle : as you say, as they say, report, allege, as I hear; used when people make mention of something said, spoken, or heard. Tuá nen? what did you say? nént thus now; it is right so, Mod.
pa, pá, suffixed: pásh, intranslatable particle, referring to the subject of the sentence. Pá ak, abbr. pá, I do not know.
pän, pēn, pē'n again, hereupon, subsequently; at pän after this, now, and; $\underline{k}$ ál pēn no longer, no more; tchúi pēn hereupon; and in numerals. Pän is also adverb.
shúhank-shítko at the time when; cf. 109, 12.
tádsh, tā'dsh, tads, the enlarged form of the adverb tat, is marking an unexpected contrast : but, however, though. Not used at the head of a sentence.
tak, ták, tok, tûk, suffixed taks, toksh, tû́ksh, a frequent emphatic, adversative, and disjunctive particle, appended to all parts of speech; answers best to however, but, though, and in Modoc forms a future tense Cf Emphatic Pronouns.
tam, tám, interrogative particle, answering to Latin num, an and to the French est-ce que?
tamń, suffixed tamúdsh, (1) interrogative particle; (2) disjunctive conjunction, whether, whether or not.
tánkt after this, afterward.
tchē'k, apoc. tché, tchä ; enlarged forms tchätch, tchēks, tchkásh then, after, at last, since then. Tchä serves as a correlative particle to hii if, q. v. Cf. û'ntchēk, under ûn.
tchí, tsi so, thus, in this mamner; sometimes used as conjunction, like gá-asht, hímasht, ná-asht. A compound is tchí hînk, tchíynuk.
tchîsh, apoc. -tch, -ts, -sh, postpositive conjunction and the suffixed form of tchí, also, too, and.
tclikásh, suffixed form of tchēk and syncopated from tchékash, tchē $\mathbf{k}$ a tchîsh, also, finally, too, besides. Postpositive like tchē'ksh, tchē'ks, which is the Modoc form.
tchúi, tsiii afier that, then, subsequently. Very frequent in historic and other narratives, and forming many compounds: tchúyuk, tchúyunk, tchúi pän, at tchúi.
útch, ûds, suffixed form of $u$, hû, if or if not, whether. Appears in compounds only, as káyutch, támûdsh, or when found standing by itself it is interjectional.
un, temporal particle, usually added in Modoc to hï̈ if, lishs, and other conjunctions for enhancive purposes, and not easily translatable. Its compound untchêk, after a while, sometimes figures as a conjunction.
wak, wák, t̂k how, how then, why, is also used as interrogative particle and conjunction. Wakaí? why not?

## THE ADVERB.

This part of speech stands in the same relation to the verb as the adjective or "adnominal" stands to the noun; it qualifies and specializes the act expressed by the verb in regard to various categories, as degree, quantity, space, time, or quality (modality). Its natural position in the sentence is before the verb, just as that of the adjective, when used attributively, is before the noun.

Adverbs show no inflection, if we except the distributive form, which occurs in some of their number. The gradation of adverbs is more imperfect than that of adjectives.

As to derivation, one portion of adverbs is formed of pronominal roots, which affix different formative suffixes to themselves, cases of the nominal inflection used in a temporal sense, adjestival suffixes like -ni, ote., or appear in the apocopated form of certain adjectives. áti high, far, wénui strange and strangcly; wika low. Another portion of adverbs is derived from predicative radices. Many of these are forming adjectives also; the adverb then reprcsonts the radix without the adjectival ending. Others are verbs, with the suffix -a, appearing as adverbs.

Some adverbs are at the same time postpositions and conjunctions, and in a few cases it is even difficult to decide to which one of these three forms of speech a certain particle belongs.

A gradation is effected for the comparative and minuitive by syntactic means, riz., by placing two sentences in opposition to cach other, just as it is done with the adjective. Disjunctive conjunctions are not always used for this purpose, and such terms as "more" or "less" do not exist. Another mole to effect gradation is to affix -ak to the adverb, a particle which serves for many other uses beside:

Móatuash lúpiak Mōdokíshash kédshika the Pit River Indians beeame exhausted sooner than the Modocs.
m'na ū'nakag mû'ak t'shī'sht for the time when his little son would grow taller, 109, 13.
The object compared stands in the objective case in the first example. and in the gradation of the adjective we observe the same thing.

Enhancive particles, like ka-í very, mû and tún much, largely, joined to an adverb will place it into what we call superlative.

The distributive form, which some of the adverbs possess, and which is rather infrequent with some others. is formed in the sam3 manner as in the verb and noun, as will appear from t.la following instances:

Módokni lakí lítchlitch shéllual the Modoe ehief fought bravely
Módokni lílatchlitch shéllual nánuk of the Modocs every man fought bravely

```
    tíla hémkank' ì! tell the truth!
    tatála hémkank' ì! tell the truth in every instance!
    kí-i pélak hemé \(\chi\) ' ì! do not speak fast ! (when you meet me once).
    ké-i páp’lak heméX' i! do not speak fast! (every time you meet me, or
    each time you converse).
ma'ntclak gitk after a while.
mámāntchak gîtk after a while (severally speaking).
```

LIST OF THE PRINCIPAL ADVERBS.
The following list of the more frequently occurring adverbs will exhibit to the best advantage the modes of adverbial derivation. Some of them are used in very different acceptations. The numerals lave branched out into two adverbial series, one in -ash, the other in -ni: ndánash to or at a third place, and udáni three times; cf. pages 530 to 532.

Temporal adverbs have all evolved from locative adverbs, and hence often retain both significations; all the so-called "seasons" of the Indian year ending in -ē'mi, --i'mi, as meliashai'mi in the tront season, may be joined to the list below. Many of the adverbs of modality are formed by iterative reduplication, of which only a few examples are given below; other adverbs possess a correlative belonging to the same subdivision. Cf. page 262, and suffix -li, pages $352,515-517$.

## Adverls of quantity and degree.

gä’tak, kétak, Mod. kánktak so mueh, enough.
ka, d. kák, so, thus; derived from the relative prononinal radix, ana
forming gá-asht, ka-f, kánktak, ká tíriani, etc
ka-f́, kí-a, kā, ga much, largely, very.
kétcha, giä'dsa, kédsa a little, a triffe, not much; ketságak very little only.
mû, d. mû́m, much, largely; the adverb of minii great.
tû'm much, a great deal; the adverb of túmi, many.
t.chátchui a great deal; tím tchátchui too much.
wiga, wikí not much, a little.

LIST OF ADVERBS.
563

## Adverbs of space.

This class of adverbs is very numerous and multiform, almost all the pronominal radices having contributed to the list. Some of those which frequently occur are as follows:
atí, d. á-ati, far, far off, afar, distantly; high up.
gen, gin here, right here; gená, giná there now, right here.
gétui at a short distance out.
gìnt, gént, génta thereabout, around there, over there.
gíta near by, close to this place.
gítak right there, close by.
gitála, gétal in that direction, further off. Its correlative is túshtala.
gítata just here, at this very spot.
gunigshtant (also postp.) on the opposite side.
há, á on the person, on oneself, in one's hand, by hand, at hand; forms compounds, as gená, tulá etc.
hátak, hátok here, on this spot, over yonder.
hátakt, hátokt over there (when out of sight).
hataktana by that spot, through that locality.
hataktok right there, at the same spot.
hátkak, hátkok on this very spot or place.
hi, i on the gromul, toward home, at home, at one's camp, close by.
hitú, abbr. hī'd right here, close by.
hitkshi at this place; from this point.
hu, hû (Mod. hî, û) there, here; referring to places visible and distant or above ground, but chiefly appearing as an affix.
húya near by, in close vieinity.
$\bar{I}^{\text {I'w w }}$ outside of camp, in the mountains or hills; íwak, iwag a short distance from home or camp.
yímatala northward.
yána, yéna down hill, downward, down stairs.
yánta (for yántala) downward.
yá-uka within that place, house, lodge (Mod.).
kaní outside, outdoors, without
ke , ki , kie right here, here; more in use among Modocs.
konē, kumí, guní over yonder.
kíi away from, at a distance; kuita in the rear.
kúinag away from town, village, or houses.
lupí, d. lulpí, firstly (of local precedence).
lípitala eastward.
múatala southward.
mína down below, on the bottom; múna tû, or tî mína, deèp doion.
nánukash everywhere.
nai'shash to another plaee; cf. Numerals.
shétatyāk half-way up.
-tak, -tok, particle, suffixed to many local adverbs for emphasis.
tálaak in a straight direetion.
tapí, d. tátpi, lastly, coming last (in space).
táta, abbr. tát, tāt, where, at whieh plaee; also interrogative: where?
whereto? táta-i? where? ká-i tát nowhere.
tii'tak right there; correlative to gitak, gétak.
tai'taktak right at the spot where.
txílampani halfways; is adjective as well as adverb.
txílamtala westward; tálaat txalamtítal due west.
tû, tú, d. túta, tút, far off, up there; refers to a great distance, to
objocts within or cut of sight on the ground or high above ground.
tuánkshi at which spot, where; somewhere; also interrogative.
tíksh from that loeality.
túla, tulāk together; is used adverbially and as a conjunction.
túsh, d. tútash, somewhere in the distanes, far out; iuterrog. at which (distant) place? enlarged from tû.
túshak at some other place.
tuishtala toward or at that (distant) plaee, spot. Cf. gitála.
wíga, wiká, d. wí-uka, near the ground, elose to, near by, nigh; not extensively.
wigá-ak not far from.
wigátak at the same place; together, unitedly.

## Temporal adverbs.

at, $\bar{a}$, a (álso conj.) at the time ; now, then; at a just now ; átutu already. gétak, kä'tak, Mod. kánktak, finally, at last.
húya, úya for a while, during a short time.
hunk, hûnk, ûnk, a particle expressing distance, and when temporal the past tense, though this is not unexceptional. The Modocs often replace it by hû; no word of English corresponds exactly to it. Cf. Verbal Inflection, pages 402-404.
yè, yé now, presently; firstly; Mod.
yuneks $\chi$ éni between sunset and dusk.
ká-ag, gá-ag, gáhak long ago, many years ago.
káyutch, Mod. káyu, kí-iu (also conj.), not yet, not now; never, at no time, not at all; káyak not yet; never.
kishé ${ }^{\prime}$ mi, kíssïm, d. kikshémi, at sundown.
lúldan in the cold season, in winter time.
litzi, litye in the evening.
lupí, d. lúlpi, at first, firstly.
lupitana, d. lulpitana, for the first time.
mā'ntch, d mā'mantch, during a long time; refers to past and future. Dim. mā'ntchak, d. mamā'ntchak, for a short while, Kl.; quite a while ago, Mod.
mbúshant, d. mbúmbûshant, on the next morning; next day, to-morrow, Kl. měník, d. nmímnak, for a short time.
náyantka sháppěsh next month; ná-ïntka shkō'shtka next spring.
nía, d. nínia, lately, recently; a short or long time ago; nía sundē last week.
nínk next clay, Mod.
níshta all night through; at night-time; nishtāk in the same night.
pḯdshit, pádshit or pádshit waíta to-day; at the time.
pata in the warm season, in summer time.
pēn, pén, pain, pēn a (also conj.) again, once more, a second time, repeatedly.
pshé, d. pshépsha, in the day-time.
pshíkst, d. psî́psaksht, at noon.
pshín atnight; pshínak cluring the same night; pshín=tátzĕlam at midnight; námuk pshín every night.
 mation : tinksk a siont ochile ago; taiskt of thed fioce; tiekt at on a sullen ef once; cinkiak pretty sosm, shordly afierrecrd; formerily.
tapi, d tatpi (also conj), for the lest iame; at hesf; subsquenty. बfierrend; tapi むita, tapi tima a shora time arernourd: tina tapí for the last time.
sati, d. tasita ? (1) inserrogazive, nchen? af uchich time or period? taá mintech! how long cyo? (2) when, that time when; ké-i taad necer: thatak ef the fine when, just when.
tiva, d titna and titatha, once, one fime, a simgle five: of a fime: tima sometive; titatra a for times, wot offen; tinatoks some ather fiste; tianat af ance; simultenemsly.
tuápa, scản, Mot, elreyys, of oll times.
tü'm frequendy; for a long time; a long while.
tuimeri ofice, frequently; the adrerb of túmi many.
tésh gish that fime, then; whew? what fime?
teha, taí inetautly, juss now; tchá-n of the present moment.
tché, d. tchétché, then, at that time; points to the futare; tché-etak af length, finally; in time.
tcherk, abbr. tche, fmally, af last, in future; is adverb, postposition, and conjuretion; tcheksh, tchrig. same meaning; tchéksla after a while. tchúshak, taissal alucrys, constantly, ever ; tchúshniak forecer, «ncensingly.
ûn, ü'n them, sonotime; una, una in the past, some time ago; meterday: uná prhin last might; úna gin long ago: unaik carly in the morning; úntcherk, underet, abbr. undsì', some time from norr ; unash tomorrour (Mod).
waitash, waitan, waita all day long, the whole day; waitolank, Mod wzitólan. yssenday; lit. "having passed one day"; hunkantka waitashtha om the same day.
we $\bar{\epsilon}, \mathrm{u}-\overline{\mathrm{E}}$, wä' for same timer for a while; still, eren mor. wigápani for a short while.

Adrests of quality or modality.
ak, hat, or when suffixed -ak, -ag, only, jusf omly, merely, solely.

Eá-asht, ká-asht, kid-ash thes, , es, in this menmer.
húmasht, d. humámasht, thes, so, in this wey; hưmasht gink. himasht gisht in that manver; acting thit may; humashtak eqwally, in the same manner.
húmtsantka in the same way, equally; cf. Dictionary, page 554.
hunáshak grownilessly, in uain: faledy; gratwitomsly; accidewtally. fortwitonsly; wuavares; nainsạk (for nayentch ak) has the same meaning.
$\mathrm{i}, \mathrm{i}-\mathrm{i}$, è yes, yea, certainly.
kätak, Mod. katchain, truly, surely, certainly.
ké-una and ké-uni, d. kekúni slorly, geatly, loasely.
ki, ke, Mod. kie, so, thus; when words are quotei verbutim.
ká-i not ; no.
kú-i, kó-i badly, wickedly, mischiecously.
-lá, enhancive particle, suffixed: very, greatly.
le, le not, in a putative sense.
litchlitch strongly, forcibly, poreerfully; adverb of litchlitehli. ná-asht, nā'sht, nās thus, so; refers only to sounds and spoken words. nadshā'shak at once, in one batch; also locative and temporal adverb. nkillank, killan, nkila, kīll, d. nkínkal, kikal, rashly, quickly, strongly; forcibly; aloud.
pálak, Mod. pélak, d. páp’lak, pép’lak, fust, quickly, hurriedly; pálakak, Mod pélakag, fast.
pátpat, d. papâ'tpat, smoothly, Mod; adverb of patpátli.
píla, pil, d. pípil, only, merely, solely; pilak solely.
ská, d skáska, strongly, coldly; also verb. Cf. the adjective slıkaini.
tála, d. tatála, correctly; none but, only; tálaak rightly, truly.
tídsh, d. títadsh, ecell, nicely, adequately; tídsh gì to be frienully; adverb of tídshi.
tchí so, thus, in this way; tchik (from tchí gì), same siguification.
wák? Mod. wak, ûk, î̀k? uchy? rcherefore? somehow; wák gi? hov? wakai? why? wak a ginga! of course, certuinly! wakaktoksh in the same mamer as; wák gîsht? in which manwer? ùk wép? how then? Mod.

## THE INTERJECTION.

This class of words is composed of exclamations resulting from wilful or unwilful outbursts of feeling, and may serve to express assent, welcome, wonderment, surprise and joy, or terror, tronble, pain, distress and disapproval. The two kinds of interjections can be easily distinguished from each other: One of them consists of organic words of the language, either of single terms, inflected or not, or of phrases and even sentences; the other is formed by inarticulate, natural sounds, representing the crude utterances of certain physical or mental feelings. Exclamations of this sort do not form organic parts of the language and are not inflected, hence are no words in the strict sense of the term.
A. -INTERJECTIONAL WORDS AND PHRASES.

As to their origin, the interjections of this class are of the most various description. Adverbs and verbs are mainly used for the purpose, often with an altered signification.
átui! now! at once! found in Modoc imperative sentences.
gétak! gii'tak! Mod. kánktak! stop! quit! that's enough! that will do!
gín! pl. gínkāt! do it! go on! hurry up!
hágg'î! háka! pl. hággāt! Mod. hággai é! lo! look here! behold! haká yē $\bar{a}^{\bar{\prime} k}$ ! let me eat first! Mod.
hátata! implies menace, threats, like the Vergilian quos ego!
hí! hí-i! híitok! down on the ground! sit down!
híya! hu-íya! don't go! stay where you are!
húmasht! that's right!
hunámasht? is that so? indeed? Mod.
kál’āsh! abbr. kā'slı! exclamation heard from old Modoc men.
kiílash stáni! the nost opprobrious epithet in the northern dialect.
kapkáblantaks! Morl. kapkapagínk î! pl. kakapkagínk āt! hush up! silence! stop talking about this!
kuítak! get away! go back! away from here!
ké-ash, kä'-ash! baul thing! a termused in speaking to children, derived from kí-i badly, and forming the verb kii-ashtímma, q. v.
léki! lē gí! pl. lékat! quit! stop! eease! don't!
nént (for nén at)! so it is! that is right! nént nént! right! right! Mod. oká-ilagēn, d. okí-ilagēn! Kl. wak haí la gēn! eertainly! of course! pá-ak, abbr pa! I do not know!
skó! d skúsku! eome up! used when thinking over something not remembered immediately.
útch, úds! never mind!! don't care if! used when worrying onesclf about something; $\hat{u}^{\prime}$ tch gît gí! let go! quit! stop!
tchawaí! well then! for tchí-u haí now then; tchawaí nā! let us do it now! Mod.
waktchí huk! how curious! (wáktchi for wákaptchi, q. v.), 24, 18.
wakéanhua! wák yánhua! I will be sick if I don't!

```
B.-INTERJECTIONS OF AN INORGANIC NATURE.
```

Ejaculations of this sort do not form organic parts of the sentence, and, being no worlls, are excluded from the morphologic part of the grammar. They are the true, gennine interjections, and are nearest related to what we call a root, in its abstract, naked form. Indeed, some of these intcrjections are forming words or derivatives in cvery language; for Klamath, some are mentioned below and on page 250 . In their origin, these derivatives come nearest to the derivatives of onomapoetic roots, as names of animals, especially birds, as quoted pages 250,323 . Some interjections are formed by iterative reduplication, which appears here as an onmatopoctic element. War and dance songs are largely made up of mmeaning syllables and terms which resemble interjections of this sort Repetitions of this same character also occur in such forms as túmi-i-i tút many, many teeth, which stands for a superlative of túmi many*, and strongly reminds us of the Semitic tóbtob very good, from tób good.
anána! ananá! expression of bodily pain or distress; from this the verb ananí a to cry ananá.
:i'-oho, $\mathfrak{i}$-uhu, i -uhuh $\dot{\varepsilon} \lambda \varepsilon \lambda \varepsilon \dot{v}$, and forming a verb like thiṣ: ï-oho=hútchna to alvanee while erying ${ }^{\prime}$ 'oho.

[^64]$\bar{e}$ ! ē-è i ì an exclamation, forming a sort of vocative: tchékan' e a kěláush! the sand here is so fine! cf. hággai $\bar{e}$, Mod., and page 468.
hai! hähai! The syllable hai imitates sounds uttered by men and animals. Derivatives: hai'ma, hamóasha, häh:ï'tamna, etć.
hé-i! héeè! look here!
kénkem! ₹émqem! kémkemtak! silence! hush up!
o ! $\overline{\mathrm{o}}$ ! marks surprise, and is often pronounced with inspiration of breath.
tútutu! utututú! implies fright, dismay, pain.

## S Y N TAX.

The syntax* of a language deals with that part of its grammar which gives a systematic account of the structure of the sentence and its portions, selects the existing grammatic forms, and assigns to them their proper places in the composition of the sentence.

Thus the grammatic forms presented by morphology, and the lexical treasure of a language furnished by the dictionary are but the raw material with which sentences are composed conformably to the laws of syntax. The words found there become true words only when they become constituents of the sentence; and, to reach their full effect, words and sentences have to be placed in such adequate logical relation to each other as expresses best the meaning of the speaker or writer.

No sentence can be considered complete in which three elements of speech-subject, predicate, and copula (or substantive verb)-are not expressed or inplied. This is true of all languages, although the means for expressing the three elements may widely differ, since the predicate and the copula are frequently embodied in one and the sane word.

The simple sentence, composed by the above-mentioned three parts only, becomes enlarged-the transitive verb by the direct and indirect; the intransitive verb by the indirect object or complement; and both may become qualified by adverbs (or adverbial attributes). Then the subject and the objects are qualified by attributes of various kinds, which may even appear under the form of a whole sentence. Based upon these fundamental categories of speech, the whole syntactic material divides itself into the following clapters:

The predicative relation.
The objective relation.
The attributive relation.

[^65]Besides this, syntax deals (1) with the various forms under which sentences may be addressed to others in the simple sentence-the declarative form, the negative form, the interrogative form ; (2) with the compound sentence, and its subdivision into a co-ordinate and a subordinate sentence.

## THE VERB A NOUN.VERB.

Comparative researches embracing languages outside the pale of the Aryan and Semitic families have disclosed the fact that they do not possess a true verb, as we have, but use terms of a nominal function in its stead, which may be best compared to our abstract nouns, to nouns formed of verbs, and to participles. This morphologic quality of the verb influences not only the inflectional forms of this part of speech, but also the laws of syntax; and investigators of a hitherto unknown language have to consider as one of their most important grammatic tasks to ascertain the origin and true character of its verb.

What makes of the Aryan and Somitic verb a true verb is the thorough and intimate comnection of a radix, assumed to be predicative, with certain affixes representing number, tense, mode, voice, and especially with affixes representing person. This is so because, in the inflective languages, the finite verb is controlled and determined in every instance by the sulject of the sentence (pronominal subjects appearing as personal affixes); whereas, in the so-called agglutinative languages, the finite verb is partly controlled by another agent than the subject. The powerful agency which has fused all the above category-signs into words, and has even influenced the vocalic part of the radix, is met with only in the two linguistic families above mentioned; for agglutinative languages, which constitute the great majority of all tongues, do not show in their verb the same assertive and predicative power.

That the Klamath verb is a verb of the agglutinative class will sufficiently appear from the data contained in this Grammar: But the question how far this verb has developed in the way of approaching the standard of a truly assertive verb may be considered under two aspects: (1) What are the properties which assimilate it to that standard? And (2) by what peculiarities are we compelled to class it anong the verbs constituting a nominal
expression? It slould be remembered here that, at the earliest period of its existence, language possessed neither nouns nor verbs, but that these distinctions arose only gradually. Whenever the aboriginal mind wanted to give a nominal character to a radix, it affixed certain pronominal roots to it, considered to signify number, location, sex, etc.; when a radix had to receive a verbal or assertive meaning, pronominal affixes, pointing to tense, mode, person, form, location, and other categories, were placed before or after it * But in thus establishing relation, every nation or tribe followed different methods; and thus originated, not the genealogical differences of languages, but the difference of their grammatic structure. Different methods were followed because each nation was in the habit of viewing things from different logical or conventional aspects.

The Klamath verb approaehes the predicative Aryan and Semitic verb in the following features:
a. In what we call the finite forms, the verb is connected with a personal pronoun, figuring as the grammatic subject of the sentence, and not with a possessive pronoun, as found in the Algonkin dialects and many other American aud foreign languages, in the place of a subject, which is there only the logieal, not the grammatic, subject of the sentence. This latter stage is represented in Klamath by some of the verbals, but these are pure nominal forms, and do not exhibit such forms as correspond to our finite verb.
b. The majority of the verbal inflectional affixes differ from those used in inflecting the noun. The process of incorporating pronominal objects into the verb is here in the same stage as in some modern languages of Europe, viz., only ill its begimning.
c. Klamath clearly distinguishes between the subjective and the objective case in the adjective, the past participle, the pronoun, and the substantive of the animate order, the objective case standing for the direct as well as the indirect object. The objective case is formed by the suffix -sh, -s with a vowel preceding, but the usual suffix of the subjective case in substantives is -slı, -s also.

[^66]On the other side, the Klamath verb differs from the true predicative verb, and ranges itself among the noun-verbs of agglutinative languages by the following characteristic features:
a. The transitive verb is controlled and modified by its olject (especially its direct object), and not by its subject. This becomes chiefly apparent by the way in which the distributive form of the verb is applied. In many intransitive verbs, this form connects itself with subjects standing in the plural number; but, from the study of Morphology, it becomes evident that the true cause of the reduplicative process in this instance lies in the repetition or severalty of an act or state, and not in the grammatic number of the subject.
b. The verb possesses no personal inflection, if we except the rudimentary agglutination to it of some personal pronouns. .It has no real personal pronoun of the third person. It has a grammatic form for two tenses only, and the modal inflection is rudimentary also. As to number, a sort of prefix-inflection is perceptible in a long series of verbs, which tends to prove their nominal nature. That part of the verbal inflection, which is developed more extensively than all the others, is made up by the verbals, which, by themselves, are nominal forms.
c. Several suffixes, inflectional and derivational, serve for the inflection and derivation of the noun, as well as for that of the verb. The fact that certain nouns can become preterital by inserting -u-, shows better than anything else can, the imperfect differentiation between the noun and the verb.
d. For the passive voice, the same form is used as for the active voice; shléa is to see and to be seen.
c. Some verbs are used as nouns without change-that is, without assuming the derivational suffix - sh, -s of substantives. But the existence of the binary and ternary case-inflection shows that the inflectional, polysynthetic power of the noun, theoretically, almost equals the power of affixation in the verb. The mere possibility of a binary and ternary case-inflection proves that some of the Klamath case-signs are of the material kind of affixes, and not of the relational kind, which are not susceptible of any further affixation to themselves. The inflective languages have relational case-
signs only, and therefore binary and ternary noun-inflection is unknown among them.

From all that has been stated heretofore, the conclusion is fully justifiable that the Klamath verb is not a true verb, but a noun-verb, on account of its imperfect differentiation between noun and verb. The lack of intimate connection between the subject-pronoun and the identity of the active and passive form also show its true nature. It expresses the verbal act or state in its abstract, impersonal, and indefinite form, and, with the particle of actuality -a appended, comes nearest to our infinitive. Thus î yékua ánku thou breakest a stick could be transcribed in the most literal manner by "thou-to break-stick", or in German, "du-brechen-Stock." Whether transitive verbs are used actively or passively must be ascertained from the context,* for the verbal term in this instance contains nothing but the abstract idea of "break."

## the substantive verb gî.

The inquiry whether a language possesses a substantive verb to be or not, is closely related to the one treated in the previous chapter. Languages lacking the verb to be employ, instead of it, other verbs of a more material signification, use more auxiliary verbs or even particles, overloading the grammar with forms; or use attributive verbs-a clumsy expedient, which is attained only by verbifying the substantive, adjective, pronoun, and even particles. By all this, nothing more is attained than what we reach by using our short verb to be. The existence of this verb testifies, not only to a considerable power of abstraction and reflection on matters of language, but is generally associated with a tendency of the language to become analytic, and to divest itself of the embarrassing wealth of synthetic forms.

[^67]Klamath is among the languages possessed of a true substantive-verb, the inflection of which is well-nigh as complete as that of any other nounverl pertaining to this language. Its presence accounts for the relative scarcity of attributive verbs, like kélpka to be hot, mā'sha and shíla to be sick, shuálka to be warm, tchkáwa to be cold. It is the ouly auxiliary verb of the language in forming periphrastic and other conjugational forms (cf. -uápka of the future tense). But besides the abstract signification of to be, the verb gi has other meanings of a more concrete nature-to become; to belong to; to do, perform; to say-all of which, together with the origin of gî, have been discussed at length in a chapter of Morphology. Here we are concerned only in the signification to be, thongh the earlier meaning of a casual, aecidental existence is still as frequently implied by it as that of real, essentia existence. The various definitions are exemplified at length in the Dictionary and Morphology. In periphrastic conjugation, gî is the real substantive verb; in other connections, it is sometimes replaced by tchia to sit, stay, live, dwell, in sentences like the following:
pi a tchía tchísluēni he is at home.
nálam p'tíshap, kat p'laí tchía our Father, who is above, 139, 1.
In short sentences, rapidly spoken, it is often omitted by ellipse:
kálam hût unák? whose boy is this?
kálam i-utila? whose is that thing below?
kílam gétant? whose is the thing on this side?
kálam gè p'léntan? whose is the thing here on the top?
kaknégatko mî shulótish your dress is dirty.
Further instances of the various uses of the verb gî, not previonsly mentioned, are as follows:
(1) gî to be, of casual existence ; the Spanish estar:
hût snáwedsh kúi gî k’lekěnápkuk that woman is so siek that she will die. E-ukskui toks lapī¹ (for la'pi gí) but of the Lake men, there were two.
hítak a kéknish gî áti here heavy snows have fallen.
hii kó-idshi wawákish gî when the ears are misshaped, 91, 8.
tú kítan hí ki!! over there at the lodge she is, I suppose, Mod.
(2) gí to become, to begin to be, to turn into:
atí hû'k lúldam gî't! that winter would beeome too long, 105, 9.
nû gémptcha pshe-utíwaslash gítki gî I deelare (nû gî) the human beings must beeome so, 103, 11. 12.
Modokíshash "Bóshtin gíuapk" kshápa they deelared the Modocs wanted to become Americans.
(3) gî to be, of real existence; the Spanish ser:
tátkni î gî? where are you from?
kaní gî? who is it? who is he?
múnî nû lakí gî I am a powerful ruler, 192; 8.
túpaksh táksh î ûn gé-u gî! you certainly are my sister!
The three syntactic relations of human speech manifest themselves, in analogous shape, in the simple and in the compound sentence. These relatious are the predieative, the objeetive, and the attributive relation. They will be treated in the same order as now mentioned.

## THE PREDICATIVE RELATION.

It is the relation existing between subject and verb, or, to use a term more adapted to the Klamath language, the relation between subject and noun-verb. It includes the whole syntax of the verb, excepting only the relation of the verb to its object and (adverbial) attribute. When the predicate is not a noun-verb, but a noun (substantive, adjective, pronoun), this noun connects itself with the subject either by the verb gî to be or some other term replacing it, as shésha to name, call, k’léka to beeome, turn into, 73, 6, etc. Concerning appositions, cf. "Attributive Relation."

The adjectives in -ni, -kni often express relations which, in English, are rendered by a prepositional or adverbial phrase, and have to be considered as adverbs; e. g.: Kaímom yámakni gî Kaimom is from the north; plaitálkni tchúslnini tchía God lives forever.

A nominal predicate always agrees with its subject in case, but not always in number.

## MHE SUBJECT OF THE VERB.

The subject of the nom-verb, or, as I will henceforth call it for convenience, of the rerb, stands in the subjective case, whether it appears as substantive, adjective, participle, or pronoun. This, of comrse, applies only to the subject of the finite verb; the subject of verbals, as the verbal definite and indefinite, follows other rules to be mentioned below. When the subject is a personal pronoun, it is often repeated and, curiously enough, without any special emphasis being attached to it:
tíds taks mî'sh nî kuizá n's nî I know you pretty well, 65, 10.
tánkt nî snä'keclui-uapka nî then I shall remove (him), 59, 17.
Especially in songs subject-pronouns are scattered in profusion; cf. pages 176-178 and first Note. Just as frequently, a personal pronoun is omitted altogether whenever it can be readily supplied from the context. So, in 30, 7, nāt we is omitted before ga-n̂'l $\chi$ a, because it stands in the sentence preceding it; cf. also àt ye before pá-uapk, in 70, 4.

When a transitive verb is used passively, the grammatic subject stands in the subjective, and the person or thing by which the act is performed in the possessive case, which often figures as the logical subject;* or it is expressed by a possessive pronoun.

That an oblique case can figure as the subject of the sentence, as in Sahaptin dialects, of this we have an instance for an intransitive verb in the incantation 158; 48: käílanti nû shilshila, which is interpreted by the Indians themselves as: "I, the earth, am resounding like thunder within (-nti) myself." An oblique case thus figures as the verbal subject. This recalls the circuustance that, from certain case-forms, as yadmat north, kia'mat back, ke-usham flower, new substantives originate with the above as their subjective cases.

The plural number of the subject of the sentence may be indicated in the following different ways:
a. Plurality is indicated analytically by adding to the noun a numeral or an indefinite pronoun, like kínka, tumiága a few, nánka some, nánuk all, túmi many.

[^68]b. Plurality is shown by the noun being a collective, or one of the substantives designating persous, which possess a form for the real plural.
c. The large majority of substantives laving no real plural, their plurality is indicated in the intransitive verbs connected with them by the distributive form of the verb, and in a few transitive verbs, like stá-ila, lúela, by a special form which has also a distributive fuuction.
d. When there are but two, three, or, at the utmost, four subjects to certain intransitive verbs, the dual form of the latter will be used. Cf. Verbal Inflection, pages 437-441.

## PERSONAL INFLECTION.

In his choice between the analytic and one of the synthetic forms combining the subject and object pronoun into one word with the verb, the speaker is guided entirely by the impulse of the moment. If he intends to lay any stress on the personal pronoun, he will place it at the head of the sentence, or at least before the verb, which usually stands at the end, or he repeats the pronoun. The synthetic form of the subject-pronoun is less frequent than the other, and not every person has a form for it. In the second person of the plural it might be confounded with the imperative, and hence it is more frequently used only in the first singular and plural and in the third plural. Object-pronouns, like mîsll thee, to thee, are placed between the verb and the subject-pronoun:
slli-uapkámslaa they will shoot you (for mish sla).
ne-ulakuapkámshni I shall punish you.
A list of all the possible syntheses of personal pronouns is presented above (pages 548. 549).

## tense-forms of the verb.

There are only two tense-forms of the verb-the simple verb-form, generally ending in -a , and the form of the incompleted act, with suffix -uapka. Nevertheless all tenses of the English verb can be expressed with accuracy by these two forms, when supplemented or not by temporal particles, and by the substantive verb gî in its various inflectional forms. To
what extent the category of tense permeates other modes than the declarative, to which the present clapter chiefly refers, will be seen in the chapter of "The Modes of the Verb."

THE FORMS OF THE PRESENT TENSE.
Klamath distinguishes three varieties of the prescut tense by separate forms in the declarative mode. The other modes are represented by a conditional, two imperafives, a participle, and some verbals.
A.-The pure prescrt tcnse, as contained in sentences like we are walking, it is raining, is expressed by the nude form of the verb. 'This form is, in tle norther!u dialect, usually preceded or followed by the declarative particle a, which here serves also to indicate the tense. Modocs generally omit this particle, but in both dialects other particles can supplant it to point to the present tense. Commected with hï if, when, this tense also forms conditional sentences, and often stands where European languages use their conjunctive mode. Examples:
kē a shúdsha ánku he is burning wood.
kelpka a ámbu the water is hot.
tám nûsh ̂̂ lola? do you believe me?
at wawápka wē they are still sitting (there).
āt a pán pála-ash ye are eating bread.
B.-The usitative form of the present tense, describing habit, custom, or practice, constantly observed, expresses it in a presential form by appending to the verb -nk (-ank, -ink etc.) in Kl., -n (-an, -in etc.) in Modoc. In form it coincides with the participle of the present, but being connected with the personal pronouns, it serves the purpose and has the function of a finite verb. It occurs when habits and customs of individuals and tribes are sketched, though the naked verb appears in this function just as frequently: il $\chi$ óta, ílkteha, $87,4,6$; shúdsha, 90,9 . On the origin of the suffix $-n k,-n$, see Participles.
máklaks kíukayunk flags the pcople stick out flags obliquely, 134, 3. 4.
pápkasliti shốtank box thcy makc a coffin of lumbcr, 87, 2.
sha shipátx̂̂kank they were repeatcdly eclipsing each othcr, 105, 2.
lúshnank sha shēétakshtat they roast it in the fire-place, 150, 7.
vúnip shulshéshlank they play the stiek-game with four sticks, 79, 2. tamadsank téwas they fasten the net on the bow, 149, 22.
nā'sh käílatoks tchpî'nualank they bury at one place only, $88,1$.
tsúi mántsak mbusä́lank or mbusḯlan gî and he lived for a while with (her), 77, 2.

This same tense-form in -nk, -n occurs sometimes in sentences which contain no usitative verb; still, a finite verb is expressed by it, and the sentence is often of an imperative or jussive character:
tchúleksh îsh tchiléyank! give me a picee of meat!
nûsh tuí tchiléyank î! give me something (soft or flexible)!
knû'ksh îsh néyank! give me some thread!
Other instances will be found under Participles; see below.
C.-The simultaneous tense-form is employed to show that an act was performed or a state existed just then, right then and there, at the time referred to, either simultaneously with another act or state mentioned, or following this act in immediate succession. It is marked by placing the emphasis upon the last syllable of the verb; the verb is then frequently accompanied by particles specifying the time. Whether, in oxytonizing these verbs, the declarative particle ha, a has coalesced with the terminal -a or not depends on the contents of the phrase or sentence; cf. Note to 54, 9. This accentuation is not peculiar to any tense, and may be also due to other causes to be specified below.
a. Following are some instances which refer to a present tense:
tsúi hûk k'lekí tawî'sh then the bewitehed one dies, 62,$3 ;$ cf. $66,1$.
k̂î-î-á a nen she lies when saying this, 64, 4.
pitchkí a lóloks the fire is out, or has gone out.
sakí a po'ks then they eat eamass raw, $74,5$.
ḱá-i spûní vushúk they do not give (her), beiny afraid (of him), 93, 1.
The class of verbs mentioned on page 239 often or usually bears the accent on the last syllable, because they suggest an. immediate or simultaneous act.
b. In the following instances oxytonized verbs refer to acts performed simultaneously with others in the historic past, or at another time bygone:
kílilks shliad they then perceiver the dust, 29, 7; cf. 65, 9.
tsúi nat wawápk k'makká nat then we sat down and were on the lookout, 29, 13.
tsí hai'mkank shapúk so she said when speaking about it, $65,13$.
wudokí hushtsóza sha they struck and killed him right then and there, 69, 1.
lupî' hûnk shpunkínka, tchû̀' lakialá first she liept, then married him, 55, 18.
tchulhińla tch'û'nk, guké at he took off his shirt, then climbed up, Mod.
à'tunk atí kedshá 'apáta kálo when it had grown high, it touched the sky, Mod.

In several instances the possibility exists, however, that this oxytonized verb is but an apocopated participle in -tko (cf. pahá dried, 74, 6; nzitsí atrophied etc.), or that an enclitic term following has attracted the accent to the last syllable. Cf. what is said on Enclisis, pages 240-243, and guluá nîsh I am swollen, 138, 3; k’leká taks nû but I am dying, 138, 6;
 tawí shash he bewitches them, 62, 3.

All our preterits, as the past, perfect, and pluperfect tense, are rendered by the simple noun-verb, and can be distinguished from the present only through the syntactic comnection or by the addition of temporal adverbs. These latter being frequently omitted, the run of the sentence is often the only point by which tense can be discerned. In the other modes the preterit is represented by the verbals and a participle.
A.-Past and perfect. These two tenses of the English grammar are not distingnished from each other in Klamath. Transitive and intransitive verbs may or may not assume, either before or after the verb, the adverbs
hûk, hûnk, hûn, and lî̂, designating the past tense. These adverbs are locative and temporal simultaneously*, their use implying the idea that what is performed in places locally distant is temporally distant also whenever it comes to be spoken of. Therefore their use is not strictly limited to the past, but applies also to other relations distant in time; cf. 105, 8.
hû́k refers to acts performed in presence or absence of the one speaking or supposed to speak.
hûnk refers to acts performed or states undergone near to or far away from the one speaking.
lûn refers to acts performed on inanimate things, present or visible. It also refers to thoughts and abstract ideas.
hû in Modoc stands for all the three above-named particles of the Klamath Lake dialect, which appear in Modoc also, and in the same functions.

The above-named particles are often connected with or replaced by other adverbs, as tehúi, nía, úna, tak, toksh. With tchuii, they form compounds, like tchúyuk (tchúi lû̂k), tchû̀yunk (Kl.), tch’hû'nk, tchû́nk (Mod.), and others. Cf. pages 402-404.
tám haitch ínslı hûnk lóla tchúi? did you believe me then?
ndáni waitúlan nía mî suéntch káyeke your baby died three days ago, Mod.
núshtoks máklaks slléa people have seen me, Mod.
pátula toks nû pä'dshit $I$ ate just now, Mod.
úna nû pá-ula $I$ ate some time ago.
î nûsh túla hûnk wudúka hûnksh you and I siruck him.
î unk (for hûnk) hä'ma you were shouting.
B.-Pluperfect tense. This tense points to the priority of one act to another connected with it syntactically in the same sentence. Althongh the Klumath has no special form to express this tense, it is clearly pointed out by the logical connection, or by particles, grammatic and derivational forms of the language, in many different ways.

[^69](1) Two or more co-ordinate sentences contain each a verb in the past tense, one of which the English language would render by the pluperfect tense:
sämtsál\%̊ hû'k a gén táwi; tû' táwipk. . . . . .tánkt tawîpk she discovered that he had bewitched that man; that he had bewitched him out there; that he had bewitched him at that time, 64, 2. 3.
tsuii lû̀k na's liukiyapk ma'ns î-u'ta then the one who had retived to the woods shot for a long time, 23, 21.
niarians shlinn wia'k he had shot another man in the arm, 24, 1. Cf. stíltchna, 43. 22; spûní, 20, 18.
(2) The verb expressing the act previously accomplished stands in the presential tense-form, and is connected with the other past tense by means of the particle at, then to be rendered by after, though its original meaning is now, now that.
laláxi shuggńlaggi at, Tchmî'tch häméze after the "chiefs" had assemlled, Riddle said, 41, 20.
lıû'yuka sha hî̀nk ktá-i at, tchúi sha máklaks pûellî̀' after they had heated the stones, they threw the people into (the bucket), 112, 21.
kayúds lû̂k k'lỉ'kat (for k'léka at) he had not died yet, 24, 6.
The conjunction at inay be accompanied or even supplanted by other temporal particles, as tchúi, tch'lıû'nk, átch'unk (for at tchúi lû̂'nk, Mod.), tchúyunk, hû tínkt, (Mod.) etc.
(3) The verb containing the act performed previously to another act may be expressed by one of the verbals. In this case, there is only one finite verb in the sentence, for all the verbals represent nominal forms. The verbals are those in -sh, with their case-forms (-sham etc.), in -uish and in -sht.
eizishtok Mî'shash k’léka Tcháshgayak but after (or while) Southwind. had put his head out, Little Weasel died, 111, 9.
tú géna Móatuash k'läwisham at away went the Pit River Indians, now that (firing) had ceased, 20, 5.

Kĕmû'sh i-ă'sh túdshampěli shûdshan gánkanktchuish Kěmukámteh earried willows on his back to build a fire after (Aíshish) had gone hunting, Mod.
nóksht-ak sha ktái î'zakpěle after stewing, they took out the stones ayain, 113,2 ; cf. $113,9$.
Aíshish shataldîldamna atí at kédshîsht Aishish looked down constantly till after it (the little pine tree) hal grown tall, 95, 3. 4.
Kěmî'sh kshélui û'nk mé-itkasht hî'nk we-ula'kash K'mukámetch lay down close to the fire after the wives (of Aíshish) had gone to dig roots, Mod.
(4) Pluperfects may also be rendered by participial forms, the present participle being more frequently used for this purpose than the past participle.
(a) Present participle in -nk, Mod. -n:
káyak wémpělank k’leká having never fully recovered he died, 65, 20.
Skélamtch shanatchvû'lank nélya m'na tchúyesh Old Marten, after taking off his hat, laid it down, 112, 18; cf. 112, 13.
gátpamnan käílatat wawálza laving arrived on the ground, they sit down, 85, 2. Mod.
tchî'sh shnéľan shemáshla having burnt down the lodge, they remove elsewhere, 85, 13. Mod.
This construction is quite analogous to the use made in English of the participle in -ing; in French of the participle in -ant.
(b) Past participle in -tko:
hekshatlēkitko k'lexípkash wátch géna the horse walks earrying the body; lit. "having been made to carry the body transversely", 85, 4.
gélzalgitk hû'kanshampěle having climbed down he hurried out again, $112,11$.
(5) The most expressive way of rendering the English pluperfect is the use of the completive form in -ola, -úla, which the majority of verbs can assume. Generally the participle in -ólank or one of the verbals serves the purpose, and at times the participle present of those verbs of motion which can assume the suffix -tka (-tkank, Mod. -tkan) is used instead. Cf.

List of Suffixes, -óla, -tka. A temporal conjunction, like at, tchíi etc., often accompanies these forms
lápěni waitólank, illolólank after two days, years haud clapsed, K1.
at nat neli'uulank at gémpěle after having sealped him (lit. "having finislied scalping"), we retwrned home, 30, 20.
tchíi sla lî́lalya prí-ulank aud having done cating they went to bed, 113, 11. kshatgatnû'lank, shíuga snáwedsh having draun out the woman he killed her, 111, 17.
shî-îtankî̀lash tchē'k after having concluded peace, 39, 13.

THE FUTURE TENSES.
The future marks an act or state not yet begun, or only intended, or an act or state begun but not yet completed. It is expressed by the suffix -uapka, a compound of the verb wá to stay within, to exist, live, and the distancial suffix -pka (cf. Suffixes, -ápka, -pka), which has assumed liere a temporal function.* In the northern dialect, -uapka is the most frequent mode of expressing the future tenses in principal and in incident clauses, whereas the southern or Modoc dialect is apt to substitute for it the nude verbal stem with -tak, -tok (not -taksh, -toks) appended. This is done, e. g., when one sentence is subordinated to another, the particle then appearing in one of the two or in both, often accompanied by un, ûn. Instances of -tak to indicate the future tense are not frequent in the northern dialect; k'likátak nî I might die, 129, 4, is the conditional mode, and could be spelled k'likát ak.

Verbs with the suffix -uapka assume various modal functions, to be sketched below. This tense forms no conditional in -t. but otherwise possesses all the grammatic forms of the simple verb in -a, -i etc., and can almost be regarded as forming an independent verb for itself.

Verbs in the -uapka form are put to many different uses, all of which have this in common, that they point to an act or state not yet begun or completed. The scarcity of temporal forms in Klamath has accumulated s, many functions upon this suffix, that adverbs and conjunctions must son.e times be employed as helps to distingnish one from another.

[^70]The various future tenses designated by -uapka and -tak are as follows:
A.-The 'future simple, pointing to the occurrence of an act at a future epoch more or less remote. Temporal particles serve often to specify the time, thēk being one of the most frequent among them; cf. $59,17$.
medshampěli-uápk nû $I$ shall remove to the former place again.
nād kēksh vutukuápka we will club him.
undsii' nî né-ulakuapk some time henee I shall arraign (her), 65, 1.
tánkt nî shä'gsuapk this time I will speak out my mind, 65, 3; cf. 59, 17.
kawaliä'kuapk sia'-ug believing they would aseend, 29, 15.
mish nû shpuláktak I shall loek you up, 36, 3. Mod.
tídsh hûnk gî́uapk he will act rightly, 59, 21; cf. 22.
wákak hûnk tchíuapk? how will they live? 105,8 .
The particle hûnk, usually met with some preterit tense, accompanies the future in the two last examples.
B.-The anterior future, Lat futurum exactum, indicates the completion of an action or state before another will take place at a time to come.
tuá nî shutii'-uapk shiúgok? what would I have profited if I had killed him? 64, 12; cf. 13.
hai î mbuseálp'luapk, spûlhi-uapká m'sh nî if you live with her again, $I$ shall imprison you, 60, 21.
hä î páltak (for pálla tak), spúlhitak sha nûsh ûn if you steal, they will lock you up, Mod.; cf. 39, 21.
C.-The form -uapka also serves to designate acts or states which had to be performed or undergone at a time known to be past when made mention of. We circumscribe this by had to be done, had to oeeur, was or were to do, etc.
tsúi $\operatorname{tchǐ}^{\wedge} \mathrm{k}$ sa wáltakuapk and afterward they were to deliberate (again), $65,15$.
hî'-îtak tchúi tchî'mapk here he was going to stay, 95, 6.
huk kûmeti kēktchannápka they were to be withdrawn from the eave, 42, 21. Mod.
hushtanknípka mbī'shan they were to meet the next day, 41, 12. Mod. gatpanpěli-uípka sha at they heud almost reaehed their home, Mod.
D.-This suffix has also a sort of usitative function in describing acts habitually done, mender certain conditions or at certain seasons of the year, and therefore prospectively to be performed also in future times under like conditions. In this sense, the future is used in many other languages also.
nad git́́ piénuapk pólơkuantch, ktïlowalshuápka we shall there serape up ehrysalids, gather pine-nuts, 75, 3; cf. 12.
nāsh sápash gépgapěliuapk, tsíalsh káwi telîsh épkuapk in one month
they will or world return; salmon and lamprey-cels they will bring, 93, 4; cf. 3.
E.-The future in -uapka is used to express the idea of compulsion by force, by uature, or by imperative command of others. Cf. "Methods to express compulsion" (below).
F.-The future in -uapka is used in its verbals, or counected with various particles, to express the ideas of possibility and volition. Cf. "Modes of the Verb." When connected with hii $i f$, or other conditional particles, it forms conditional sentences.

## MODES OF THE VERB.

Of the three modes of the finite noun-verb-the declarative, the conditional, and the imperative-only the first and last show the beginnings of an incorporation of the personal pronoun. The conjunctive, optative, and potential of other languages are here expressed analytically by particles added to the two first-mentioned modes, and these are spoken of under separate headings.

THE DECLARATIVE MODE.
It corresponds very closely to the indicative of European languages, and has been treated of at length under "Tense Forms", pages 579 sqq. It is used in the style of historic narrative, in queries and replies, in affirmative, negative, and interrogative sentences, in conditional sentences when formed, e. g., with hä if, and often serves where we would use the conjunctive or another mode.

THE CONDITIONAL MODE.
Verbs in the conditional mode introduce an act performed or a status undergone under a eertain condition, which is either enunciated by a separate, often incident or participial clause, or silently understood and admitted. The origin of the suffix -t, from: at now, then, at the time, readily suggests all the uses to which this mode can be put. The hearer is notified by it that such an act took place "under such temporal conditions", or "under these circumstances."

The various uses to which the conditional mode is put will appear more clearly by distinguishing those instances which connect a conditional sentence with it from those which present that mode standing alone for itself. The verbal conditional will be considered separately.
A.-The conditional mode, when accompanied by a verbal or a conditional sentence, is often connected with the potential particle ak or its combinations. The idea of possibility thus becomes more apparent. By a sort of syntactic attraction, both correlative sentences sometinies place their verb in the conditional mode.
k'lakát n' u'nk shlä-ók I may die for having seen (the spirit), 129, 5; cf. $130,3$.
hissúnuk tchätch nî'sh ké-i siû̀gat when songs are applied as medicine, then it may possibly not kill me, 129, 5.
hä̈ nen wä'g'n kä'git, énank ílktcha when no wagon is at hand they carry him out for burial, 87, 5.
shle-úta nû mîsh shéwant a when I find it I will give it to you.
hïi nû nen hótchant, shlít nîsh a nen if I had run away they would have shot me, they said.
nî ká-i spúlhit sqoktî'sht nîsh $I$ do not imprison him provided he has paid me, 62, 5.
sta-ótank kaitua pát while fasting he would eat nothing, 83, 2.
Also the passages $105,8.9 ; 147,13$.
B.-The conditional mode, when standing alone for itself, generally corresponds to the English verb accompanied by the auxiliaries would, may,
might. The other' sentence needed for completing the sense is here suppressed, and its contents have to be supplied by the hearer. The particles ak, kam, etc., added to the form in -t, give it the character of a special relation, as that of volition, possibility, etc.
pi ak shuint (for shnfnat) he can sing; supply "if he wants to sing."
hư̂'nk ak taksh ûn nû shléat I can sec him; supply "if I choose."
nû' kam hî'tksh telúlīt I wish to look down from there, 192; 4.
ké-itat sa nelli'nat, hî'shtchok'huya hak sa they would never scalp (enemies), they only killed a few (of them), 19, 4.
gíta tchípash ké-i tî'm kédslıant not much tchipash-grass will grow hereabout, 149, 10.
wokslat, wókash shutï'shlat, awō'lat, péksat shîulína they may collect, grind, and cook the pond-lily seed, and rub it fine upon the metate; supply "whenever they camp out there", 74, 7-9; cf. 15.
tuá kam a nû kít shashapkéat I do not know what story I am going to tell you, Mod.
ká-i hûnk shlïi-át hû́nkesh kiä'mat skókshash I may possibly not see the dead man's spirit in the fish, 129, 7; cf. 1. Cf. also 120, 17.
hû'nk ká-i mat pî'sh sińkat $I$ did not kill him, as alleged, 64, 5; kí-i nû hû'nk siúgat $I$ have not killed him, 64, 11.

It has been stated above that conditional sentences, when introduced by particles, like hï, tchä, at, taksh, are just as often expressed by means of the declarative mode of the present and of the future. The "Legal Customs", pages 58-62, afford many instances; cf. also 38,$20 ; 65,6.7$; 113, 17.

## THE IMPERATIVE MODE.

This mode fulfills the same office in Klamath as in English, though it differs from it by being generally accompanied by a personal pronoun, except in the third persons. In such sentences as vúl $\chi$ ' îsh tála! lend me money! the pronoun î thou has coalesced with the î- of nîsh, apheretically îsh me, to me. This sentence may be expressed also by: tála îsh víl $\chi \hat{1}$ !

In the chapter on "Modal Inflection", morphological part, the uses of the two forms of the imperative-the imperative proper and the exhortative
form-have been discussed, though it will be appropriate to add a few more syntactic examples here for illustration. The future in -uapka, which has no exhortative form, is sometimes supplanting the imperative under certain conditions. We also find the participle in -nk, -n replacing the imperative, but rather unfrequently; ef. "Usitative tense-form," page 581, and below.
gén' ì go thou! s\%ótk' îsh! eross me over!
spízî a nā! now let us pull! gená-atak nā! let us go there!
nánuk tíds waw wallzat! all of you stand up straight! 90, 14.
ktíwalұat nā-éntch tchkash! post ye up another man besides! 22, 15.
ka'hlántak ná ûn! let us enter now! Mod.
î shutétkî! let thou perform! 139, 6.
u'ts gint, shlítki nûsh! never mind, let them fire at me! 22, 10.
ká-i i téltkitak! you must not look downward! Mod.
tchelð́n!! sit down! nûsh tchiléyan î gî! give it to me! Mod.
tchńleks îsh tchiléyank î! give me some meat! Kl.
lunkōktki kädshikúlaktki! take a steam-bath and take a rest! Mod.
páh gépkan tchími! come and eat right here!
kíyak kílhuan! do not get angry! Mod.
Many inperative locutions suppress their verb, which, of course, can be replaced without difficulty by the hearers; cf. page 568 , and :

hí-itok āt! sit down! down!<br>pélak tchími! here! quiek! pélak kúnî! over there, quiek! húya! don't go!<br>ká-i ta! do not! hold on! kér-i tchēk î! do not (shoot)! Mod.

## THE PARTICIPIAL FORMS.

The two forms of Klamath now to be spoken of correspond in almost every particular to the participles of the European languages, and I have therefore not hesitated to call them by this name. Participles and verbals afford excellent means to build up periods, in the most breviloquent and expressive manner, by subordinating certain acts or facts to the main verb and incorporating all into one sentence. What the Klamath and the classic languages of antiquity express by a participle or verbal, modern languages will often resolve into an incident clause, or into a principal clause, correl-
ative to the main verb; but to turn the sentence into a nominal form of the verb often has the great advantage of brevity and vigor over the analytic wording of it.

1. The participle in $-n k$, $-n$ temporally expresses the past and present, sometimes the pluperfect, though I call it the present partieiple for the sake of brevity. Its subject is mostly identical with that of the main verb, and whenever it fulfills the function of an adjective its natural position is before that verb. Like the English participle in -ing, it frequently stands where the Latin would use its gerund-form in -ndo; cf. shulatchtilan tchélza to be on one's knees, in Morphology, page 407; and this also las to be placed before the verb of the sentence.

The structure of this participle as a part of the sentence presents no difficulties, and we therefore give only a few instances of its use:
kû'shga tcha, p'lu' î'tchuank . . . . . . lé'vuta they combed, oiled, and dressed him, $95,17$.
Tchíka shlaá Aíshishash huyégank, hû́tan ku-ishéwank shlia' pĕle Tehilia saw Aishish sitting far off, jumped up, being glad to find him aguin, 96,5 . Here huyegápkash seems preferable to huyégank.
Itpampělank yámnash shash shewána bringing the beads home he gave them to them, 96, 8.
hû̂ktag hû̂llatchúyank pakakólank pákshı nûtolála lúlukshtat the little one ran baek and forth, and, jerking off the pipe, swoung it into the fire, 96, 16.
géknan shlá-uki! go out and elose the door! Mod.
Instances of its use may be found on almost every page of the Texts. Compare, e. g., the passages 22,$16 ; 34,13 ; 42,7 ; 71,7 ; 109,4$.

The use of this participle as a usitative and imperative form has been alluded to severally; ef. pages 580,581 . A similar form is produced when the finite verb of a sentence is supplanted by the present participle, as in:
tchí sha hátokt gelōlank shewátxastka thus they dismounted there at noon-time, $19,10$.
nā'dshak hîk lî̂shuákshlank K'múkamtchash only one eonsorted (at that time.) with Kmúkamteh, 95, 11.
mo-ówe hûnk hûtápĕnan a mole ran past him, 127, 1.
2. The participle in -tko and the morphology of its snffix has been previously described (pages 378 sqq., 408, 447, 451), and it remains now to exemplify its syntactic uses more extensively. I call it past participle, from its prevailing application to past facts or conditions, but it may designate the present tense also whenever it forms verbal adjectives or is used in a possessive sense. In its origin, it is neither active nor passive exclusively, and when forming derivatives from intransitive verbs it is neither the one nor the other. In its nominal inflection, we find not only the sinple caseforms, but those of the secondary nominal inflection as well, and it is attributively and predicatively conjugated with the noun it qualifies.

With the auxiliary verb gî, in all its various verbal forms, the participle in -tko forms a periphrastic conjugation, and this is especially the case whenever the participle is nsed passively or is formed from an intransitive verb. The gî then assumes, so to say, a demonstrative function. Thus ć-ush wétko gî means the lake is frozen, as you and everybody can see, the result being visible to all; but é-ush wétko would simply mention the fact that the lake is frozen. Even when gî is suppressed, the form in -tko is to be regarded as a finite verb, like the usitative form of -nk. Examples:
> ké-isliam î kógatko you have been bitten by a rattlesnake.
> tchī'sh ká-i wétk the place in the lodge did not freeze, 111, 21.

Whenever -tko is construed with gî in the sense of the passive voice, and the logical subject of the periphrastic form is mentioned, this subject is placed in the possessive case in -am (-lam), or, if pronominal, it is introduced as a possessive pronoun. Possessive participles ending in -altko, -tko must be considered as circumscribing the participle gítko possessed of, and are construed like this, the object possessed or worn being then contained in the word itself. Steinshaltko, "having a heart", is equivalent to steínash gítko ; and mù steínshaltko equivalent to mû̀nish steínash gítko magnanimous; lit. "having a great heart." In wewékalam sha táldshitko
they, armed with the little arrows of the children, 123, 6, táldshitko stands for táldshi gítko, "arrows having."
a. Instances of the actwe signification of -tho.
ktchî'dshŏ sǩálaps shîlttílatko a bat holding a deeoy-mask under its wing;
lit. "having placed a decoy-mask etc." 127, 1.
hashtcháktchuitk carrying (an object) in his drcss, 111, 13.
hä nî sluíshaltk (gî) if I recur to magic songs, 130, 3.
tû̀ma wásh shléa kshiûlðápkash he saw many coyotcs dancing, 128, 8.
láp’ni ta-unepánta illólatko twenty years old; lit. "having completed twenty years", $55,20$.
késlga kétí nû kä̈'kotko I did not succecd when I tried.
tátzĕlampani gággătk having crossed (the river) half way, 123, 2.
b. Instances of the active possessive signification of -tko.

While referring to the syntactic examples to be given under "Methods to express possession," q. v., I auticipate here a few sentences relating to possession, in which the object possessed is more distinctly determined :
t teé-u pé-ip kinkánish weweshélť̉o the elder daughter has (but) a few children; cf. 85, 16.
nútoks shléa gé-u lúlpatko (for lúlpaltko) or nútak sllépapka gé-utan-
tkak húlpaltko $I$ saw it with my own eyes (stands for gé-utantka gî hílpaltko).
tchuyétk Yámsham núsh dressed with the head of South Wind serving as a hat, 111, 19.
klána pálpalish shlapsháltko the klina-plant has a white flower (for pálpalish shláps gítko), 146, 14.
inbushaksháltko possessed of obsidian tools.
tû́ma watcháltko owning many horses, 127, 9.
c. Instances of passive function of -tho.
kédsha hemkankátko when specches had been made for a short while 34, 16; cf. 44, 5 and Note.
mîsh gé-u skútash skutápkash you, wrapped up in my own gairment, 126, 12; cf. 125, 2.
kimā dsham pátko tooth-aching; lit. "eaten by the ant."
wákash ággaipksh the bone-awl which was stuck into (the ceiling), 120, 22.
tchíktchikam lupatkuelátko scarred by a wagon.
sáwalktko having been given presents, 136, 7.
d. Instances of participles in -tho derived from intransitive verbs.

Many of them can be distinguished only with difficulty from the verbal adjectives of the same terminal. Some have even turned into substantives, abstract as well as concrete: ${ }^{\text {k}}$ 'lekátko corpse, i -utántko heavy load; strength, k'mutchátko old man. Cf. Suffix -tko, No. 5.
shlóa warvakayápkash lynxes sitting upon (trees), 125, 2.
kikaskánkatk having walkcd about, 24, 20.
(nû) hátokt gátpantk I was going there, 140, 6.
p'gî'sh=lúlatko, shashámoks=lolatko bcreaved of mother, relatives; lit. "the mother, the relatives having died."
gíuľa, for giulqátko, born; cf. léluidshish, in Dictionary.
e. Instances of verbal adjectives formed by -tko, -tk.

These words are often the participles of attributive verbs, q. v. Add to these all the comprehensive terms of relationship in -altko, as shaptálaltko etc.
sa-ulankánkatk (his) followers, 100, 17.
k ̂̀'mme lalaúslialtko the hard-rock cave, 42, 19.
tsmō'k pîluitk smelling after rotten fish, 146, 7.
hémkanks túmĕnatk they were acquainted with the language, 23, 3.
wika=télantko short-facer, $190 ; 14$.
Others are: kshúǐitko, lúiұitko, winíðitko superior to, surpassing; mā̄'shetko, máshitk tasting like; shawígatko irritable; tishílatko crooked; tishzalkuleátko plicated; ulézatko flexizle.

## THE NOMINAL FORMS CALLED VERBALS.

The various nominal forms of the verb, called verbals, are a peculiar feature of Indian languages, and since some of then differ in their uses from all we know in European languages, their correct use is not an easy
matter to acquire. Their function is to express more concisely what we convey by our participle in -ing, preceded by some particle ( for, while, etc.), or by incident clauses of an adverbial, conditional, or other nature. In his use of the verbals, the Indian is guided not only by the matter he intends to express, but he will choose one verbal when the subject of the nounverb is identical with that of the verbals, and another when it differs from this. The corresponding clapters in Morphology will explain many facts concerning the syntax of the verbals, but the examples to be now given are intended as additional contributions to teach their correct use. The infinitive mode is here regarded as one of the verbals, and all the verbals inflected by case are here treated in one single chapter, with subdivisions, just as they were in Morphology.

## 1. The infinitive.

Concerning this form, I lave nothing to add to the statements made in Morphology. It occurs but rarely, and shows no inflection save that for severalty. Cf. pages 409, 410.

## 2. The verbal indefinite.

A.-The subjective case of the verbal indefinite ends in -sh, -s (-aslh, -ish), and possesses no exact equivalent in the English language, though we may define it as occupying a middle position between the verb and the noun. Sometimes its function is that of an abstract substantive; sometimes it is predicative, though in most instances the English participle in -ing corresponds best to it. Tiä'mish gé-u, "my being liungry", expresses the same idea as my hunger; hemézish m'na, "his speaking or saying", is nearly identical with his speech.

The rules of its structure, whether used actively or passively, having been illustrated previously (pages 323, 338, 368, 410-413), we proceed to state under which circumstances this verbal is used.
a. The verbal indefinite may stand in its subjective, uninflected, case as the subject of a sentence, governing a verb, but not being governed by any verb whatever-or, as forming a phrase, which has to be rendered by a subordinate clause in Englisl.
tuá lîsh mî pélpelsh gî gitáki? what is your busincss here? lit. "what your working is here"?
gé-u gúikak hû'k lû'gs spunî'sh the slave transferred (spunî'sh) by me (gé-u) ran away, 20, 17.
kaní gén gé-u kápa kó-i shutépka shlelұtchanólish gé-u? who spoiled my coat which I left behind? lit. "the one dropped behind by me"?
kédsha kápka kokî'sh gé-u the pine tree grew while I climbed it, 101, 16 ; kúkuish gé-u would signify after I had climbed it; lit. "the one climbed by me before."
nāt ká-i kaknō'lsh slé-ipěle ne-uqúllp’lîsh gíntak lákiăm we did not return the parfleshes, though the ehief ordered us repeatedly (to do so), 21, 6; lit. "though we were the repeatedly ordered ones by the chief."
b. When the verbs of telling, thinking, wishing, conceding, and refusing require in English a sentence to express their object or complement-which is usually introduced by the particle that-this objective sentence, when not containing the idea of a command, purpose, or plan, and having the same subject as the main verb, is expressed by the verbal indefinite. Verbs which are construed in this manner are shápa, shapíya, heméze, hémta to say, to tell, and other derivatives of hä'ma; héwa, shéwa, hû'shka, hû'shkanka (Mod. kópa), to suppose, reflect, think; háměni, sháměni, shanáhōli to wish, desire, want; shayuákta to know, túměna to hear, heshégsha to complain, vúla to inquire. Cf. Verbal conditional, No. c.
kanî' shapíya, mā'lăsh nā'lăm shuenkuápkash ? who says that we intend to kill you? 40, 18. Cf. 35, 10.
káti nû ûn kánash shapítak tuá mî shapíyash I shall divulge to nobody what you tell me; lit. "what was told by you", 40, 11.
gitá nû gátpa käíla shéshatuish haměniúga wanting to scll lands, I came to this place.
tátank iták shéwanash hám'nian îsl, shpunkánktak nû wúshmush I will scll you the cow for what you like to give me, Mod.
ndî-ulěđápkash máklaks shaná-ulî nelínash after he fell, the Indians attempted to sealp him, 42, 15. Cf. 35, 11. 18; 36, 19; 42, 19.

TChmû́tchăm tálaak shlepaknápkash shayuákta he knew that by Frank Riddle he would be protected with firmness, 36, 12. 15.
lakí heshégsla E-ukshîkíshăm ktclínkslı pēn pállash the ehief eomplained that the Klamath Lake Indians had again stolen their rails, 35, 17.
léwitchta Canby wátcl shewanápělish Canby refused to return the horses, 39,12 . Cf. 24,$16 ; 36,13.14$.
.... shii'walsh túměna (nû) I heard that he has slandered, 185; 38.
c. Another series of verbs requiring the verbal indefinite to express their syntactic object or complement are those expressing inability, stoppaye, termination, exhaustion, dreall, and also those indicating habit or custom. We find, e. g., the following verbs construed with this verbal: késlika and tchána to be unable; kěléwi to ecase, stop; vína, vúnha to finish, terminate; kédshika to be tired, exhausted; yáyaki to be afraid of; nétu to have the practice of; kélza nûsh I am accustomed to.
késhka nû kō'sh lisháktgislı I am unable to shake the pine tree; cf. 42, 6.
késhguga îdshi'sh being unable to remove them, 38, 1.
k'lewi-uápka nāt shéllualsh we will quit fighting.
vún'a an gé-u stéginslı lédshish I have finished knitting my stocking.
nû kédshika hémkanksh I an tired of talking, 42, 3.
nû yá'ya'ki gukísh I dread to climb up.
nétu an lédshish stéginsh I am praetieed in knitting stoekings.
kélya a n'sh únak gé-u pátkalslı I am wont to rise ear'y; lit. "rising early by me is habitual with me."
B. -The verbal indefinite in -sham contains the possessive pronoun sham, which is here so closely agglutinated to the verbal indefinite that the $-s h,-s$ of one of the two has disappeared. Sham may be either the possessive case of sha they, or an abbreviation of hû̀'nkělamıshan, lhû'ksliam, liû'nktsham, kē'kshanı, or of any of the pronouns forming their phural by means of final sha they. That sham is really a word separate from the verbal indefinite preceding it is proved by the passage 23, 9: $\underline{k}$ í-i săm wai'walsh shlin I shot (her) beeause they would not allow (her to me), which is equivalent to $\underline{k}$ á-i wia'walsham (for wewa-úlash sham, d. form of wé-ulash, from
wé-ula to allow) shlin. The logical subject contained in sham of them, their, theirs differs from the subject of the verbal indefinite, and also from the grammatic subject of the finite verb, on which the latter depends; and when the verbal indefinite is made from a transitive verb it has often to be taken in the passive sense, for the possessive case is the case expressing the logical subject of a passive verb.

But intransitive verbs are also construed in this manner, and transitive verbs may retain their active function, as appears from the passage quoted on page 413. That the form in -sham always indicates a plural subject is made apparent by the signification of the pronoun itself. This difficult matter will appear more lucid through the following examples:
tû' géna Móatuash k'léwisham at the Pit River Indians went away when (the Lake men) had ceased (fighting), 20, 5. Here the intransitive $\mathrm{k}^{\prime}$ 'lewish (the stoppage, the "act of ceasing") has for its subject the Lake men, not the Pit River Indians, and this subject is referred to by -sham their, of them: "after the ceasing by them."

The following exanples all contain transitive verbs:
káhaha shlisham he aehed beeause they had wounded (him), 22, 11; lit. "he ached, being wounded by them."
lúks t'shín spû'ntpisham a slave grew up after they had brought (him there), 16,14 ; lit. "grew up, carried off (or brought) by them"spû́ntpish sham.
nánka gaggiáha penō'dsasam some hid before their pursuers, 17, 14: lit. "hid, being followed by them"-by others than the subject of the sentence.
wétta kübatoo'lsham he laughed when they uneovered (him), 24, 14; lit. "he laughed, being uncovered by them."
C.-The verbal indefinite in -shti, -sti is of rare occurrence, and the syntactic instance given, page 413, of its causative function shows that the -ti found there really means about, concerning, a function which it shows sometimes when appended to nouns. In the verbal, the additive signification is more frequent, and examples may be fonnd on page 478. In the example
quoted, page 413, the verbal in -ti does not refer to the subject of the main sentence, but to its object.
D.-The verbal indefinite in -siésim, -shäm is used just like an adverb, and since no subject is mentioned with it, it refers to the subject of the sentence. It points to things done during periods of time having a certain length, and the same suffix, -ëmi, is frequently found appended to substantives. It öccurs in passages like 55, 8. 19; 56, 1. and, from 148, 19 we gather the information that it is capable of combining with other case-endings into a ternary case-inflection.
E.-The verbal indefinite in -shi, -si is remarkable for combining a temporal with a locative function, and for placing its nominal or pronominal subject, which differs from that of the main sentence, into the objective case. It refers to a distinct place or spot where, and to a certain moment when something occurred, and not to a longer lapse of time, like -shé'mi.
nî hû'tpa híhassuaksas hátokt lîuká-îisì (for liukáyash=î) by running I reached the men while they were gathered there, 22, 4.
tsúi hutapěnō'lshi n's náyĕns shlín pä'n nû'sh then, after I had arrived there running, another (man) was shot in the head, 22, 11; n's (for nîsh me) being the subject of hutapěnō'lshi.
náts a gépksî (for nálash a gépkashii) at shli'pka Sā'tas when we arrived, they (the soldiers) saw the Snake Indians, 29, 19; cf. Note.
sänótanksi nat sash gítpa while they fought, we reached (them), 29, 20.
Sā't hûk téwi gatpánkshkshi (for gatpánkshkashîi) hin̂'nk wáts the Snakes fired at him when he had almost reached the horse, 30, 4.5, and Note.
nat gulháshktcha shewatzû̂lsî we started in the afternoon, 24,6 , and Note.
F.-The verbal indefinite in -shtia, -stka, which I call verbal desiderative from one of the uses to which it is applied, connects itself with all the inflectional forms of gî to be, but is found alnost as often without these, and then has to be considered as incomplete, as stated pages 413 sq . But when the form -shtkak occurs, the form is complete, for the final -k represents the abbreviated -gî. Whenever this instrumental case -tka is appended to
the verbal indefinite of transitive verbs, it expresses a desire, a wisling or eraving for, a tendency toward, an attempt; but when appended to the verbal of intransitives, it has to be rendered by being on the point of, going to be.

Concerning their syntactic use, we have to distinguish whether verbals in -shtka are used like finite verbs, independent of any other verb, or are governed by another verb.

1. When used independently of any other verb, this verbal is not inflected, except through the auxiliary gì to be, and is hence to be compared to the usitative form in -nk, -n (-ank, -an) referred to pages 408.580 sq . The subject noun or pronoun joined to it and the substantive verb gî, whether added or left out elliptically, gives it the predicative power of a finite verb.
nánka Ä'-ukskni lûgsálslıtkak, nánqa síukshtkak some Klamath Lake men wanted to make a slave of him, others to kill (him), 24, 16; cf. 17.
shnû'kslitkan nā'sh siwák hû́nk I want to seize this one girr, 23,8 .
nā̀sh shnuktsístkak hû'nk wátch one (man) attempted to seize that horse, 30, 2.
tsúi sa sakatpampěléastka gî then they desired to have a horse-raee, 20, 14.
hii hû́t mîsh p:in shli'shtka gî́uapk if he shonld attempt to shoot at you again, 110, 4.
2. When governed by another verb standing in the same sentence, the subject of the verbal desiderative is also that of the finite verb governing it, as appears from the following:
kekó-uya shiûlkishðéni géshtga giû'ga he attempted repeatedly to go to the reservation, 55, 11.
nánka $\underline{\text { kéi-i shéwanat pásh shí'ukslitka gíug others gave (him) no victuals, }}$ desirous of starving (himi) to death, 66, 10, 11.
hulládshui wéka K'mûkámtchash pā̄ksh pakakóleshtka the little boy ran toward K'mikamteh, desirous of jerking off (fiom his neck) the tobaeeoріре, 96, 14.

There are a few forms of the verbal indefinite in our Texts which indicate the existence of other case forms of this verbal than are mentioned
above. Thus I may refer to the objective case of the distributive verbal of shemtchálza to diseover, find out, in 65, 3: lä nî wák nä'-ulaktanuapk sheshauntsalzíshash hû'uk I do not know how to proceed against (her), who hus (or for having) diseovered every part of it. Another passage contains the emphatic adessive case-suffix appended to the verbal of spúka to be prostrate: spû́ksksaksi where the (man) lay extended, 24, 19. An uncommon periphrastic form is also, kedshnútash kin it was growing all the while, taken from a Modoc text. As soon as more parallel forms are gathered, it will be possible to investigate all the uses to which these new forms are put.

## 3. The verbal conditional in -sht.

This verbal ending in -sht, -st undergoes no inflectional change, and in the majority of instances has to be rendered in English by a clause dependent of the main sentence. It enunciates the cause, condition, circumstance, or time of the act or state which is mentioned in the principal clause; its suljeet necessarily differs from that of the finite verb of the prineipal sentence. Whenever the noun or pronoun of the verbal conditional is mentioned, which is done in the majority of instances, it is preceding or following the verbal in the objective case, as it does with the verbal indefinite in -slii, q. v. Since cause or condition for an act or state necessarily precedes in time the act or state itself, our verbal differs in its temporal relation from the subjective case of the verbal indefinite by referring more frequently to the past. There are sentences in which we have to render it by the English past, the perfect, the pluperfect, and others where the English present and even the future is in place.
a. Verbal in-sht in a causative function. One of the more frequent uses made of this verbal is to express causality or condition for the performance of an act, and, as the ending -t shows, the conditional function gave to this form its origin. The difference between it and the suffix -oga, -ok, -uk, when indicative of cause, lies in the subject of the two-when the finite verb and the verbal have the same subject, -bga is the form to be used; when both differ in their subjects, the verbal in -sht has to step in.

From the large number of instances which could be extracted from our Texts, I select what follows:
ts'ū'ks ké-usht tchékěle kíuks ítkal when a leg is fracturcd, the comjurer draws the (infected) blood out, 71, 8.
ndé-ulqan slllä-ánk hû'nkt layípakst (for layípkast) I let mysclf down, perceiving that he had (his gun) pointed at me, 30, 13.
sawíka wátch m'na mbá-utisht he bccame angry because his horse had becn shot, 19, 9.
ká-i gé-isht, tpîdshántak! if they do not go, expel (them)! 37, 2.
hushtsóza sha kíuksas k'léksht hî'nk snawédshash they killcd the conjurer, since this woman had died (bewitched by him), 69, 1.
shawígank k’lepgî' kekewélaksht shash heméze angered at their having wasted rcd paint she said, 121, 2.
shapíya ká-i tchû́leksh pátki, shpańtish itámpkash gî'sht he told (them) not to eat of the mcat, poison having been put on it, 13, 17.

The following examples refer to causalities and conditions of the main act, which can be fulfilled in the future only:

Skélamtch nteyakalíya, m'na únakag mû'ak t'shī'slit Old Wcasel made little bows for the time when his boy would have grown taller, 109, 13.
Móatuash m'hû́ ká-i lúela skó tchiálash tchuká k’le-ugtki-uápkasht the Pit River Indians do not lill the grouse in spring, unless the salmon would cease to come up stram, 135, 3.
. . . - p ̂̂'tank nálsh k'leknápksht (our mother forbid us to dive in the water) lest we might smother and die, 120, 6; cf. 120, 2. 4.

More instances may be found in Texts $13,4.7 ; 55,17.120,17$.
b. Verbal in -sht in a circumstantial function. This verbal is often employed in sentences not purely causative or conditional, nor strictly temporal, the act expressed by the main verb showing a connection with that of the verbal, which recalls a very distant cansal nexus, and as to time generally precedes the latter. The term "circumstantial function" will hence be found acceptable.
p'laítalkni nû'slı shla' popk hia'mkankst God observes me as I speak, 64, 12.
Agency tchúi gépksht tapî' tî'ta shash, ktingínlank kí-ishtish they having a while after gone to the Agency he kicked the cloor open, 66, 12.
ndiuláksht nı̂'shı ̂̂n tû'mi gintíltak after I have fallen, many will lie muder (me), $40,5$.
Aíshish shataldî̀ldamna gûkěnı̂̀ta, atí at kédshîsht Aishish, while climbing up (the kápka-tree), steadily looked down until it had grown high, 95, 3. 4.
sha kíl-i shî̀ktgisht tû'slıkansha kî̀mětat as she did not stir, they two ran out of the cave, 122, 4.
lûlhûksh shpítcht (Mod. for spitchasht) when the fire has gone out, $85,10$.
Aíshish pā'ksh ke-ulálapka nádshpâksht Aishish pushed the tobaeco-pipe into the fire until it was burnt, $96,17$.
tû' sal\%î'ta snawédsh gé-u shillalsht over there my wife lies bewitehed, having fallen sick, 68, 1. 2; cf. 9.
.-. .kělekápkash itpanōpkasht (for itpanuapkasht) until the corpse is broaght; lit. "will be brought", 85,3 .
nád pia'ktgist gákiamna when it dawned, we surrounded (them), 21, 14.
We may classify under this leading such adverbial locutions as himasht thus; luimasht gîsht in this manner, hence, therefore; lit. "having done so"; wák gîsht? why? lit. "how acting"? "how having been"? psleéksht (for pshé gîslit) at noon-time, etc.
c. Verbal in -sht in a temporal function. A purely temporal use of this verbal is not observed so frequently in our Texts as other uses, but the following examples suffice to prove it:
ketchkaniénash $\bar{o}^{\prime}$ gîsht wéngga they (his parents) died when he was an infant, 55, 21. Cf. 55, 7. 56, 2.
E-ukshîkni tutenépni waitólan kělékslit vûmî' the Ǩlamath Lake Indians bury on the fifth day after death, 85, 1.
....káyutch tuá kii'sh mé-isht, (she filled her basket) before (SlreGrizzly) had dug any ipo-bulbs, 118, 4. 5.
tút nánuk nîkualksht the teeth having all fallen, 80, 2.
ḱýy któtclasht nû shtílta lı̂̂'nksḷ before it rained I sent him away.
d. Verbal in -sht after certain verbs. Sentences expressing the direct olject of the verbs of knowing, believing, hearing, speaking, inquiring, and others mentioned on page 597, are rendered by the verbal indefinite in -sh; but when they refer to causes, conditions, or circumstances of the act, and especially when their subject differs from that of the main verb, the verbal in -sht is employed, and the verbal in -tki, -tgi, if a purpose or order, command is mentioned.
lû'la wásham pákluipkash k'lekuapksht tchēk they believe that when the coyote howls they (other Indians than themselves) will die, 133, 2.
tsí n sáyuakta tî'na Móatuashash séllualst (shash) thus I know that they (the Lake people) have once fought the Pit River Indians, 20, 21.
túmi hû'nk sháyuakta hû́masht=gisht tchuti'sht many know it, that (the conjurer) has eured (patients) in this manner, 73, 8.
shemtcháľa hû́nk, tawi'shit Dr. Johnash k’lekápkash she discovered that Dr. John had bewitched the deeeased (man), 66, 1.
Aíshish túměna shtútzishalsht pîsh hlilúka Aislish heard that his wives lad wept for him in mourning, Mod.; cf. 39, 20.
vû́la: "túm tatákiash shlēsht"? she asked whether he had seen the ehildren, 122, 18 (indirect question).
nî'sh sa lïwä'-ûla hû'kuapksht they did not allow me to run aeross, 22, 5.

## 4. The verbal preterit in-uish.

This verbal shows, in its function, considerable analogy with abstract substantives and the nouns in -uish in general, but differs from them by its lack of case-inflection. It refers to tets or states belonging to the past, and the subordinate clauses by which we express its bearings have to be worded in our past or pluperfect tense; discontinuation of the verbal act is not always implied by its use. When the grammatic subject of the verbal is expressed by a substantive or personal pronoun, it stands in the objective or possessive case: if by a possessive pronoun, in the objective case. It sometimes differs from the subject of the finite verb in the sentence.

1. When the object or complement of the verbs of telling, annomeing, thinking, replying, hearing, and others enumerated on page 597, consists in a
clanse belonging to the past tense, this clause is expressed by the verbal in -uish, then often equivalent to one of our substantives.
máklaksl kíti kópa tû'sh p'nílăn kú-i gíwish the Indians did not think that they did wrong then, 38, 17, Mod.
at gatpámpělan shapíya (sha) máklăksam hemkánkuish after they had returned, they reported what had been said by the Indians, 40, 6.
Dr. Thomas shapíya p’ná shenólakuîsh $D r$. Thomas informed (him) what he had agreed upon, or of his compact, 41, 13.
2. When the verbal in -uish does not form the object or complement of the finite verb in the sentence, it may stand as introducing a causal, temporal, or other circumstance belonging to the statement, and has usually to be rendered in English by an incident clause, not by a substantive. In many instances, this incident clause contains a pluperfect, and the verbal is accompanied by: at or some other temporal particle.
tapítan gakiúluish at, hämóasha hû'nk after they had gone (underground), she ealled (the children), Mod.
húmasht-ak î tsókuapk klliikuî'sh gînt nû'slı you shall perish in the same manner as I have perished, 64, 15.
shúina sha k'lckuish tutiks m'nálam when he had expired, they sang what each had dreamed, 65, 20.
klékuish at, snáwedsln gî when he had died, the woman said.
táukt shû̀ldshaun génuish máklaks shuénka hû'nk finally, after the soldicrs had retreated, the Indians killed the (wounded) ones, $38,2$.
killílga kóltan génuish after the otter has left, dust is rising, 166; 24.
wî' wal'hag ktánhuish shutuyakiéa ánkutka the young antelopes bombarded (her) with sticks, after she had fallen asleep, 122, 3.
û'nagîn shash génuish hû̀ksha gitpa long after their departure (from the cave), they reached (Old Crane's home), 122, 16.

## 5. The verbal causative in -uiga.

The suffix -úga, -oga is one of factitive verbs, and implies localization (1) within, or (2) on the surface of some object. But when-úga is used for. inflectional purposes, its function becomes an abstract one. It assumes the
power of designating either the cause of an act or state-a function probably originating from the one given above, "on the surface of"; or it may desigrate a temporal relation to the verb of the sentence-a function proceeding from the original locative signification within, inside.* The causative function of -úga largely prevails in frequency over the temporal one, which we have to indicate by when in rendering the verbal by a subordinate clause. The grammatic subject of the verbal is the same as that of the governing verb; if the subjects of botli were not identical, the verbal conditional would stand instead. Cf. page 415.

1. The verbal in -uga designates the natural or logical cause of the act or state pointed out by the finite verb of the sentence. In English it has to be rendered by for, to, in order to, because of, on account of, or other particles of the same import.
shapíya tuá gatpamnóka he told what he had eome for, 34, 1.
géna sha mbúshant mé-idshuk kai'sh next day they went to dig ipo-bulbs, $118,6$.
nād gelō'la pá-uk we dismounted for repast, 19, 7.
tchilä'lza sha tchńlēks mbúshant tchē'k pá-uapkuk they saved the meat in order to eat it next morning, 119, 16.
nû génuapk nē'gslı mā'lam p'gíslıa haítchnuk I shall start to seareh for your absent mother, 119, 19; cf. 122, 17.
wéka ku-ishé-uk hîlladshuitímna p’lukshá m'na the little boy, being full of joy, ran up to his grandfather and buek again, 96, 13.
tátktish íshkuk kíuks hánshna ma'shish in order to extract the disease, the conjurer sueks at the patient, 71, 5. 6.
túnip hushtsó shenō'tankok they killed five men when fighting.
níshta hä'ma mûkash t $\chi \hat{\text { û't }}$ 'uk when the owl predicts (nisfortune), it hoots all night long, 88, 6.

Compare also the passages 77,$3 ; 122,5.10 ; 123,3 ; 136,1$. The connection of this verbal with ségsa, in 20,9 , is rather uncommon
2. The verbal in -riga points to the time or opoch of the act or state mentioned by the finite verb of the sentence. In some instances, the causal

[^71]relation is still apparent, together with the temporal one, while in others the relation is a purely temporal one. Cf. the verbal in -shémi.
tû̀m wátch ítpa sa hin̂'nk lû'gs sesatuî'tkuk they brought home many horses when returning from the sale of slaves, $20,19$.
shá-amoksh hádaktna genō'ga ktá-i nutolā'ktcha when a relative passes that spot, he throws a stone upon it, 85, 15.
hémkankatchna, génuk she said repectedtly while walkiny, 121, 19.
mbáwa sténash nû'dshnuk (one) heart exploded while flying off, 114, 4.
wéwanuish tchî'mma-uk tínkanka women, when plenying the tehimmá-ash game, run back and forth, 80, 7. Cf. also 105, 16.

## 6. The verbal durative in -uta.

This terminal is forming, when derivational, durative, usitative, and instrumental verbs, but when inflectional it fulfills one function only, and remains unchanged. This function is to express an act or condition which lasted or occurred while the act of the finite verb by which the verbal is governed took place. Thus the ending -úta corresponds to our while, or, when nouns are used to render it, to our during, pending. The subject of the main verb has to be identical with that of the verbal.
tcháki hûnk shuaktchóta pán the boy cried and ate at the same time.
shle-úta nû mîsh shéwant a when I find it I vill give it to you.
kû'tagsh stû'kapksh galalinóta (him) who was gigging minnows while skirting the water, 122, 6.
shlï-ótak (for shlä-óta ak) Ä-ukskísas tínsua at the mere sight of the Klamath Lake Indians they fled, 19, 3.
yímatală génûta shûshtédshna during his journcy to the north he created them, 103, 3.
gennita shuáktcha Sháshapamtch Old Grizzly wept while walking, 121, 18.
Different forms of the durative verbs express exactly the same thing as the verbal durative does, but have to be kept asunder grammatically, because the former inflect; while the latter do not. Even the present participles in -nk, -n have to be distinguished from the verbal, though the Modocs use -ítan and Klamath Lakes -útank as frequently as -úta, and in the same
sense.* Inflected forms of -úta mostly belong to instrumental, not to durative verbs.

Títak kishkankótank shluyakíga Tittek whistles whilc walking about.
kû'lsh kuleótank kì' nak ěn gì' the badger, while entering (his den), makes nak, nak, 185; 43. Cf. 83, 2.

## 7. The verbal intentional in -thi.

Identical in form, and almost alike in its purport with the exhortative form of the imperative mode, is the verbal in -tki, -tgî. Unlike other verbals, its subject is either that of the finite verb of the sentence, or differs from it, and in the latter case the subject of the verbal, whether nominal or pronominal, stands in the objective case. The function of the verbal in -tki is to indicate purpose, intention, order, or command. Whenever the verbs, which usually connect themselves with the verbal indefinite to express their grammatic or syntactic direct object (page 597) introduce a statement expressing the intention or command of somebody, they are followed by this verbal. Therefore it is. but natural that verbs suggesting a command or injunction, as shátěla, né-uľa, tpéwa, are accompanied by this verbal in the majority of instances. The verbal is in many instances followed by some inflectional form of the auxiliary verb gî, especially by gíga, abbr. gíug. Cf. also what is said in Morphology, pages 416, 417.
a. Examples in which the subject of the finite verb is the same as that of the verbal:
íwam lúitki n's léwitclita á they rcfused to give me whortleberries, 75, 10. gátpa nā tchékěli vudshozalkítki we eame here to wipe off the blood, 40, 16. nāl shgúyuen māl shûtánktgî he sent us to coneludc peace with you, 40, 15. ḱti-i nû shanáhule nûsh sha-akaktántgî I do not wish to be blamed.
b. Examples in which the subject of the finite verb differs from that of the verbal. The subject of the verbal is sometimes mentioned; at other times, not:
kíli tchû'leksh pátki shapíya he told (them) not to eat any meat, 13, 17.
aláhia K'mukámts kokántki gińg Kmúkamtch showed (hin) the pine trec (he had) to climb, 100, 6.

[^72]ké-i wénenla gulitki hint gíug $I$ do not allow (anybody) to enter.
p'gíshap nálam kíi-i shanáhîle nálsh shuhûluléatki gíng our mother does not want us to jump clown (from the lodge), 120, 1.
lakí kétí shaná-uli kí-ukshăsh suawédshash shiukátgi the ehief did not desire that the conjurer should kill (this) woman, 41, 6.
lakí ké-i E-ukshikíshash tpéwa tála shewanátki the agent did not order the Klamath Lake men to pay money, 35, 13.
shátěla snawédshash lutatkátki písh he hired a woman to interpret for him, 13, 11.
Kmukámtch né-uľa páplishash gítki gíng Kmíkamteh resolved that a dam should come into existenee, $94,5$.
Skai'lamtch shtûlí tấpia m'na íktchatki gíug kmă' Old Weasel told his younger brother to obtain skull-eaps, 109, 2. 3.
p’ná máklakshash hî'ushga ká-i nánuk shúldshash shuénktgi he enjoined his men not to kill all the soldiers, 56, 6. 7.
hûn nû shuté-uapk snawédshash kä'sh meítgiug $I$ shall ereate woman to dig the ipo-bulb.

## RECAPITULATION OF THE VERBALS.

Of all the morphologic forms of the Klamath verb, and the verb of many other Indian languages, the verbals show the greatest difference when compared with the parallel forms in the modern literary tongues of Europe. Only by grasping the real meaning of the verbals can we expect to come to ${ }^{\prime}$ a full comprehension of the Klamath noun-verb. There are several other categories which the genius of that upland language has incorporated into the verb almost as constantly and regularly as the categories expressed by the verbals-e. g., that of completion (-ola), repetition (-pecli), motion toward (-ipka), motion away from (-apka). But since these suffixes are forning verbs with an inflection separate from that of the simple verb, these verbs have to be considered as derivational, not as inflectional forms, and find their proper place in the List of Suffixes. The verbals of Klamath are few in number and remarkably well-defined in their functions, easy to handle on account of their lack of inflection and their laconic brevity. If we count the six case-inflections of the verbal in -sh as separate verbals, the whole
number of verbals amounts to tivelve. The verbals of the majority of such transitive verbs as can assume a direct object may be used in a passive sense also.

The verbal in -sh, -s is the only Klamath verbal susceptible of inflection. Whenever the forms in -uish show marks of inflection, they are substantives, and not verbals; when the forms in -úga, -úta are inflected, they are verbs, and not verbals. The case-forms of the verbals in -sh are not inflexible; -shé'mi, when it turns into a subjective case, cannot any longer be considered as a verbal.

The verbals which are periphrastically conjugable by means of the substantive verb gî to be and its various inflectional forms, are those in -sh, -shtka, -tki.

The subject of the verbal has to be identical with the subject of the finite verb of the sentence in the case of -sh, -shémi, -shtka, -oga, -úta. It has to differ from it in the case of -sham, -shi, -sht. The subjects of both may differ or not differ in the case of -shti, -tki. Whenever the subjects of both differ, the subject of the verbal stands in the objective case, whether nominal or represented by a personal pronoun. When the verbal -sh is used in a passive sense, its nominal subject stands in the possessive case, its pronominal subject in the possessive form of the pronoun.

Causality is expressed by the verbal in -uga; occasionally by those in -sht, -shti, -tki.

Duration is expressed by the verbals in -úta and -shémi; sometimes by those in -sh and -úga.

Tense is expressed by various verbals-the present by -sh, -shémi, -shtka; the past by -uish, -sht; the pluperfect by -sh, -sht; the future in some instances by -tki. But this does not exclude that these verbals may be used to mark other tenses besides the ones specialized here.

## THE DISTRIBUTIVE FORM.

In the earlier periods of the Klamath language the category of number in the noun and noun-verb did not appear to the natives as being of much importance. This is proved by the fact that there are different ways to express number, and in the noun-verb all seem to be of recent origin, with
the exception of that by which a change of radix is brought about in the intransitive verb. Had number been of great value to the native mind, it would have been expressed by the same grammatic form throughout. This was done, however, concerming the category of severalty, for which only one form exists, though this one form is applied in many different ways This feature is the distributive syllabic reduplication; it pervades the whole language, down to the postposition and some adverbial particles. The same grammatic form which in Pima, Opata, and other Nahua languages expresses a plural, reappears liere, in the Selish and Malayo-Polynesian dialects, as pointing to severalty or distribution, sometimes involving the idea of custom, frequency, repetition, or that of a gradual process. In the verbs of the Aryan fanily, it once fulfilled the function of marking a preterit tense.

Whenever we see intransitive and objective-transitive verbs used in the distributive form, we naturally expect that the subjects of the former and the direct objects of the latter should assume the same form. But the Indian does not always apply our Aryan ideas of syntactic congruence to his own speecl; his syntactic views are rather of the incorporative order, and what is expressed by one part of a sentence applies to the whole sentence, for it is needless to repeat a grammatic fact previously stated. Thus the idea of severalty, and also that of plurality, when pointed out by the verb, will hold good for the governing or governed noun also, and needs no repetition. When adjectives are joined attributively to substantives or pronouns, the same incorporative principle applies to the case-forms and the distributive forms, as shown in Morphology. But there are some other reasons of a more stringent nature which, at times, prevent the use of the distributive forms in one of the syntactic components. They are as follows:

When the verb of the sentence is an intransitive verb, showing the distributive form, its subject will usually show the same form when animate, and the absolute form when inanimate; but when the verb is transitive and shows the distributive form, the object will stand in the absolute form if only one object has been acted upon, or if the object is a collective noun, and in the distributive if each object has been acted upon separately. But when there are many subjects acting all at once, we have to expect the subject either in the plural or in the distributive form and the verb in the
absolute form, and this would agree with the real function of the distributive form, as developed on previons pages of this Grammar.

Sometimes the distributive form, in the noun or in the verb, is a phonetic impossibility, and then some analytic means have to be employed. Personal and some other pronouns do not possess the distributive form.

Thus we obtain three possibilities for the use of the distributive form in the sentence:

1. The verb alone assumes it.
2. The subject or object alone assumes it.
3. Both verb and noun assume it.

While the two first modes of construction are frequently met with, the third one is decidedly the most unfrequent of all. Syntactic instances for all three are as follows:

1. Distributive reduplication applied to the object or subject alone:
wíwalag vûla shasháshapkash the young antelopes asked the bear cubs, 119, 23.
ká-i lıûnk vúsa tumá máklaks kakaknólatk gíug each being armed with parfleshes, they were not afraid of many men (attacking them), 17, 4. tatála hémkank i! tell the truth in every instance! tánna î wewéash gitk? how many children have you? ngä'-isa sha wéwaläks píla they shot the old women only, 28, 3.
lelahówitko wátclı wuzóyi he traded slow horses, 189; 8.
2. Distributive reduplication applied only to the verb:
túmi shtinā'sh nenálqa many houses were burnt, Mod.
këkkii'gi a n'sh tchō'ks I am lame in both legs.
tsúi nî shlín hû'nk, kát hûk yū'ta then I wounded the one who was shooting continually, 23, 1.
suashuála Sā't hûnk ktá-i the Snake Indians piled up stones, 30, 9.
wákaitch gíug nia'g tû'm laktch shápěsh shusháta? why did the absent (mother) make so many moons? 105, 7.
$\underline{K} i^{\prime}$ 'kakilsh yámatală genúta shûshtédsha he created the bearded men at different times (or places) when he had gone north, 103, 2.
 pitch on his head, 132, 6.
Móatuash äóho=uátchna (for =hulhátchna) the P'it River Indians raised their uar-cry while ruming, 23, 15.
3. Distributive reduplication observed in the noun and verb:
kēk wa-utchága titádshi gî these dogs are faithful.
gēk shash slíushuak a pepéwa these girls wash cach other.
sa hû́nk lû́luags wï'k slnúshně $\neq a n k$ slnîkshúlza seizing the captives by the arms, they made them dance, 16, 12.
wíwalag tû'slikampěle the young deer werc running out again, 120, 12. 15. tchitcháluish kintála young fellows are walking about, 186; 52.
at gakiámna shlishlolólan then they surrounded (her), each coching his gun 41, 3, Mod.

## methods of expressing possessiun.

There is no exact equivalent in this language for our verbs to possess, to own, to have; and with the verb gî, which is chiefly used to express possession, the logical subject is not identical with the grammatic subject. The different methods in use to express this idea are the following:

1. The substantive verb git to be, when not occurring in its participial form, gítko, requires the possessor to stand in the possessive case of a noun, or, if expressed by a pronoun, a possessive pronoun fulfills this function. The object possessed then figures as the grammatic subject of the finite verb gî, and the sentence becomes equivalent to our to be somebody's. The verb gî, or inflectional forms of it, are often dropped altogether:
kálam gē láteluash? or kálam gē látchash gî? who owns this lodge? Kl. kákiam gēk shulótish? whose (pl.) arc these garments?
túmi málam máklaksam luldămaláksh gî your tribe has many winter-lodges. ude-událkatko ké-u wakísh gî I have a streaked roof-ladder; lit. "my inside roof-ladder is speckled", 175; 14.
And other examples on page 432.
2. But whenever the participle gítko, abbr. gittk, having, possessed of, is employed instead of one of the finite forms of gî, the grammatical subject
becomes also the logical subject, and the object possessed stands in the objective case. The sentence is complete only when gî is or are is added to gítko; gî is not possessive in that case, but it represents the substantive verb, and is frequently dropped or coalesces with the gítko preceding into one word.
kēk wátsag múměnish wawákaslı gítko this dog has long ears.
tíma nīl gítk nálam shī̀p our sheep carry much wool.
wakwákli nû'slı gítko conical-leaderl.
ká-i nû shanáluli snawédshaslı kókuapkash lûlp gípkash I do not want a wife having swollen eyes, 186; 54.
(î) túma tuá gítkuapka (for gítko gí-uapka) you will be possessed of much property, 182; 7.
(sha) kinkáu' smṑk gî'tk, atínsh lák gítko they have a spare beard; they wear the hair long, 90, 5. 6.
3. The idea of possession is intimately connected with that of wearing, using, being provided with, or carrying an object, when the participial suffix -tko, abbr. -tk, is appended to the object worn, used, or carried. This applies to parts of the human or animal body, to the organs of trees or other plants, to manufactured articles, tools, and garments, as hats or coats, or to domestic animals. More stress is laid on the use of these articles than on their possession. Some of these forms in -tko are derived from a corresponding verb, as kúkatko, from kíka to wear a gown, but the majority are the product of the suffixation of gitko to the noun of which they appear to be the derivatives, and of a subsequent contraction. But as to táldshitko provided with small arrows, for instance, it would be out of place to suppose that there ever was a verb táldsla to provide with arrows; the word is a contraction of táldshi gítko "arrows having." More will be found in List of Suffixes, under -tko, No. 4.
kîlí'wash shkútatk dressed in a woodpecker mantle, 189; 6. pî a wáwakslnatk he has moccasins on.
tsé-usam tsúyätk (hût gî) he wears a hat adorned with the feathers of the yellow-lammer, 181; 1.
tidshá kókatk î shéwa you believe that you are dressed nicely, 189; 5. wika-télantko having a short face, 190; 14.
4. Possession is also expressed by the suffix -altko, in the oblique cases -álpkash, -álpkam, under similar conditions as in case No. 3. Being derivatives of real or supposed inchoative verbs in -ala, the forms in -altko do not exactly refer to dress or wear, but to possession acquired by purchase or otherwise, or increasing steadily, or property becoming accessible gradually. The possession of mental and moral qualities is also expressed by this verbal form. The verb gî, in its various inflectional forms, may be added to it, but is generally omitted. Cf. -altko, page 317; also page 594.
nû a tchuyéshaltko (gî) I own a hat.
nû a loloksgishaltk $I$ possess, carry a gun.
î a watchákaltko you have a dog.
pāt a wá-utchaltko (gî) they own horses.
hû lîsh snáwedshash vunípa weweshéltko (Kl. wewesháltko) this woman has four children, Mod.
hii tálaltko, tchēk ak nû tá-uni gént if I had money, I would go to the city. híshuaksh hûn mû tálaltko this man is vealthy, K1.
E-ukshikni litchlitchlish steínshaltko the Klamath Lake people are lrave ; equivalent to: É-ukslikni litchlítchlish steínash gítko, "strong learts are having."
5. Among other terms sometimes resorted to to express ownership,* we quote the following, and add their real signification: keliak not having, not possessed of, with the object in the objective case; shunuisháltko, slítaluatko having property; hashtaltímpka to manage one's property, to lord it over.

## METHODS OF EXPRESSING COMPULSION.

According to the degree of compulsion which is brought to bear upon somebody, different modes of expression will be used. If the impulse is a mere inducement, advice, or suggestion, the exhortative mode in -tki is employed:
tchē'ksle nû gatpántki let me go there after a while.

[^73]kaitoks nî'sh tú-una Lěmaikshína káyaktgî (hî) he ought not to pursue me around Shasta Butte, 40, 4; cf. 54, 8.
ḱá-i nálsh î tuá shutétki kútidsha let thou do us nothing wicked, 139, 6.
A more forcible mode of compulsion is expressed by the imperative proper, or jussive mode. A form for it exists in both tenses-in the pastpresent and in the future-and the former is of a more commanding and purely mandatory character than the second, because it insists upon the command being carried out at once. Often it becomes difficult to distinguish the declarative mode from the imperative of both tenses.
líelat hî'nksh lî't! kill ye this fellow on the spot! 190; 15.
ká-i nálash kó-i shútï do not make us wicked, 139, 11.
tchély' āt am î kä'dslikuk ye ought to sit down, because ye are tired.
tunî'pnî î spukle-uápka five days you shall sweat, 142, 13.
tchússak āt kátak gí-uapk ye shall always speak the truth.
kílank āt shuínuapk! ye must sing loud!
The declarative mode of the future tense is used extensively, instead of the imperative, to express regulations of law, practice, commands of chiefs or other people in authority, strong suggestive hints to compel people to act in a certain sense, and the necessities of natural laws. The "Legal Customs", pages 58-62 and Notes, furnish a large number of instances to show how the future tense is employed in law regulations. This form thus corresponds to our terms I must, I ought to, I have to, I an obliged.

ḱti-i î wátsam tchî'kluapk wännîkîsham do not ride the horse of another man, 58, 11.
ká-i î láp snawä'dsaluapk you shall not marry two wives, $60,17$.
ká-i î shlí-uapk shash don't shoot each other, 58, 10.
tumántka shute-uápka lakí the chief must be elected by the majority, 90,3 .
î n's shatuáyuapka you must help me, 75, 14.
nánuk máklaks k'lékuapka every person must die.

## POTENTIALITY, POSSIBILITY, VOLITION.

The first of these abstract terms describes the power or ability to perform an act, or to bring on certain events or conditions; whereas the second points to chance, casual occurrence, or to actions that might be per-
formed, or not performed, according to somebody's arbitrary choice. All this we express by the so-called auxiliary verbs $I$ can, I could, I may, I might, I hope, I expect, may bc, and by the particles perhaps, possilly, probubly, likely. The Klamath language possesses none of these verbs, nor any particles corresponding exactly to the English particles mentioned. Nevertheless all the above ideas can be expressed with accuracy in Klamath, either by verbs differing somewhat in their function, or by the particle ak, which, combined with other particles, appears as ak a, aká, áka, ka, kam (for ak am), wák ak; their connection with the conditional mode in -t, whenever it occurs, also expresses possibility. Ak is nothing else but the enclitic particle ak, which means only, but, just, and also appears as diminutive suffix; but here it appears in a somewhat different function. The conditional mode is sufficient to express possibility and potentiality by itself alone, without any particle.
A.-Potentiality. Whenever $I$ can is used in the potential sense of $I$ am able in body or mind-I have the faculty to perforn a thing-it is expressed by the conditional mode, by ak, ka, or by the verbal indefinite. In the latter case, "I can ride", "I can make arrows", becomes wholly equivalent to "I am a rider", "I an an arrow-maker"; and when the sentence is negatived $\underline{k}-1$ is added to $i$. The ak may be dropped if the verb stands in the conditional mode.
> pí ak shuint he, she can sing; he, she is able to sing.
> pí ak $\underline{\mathrm{k}}$-i-i shuint he, she camot, is unable to sing.
> ák a nû ǩí-i péwat I cannot swim.
> kí-i ákă nû kokant kō'shtat I cannot climb the pine tree.
> ká-i nû'sh shíugat táta he can never kill me (under these conditions), 96, 22. Cf. 129, 7.
> pîl máklaks hûk shlã't skū̌ks only dead Indians can see spirits, 129, 2.
> tám î shyeszenísh $\chi_{1 \text { î? }}$ can you row? lit. "are you a rower"?
> nî nánukash shla'sh kî I can see everywherc, 22, 17.

Whenever the ability of performing an act is negatived, there are two verbs in Klamath expressing what we render by $I$ cannot: $\underline{k}$ éshga (or késlika, a derivative of kati not) and telaina. Both of these take their
verbal object in the form of the verbal indefinite in -sh (-ash, -ish), as seen previously; cf. page 598.
késlgga nû shlé-ishl húnkělam I ean or could not see him; lit. "I cannot be a seer of him."
pî a késhka nkil heméxish he is unable to speak loud.
késhga a nû púnuash I eannot drink.
késlıka $\not$ aí nû kea'kotko I did not suceeed when trying.
tchínish nû s $\chi$ ē'sh gî I eannot row.
tchánish tchúluish giúga for being unable to swim, Mod.
B.-Possibility. The idea of possibility, referring to acts or occurrences physically possible, or dependent upon the arbitrary decision of men, expressed in English by I may or might, I expect, probably, possibly, and other particles of this kind, is rendered in Klamath by ák, ka and their combinations with other particles, generally accompanied by the conditional mode.
hî'kt kan gátpant he may come; I hope he will come.
i kam gátpant you expect to come.
yáta ak āt a nen I believe ye are crying.
shlít ak nû lílhanksh hä̉ nî shléat nā'slı I would shoot a deer if I saw one. nû aká hûn shléa, or hûnk ák taksh ûn nû shléat I can see him (if I wish to do so).
Ámpzänkni ak sas hushtsózuapk the Waseo Indians might kill them, 93, 7.
hä tidshí gitk máklaks, tánkt nî gê'nt if the people were good-hecrted then I might go there, 93, 9.
k'lakát n' û́nk sllï̈-ók I may possibly die for having seen him, 129, 5. tchätch nî'sh ká-i siúgat then he may possilly not kill me, 129, 6.

Some instances of possibility are found in Texts, page 118, 10-12; the verb stands in the declarative mode of the future tense, for the future tense of the finite verb has no conditional form in -t.

Two instances where the verbal conditional of the future tense is used instead of a finite verb to express possibility are as follows:
shúluashka tch'û'nk gitki gî: "i-i í-amnash kewe-uápkasht" he told him to take off his dress: "you might break your beads," Mod.
shushatelóma télish, p'mâ'slı ktchályishtka slıkukluápkasht they smear it on their faces to preserve themselves from possible chapping on account of sunburns, 150, 8. Cf. 135, 3.
C.-Volition is expressed in a similar manner as possibility, and the language has no word equivalent to our $I$ will. It may be rendered by shanahō'li to wish, desire, to want, as in 105, 11, a verb for which the Modocs often use hámĕni; or we find it expressed by the future tense, when it is equivalent to $I$ am resolved, I am willful, or one of the above suppositive particles may be used. All these different means are resorted to to express volition, because the language lacks a real optative mode.
medshampělí-uapka nû $I$ will remove to the former place again.
pî a mísh túla génuapk he will go with me.
ká-a mísl nû ká-a nî mbushéaluapka very much I want you for a husband, 182; 7; cf. 182; 6.
nû kam hî'tksh telúlit I wish to look down on it ${ }^{\bullet}$ from there, 192; 4.
nû kan tchīk mîslı shléat $I$ wish I could see you again, Mod.

## THE OBJECTIVE RELATION.

Whenever the sentence, composed of subject, predicate, and copula, becomes enlarged beyond this narrowly circumseribed limit, it will soon extend in the direction of its objective relation. The intransitive verb will complement itself by means of some indirect object. Transitive verbs are either objectless or objective; that is, some of them require no direct object, some do; and the same may be said of the impersonal verbs. But these three sorts of verbs may all be qualified by indirect objects, which often correspond to the dative and ablative case, or contain locative or temporal indications, or have to be expressed by a whole sentence. This gives origin to a compound sentence, of which anotleer chapter will treat. But when the object is expressed by a noun or pronoun, no distinction is made in Klamath between the direct and the indirect object, except under the restriction mentioned below. Several verbs which in English require a preposition before the object are in Klamath comected witl the objective case without postposition : kiíla gutila to enter into the ground; Aishishash
hûn gáldshni unite yourself to Aishish, 193; 11; spaútish slıniáktcla to send for poison, 13, 14.

The linguistic matter coming within the scope of the objective relation will be treated under the following headings: Object expressed (a) by a noun ; (b) by a pronoun; (c) by a verbal form. In the case of the indirect object the noun is often accompanied by a postposition. The distinction drawn between the direct and the indirect object is made from the standpoint of English, not of Klamath grammar.

## THE DIRECT OBJECT.

Only transitive and some impersonal verbs can take a direct object. The direct object, if nominal or pronominal, must be in the objective case.
A. Nouvs as objects.-The substantives of the animate class, which includes persons, personified beings, quadrupeds, etc.; all the adjectives and the numeral adjectives assume the terminal -ash, -sh in the objective case, whereas the substantives of the inanimate order, which coniprehend all the lower animals, plants, lifeless objects, and abstract nouns, form their objective case like the subjective. The possessive pronouns have to be classed with the inanimate crder of substantives in regard to their objective case.

But this rule often becomes infringed by phonetic influences, by the use of adjectives as attributes of nouns, and by other circumstances. Of this a separate chapter gives the particulars. There are a few instances where the object is expressed by other oblique cases:
li'lhankshti î'tpa he brought venison, 112, 15.
nánuktuanta pépuadshnish one who spends everything.
We would expect here: lî̀lhankshti tchulésk i'tpa and nanuktuálash pépuadshnish (from puedsha to spend, throw away).

There are also instances of one verb having two or more direct objects, commonly one to designate a person and the other or others an inanimate thing:
skû'tash sha pállapka hû'nksh they robbed him of a blanket.
ná-äns shlín wä'k E-ukshkî'shas he had shot another (man), a Klamath Lake, in the arm, 24, 2.
ilkshyéni a sha shnúka nē'p k'lăkápkash at the grave they seize the deceased by the hand, 87, 10.
Aíshishash slitilta slnû̀lash he sent Aishish after a nest, 94, 9.
One object is pronominal and the other nominal in:
gî̀tash nū'sh kū'pga nŭsh a louse bites me on the head, 119, 3.
tî̀'m shash ngä'-isha Moatoki'shash many of these Modoc men they wounded ; lit. "many them they wounded Modocs," 21, 16.
vussō̄k sas tilli'ndsa wéwanuish frightened, they abandoned their females; lit "them they left the women," $19,16$.

In the last two examples shash, as hû'nk does in others, appears superfluous to us, but it does not appear so to those who speak the Klamath language correctly.

The regular and natural position of the nominal object in the sentence is after the subject and before the verb.
B. Pronocys as objects.-When the direct object is expressed by a personal or demonstrative, interrogative or relative pronoun, these are given in the full or syncopated, absolute or distributive form of the objective case. When expressed in their full form, their position in the sentence is usually before the verb, but when the syncopated form is employed they may be placed before or after it. Reflective and emphatic pronouns are dealt with in the same manner as personal pronouns. When the direct personal or impersonal object is expressed by a demonstrative pronoun, its distance from the speaker, and the circumstance whether it is within his sight or not, is indicated by the selection of the pronomn. Even the deceased are referred to by special pronouns, as hû't, hū'ksht, etc.; for it would be a sin against the sacred customs of this people to pronounce the name by which a deceased person was known during life. The above has been referred to in numerous examples given on previous pages of the Grammar.

Impersonal verbs have their pronominal or personal object in the objective case; but whether this is a direct or an indirect object in the sense employed in the grammars of European languages is not always easy to determine. Cf. the list of objective impersonal verbs on page 430, and Note to 72, 1.

Pronouns serving to express a direct object are sometimes suppressed in the conversational form of language, whenever they can be easily supplied by the hearer from what precedes.
tsúi sa lû'luagsla then they made captives; supply: shash them, 19, 16.
sha shiníga they killed; supply hû'nksh her, 123, 7.
In 40,5 it is uncertain whether the object nîsh belongs to ndiuláksht as direct object, or to gintíltak they will lie under me, as indirect object.

Reciprocal and reflective verbs bear their pronominal direct object witlin themselves, since it is embodied in the prefixes sh- and h-sh-. Long lists of these verbs are given in this Grammar, pages 278, 279, 285, 296, $423-425$. The majority of the prefixes give a hint at the form, quality, or number of their direct objects, but these have to be expressed by separate words to make the reference intelligible. Thus luyéga nû means I pick np one round object, and pe-uyéga many of them, but léwash ball or tála dollar-coin have to be added to determine the kind of the object or objects which were picked up by me.
C. Verbs as objects.-When the direct object is expressed by a verb, this verb will either be the verb of a separate sentence, and then the sentence itself is in fact the object, not the verb alone; or the verb will assume the form of a verbal indefinite in -sh or that of a verbal intentional. This can be done only when the finite verb of the sentence belongs to certain classes, the particulars to be found under "Verbal Indefinite," pages 410413, 596-598, and "Verbal Intentional," pages 416-417, 609-610.

These matters have beel anticipated and described under "Predicative Relation."

## THE INDIRECT OBJECT.

Every verb may take to itself an indirect object or complement, and, when the sentence requires it, two or more of these may be governed by one and the same verb. The fact that the objective case is one of the forms to express the indirect object and also the direct object proves that this case is not really a grammatic or relational case, but has an admixture of a material, or, we might say, locative function. The indirect object is in its
nature much more varied than the direct object, and thms it requires different modes of expression.
A. Nouns as objects.-All the seven oblique cases and the five post-position-cases of the noun may serve to express indirect objects, though some are more frequently employed than others.

1. The objective case in -ash, -sh is employed whenever the indirect object corresponds to what we are wont to call the dative case, which is introduced by the particles to, for, at, in behalf of, against, or the locutions for the benefit of, to the damage of, etc. This case also stands when an object or thing is mentioned upon which the verbal act extends; the parts of the human or animal body or parts of the dress are frequently construed after this rule, which answers exactly to that of the accusative of relation in Greek grammar, and is, in fact, when combined with the accusative of the person, nothing else but an inanimate direct object expressed by the accusative case. Whether we have to regard these objects, when mentioned in that connection, as direct or indirect complements of the verb it is difficult to state ; but by all means this construction corresponds to what is called the accusative of relation, as previously mentioned.
(a). Instances of a personal or animate indirect object:
hîlládslıui K'mîkámtchash he ran up to Kmúkamtch, 96, 14.
at unák nä'-ulakta Aisisas then after daybreak he plotted against Aishish, $100,1$.
Bóshtin pípa mû'ni lákiash slnigota Americans sent by mail a petition to the President, 36, 21.
máklakshash wúshnû̂sh shiukiéshtka he would kill an ox for the Iṇdians, 13, 13.
mo-ówe ktchidshuash hítnan the mole running against the bat, 127, 5.
hémta m'na típia he said to his younger brother.
k'nukága mî túpakshaslı né-i hand the thread to your sister.
liä ā tídsh shutankúapka nālash if ye will negotiate with us, 38, 19.
hä nî skuyû'shkuapka m'sh if I should separate (her) from you, 61, 1.
(b). Instances of an inanimate indirect object; parts of the body, etc.:
shtíé sluupělóka nû'ss she laid resin on her head, $89,6$.
ná-ends nû'sh shlín another man was shot in the head, 21, 18. Cf. 24, 7. wä'k shnúshnězank lûluags seizing each captive by the arm, 16, 12. Cf. 24, 2.
tsni'pal sa shlin they wounded him in the shoulder, 24, 1.
híshnata a n'sh spéluish I burnt myself on the index finger.
nā'd nańkash mama'sha we have sore throats.
wátchăm tchî'leks k'lekápkash î'dsh $\chi$ a they place the horsc's flesh upon the corpse, 85, 8.
tsuyai'sh nî shlín $I$ was shot through the hat or cap, 138, 2.
hûnk E-ukshikíshash tchák máklaks shúta he created the Klamath Lake people from a service-berry bush, 103, 1. 2.

Whenever the indirect object is of a temporal import, referring to time or sections of time, it is frequently expressed by a noun standing in the objective case, as in the following instances:
knéwa pshín, or knéwa nánuk psín to put out the fishing-line for the night. Cf. 54, 6, and Note to $83,3$.
gén waítash któtchuapka it will rain to-day.
lā'p sháppash (nû) spû̀lhi I imprison (him) for two months, 61, 11.
té-unaipnî illólash (sha) túla tchía they lived together for ten years, 54, 3.
túměni illólash through many years.
2. The locative case in -tat, abbr. -ta, -at, may express the indirect object whenever this contains a locative complement to the verb of the sentence and is expressed in English by prepositions like in, into, at, on, upon, through, towarls, from, out from, out of. The ending is often dropped, especially when the nom is attributively connected with an adjective, but sometimes, also, when the object noun stands for itself, as in käíla, tchpínu below, and then may be easily confornded with the objective case.
ké'kga mbū'shan kû'metat they went out of the cave ncxt morning, 43, 3 .
lāp íshka atí käila two they took to a distant place or land, 44, 7.
vud'hitakuéla ktáyat he rollcd (him) over the rocks, 131, 11.
nā's wípka hû ámbotat one escapcd, into the watcr, 88, 7.
shnélza toks hûnk tchpínû (instead of tchpinutat) they cremated on the buryiny-ground.
40
shakálshtat laki tmélhak the tmélhak-squirrel is most powerful in games (as a charm), 134, 6.
Many other instances will be found on pages 479 sqq.
3. Besides the objective and the locative there are other cases employed to express the indirect object of verbs: the partitive case in -ti, syntactic instances of which were given on pages 477, 478; the instrumental case in -tka, page 479; the illative and the transitional case in - $\chi \bar{e} n i$ and -na, and the temporal case in -èmi, pages 482-485. The five case-postpositions are all subservient to the same purpose, and when -ksaksi changes into -ksûksi it becomes temporal, like-èmi, but refers to the past tense only.

The indirect complement of the verb is expressed just as frequently by nouns connected with postpositions, which may be of a locative or temporal character. When motion is implied, these nouns usually stand in the objective, when rest, in the locative, but frequently in the objective case as well. Cf page 554.

In addition to the frequent examples of indirect objects presented in the previous portions of the Grammar, I add the following syntactic instances, which could be multiplied ad infinitum from our Texts:
(a). Object expressed by cases and case-postpositions:
kō'l slitápka ktáyatka they pound the kō'l-root with stones, 147, 11.
tsúi sa saikënn géna then they went to the prairie, 107, 2.
slné-ilakslitala gutéktcha they went in to the fire-place, 120, 20.
wáyalpa nánuk wā̀shîn everything froze in the lodge, 111, 20, and Note. stá-ila sha kshunē'mi they gather (it) at haying-time, 148, 3.
géna hûnk, haítkal maklakuísh=gishi he then started and followed them to their camping-place, Mod.
(b). Object expressed by a noun and postposition:
at Aísis tû' kálo wikā't now Aishish (was) far aucay, almost up to the shy, 101, 6.
e-ush gunígshta käilalía he made a world for them beyond the ocean, 103, 5.
Káyutchish hû́k gátpa Kî̀uti kúitit Gray Wolf arrived at a place above Kiuti, 131, 5.
kiä'n nutuyakía nákosh gai'tant (they) threw fish to the other side of the dam, 132, 3. 4.
at lulálzat pipělántan îsh now lie ye down on each side of me, Mod.
mîsh guníta huwaliéga he ran up the hill beyond your lodge, 183; 17.
4. Forms of the composite nominal inflection may be used for expressing indirect objects just as well as the case-forms of the simple declension. This composite inflection is either binary or ternary ; instances of it may be found in the paradigms of substantival inflection, pages 493, 494, 495, and syntactic examples on page 491.
B. Pronouns as objects.-When a personal or reflective pronoun is the indirect object of a transitive or intransitive verb, it is usually expressed by the objective case in -sh, -s, unless some locative or other reference requires another case or the combination of the pronoun with some postposition.

The objective case of the personal pronoun may be used to indicate somebody's home, house, or dwelling, just as in French chez moi, ehez soi. Special forms of the reflective pronoun are those in -i, as húnitak within or by oneself, in one's mind; and the suffix -gien, -giank, -gianggi, formed of the participle of gî to aet, perform (gíank) and the above particle i; cf. page 329.
lúya mîsh nû léwash I give you a playing-bal.
shewána 'sh nadsháshak give all at onee to me, Mod.
ani'k tchákěla n's skaí tak $I$ send a basket to get me something in, 75, 9 .
lutatkátki písh shátěla he hired (her) to interpret for him, 13, 11.
tánkt mîsh mî skuyû'shkuapk finally I shall separate (her) from jou, 60, 22.
sla''bopk hû'nitak tû' sas hishō'kst he knew by himself that out there they had killed each other, 108, 5.
kaníta pî'sh outside of his lodge, lit. "outside of himself," 71, 2.
mîsh gunî'ta beyond your home, 183; 17.
The indirect object of a medial verb is pronominal, and is indicated by the medial prefix sh-, s; ; the object of some of the reciprocal verbs is an indirect object in English, and in Klamath is referred to by the same prefix sh- or by the compound prefix h-sh-. Cf. page 425.
C. Object expressed by verbs.-The indirect object in a sentence may find expression in a verb, and in that case an incident clause is usually
formed dependent on the verb of the main sentence. This clause may appear under the form of an adverbial, conditional, or other clause, and as such will be spoken of under the heading "Compound Sentence"; or the verbal object appears muder the form of a causative, intentional, durative, or other cerbal, examples of which have been presented under their respective headings in previous parts of the Syntax.

Many verbs which are accompanied by a nominal or pronominal indirect object figuring as a separate term have a way of pointing to that object by means of some sound or syllable forming an integral part of these verbs. Among these affixes we remark-fa, -íya, a verbal suffix pointing to an animate being for which, or in whose interest, an act is performed, and -pa, a suffix referring to an act directed toward the subject of the verb. Cf. -éa, -gien, and the above two, in: List of Suffixes.

The external form of an indirect object, like that of a direct one, is outlined by a number of prefixes, as a-, $\mathrm{i}-\mathrm{l} \mathrm{l}-\mathrm{n}$-, nn-, pe-, shl-, u -, and others, some of these being also indicators of number. To make the reference intelligible, the indirect object las to be added, and this is usually done by means of a noun. Léna to travel describes travel by means of a round object, and the phrase is conuplete only when we say: tclíktchikatka léna î you travel on a veagon, cart, or carriagc; théka to perforutc with something long, as a lnife, or the hand: wátitka, népatka; upáta, upátia to inflict a wound with a long article, as with a knife; wátitka, ulï'tza to linock dowen with a stick or club. The following distinetions remind us of the six instrumental prefixes occurring in the Dakota language : latcháya to split with a kuife, ntcháya to split with edge and maul, patcháya to split with some tool in lhand, utcháya to split with the long way ax or hatchet; add to this: ktatcháya to cut into strips.*

## THE ATTRIBUTIVE RELATION.

After the simple sentence has become enlarged by the addition of a direet and indirect complement to the finite verb, it can expand still further

[^74]in the direction of the attribute. The attributive relation is a relation qualifying either the verb or the noun. The verb may become qualified or deternined by an adverb, an adverbial phrase or locution, or an adverbial clause containing a finite verb. The noun, generally the substantive only, may be determined by some attributive, so-called adnominal term; this may be either an appositive noun or a qualifying noun (added to it in the possessive or partitive case), all adjective (qualitative or numeral), or a pronoun.

The compounding of words and the extent to which it is carried on forms an important chapter in every language. I have omitted it in the Morphology in order to treat more fully of it in Syntax, and in fact this linguistic feature belongs rather to the syntactic than to the morphologic part of grammar, for it finds its true position in the chapter on the attributive relation. Under the term of word-composition I comprehend the compound verbs and compound nouns only, excluding all the other ways of wordcompounding, as the polysynthesis of formative affixes, otherwise called derivation; the incorporative process, etc.

Word-composition is a process of synthesis which is of greater grammatic importance than it would seem at first to be. We have first to observe carefully which one of the terms, the qualifying or the qualified one, stands before the other, for this gives us an insight into the logical faculties of the people speaking the language. Usually the qualifying term has the precedence, because it is considered more important for the understanding of the whole sentence. The location of the rhetoric accent upon the first or the second part of the compound is not without signification, and the combination of the two elements into a new word with a curious or unexpected definition is at times of great ethnographic and psychologic importance. The compounding may be effected in two ways, whether there are two, three, or more elements to be combined into one: (a) by agglutination, viz., by connecting the elements without any or without important phonetic alteration, the parts retaining their usual accentuation; (b) by fusion, viz., by an intimate, thorough connection of the elements to form a new term, attended by the loss of accentuation on one side and an occasional entire change of signification, as well as a loss of phonetic
elements by contraction. This second stage forms the transition to what is generally called incorporation, and many of the forms produced by fusion are decidedly incorporative, like metsmetsíwals obsidian arrowhead, mîllakí head-elief.

The attributive relation thus presents itself under the following aspects :

## A. The verb, attributively qualified:

(a). By an adverb standing separate.
(b). By an adverb agglutinated to it as a prefix, and thus forming a compound verb.
(c). By the agglutination of two verbs into a compound verb.
B. The noun, attributively qualificd:
(a). By another noun placed before it in the possessive or partitive case.
(b). By another noun forming apposition.
(c). By another nour, both forming a compound noun.
(d). By an adjective or numeral.

## A.-THE VERb With its attributive qualification.

When verbs become qualified by other terms, these terms are most generally of an adverbial description. They may be either adverbs, or phrases used in an adverbial sense, or separate clauses determining the verb adverbially, that is, in regard to quantity and degree, to space, to time, to quality. These adverbial clauses will be spoken of in a separate clapter as a part of the division "Compound Sentence." Adverbial plrases are composed of two or more words forming but one idea, such as tapí títna $a$ short time afterward, pia'dshit pshin to-night, wákaktoksh in the same manner as, tû múna deep down; while others form the rudiments of separate clauses, though they have to be considered as locutions or phrases only : húmasht gînk in that manner, wák a giúga of course, nánuk pshi'n gîsht every night.
(a). Adverb standing separately.

Of the adverb the usual position in the sentence is before the verb it qualifies, and, therefore, whenever it coalesces with the verb into one word,
it becomes its prefix or first part. When standing separate, some of them assume the reduplicated form when used in a distributive sense, though the majority of adverbs lack this grammatic form ; the qualified verb sometimes assumes the distributive form also. A few adverbs are exactly like the adjectives formed of the same basis, and concerning these it may be difficult to decide whether the Indian uses them as adverbs or as adjectives; cf. wénnitoks kēk shúta he acts differently from others.

The numeral adverb corresponding to our four times, five tines, etc., and some of the locative adverbs pointing to direction, or to the points of the compass, show the ending -ni, which remains uninflected. Another series of numeral and other adverbs ends in -ash, at terminal which represents the objective case of the numeral adjective. Both endings have been discussed in Morphology, pages 530, 531.
tídsh nû húshlta I feel well, healthy.
tinā'k shniwátchna to swallow at one gulp.
pä'dshit pshín ka-á tchěmúka it is very clark to-night.
áti éwa the water is deep; lit. "it stands, fills up deeply."
a-ati e-éwa the waters are deep.
wí-uka (or uyúga) e-éwa the waters are shallow.
wewáni a sha hûnk pēn shulóta they dress differently.
ndáuni shúta hû he did so three times.
tunépni gé-u laluálatko I own five pins.
sa shlin tû'kni they shot him from the other side, 23, 21.
kokagtálkni gépgap'l' they returned over a brook, 29, 14.
Mō'dokni ndā'nash pelpeltámpka the Modocs began to work at a third place, 35, 20.

A special use is made of the numeral adverb when days and years are mentioned, which differs from English considerably. For our terms day and year are not always expressed by the substantives illólash, iltư'lsh year and waítash, wäítash day of twelve or day of twenty-four hours, but at times by the verbs ilhúla, illola (in Klamath illolola) to complete a year, to pass a full year, waíta, wäíta, waiitóla to wait or pass one day, to lay over for a whole day, or day and night. Then this verb is qualified by the adverbial in -ni, not
by the cardinal numeral, and tína once is substituted to nā'sh or nā ${ }^{\prime}$ dsh one. In mentioning certain numbers of days, waiita or waiitóla is often dropped from the sentence, the numeral alone remaining.
láp'ni illolan after two years, Mod., cf. láp'ni illólash during two years. tîna illólolatk Shā't gúikak after one year the Snake Indians left, 28, 14. Kl.
illóluapka the year will be at an end, Mod.
tína tchíank illolóla he lived one year ; lit. "he completed one year while living," Kl.
té-unäpni illolólatko ten years old, Kl.
mák'lěk tiná nat waíta we encamped and lay over one day, 29, 9.
nát waítuapk (without tína) we will wuit one dlay, $75,2$.
ndā'ni tchēk waitólank finally after the lapse of three days, 66,6 ; cf. 66 ,
8. 85,1 , and many other passages mentioned in the Dictionary.

## (b). Adverb prefixed.

Many adverbial particles, especially when consisting of one syllable only, lose their accentuation when standing immediately before a verb, and coalesce so closely with it as to appear as prefixes. A considerable number of these are mentioned, with grammatic examples, in the List of Prefixes, and are referred to on page 303 as "prefixes embodying relations expressed by adverbs," having either a locative or a modal function. They are as follows:
i-, $y$ - No. 2 (page 286), locative prefix referring to the soil, ground.
ino-, inu- (page 286) away from.
yan-, ya- (page 286) downward, down below.
yu- (page 287) downward.
k-, gi- (page 287) thus, so, in this mamer.
kni-, ku-, gu- (page 289) away, from, into distance.
1- No. c (page 291) along a side, slope, declivity.
le- (page 292) not, when used in a putative sense.
tu- No. 1 (page 300) out there, out at a distance.
u -, vit No. a (page 301) away from (horizontally and vertically).

Some other prefixes of this sort could be placed here almost as well, e. g. m-, pointing to a curvilinear motion along the ground, and its compound km -, cf. page 288. Like many other prefixes, the above often figure as radical syllables or as parts of such; cf. page 282

There exist a number of adverbial terms in the language which at times occur as independent words and at other times as prefixes to verbs or nouns, in which case they lose their accentuation. The majority of them are real adverbs, susceptible of reduplication within the compound word formed by them and undergoing apocope or contraction like the English agoing for "on going," or doff for "do off."
ká-a, ká- strongly, vehemently: kayá-a to cry aloud, for ká-a yá-a, Mod.; kayéga to begin to grow tall, for ká-a uyéga. Cf. also káhaha.
kádi-1 not, no: káyai, d. káyaiyai not to cry; kaíxěma not to know, not to recognize; kéliak not possessed of, or absent.
kúi badly: kuyéga to bccome or fall sick; kuyéwa to bc disgusted at, to dislike.
mä-, m'lhä-, prefix referring to the incomplete filling of a vase, receptacle; m'häwíza to fill partially; cf. iwíza to put into, to fill into.
mî-, mu- largely, greatly, much, the adverb of míni great: nû̂lbúka to grow as a large round fruit upon the ground (also subst.); mû'laa to be dense, thick, from mû' lqán; múlkualqa to emit smokc. From the distributive form mutchutchuyápka to laugh, smilc, it appears that mu-is the above adverb, and the second part is probably tchútchua to croak.
ná-i on one side, the inessive case of the numeral nádsh one: na-ital= télshna to ridc women-fashion, lit. "to look to one side only;" na-i= shlákgish horned beetle, lit. "pincher on one side;" na-igshtáni half. takanilza to fall right side up, from tálaak straight; nélza to lay down.
tidshéwa to rejoicc at, to like, from tídsh well, héwa to think, consider; cf. ko-ishéwa, kuyéwa.

## (c). Two verbs forminy a compound verb.

The modus of compounding a verb from two verbs is unusual in Aryan, but not unfrequent in American languages, and is extensively em-
ployed in Iroquois, Káyowē, and Atákapa. In Klamath it is frequent enough to require a separate chapter of the Grammar. When the verbs combine in one, the first one in some instances loses its conjugational suffixes, and appears only in the shape of its radix or base, while the second verb retains its inflectional elements. Compounds of exactly the same description are the verbs formed by means of the suffixes -kakiamna, -kakua, -ki (-gì), -kídsha, -tímna, all of which are originally verbs. To the following list I add after the two-verb compounds those nominal compounds, the first of which is a verb, the second a substantive formed from a verb).
lepleputia'na to play the "smothering" game, altered from léwalewa-putii'na; this from léwa to play, púta to smother.
shalatchguála to be joined to, conneeted with; from látcha to intertuine, gíwal to go or place on the top of.
shepkédsha to thank, from shápa to tell, kédsha to reply (differs here from the suffix -kidsha).
slnekē'gi to spill, waste, lose; a compound of kégi, kä'gi (ká-i gí) it is no longer, it is absent, and the radix ni-, ne- occurring in niwa to drive out.
shnukaléna to carry a round or bulky object by the handle; lit. "to hold and carry ;" from shnúka to seize, hold, léna to carry something round. Cf. shnukalenótkish handle.
shnutchóka to burn or singe to death; a compound of tchóka, tchúka to die a violent death and the radix nu- in núta to burn.
tilampudshéa to roll oneself about, from tíla to roll, púedsha to cast away, seatter, throw.
tchawíya to wait for, expeet, from tchía to sit, stay, waiha to wait. tchiluyéza to brawl, halloo, make noise, from yéka to shout, the first term being either tchiluish boy or tchilla to stay together, to side with.
Compound words, of which one part is a verb and the other a noun, are as follows:
gáma-palí-ash flowr- or grist-mill.
gínta-pápalish sneak-thief.
shalatchgípshtish room in a house, lit. "structure adjacent," from látcha to build a lodye, lit. "to intertwine ;" kápteha to be in eontaet with.
spakí=wēslı tool for breaking ice.
te-iniwíash young woman, lit. "young growing" or "newly existing;" also other terms formed of the verb wá.
tchliuyägótkislı slit in pocket-knife blade to facilitate its opening, from tchlíka to grasp, uyéga to lift up.
Remark.-To incorporate nouns or pronouns into the verb is a method of word composition frequent in many languages of Europe and Ainerica. Greek is characteristic for its facility for incorporating nouns and verbs into one term, the noun being usially the direct object of the verb. In Naluat the transitive verb incorporates either its nominal object or a pronominal particle instead of it. But in Klamath I know of no instance of this sort, for îsh lulpalpaliat make ye eyes for me again, $154 ; 11$, is not derived from lúlp eyes and pélpela to work, but from lúlpala to make eyes, -palí- for -pělí again, āt ye.

An instance of a pronoun incorporated into a verb seems to be: húmasht, d. humámaslit so, in this manner.

## B.-THE NOUN WITH ITS ATTRIBUTIVE QUALIFICATION.

The natural position of the attribute is before the qualified noun, and not after it. The parts of grammar which serve to qualify the noun are chiefly adjectives and substantives, and when two substantives unite into a compound, this is fiequently done by syncopation.

## (a). Nominal compounds expressing possessive relation.

Whenever a noun standing in the possessive (-am, -lam) or in the partitive case (-ti) is placed before another noun, the antecedent qualifies the following noun as to ownership, appurtenance, origin, substance, or material. The ending of the possessive case is sometimes shortened to $-a$, or drops off altogether in rapid conversation, and this forms the transition to the properly so-called compound nouns.

Instances of possessive case:
kōltam wásh otter den.
kúls tgé-ush (for kúlsam tgéwash) place where the badger stands in water.
lkóm a'-ush blaek lake, lit. "lake of coal."
lóloks=wï'gěnam stí railroull, lit. "fire-wagon's road."
Mö'dokisham kaíla the eountry of the Modocs.
p'gisham wéash the mother's ehille.
shlóa skútash lynx-skin mantle.
sxīl kailish otter-slin belt.
tchíkĕmen póko iron kettle.
Instances of partitive case:
kiaíla látchash earth lodge (for käílati látchash).
numeantí tapáxti lutísh thimbleberry, lit. "berry on large leaves."
núshti káko skull, lit. "on head the bone."
yaínati tikága mountain quail.
More examples will be found on page 477.
(b). Noun with its apposition.

Nouns with their appositions form a peculiar and rather frequent class of nominal compounds. In the mutual position of both there is a certain freedom, as the apposition precedes the noun just as often as it follows it.

The apposition occupies the first place in:
Aíshish kaí nû sha ûlōla I Aishish I am swinging my sword, 193; 10.
hishuákga=kóhiegsh boy-orphan.
mbúshaksh tuekótkish borer made of obsidian.
pilpil shuísh virginity song.
sessalólish lakí leader of war expeditions.
shuítchash láwalsh urine-bladder.
shû-̂̂tankétkish=páksh council-pipe, lit. "peace-making pipe," 14, 6.
skenshnútkish mbútitch sincw-thread.
skúks:kiii'm spirit-fish, viz., "fish containing a dead person's soul."
skúlhash pē't ambulanee-bed.
tchátcha:p’lí sweet sap of the sugar pine.
The apposition stands after the noun in:
í snawi'dsh you as a woman, 58, 15; cf. 59, 2. 6.
kó-e welékash the old female frog. spû'klish láwish promontorial sweat-lodge. stópalsh tamāddslı solitary peeled pine, 74, 16. tcháshkai lakí male of weasel.
tchia'lish páwa hû he eats as or like a porcupine, $190 ; 14$.
tsáshash-kiúks the skunk as a conjurer, 134, 8.
únaka m'na Aíshishash his son Aíshish, 94, 8 .
wékwak wéwanuish the female butterfies, 95, 14.
(c). Compounds formed of two or more substantives.

Under this heading are gathered compound terms which are dependent on and governed by each other. Both portions are substantives, but one of the two is sometimes a compound by itself, thus forming no longer a binary but a ternary combination. The combination may consist of a substantive of verbal origin with its direct object, or with its indirect object, or with an object accompanied by a postposition or with adverbs; therefore, compounds of this sort often contain nouns standing in the objective, locative, and other cases. Here, as well as in the majority of other languages, the qualifying noun precedes the noun qualified.

Instances of the objective case:
käíla-shúshatislı miner and mole, lit. "earth-worker."
kiä'm=luelótkish fish-trap, lit. "fish-killing instrument."
k'lekápkash iwizótkish coffin, lit. "corpse-receiving tool."
lgû'm=ldáklish and lgû́n$=10 l i e ́ g i s h ~ m o t h, ~ l i t . ~ " c o a l-l i f t e r . " ~ " ~$
lúluks skítchaltko one wrapped up in fire.
máklaksl-papíslı (for máklakshash=papísh) man-eater, lion.
nû'sh=tilansnéash turn-head.
pē'nsh lúkash=luelótkish pitfall to kill grizzly bears, Mod.
p'tísh=, p'gish=lúlatko one who has lost his father, mother.
tchikass=kshíkshnish sparrow-hawk, lit. "ravisher of little birds."
tclíkěmen=mpámptish blacksmith, lit. "iron-beater."
tchóke né-utko field with pumice-stone.
wátchash=nétzish bridle of Indian mamufacture.

Instances of otlier inflectional cases:
atí-kaílíla-gí'sll foreigner, lit. "living in a distant land."
pákshtat tulish pipe-stem, lit. "handle in the pipe."
súnde-kä'klkish preacher, lit. "Sunday gesticulator."
wáwa-tutû'ksh ear-wax, for wáwakshtat tutû'ksh, lit. "what is taken from the ears."
(d). Compounds formed of adjectives and substantives.

When adjectives become connected with substantives so closely as to form compound nouns they often appear in the apocopated form, especially the adjectives ending in -li, -ni. Numeral adjectives also appear in a shorter form. Having previously mentioned a few adjectives which appear chiefly in the form of suffixes, as -amtcl, -kani, -shítko, -tkani (pages 518-520), and also adjectival abbreviations like kál-kmă skull-cap, and three others on page 516, I add the following examples:

Ḱál=Lúlp "Round-Eye," nom. pr. masc.
kal=mómoksh glow-uorm, firefy, Mod.
kal=tchítchiks spider, from kálkali round, tchi̊'dsha to remain.
litch=katchíash strong person of short stature, from litclliftclli strong, powerful, and kétcha in ketchkáni small, short.
métsmets-síwals obsidian arrow-head.

When adjectives and numerals are used in a sentence or phrase imply ing possession, they may become connected with a participle of the past, and then stand in their objective case. To the examples previously enumerated (page 616) I add the following, all from the Modoc dialect:
hû snáwedshash vunípa weweshéltko this zooman has four children (vnnípa abbr. for vunipénash).
kudshá ánku shtinasháltko a woodrat having a wooden house.
kudshá shnawédshaltko p'gishá pĕna a woodrat had his mother for a wife. vílằm nıbá-ush tclutcliesláltko dressed in ell-shin caps, $90,17$.

## (e). Other nominal compounds.

Substantives can form other compounds-with adverbs, for instance. They take the second or last place in the compound, and their verbal nature becomes more apparent than in other compounds:
> hátak=tchítko settler, inhabitant.
> lıunáshak slıéshaslı nickname.
> kétcha bubánuish tippler.
> kétcha muatítala shléwish west-south-west wind.
> kíllan shishúkish brave warrior.
> kó-i tumĕnash noise, lit. "disagreeable hearing."
> $l^{\bar{\prime}} \mathrm{p}=\mathrm{klē} \mathrm{ks}$ (supply p'gíshap) mother who lost her children.
> múna tatánınuish mole, lit. "walker in the deep."
> nánukash=käilákni people from every land, strangers.

## POSITION OF WORDS IN THE SENTENCE.

Languages endowed with a copious array of inflectional affixes express the nutual relation of words by means of these, and need, therefore, no strict rules for position of each word in the sentence. Monosyllabic languages cannot inflect their words; therefore they indicate the sulbject, object, etc., exclusively by their position among the other words, while English, which preserves a remnant of its former wealtl of inflection, is more free in this respect, and Klamath is freer still. Nevertheless, this language follows certain principles in arranging the elementary parts of the sentence, which are disregarded only when rhetoric effects wre attempted.

The chief rule for the simple, declarative sentence is: "The subject stands before its verb, and its usual position is at the head of the sentence. If the verb or predicate does not inchude the copula (viz., the verb to be), then the copula comes after the predicate. Direct and, less frequently, indirect objects precede the verb, standing between it and its subject. The attribute precedes the noun, the adverb the verb which it qualifies." Sen-
tences exhibiting the parts of the sentence in their natural order run as follows:
nād láp méliash nā’ds $\chi$ ēks ngák tchîslı hînk shnókua we caught two trouts and nine turtles.
pálpali walwilli'gash kū'slitat liunúměni a white butterfly flew up on the pine-trec.

Incident clauses are not incapsulated within the parts of the main sentence, as is done sometimes in English, but precede or more frequently follow it, no matter whether they contain a verbal or a real, finite verb. This holds grod when the object or the attribute is expressed by several words, by a phrase, or by a sentence:
lî̂ nûsh kíá-i matchátka tpéwash he does not listen to my orders, lit. "he to me not listens when ordering."
ká-iu Bóshtinash gátpish, Mō ${ }^{\prime}$ dokni mbí-ush shulō'tantko (gî) before the Americans arrived the Modoes were dressed in buckskin, 90, 16.
nû mîsh lhûnk shéshatui watchága múměnish wawákash gípkash I sold you a dog having long ears.
sämtsálza Doctor John a gén táwi she discovered that Doctor John had bewitched him, 64, 2; cf. 13, 16. 17.
tidshéwa nû mîslı gátpisht $I$ am glad that you came.
There are many agencies which tend to modify the natural sequence of the syntactic elements in a sentence, as outlined above. All of them are reducible to rhetoric causes, viz, to greater emphasis laid upon certain words or a whole plrase or sentence. The more important a term or plrase appears to the speaker the more he will seek to bring it out by emphasis or transposition. In the following examples the narrator desired to lay particular stress upon the word which lie has placed first:
kaknegátko gî mî shulotish! dirty is your dress!
lap'nì' sha shéllual Walamski'sas.E'-ushkni twice the Lake people fought the Rogue River Indians, 16, 1.
lơla á-i mîsh nû I believe you, lit. "believe I do you."
níshta hai'ma mû'kash txû'tzuk all night long does the owl sereech for presaging, 88, 6. Cf. all the terms heading paragraphs on page 75. núshtoks máklaks shléa the people have seen me.
nûsh túla géna î! you come with me!
slikútchipk tchiká kěmutsátk on a stick walks the deerepit old man, 136, 5 ; cf. kî'shtchipk in 136, 6.
shmauyoléshtat ktchálhui sáppash after rain comes sunshine.
The following are instances of terms placed at the end of sentences for emphasis:
géna mî at hukî'sh! now is gone your spirit! 87, 15.
púpakuak a sha nánuktua îloóta, . . . . . tálatoks kíi-i they bury with him various cups . . . . but no money, 87, 4.5.

Transposition of words from the natural order, as the placing of the attribute in the possessive case after the noun on which it depends, and of. the adjectival attribute after its substantive is often resorted to to produce variety and to relieve the monotony of the regular order of words:
máhiash Aíshisham the shadow of Aishish, 96, 2.
pētch ktákta skei'itish tapi'dshnish he cuts off the left hind leg, 134, 15.
p'tisa m'nálam their father, 101, 10 : cf. 61, 19. 21.
shnû́laslitat slkkû'lelam in the nest of the lark, 95, 5.
snáwedsas Aísisam a wife of Aishish, 100, 5; cf. 13.
Probably for the same cause transposition has been made in :
nat gaì'-ûna géna hûnk ngä'-isapksh :̈̈'nok ndánna we went on slowly, carrying the three wounded men, 24,7 , instead of ndánna ngä-isípkash ii'nok.
nat wál'hha kawaliä'kuapk sä'-ug we watched then, believing they would ascend, 29,15 , instead of sia'-ug kawaliä'kuapk.

In various examples to be found on page 123 the indirect object follows the verb, as it does also in 24, 6 : nat guháshktcha shewat $\chi \hat{u}^{\prime}$ lsî at noon we started, and in numerous other passages.

The syntactie feature called ineorporation often eanses inversion and other ehanges in the natural position of the words, examples of whieh will be quoted under the eaption of "Incorporation."

In the negative, interrogative, and interrogative-negative sentenee the position of the words is in the main identieal with the one observed in the declarative or affirmative sentenee ; in the oratio obliqua or indireet mode of speaking and in indirect questions it does not differ from the sequenee of words in the direet miode of speaking (oratio recta) and the direct questions.

The syntactic arrangement of the sentenee exereises some influence upon the word-aecent. Some remarks on this have been inserted in Plonology, pages 236-243.

There is, perhaps, no part of the Klamath Grammar less subject to rules than the position of words in the sentenee. This is so beeause this language differentiates the parts of speeel better than many other Indian languages, and in regard to the placing of the attribute is even freer than Freneh, English, and German. In some points all languages of the world agree, as in the plaeing of the eonjunetions at the head of the sentence; the subjeet also leads the sentence in the large majority of languages when it is expressed by a noun.

Many other indieations coneerning the position of words are disseminated throughout the Grammar, as in the ehapter on adjectives, pronouns, and partieles. The negative partiele $\underline{k}^{2}-\mathrm{i}$ usually leads the sentence, but the putative negative lē not in most instanees stands immediately before the verb qualified by it:
pî hûnk nen ak lē képka he does not want to come, he says.
wátehag lē génug wáwa a dog howls for not (being permitted) to go.

## THE SENTENCE.

## STRUCTURE OF THE SENTENCE.

The simple sentence is the most frequent and also the most ancient form of the sentenee. This form need not contain anything else but the subject and its predieate, or, when the latter is a transitive verb requiring an object,
the subject, object, and predicate. The next step to a ligher complexity is the coordination of two or more sentences, which may stand in a continuative or in an adversative relation to each other. Next in order is the compound sentcnce, in which one or more clauses are placed in a relation of dependency to another clause which figures as the principal clause. Many statements which, in English, would figure as dependent or incident clauses, are, in the more synthetic languages, as Klamath, expressed by participles, and more especially by verbals, which of course do not form sentences by themselves, but express verbal ideas subordinate to the main verb. Languages showing a complex structure in their sentences presuppose a considerable mental development in their originators. The latest form of linguistic evolution in the sentence is the incapsulation of many sentences into one, implying interdependence of many sentences from a single one. Languages in the primitive stage do not show this, and even in the best developed languages it is a difficult inatter to combine incapsulation with correctness of expression. Our Klamath language has remained free from this stage.

The above considerations prompt me to divide this syntactic section into two portions : the simple sentence and the compound sentence. Many points discussed in the first portion apply as well to the principal clause of the compound sentence, and partially also to the incident clause; e. g. what is said concerning certain particles and the negative form of speech.

## I. THE SIMPLE SENTENCE.

According to the intention or spirit in which a speaker may address his hearers, and the various rhetoric modes consequent upon it, the simple sentence is subdivided in the declarative, the negative, the interrogative, the imperative, the exhortative, the exclamatory sentence. Coordinate sentences, when they are in the slape of principal and not of incident clauses, I also consider as simple sentences.

## A.-The declarative sentence.

This form of speech, also called affimativc, is used in communicating thoughts or news, in stating facts, in uarrating stories, fables, mytlis, his-
toric events, and also figures prominently in the oratory and poetic style. The declarative mode is the proper form for this sentence, the use of the conditional mode being rather scarce. Potentiality and possibility may be expressed by the declarative sentence also.

> B.-The negative sentence.

Whenever a sentence las to be negatived, negation is expressed by two particles: $\underline{k}$ á-i, sometimes pronounced $\underline{k} a i$, and $\mathfrak{l e}, \mathfrak{l e}, \mathfrak{l i}$ not. They are words standing separate in most instances; but there is a number of verbs and other terms to which they become prefixed, to be enumerated below. Cf. pages 292. 632. Kíai forms several compound particles.

The difference between the two particles consists in this: kiti opposes a flat denial to the statement contained in the verb or sentence, and is, therefore, used in negative replies: no! whereas lē innplies̉ a putative denial existing in the minds of those acting or supposed to act or speak. Kí-i stands at the head of the sentence, before the verb, and this nay have prevented the formation of a special negative inflection of the Klamath verb, which exists in so many foreign and American languages, e. g. of the Maskoki and Algonkin family; there the negative particle figures as a suffix to the verbal stem. Its position before the verb it has in common with all other particles; it also accompanies imperatives and exhortatives as a prohibitory adverb when, at the head of a sentence, it is pronounced with emphasis and a raising of the voice.
kí-i an túsh shléa pûsh I have not seen him anywhere.
ká-i nād ukaňō̄sh lúashtat shléa we do not see the moon through the fog. ká-i kélank gákuat shlánkoshtat, ké-uni at gákuant! do (ye) not run fast over the bridge, but go (ye) slow!
káá-i nû shéshatuish â-i gî! I am not a trader!
Particles and other terms derived from ká-i not are: káyak not yet, káyu, ká-iu before, kaítua nothing, no one, káyutch and káyu never, ká-itat:l nowhere, no more, never, kéliak or kaíleak being without or deprived of, absent, kíya to tell lies, késhka to be unable, kédshika to be tired, exhausted, kei'gi or káyčecke to be gone, not to exist, to le weak, with its derivative heshēe'gi to kill,
ká-ikěma not to know, etc. Cf. also page 633. The use of these terms negatives the whole phrase or sentence, and examples for their use may be found in the Dictionary. Another negative verb to be unable, and parallel to késhga, is tchána: nû pépelash tehána or telánish I cannot work, lit. "I do not know how to work." On the construction of these two verbs, cf. page 598.

A passage in which $\underline{k}$ d-i stands at the end of a sentence is $87,5: \mathrm{kmar}$ yámnash tchîsh, tálatoks ké-i skull-caps and beads, money none. But here kí-i negatives not a whole sentence, only a noun, that is a portion of a sentence. Our no! when it forms a reply to queries, is usually expressed in Klamath as a whole sentence; cf. Dictionary, page 162.

The other negative particle, lē, is of a putative character, and is used only when the denial is a conditional one, or when it is not outspoken and existing only in somebody's mind, or when it is only in the stage of uncertainty or doubt, and is not uttered as a flat denial. Le composes the interrogative particle lish, the verb laki it is gone, lewé-ula, and several other terms to be found in the List of Prefixes and in the Dictionary. Cf. also lé wak, ké-i wak, on page 458 and in the Dictionary.
lē nû ak géna $I$ do not expect to go.
lē nû wák I am uncertain; I do not know.
lē wé-ula a n'sh sha they do not allow it to me; cf. $23,9$.
pî hûnk nen ak lē képka he says he don't want to come.
In the negative sentence the position of the words is the same as in the declarative sentence, le and $\underline{k}$ ki-i preceding the verb. In the negative questions the interrogative particle leads the sentence: wák gî hî káai-i gépk? why does he not come?

## C.-The interrogative sentence.

In the interrogative sentence the query is put either directly or indirectly. In the language of which we treat the position of words in the direct question does not differ from their position in the indirect question. Indirect questions form here as elsewhere incident clauses dependent upon the finite verb of a principal sentence, and hence follow the structure of the incident clause; of this a later chapter will treat. Thus we will have to deal here with the form of the direct question only.

The dircet question begins either with an interrogative particle of pronominal origin or with the interrogative fi, lhá placed after another term or at the end of the sentence, or with some interrogative pronoun standing at the head of the sentence in one of its inflectional cases, usually the subjective. One of the particles, tám, oc̣curs in interrogative sentences only, but there is no distinction made between particles introducing questions which require affirmative replies and those which elicit negative replies. The verb usually closes the sentence.

Questions introduced by an interrogative particle:
tatá î gepkuápka? when will you come?
tát î géna? tát āt géna? where do you go? where do ye go?
tatá māntch î tchí-uapk lákiam látclashtat? vunípni hak waítash how long will you stay in the chief's house? four days only.
tát gîsht slnnawédslash û'nk? where is that woman? (Mod.)
tuatála tak î letelína? why did you not let it alone?
wák î pà'dshit húshlıta? (Mod.) wák î gî gén waitash? (Kl.) how do you do to-day? wák gî? why?
wák lish î giníga káti nîsh wálza? why don't you reply to me?
wakaitch nû ûn né-ulaktak? how shall I decide now?
wák ma? or wák nen? what did you say? or what did he say?
Questions introduced by an interrogative pronoun:
kánam kēk í-amnash? whose are these beads?
kaní haítch hût gî? who is he? who is she?
kaní gén pakolesh shlín? who shot this mule-deer?
tánk î méliitish shnókna? how mamy trout did you eateh?
tuá î húslıkanka? what do you think about?
tuá î yewántku ki? what are you filled with?
wáktchi n' ûn gítak ? what shall I do now?
Tám, a purely interrogative particle untranslatable in English, like num or $a n$, or the postpositive -ne of Latin, introduces questions when there is no other particle to introduce them. It frequently connects itself with other particles for reinforcement, so to say, and precedes them: tamí (for
tam hú), tám hai, tamá (tam há), tamúdsh, and (Mod.) tám lislı, tamú lish, tamû há.
tím lish á-ati e-éwa? are the waters deep? Cf. page 631.
tám lish i-i tchúi túměna ? i-ī, nú túměna! do you hear me? yes, I hear you! (Mod.)
támûdsh kēk híshuakga hémkanka? ean this boy speak?
tamú a pá-ula mā’l? did ye finish eating? (Mod.)
tamû' lish à mulóla? are ye ready? (Mod.)
Há, ha, -á, -a, a, always occupies some place after the first word of the sentence and refers to actual time or the time being. It expresses nearly what we express by a raising of the voice toward the end of a question. When it stands alone for itself, it signifies that a question has not been well understood.
ámpu a? ̂̂, ámpu! do you want water? yes, I want water!
at há pítcha lóloks? i, pitchō'la at lóloks! is the fire gone out? yes, the fire is out! (Mod.)
hûn á nánuk kō'sham wákwakshtka hựntka há î táměnû? did you travel on the top of every pine-tree there? (Mod. myth.)
ká-itak lá î nîsh lóla? did you not believe me?
shaná-ul' í ámpu? do you want water?
tálaák há? is that eorreet? is he right?
tuá há aká ûk? what eould this be?
tuá ha î shlia'popk? what are you looking at?
Direct questions may be put also by merely using the special intonation of a questioner without any particle or pronoun heading the sentence.
néwatala ̂̂ hût (or ut)? did you dip this (cloth) in water?
shuhûluléna nāt? shall we skip down? 119, 23.
D.-The imperative sentence.

Sentences of a mandatory character may be expressed in a harsh manner as a command, belest, or in a more kindly, patronizing mode as advice or counsel. The jussive mode, or imperative proper, serves best for the
command, while the exhortative form in -tki expresses the second or adviceform. It is the verbal intentional, either in its full or abbreviated shape. The structure of both kinds of the imperative sentence differs in nothing from that of the declarative sentence, if we except the point that the pronoun of the person addressed is with greater freedom placed either before or after the verb, and is sometimes repeated. The exhortative form is found connected with all the personal pronouns. Interjections used in mandatory sentences are mentioned (pages 568,569 ); the negative particle introducing prolibitory sentences is $\underline{k}$ it i . Sometimes the form in thi is replaced by the future tense in -uapka.

Examples of the jussive sentence:
gén' āt kúni, luéltak ma nû ûn! ye go away (or) I shall kill you! (Mod.) gún' î gánktak! make him stop! (Mod.)
ká-i gé-u kshínksh guizídshi! don't cross my fence!
nûsh pélak kitch obli ! get away from me quick!
tchím' î shnóki! here! take this!
Examples of the exhortative sentence:
ká-i a hûn guné tashtínt a! mobody dare to touch that!
kaítoks nî'sh tî̀'-una Lěmaikshína káyaktgî he should not pursue me around Shasta Butte; 40, 3.
nûsh i-akashétki! press your foot upon me!
n̂'tch hû́nksh gaímpělitki! let him go home!
ni'ts gint (for gíntak), shlil'tki nûsh! never mind, they may shoot me! 22, 10 ; cf. 17, 9.

## E.-The exclamatory sentence.

It differs from other sentences, not in the mutual arrangement of the words composing it, but by a frequeut use of interjections and a raising of the voice to a higher pitch. The dropping of the verb is very common in sentences of this sort, especially when they contain a wish or command. A list of the interjections usually occurring is presented in Morphology ; a particle often employed in them is útch, ûds! never mind! mostly con-
nected with gîntak, gi'int. Útch gi'ntak! let it go! is said when something is held tightly.
giikín a nā't! û'tch nā̄lsh hushtchō ${ }^{\prime}$ ktgi! let us go out, whether they kill us or not! 17, 9.
génu î git', o-ólka, kinhiä'na! come right inside, o little pigeon! 182; 4. ya! atî' a nā'lsh winnî' $\chi$ itk tuâ' ki! to be sure! he is somelody much stronger than we are! 112, 11. 12.
káá- $\chi$ aí hû̀kt gî! it is not he! (Mod.)
tû'sh ak nen hî'k wák kie'la? what ean they be doing somewhere? 110, 19.
tútutu! wennínî tuá gátpa! by heavens! some strange man has eome in! 112, 7.
ûk haí! uk ta wē’k hû, tuán a! why! perhaps he did some evil to him! (Mod.)
ûtch gíntak am nû gē'nt! I have a good notion to go!
û'tch gíntak am nû ḱá-i gît! I have ehanged my mind and will not do it!
F.-List of partieles frequently used in the simple sentence.

Under this heading I have gathered a number of particles, partly untranslatable, or to be rendered in English by a separate plurase or sentence only, which are peculiar to Indian speech and of rather frequent occurrence. Among them are two oral partieles, which in recounting stories are repeated to satiety by the Máklaks ; similar particles are introduced into almost every sentence of a narrative by Iroquois, Omaha, Ponka, Tónkawe, and other North Ainerican Indians. Some of these particles must be considered as adverbs, while others participate more of the nature of conjunctions.
a. The declarative particle $a$ represents the idea of actuality, action at the present time; it stands either separately or forms the declarative mode of the verb, or words of verbal origin, or composes suffixes, as -óga, -tka, -llapka, etc. Standing separately it points to the present tense, and is more frequently used in this function in the northern than in the southern dialect. In sound it is like the interrogative á, and should not be confounded with it.
at a nā'lsh pinū'dsha now she has eaught up with us, 121, 22.
i a shuáktclaa you are just weeping.
kínk a nî sii'tı I am counting so many, 70, 9.
uî a gaitpa piïp I, the marten, am eoming, 177; 10.
shmédshua telin̂'nk at pén a then again they went to gamble (Mod.).
Instances where a coalesces with other particles or words may be found in Dictionary, page 15.
at now, presently; at that time; then, hereupon, finally. 'This particle may be abbreviated into $\bar{a}$, and is pronounced mostly with the vowel long; (at); it either points to the present tense or to an act preceding (cf. page 584) or following another act. It can serve as a conjunction or as an adverb, and its position in the sentence is very free; when it becomes the final word of a sentence it is generally pronounced with emplasis.

When closely connected with other particles, at often fulfils the office of a mere expletive: tchá at now, presently, 87, 14; tchíi at hereupon, 23, 4; and in the following particles taken from Modoc: tchíkink at and then, for tchík lıû'nk at; átchkûnk then, for at tchēk lıûnk; átûnk, átchûuk then, hereupon, for át lıînk, at tclîsh hûnk. Other particles are subordinate to at in locutions like the following: átû, átui now, at present; átûtû just now, alrearly; átch, áts then, for at telîsh.

1. At used as a conjunction :
at gátpa at shlo'kla when they had arrived they shot at the mark, 100, 20.
it'há ûnk nánuk tchulíshtat, tchulían ûnk át kin all beads he plaeed on his buckskin shirt and thereupon he dressed in it (Mod.).
Wanága lıûnk at génıpčle, í-amuash nánuk î'tclıa i'kgan after Young Silver Fox had returned home he won all the beads (from them; Mod.).
2. At serving as an adverb:
at nû khéwi now I quit ; now I have enough of it.
át nen gépka pē'n a now they eome again, said they (Mod.).
áts (for át tchîslı) nál ne tuána shuédshipka now they approaeh us again for gambling (Mod.).
ḱá-i ktchálhui ukaúzōsh pia'dshit at the moon does not shine to-night.
tuá nād sluté-uapka at? what shall we do now?
hai, ai, ai, a-i (Mod. haí, kaí, ұaí, ai)—enlarged haítch, aítclı. This particle, whenever translatable, corresponds best to our evidently, clearly,
of course, as you see; it conveys the idea that an act or state is visible or perceptible to somebody or to all in its process or through its effects, or can be observed at the time being. It alyays refers to the verb, not to the object or any other word of the sentence, conveys emphasis, and brings on a higher pitch to the whole sentence. Hence it often stands in interrogative sentences when the interrogative pronoun or particle heads the sentence; also in exclamatory phrases. As a rule it holds the second place in a proposition, and the enlarged form haitch, though more impressive and emphatic, does not differ from haí as to its position. It may be stated that hai, haitch refer to the sense of vision in the same manner as mat and nen refer to the sense of hearing. Examples :
at kái kapatá wálhlaks but evidently they landed white being watehed (Mod.). géna ai sla they have gone, as I have seen.
lû kaí at géna! there he goes now!
léshma ai î' nálsh certainly you will not diseover us, 121, 10.
Meacham kaí hit pípa ítpa Meaeham openly laid down the doeument, 34, 6. 'mûtch đaí nîsh shishúlqa the old man wrestled with me (Mod.).
shlä' wish á-i nîsh wílhua the wind blows at me (you and I feel it), 155; 25. Cf. 165 ; 6. 171 ; 71.
tídsh kaí nû húshlta I am in good health, as you see.
tû'sh hai at tátaksni wawatáwa where the elilldren sat outside the lodge, as seen previously, 121, 7.
uk haí la gēn, nitú $\not$ ai núk tchúi tchēk u hû’kt gî! certainly, this time I reasonably suppose that it is himself! (Mod.)
wélwash kaí nîsh palálla my spring has run dry, I pereeive, 173; 4.
Connected with other particles, haí, aí appears in tchawaí now then, from tchátu haí ; wakaí? why? from wak haí, Mod. ńk'laai.

The enlarged form, haitch or aítch, occurs in :
káni haitch hût gî? who is he or she?
tatá māntch haítch hûk híshuaksh mā'sha ? how long was this man siek? (viz., how long did you see him to be sick?)
tuá laaitch hût gî? what is that?
tnshtal haitch sha géna? which way did you see them go?
n̂k haitch mîsh nû û'n sha-amakpákta? how ean I call you one of my relatives? (Mod.)
wakaítch? wakii'tch? why then? tutsh haitch? where then?
11at, abbr. ma, -m. This particle serves to partly supply the want of special grammatic forms for the indirect mode of speech, or oratio obliqua, by which sentences or speeches pronounced by others are referred to or reproduced by the relator. The adverbial particle mat refers only to facts, aets, events, occurrences to be spoken of, or to the condition or state observed upon somebody or something. It makes no difference whether the events occurred long ago or recently, or whether they toek place at home or in foreign parts, provided the one speaking relates them from hearsay. Mythic stories usually begin with mat, ma, which occupies the second place in the sentence, and refers to the whole story. It corresponds nearest to our alleged by, as they say, as reported, etc., and to the Latin uiunt, ferunt, dicunt, ut fertur, etc. Verbs of saying, telling, etc., are usually omitted, for mat supplies their function, or directly supplants them, as in the sentence below: tche mat hûk. The form mut, $190 ; 19$, is the oral particle mat with $\hat{u}$, hu infixed, which points to elevation or distance.
hémtchnam: "s $\chi$ otk' îsh!" they shouted: "eross me over!" (-m abbreviated from mat), Mod.
hû'nk kíti mat pîsh siúkat I did not kill him, as alleged, 64, 5.
kápaltch" á, ma, ká-i tû'sh kéluipktak shtinā'shtat kánam "gather stalks!" the story says, "and do not go to amybody's lodge amywhere." (Mod.)
Kmúkamtch mat kiiíla shúta Kmúkamtel created the world, we are told.
shuétchna mat sha, shnéna mat sha lńloks they ure said to have gone from place to plaee gambling and making camp-fives; Mod.; cf. 99, 2.
Skülamtch mat tchía shetxé-nnalt\% Tchashgáyaks Old Marten, they say, was the elder brother of Little Weasel, 109, 2.
tuá ma? what is it?
túmə̆na nû máshish pîl mat pá-ula I hear that the patient has at last been eating, 140, 7.
tché mat lin̂k thus he said, as reported (Mod.).
nen, abbr: nĕn, ne, né, $-n$, the other of the two oral particles in the langnage, may, whenever translatable, be rendered by alleged by, as they say, as reportcd, like the preceding one, but it also supplants the verbs $I$ say or said; he, she says, said; they say or said so, so I am told. Not only words spoken by oneself or others are referred to by this ubiquitous particle, but also musical sounds, sounds of nature, noises, cries of men or animals. It, however, does not refer to acts, events, situations, like mat. This may be better understood when considering its prefix $n$-, which refers to motions extending along the ground or the earth's surface ; cf. néna, nénu (nä'nû), népka, népaksh, in Dictionary. This particle, which saves many circumlocutory sentences to the natives, differs also from mat in its capacity of heading a sentence, and serves, like mat, to introduce verbatim quotations or indirect speech. Nen also stands for to name, to call; cf. page 458.
(a). Nen referring to sounds, noises, etc.:
kanítani nen kaní gì ? who is outside? (nen referring to the noise heard outdoor).
nä'n u wíka=shítko múkash hä'ma an owl is hooting apparently close by, as I hear, 192; 2.
nû ai nen nûtû'yamna I am buzzing around, you hear, 165; 16, and Note; said by the wasp.
(b). Nen referring to spoken words, often as a mere expletive:
átěnen (for at a nen) gakáyōluapka, ná-asht nen wáltka now they will leave the woods, so I hear them say, 23, 5. 6.
$\bar{a}^{\prime}$ t ne tchúi tchëk Aíshislı gépka this time Aishish has come, so ye say yourselves (Mod.).
húmasht tchí nen hémkanka í' that's the way you talk! (we heard you).
kéa-i nû nen kí I shall not do what you say.
kéksha ak nen wénkat these men would have died, I am told.
kliká nû nen I say I have no time.
lakíam ne únaka npadsá ne at now they have made blind the chief's son, as reported (Mod.).
nēı ka tánni ak that's all, lit. "just so far they report."
nē'nt nēnt! that's the way! (the way to say, to call; for nén at). shleá tcl'lhînk tû'gslitakni, at nen "gépka pén a" and when those on the other side perceived (the smoke), they said (nen) "now they come again" (Mod.).
shli't nîsh a nen! shoot ye at me, I say!
tát ne gémpka? where did she say she rould go?
tuá î nen lémkank? what do you talk about?
tuá nen? what is it you say or said? cf. 41, 14.
t $\overline{\mathbf{a}}$ 'dsh, tä'ds is another conjunction used in connecting sentences of an adversative import. It introduces a more unexpected contrast than tak, taksh, and answers to our in spite of, although; it does not occupy the first, but usually the second place in the sentence. A considerable number of instances were given in the Dictionary, page 382.
tak, tok, tûk, enlarged taksh, -taks, toksh, -toks, tûksh, is a connective particle, the fuil significance of which can be studied only from its use in the compound sentence. Nevertheless, some points may be brought out l.ere concerning its use in the simple sentence. It belongs to the enclitic particles and does not reduplicate; sometimes it can be translated in English, sonetimes not. Its purport is either of an emphatic or of an adversative, disjunctive nature, and when used in the latter sense it corresponds in many cases to the German doch. It is appended to all parts of speech, though after substantives it occurs but rarely; cf. 100, 20. Vowels before tak, toks often become elided through syncope; e. g. télintok for telinatok. The enlarged forms of the particle virtually possess the same signification as the simple ones, but words and sentences are connected by them more closely to what precedes, and they are not employed to form a future tense; I have therefore treated both in separate articles in the Dictionary.
A.-The cmphatic use of tak, toksh appears:
(a). In the emphatic pronoun : nútak myself; luntak limself; káhaktok whatsocver, 71, 7, etc.; cf. Emphatic Pronoun, pages 552, 553.
(b). In verbs like the following: nû kmákatoks I look all around; cf. nû kmáka I look around.
(e). After adjectives: ké-mitoks quite slow; kó-idshitoks rather bad ; wénnitoks quite strange, abbr: from wenníni different, curious, strange; nd̄̄nnántak but for three, 142, 15. After substantives it is found in $71,7.8$.
(d). After adverbs like the following: kánktak enough, so far, cf. kánk so mueh, so many; tapítak right after, cf. tapí lastly, at last; tímktaks long ago, cf. tánk some time ago; ká-itoks not at all, kí-itoks nû híshkanka ká-i gátpîsht I despair entirely of his cominy.
Cf. also page 531 (first example); it appears twice in hátaktok right there, at the same place; cf. hátak here. It connects itself also with - nany conjunctions: at toks, h:i'toksh, etc.
B.-The particle tak serves in forming a future tense, thongh more regularly in the Modoc than in the Klamath Lake dialect ; cf. Future 'Iense. This use is but a special application of the use indicated under D, q. v.
C.-Tak is used in an adversative sense, to mark contrast, difference in quality, time, etc., in such connections as the following:
ká-itak lá î nîsh lóla? did you not believe me?
kó-idshitoks wásham tchúleks eoyote-meat is unpalatable (when compared to the meat of other quadrupeds).
 ing ground (but they do it no longer).
D.-Tak, toksh serves to connect two co-ordinate sentences, when one of these stands in an adversative relation to the other, though not syntactically depending on it. It then corresponds to our but, however.
nā'dshak lıûk hîshuákshlank K'múkamtchash, nánka toks káti-i shanahö'li one only eonsorted with K'múkamteh, but the others did not want him, 95, 11.
. . . . nā'slı wí-uka kshē'slı; kshawínasht tûksh kaítua wí-uұant . . . . they goin one eheck; but if they (the teeth) fall unequally, they win nothing, $80,4.5$; cf. 71, 2.
Other particles connecting simple sentences are pén, tchîsh, abbr. tch, ts; tchē k or tchīk; tchúi, tsúi and its compounds tchńyuk (tchúi hîk), tchńyunk (tchúi lû̂nk), átchui (at tchíi), all these of a temporal im-
port. They present no syntactic difficultics; the list of conjunctions, pages $556-560$, and the Dictionary fully suffice to teach the uses made of them, which mainly consist in connecting co-ordinate sentences.

## II. THE COMPOUND SENTENCE.

Compound sentences consist of two or more clauses with finite verbs showing some temporal, causal, or other logical connection, and forming but one period. When the compound sentenco is composed of two clanses, one of the two is subordinate to the other; when composed of three or more clauses, one of them figures as the principal clause, the others being dependent of it. The sign of connection between the principal clanse and the incident clause or clauses is a conjunction. Clauses may be embodied also in sentences in which the finite verb is replaced by a participle or verbal; but then they are not clauses in the grammatic sense of the term, although they may fulfill the same syntactic office as these. Compound sentences may also be formed by a multiple system of clauses, one of these clanses being dependent from a principal one, the other clauses being incident to the one depending directly from the principal clause.

What we express by incident clauses is often rendered in Klamath by - copulative sentences co-ordinate to each other; and it may be stated as a general principle that in the languages of primitive populations the co-ordinate sentence is a more natural and frequent syntactic form of expression than the compound sentence.
kaígi a n'sh tchō'ksh, hí ni génuapk though one of my legs is lame, I shall walk to the lodge.

Nothing is more common in our literary languages than subjective, objective, and attributive clauses, terms which express the fact that subjects and objects of sentences and attributes of nouns are not rendered by single words but by sentences. This practice is greatly favored by the extensive use of the relative pronoun and the numerons particles derived from it, as well as by the analytic character of these languages. But in Klamath and many other Indian tongues the relative pronoun is seldom employed, certain particles possess a more limited function than ours, and
the synthetic character of these languages militates against an unlinited use of incident clauses, the structure of which is not so developed nor so intricate as in our tongues. Hence our subject-, object-, and attributeclause is in Klamath mostly rendered by a participle or by a verbal, and this gives to the sentence an eminently synthetic (either adjectival or adverbial) turn. Incorporative locutions also replace some of our incident clauses, whereas the comparative, superlative, and minuitive of our adjective, sometimes of our adverb also, usually have to be expressed by two sentences, which are usually co-ordinate and not subordinate to each other.

As will be seen by the introductory words and the list in the article "Conjunction," pages 556 sqq., the language has a considerable number of conjunctions introducing incident clauses, some of which are found in principal clauses as well. But our while, when, after, beeause, for can be rendered by Klamath conjunctions in rare instances only; there are verloals in the language which are intended especially for the expression of these. No particle in Klamath corresponds exactly to our and, but, however, though, then; but there are expedients to express the ideas contained in these particles as clearly as we can express them. Some of the conjunctions do not stand at the head of the sentence.

When verbals are found in texts where we have to employ incident clauses with a finite verb, their subject usually stands in the objective case, a mode of synthesis which strikingly resembles the aceusativus cum infinitivo construction of Latin. The use of the verbal indefinite in -sht corresponds in many instances to the ablativus absolutus of Latin and the genetivus absolutus of Greek, since in both the subject has to differ from the subject of the principal clause and the verb is not a finite verb. As.far as syntax is concerned, probably no parts of Klamath speech offer more analogies to Latin and Greek grammar than the verbals and participles.

Correlative sextences consist of antecedent and consequent clauses introduced by pronouns or particles corresponding to each other in their signification, and therefore called correlatives. Disjunctive words used for this purpose are: the one, the other; on one side, on the other side; either, or; where, there; when, then; etc. One of the two sentences, generally the antecedent or the one first in order, is subordinate to the other, but in Klamath
this is evidenced only by the pronoun or particle introducing it, not by the position of the words. In the main sentence or apodosis the correlative term is not unfrequently omitted for brevity, especially in conditional sentences.
hä sliuápkst, tehä mā'lsh ngátuapk nálhlis if ye will be shot, then to you will snap the bowstring, 21, 10.
tánktě nát hû́nk tatátec nat sukō’lkip’l, tánkt sa hî̀uk gáwal kikaskínkatk whers we gathered in a crowd at that time, then they found him as they walked alout, 24, 19. 20.
tiaitáktak hûk kálak mā'sla, gai'tak ubá-uslı ktû'slika as far us the relapsed (patient) is infected, just so large a (piece ot) buckskin he cuts out, 73, 2.
The position of the words in the incident clause, which forms such a perplexing feature in the grammars of Germanic languages, is identical in Klamath with the position of words in the principal clanse. The only addition is formed by the conjunction introducing the clause, and if the words are arrayed in anotler than the usual order, this is done for purely rletoric reasons.

The incident clause is not incapsulated within the main or principal sentence, but precedes or more frequently follows it, as pointed out on a previous page, where examples are given.

Suldivision.-The various kinds of incident clauses necessitate a subdivision of them into classes, and I have classified them under the following headings:

Conditional clauses.
Adverbial (temporal, etc.) clauses.
Relative clauses.
Indirect questions.

## A. THE CONDITIONAL CLAUSE.

This clause is formed by a sentence stating the condition or conditions under which the fact or circumstance expressed by the principal clause takes place, and is subordinate to this principal clause, whether it stands before or is placed after it. It is conmonly introduced by a conditional
conjunction, as hä if, and to this corresponds, at the head of the apodosis or main sentence, another conjunction correlative to the above, like tchii then, though this is frequently omitted. There are instances, also, when the conjunction of the conditional clause is dropped and that of the apodosis alone is inserted.

Hii, he if, supposing that, is proclitic, and mostly used in a purely conditional, not often in a temporal sense, like our when. It often combines with a, -tak, -toks, tchîsh, tchúi into a compound particle, and then becomes accented, as in hï'tak, hä'toks, hiia' a toks but if; hä tchúi, abbr. hä'tchi, hä'tsi if then; hä' tchîsh, abbr. hä'tch and if. The terms for if are usually inflected or case-forms of pronominal roots, and so hä seems formed either from há on hand, by hand or from hut this one* by the addition of the tentporal and local particle $i$. Hii usually connects itself with the declarative mode, but the conditional mode is not unleard of ; cf. 87,5 .

In the apodosis, tchai then corrcsponds correlatively to the hai, he of the subordinate, conditional clause, but is very frequently omitted or replaced by some other particle. Its vocalic ending is analogous to that of häi if, and tchä, tche is etymologically connected with tchá-u now, at the present time, and with tchēk finally, at last. Tche $\bar{c}^{\prime} k$ is nothing but the particle tchia enlarged by the demonstrative adverb $k \bar{e}, k e$, abbr: - $k$, is usually postpositive and often ends the principal clause, especially when connected with the future tense. But it also stands for our until, and in that case introduces statements of a purely tenuporal import.

If the act or state described by the incident conditional clause is laid in the future tense, the Modoc dialect prefers the use of the particle -tak (not -toks, -taks) appended to the base of the verb, while the northern dialect clings to the suffix -uapka. For the sake of parallelism, Modoc repeats the same form in the apodosis and often adds the particle ûn, ûn a, úna in one of the clauses or in both. This particle is temporal, and corresponds nearest to our sometime, but is not often translatable in the English rendering of Modoc sentences.

[^75]haï nánuktua kú-i gî'-uapka, tánkt nî shnäkělui-uápkan î'-allhîshash if he does verong in everything, then I shall remove the guardsman, 59, 18.
hä'toks î láp snawai'dsaluapk, nai'-ulakuapka m'sh . . . . but if you should marry two wives, I shall mmish you, 60, 18.
haí tchi m's snáwiidsh gáskuapk . . . , , kéti spuní-uapk a m'sh wátclı then if (your) wife runs away from you, she need not transfer a horse to you, 60, 14. 15.
hä' tchilloyága lō'k shíuka, át hî̂k sheshalólesh kำéxa when a young mun lilled a grizzly, then he was made a varrior, 90, 19. 20.
kukaluák takslı takanílkuk gélza, tsúi sha nā'sh kshē'sh wí-uza if the lower (teeth) only come down in falling right side up, then they win one cheek, 80, 3 (takslı stands here instead of hï). Cf. $80,4$.
wakiánua hissúnuk, tehätch nísh ká-i siúgat should I reenr to magic songs, then (the spirit) might not kill me, 129, 5. (Here the conditional clause is expressed by the verbal causative.)
wátchag wawí-a î-unégshtka, knílitchai nı’l úk if a dog whimes just after sunset, it is a bad omen for you, 133, 6.

Sentences in the Modoc dialect:
hä káá-i haí nîsh lóla î, vulanuápka nû nanukénash if you do not belicue me, as I see, I will ask amybody.
hä î páltak, spúllitak sha mîslı ûn if you (shall) steal, they will lock you up.
liä î în shléatok tuá, mîsh nû ûn shéwant a if I find something I may give it to you.

THE CONCESSIVE CLAUSE.
Concessive clauses have to be regarded as a special sort of conditional clauses. They are introduced by a concessive particle like thongh, althongh, but, nevertheless, and Klamath expresses them more frequently by the use of verbals and participles than by the finite verb, joined to the particle gint or gintak, which in most cases occupies the second place in the sentence or phrase. This postpositive location of the particle is due to its verbal nature, since it las originated from giant, gíant ak, and was contracted to gínt like
the suffix -gink from giank. Its original meaning is, therefore: "may be, could be so, perhaps, for instance," and from this the concessive though has gradually evolved. The Modoc dialect seldom uses it, and the instances below will show how frequently it is connected with verbals and participles. In 112, 3 we find it connected with an adjective ; cf. $\mathrm{u}^{\prime}$ tch in Dictionary.
kla'i'zatk gíntak î hût'tkalpalank shlí-uapk hî̀nksh though dead, you shall skip up ayain and shoot him, 110, 6.
k'mî'tchatk gìntak tchiltgipečletám'uîk in order to be restored ayain to life repeatedly, though in old age, 103, 10.
nû́ ak ya hûn shkáyent gî́ntak (for: shkaíni at gî́ntak) gu'hlî'plît $I$ can eertainly get into, although he is strong, 112, 2. 3.
tsutísh gî'ntak kúti-i gî slie gets worse, though treated (by a conjurer), 68,8 .

```
B. TILE ADVERBIAL CLAUSE.
```

This grammatic term comprehends all the incident clauses by which a finite verb or the principal clause containing this finite verb is determined in an adverbial manner. Following the classification adopted in Morpholngy, pages 562 sqq., we thus have adrerbial clauses of (a) quantity and degree ; (b) of space; (e) of tense; (d) quality or modality and cause. Many of these clauses appear as rudimentary sentences, viz., as plrases containing a verbal or participle or embodying no part of a verb at all, like pä'dshit pshín to-night. Adverbial clauses are mainly of a temporal, sonetimes of a causative import, and the conjunctions introducing thens either stand at the head of the sentence or occupy the second place in it. The conjunctions occurring in this kind of clauses have all been mentioned in the list, pages 562 sqq. The "Legal Customs" Text, pages $58-63$, is full of instances where sentences which we would render in the form of adverbial clauses are resolved into simple sentences and made co-ordinate to the principal clause; cf. page 61 . The same may be said of many of the sentences introduced by tchúi in the "Snake Fights," pages 28-33.
at gatpa at shlō'kla when they had arrived, they shot at the mark, 100, 20.
 is all I know how the Klamath Lakes fought the Rogue River Indians, 17, 18. 19.

- at nûka wókash, wóksalsha at when the pond-lity seed is ripe, then they gather it, 74, 7.
at tánkt káai tídsh liemkínka, Mōdokni at gai'mpěle as no treaty was made at that time, the Modocs returned homeward, 13, 17; cf. 38, 1. 2. at waitolan when a day is over, 91, 3.
lıû'masht=gîsht shnû'kp'lisht lāp sháppash spû'lhi because he took (his wife) back.I imprison him for two mouths, 61, 10.
ké-iu Bóshtinash gatpish . . . . before the Americans arrived, etc., 90, 16; cf. $184 ; 37$.
ma'ntch gîsht or ma'ntch gítko sometime afterward.
nánuk pshî'n gîshit every night.
 tary had advanced in front of us, before we: hed descended from the hill, 29, 17. 18.
nû'sh ak gíntak wítchnoka lúlula î you are rattling around (the lodge) verhaps because you love me, 183; 16.
pûks pahátko ma'ntch gîntak ípakt camrass, after it is dried, may lic a lony time, 148, 14.
tsúi nat lápî gulì'ndsa, skuyû̀i natch hû'k laláki then tuo of us went down into (that place), as the commanders had detuiled us, 29, 11.
wák gîsht how; wák gíug, wák gîtko why, for what cuuse.
waíta shéllnal, tinōlōlish tehēk kěléwi they fought all day, untit they ceased at sundown, 37, 21.


## C. TIIE RELATIVE CLAUSE.

The relative clause is introduced either by the relative pronoun kat, abbr. ka, and its inflectional cases or by a particle formed from the pronominal roots ka- (kink) and ta- (tínk) for the purpose of qualifying the subject or object (direct and indirect) of the main sentence. As the language possesses many other means to qualify these, relative clanses are comparatively scarce, and usually stand after the principal clause, or may be incapsulated into it. Sometimes a demonstrative pronoun precedes it as correlative.

Besides the examples given on page 542 and in the Dictionary, the following may be quoted here:
hantchípka tclīk, káhaktok nánuktua nshendshkáne then he sueks out, whatsoever is of snall size, 71, 0. 7.
hư̂nkst nî násh súnidē spû̀lhi, kát sas lû̂'k wudsháya $I$ imprison the one for one week, who has whipped them, 61, 17; cf. 61, 12, and 129, 7.
hû̀nk shílalapksh, kánt sha shî'uks gishápa that siek man, whom tiay reported killed, 65, 18.
tchákiak, kát gen gént, $\chi$ fege the boy, who went there, is dead.
wû'la sa tû́nipüns, kát hû̀k tánkt mák'lèza they ashed those five, who at that time had encomped there, 17, 7.

## D. THE INDIRECT QUESTION.

The direct question mentions the words of the inquirer verbally, whereas the indirect question gives only the sense of them, and clothes its contents in the garb of a subordinate clause. Utterances of doubt, suspicion, incertitude, when enunciated in a clause depending of a principal clause, also come under the caption of queries indirectly put. Only their contents, not the position of the words, stamp them as indirect questions; they are not always introduced by conjunctions, and verbals or participles sometimes serve to express them. A comparison of the examples added below, with those mentioned under "Ihe Interrogative Sentence" will be the best means to show the syntactic difference between the two modes of interrogation. Like the direct question, the indirect question may be affirmative or negative, and if introduced by any conjunctions at all, these conjunctions are about the same as used in making direct questions.

ḱxi-i nû slayuákta tám nû ûn shlé-etak I do not know whether I shall find (liim, it).
ká-itoks nû hushkánka ká-i gátpisht $I$ despair of his coming; lit. "not indeed I think (he) not to be coming."
kì'uks suawínuk sas kínts sliuápkst when a conjurer examined them (to find out) who might be wounded, 21, 9. 10.

Lěmé-ish gákua shlēedshuk, Skélamtchash tamî'dsh ktánshîsht one of the Thunders erossel over to observe whether Old Marten was asleep (or not), 113, 15; cf. 122, 3. 4.
vû̀la Shî̀kamtchash, tám tatákiash shlē'sht? she asked Old Crane whether he had seen the children, 122, 18.
wák gì hî kílit gépk? what is it, that he does not come?
What is called in Latin syntax oratio olliqua, viz., the paraphrasing of the verbatim quetation of what has been said or written into the form of a dependent clanse, also exists to a certain extent in Klamath syntax, and in its structure comes as near as possible to the "indirect question." Perhaps more frequently than this, it is expressed by verbals, and in our printed texts the informants avoided this form as much as possible, preferring the oratio recta, or verbatim quotation of spoken words. All sentences introduced by gishápa, kshápa to deelare, to say so, are also worded in the oratio olliqua; cf. Dictionary.
hemkánka nánuk máklaks: at nánuk tchékěli vîmî' p'nálam shelluáluish all the tribes deelared, that now all blood is buried of their former fights, 54, 18 ; p'nálam instead of nálam in oratio reeta.
slā̃'tẹla hûnk snawédshash: máklăks gatpántkî, shun-utánktgi pî'sh giúga máklăks; shapíya, máklăkshash wúshmûsh shiukiéstka he instrueted this woman (to say) that the Indians should come, that he wanted to meet the Indians in council; he amounced that he would kill an ox for the Indians, 13, 12. 13. Cf. 43, 22.
Tolyy liemkínka: "ǩí-i hîhítchantgî̀" Toby shouted that they should not run, 54, 8.
By the oral particle nen, ne words are introduced which were spoken by others, and therefere sentences with nen form a substitute for the oratio oblique of European languages. This may be said also of many sentences embodying the particle mat. Cf. mat and nen, pages 6.52-654.

## INCORPORATION.

I have relegated this important topic to the close of the syntactic portion becanse incorporation is a general feature, and pervades to some extent
all portions of this language, although the instances where we can trace it are not very frequent.

There has been much wrangling and contention among linguists concerning "incorporation in American languages." Although many of them were agreed as to the facts, and acknowledged also the existence of incorporation in Basque and other languages of the Eastern liemisphere, the main canse of the strife was this, that every one of the contestants had a definition of the term "incorporation" for himself. Lucien Adam regards it as a special sort of polysynthesis,* while others use both terms for the same sort of linguistic structure. D. G. Brinton gives a circumstantial definition of the two, $\dagger$ and considers incorporation as a structural process confined to the verb only. Several recent authors refer to "the incorporating languages of America" in a manner likely to induce readers into the belief that all Indian languages of America possess this mode of structure. But of the whole number of from three to five hundred dialects spoken in North, Central, and South America we are acquainted with perhaps onetenth only; thus nobody is entitled to include the other nine-tenths, of which we know nothing, into a classification of this sort. At all events, the American languages which have been studied differ enormously among each other as to the quality, degree, and extent of their incorporative faculties.

In the present report I am using the two terms above mentioned in the following sense, to aroid all further misconception:

Polysynthesis I regard as an exclusively morphologic ternı, and mean by it the combination of a radix with one, two, or more elements of a relational or material signification, joined to it to build up words either by inflection or by derivation.

By incorporation I mean the combination of two or more words existing in the language into one whole, be it a phrase or a sentence, non-predicative or predicative, nominal or verbal, by aphaeresis or apocope of the inflectional or derivational affixes; the operation bearing the impress of a syntactic, not of a morphologic process, and producing in the hearer's mind the effect of an inseparable whole or entirety.

[^76]From the above it follows that polysynthesis as well as incorporation can occur in agglutinative and inflective languages only, and that the modes and degrees of both species of synthesis must be almost infinite in mumber: The Greek language exhibits more polysynthetism than Latin, German, English, the Semitic, and many American languages, but many of the latter incorporate in a larger degree than most European tongues. Going into further details, the two modes of synthesis which occupy our attention extend over the following grammatic points:

Polysyntiesis embraces the phenomena as below:
(a). Prefixation and suffixation for inflexional and derivational purposes; also infixation of elements into the radix, wherever this uncommon mode of synthesis can be traced with certainty. The order in which the affixes follow each other is too important to be neglected by the students of language.
(b). Phonetic change of the radix or of affixes, when traceable not to the ablout, but to elements reaching the radix through extraneous addition.
(c). Reduplication of the radix or of its parts, or of other portions of the word, for the purpose of inflection or of derivation.
(d). Gemination or phonetic repetition or lengthening of certain elements in the word.

Incorporatron as a syntactic feature may manifest itself in the following processes:
(a). In the formation of compound terms by binary, ternary, or other multiple combination. Only then are the parts combined by real incorporation into one term, when one or some are losing sounds or syllables by the process, either by aphaeresis, ellipse, or apocope. For Klamath we have instances of this in kálikmă, Lók=Pshî'sh, tchawáya; nouns and verbs are equally liable to undergo this mode of synthesis. More instances will be mentioned under the heading: "Conversational form of language."
(b). Direct and indirect nominal and pronominal oljects are incorporated into the verb whenever they become altered from their usual form and placed between the pronominal subject and the verb. Incorporation also takes place when the pronominal object is so closely affixed, either
prefixed or postfixed, to the verb as to lose its accent and form one word with it, and then it usually occurs in the altered form, as in French: donne-le-lui, or in the Italian: a riveder vi to see you again. Klanath does not alter the nominal object, but concerning the personal pronominal object a beginning of incorporation is perceptible. In some instances the pronominal subject is also changed and incorporated into the verb by postfixation, by what I call the synthetic form of inflection.
(e). The effect of incorporation is shown in many striking instances in the ease-inflection of the substantive, when inflected simultaneously with an adjective or pronoun used attributively. The use of the apocopated form in numerals, as láp, ndán, etc., implies incorporation also. In these adnominal parts of speech case-forms are not so extensively developed nor so polysynthetic as in the substantive, and placed by the side of it have some of their endings truncated, altered, or lost, because the words are no longer felt to be separate words. They are regarded now as a unity or combination, and hence one case-terminal, either in the noun or in its attribute, is thought to suffice for both. The principal relation in which Klamath is incorporative is the attriburive relation, and the examples below will show what kinds of combination the noun is able to undergo, especially if the verbal signification is still apparent. Klamath is undoubtedly an incorporating language, but in a limited degree, and polysynthetic more in the derivation of verbs than in their inflection.

Instances of incorporation like the ones to be considered occur in all European languages, when plrase-like compounds or parts of sentences, even whole sentences, are used as single words, often in a rather burlesque manner. Thus we have in Spanish: tamaño size, froṃ Latin tantum so much, magnus large; in German: Gottseibeiuns, for the devil; in French: affaire (ì, faire: business, lit. "something to do"), un tête-ì-tête, un en-toutcas; in English, popular wit and ingenuity are inexhaustible in forming such combinations as go-ahead people; get-up bell; penny-a-liner; stick-in-the-mud concern; a go-as you-please match; a catch-as-catch-can wrestler; a how-come-you-so condition. A teo-egys' omelet is an instance of compounding by juxtaposition; a two-egg-omelet one of compounding by incorporation.

The Klamath exanples do not differ much from the above except that they are susceptible of inflection by case-endings. If I am jnstified in regarding word-composition as a syntactic process, nominal compounds might all be considered as instances of incorporation. But it is safer to regard them so only when such componnds show loss or alteration by aphaeresis or apocope, becanse this goes to prove that the combining of the elements has been of a close and forcible nature.
atí=käíla-gîsh foreigner, for atínish kiílatat gîsh.
ga-ulipkan é-ushtat gunigshta arriving at the opposite shore of the lake, Mod ; stands for ga-ulípkan gunígshtant é-nsh.
hátak=tchī'tko settler, lit. "a liver there."
yaúkēla stupúyuk stinā'sh menstrual lodge, lit. "cry and dance- for first menses-lodge."
kaiila=tatímmish mole, for kiaílatat tatímnuish.
kapkágatat=stinā'sh lutíla to stay in a brush-lodge. This inversion from kapkága=shtinaishtat can take place only, because both terms are practically considered as being one word.
kétcha-bubámnish tippler, lit. "a pettily drinker:"
lílnksskítchaltko .urapped in fire, for lúlukshtat sk nitchaltko.
máshishtat shî'-usha shátělaks salve, lit. "on sores-to line-oneself rub-bing-substance."
púksh gé-1 ipakshkshákshi géna nû I go to my eamass-storing place. Ipaksh storing-place stands for ípkash throngh metathesis, and is the verbal indefinite of ipka to be kept or stored; puiksh camass is objective case depending of ípaksh, the verbal function being retained.
shiî̂lkishýnini "Mâ’dok Point" shéshash gîshî̂ gítpa they went to the reservation ealled Modoc Point, lit. "to the reservation Modoc Point (its) name-at they went," 34, 19. Cf. also shésla in 189; 3, and Note.
spakíi=wē'sh iee-punch, iee-breaker, for wésh spakō'tkish.
vû'lzashti kîlî'wash=shknítatk n'hlutuína dressed in a horrowed woodpeeker skin mantle he trails it along the ground, 189; 6. Here vî'lyashti and kili'wash are both equally dependent of shkítatk ("dressed in mantle"), and vî́lzashti again depends of kîh'wash. The full caseform would here be vû'lzashti kîlíwashti or kîh'washtat, but the suffix -ti occurring in one part of the combine will do for both.
(d). Only a limited number of adverbs, mostly monosyllables, can become incorporated into the verbs which they define and then they figure as their prefixes, as the natural position assigned to attributes is before, not after the word qualified. Adverbial prefixes of this description sometimes partake of the functions of our separable and inseparable prepositions, and a list of them is found in "Syntax," under "Adverb Prefixed," page 632. A list of adverbs which can appear also as independent words with an accent of their own, like kí-a, kú-i, mû, tídsh, is added to the above list. But wherever any adverb included in the above lists becomes a real prefix, there, of course, we have to do with polysynthesis and no longer with incorporation.

## RHETORIOAL FIGURES.

To conclude the syntactic section of this grammar, a chapter on figures is subjoined, to some of which allusion has been made previously. Rhetorical figures occur in all languages of the world, though one and the same figure may largely differ as to frequency in the one or the other tongue; anaphora, ellipsis, metaphor, and tautology are perhaps the most frequent, no language being deficient in them.

Alliteration should be given a separate place among the rhetoric figures, because it is a phonologic rather that a syntactic feature of language. We know it best through its frequent use in the poems of the Germans and Anglo-Saxons dating before A. D. 1100, in a literary period when rhyming was yet unknown as a factor in rhythmic poetry. We find alliteration in many of our Klamath song-lines, but whether the song-makers used it there on purpose and designedly like the Anglo-Saxon poets or not I am unable to say. Syllabic reduplication must have prompted its use. The alliteration is consonantic only, whereas the Germanic nations made use also of vowels for this rhythmic purpose. A few examples of "alliteration are as follows:
g: gutitgúlash gé-u népka, 166;27.
k: ktsálui kî'alam gé-u ké-ish, 165; 14. Cf. 13.
l: lúash ai nû'slı a lûlamnapka, 158; 57. Cf. 157; 40.
$l$ and $p$ : palák! îsh hû lûlpalpalíat! $154 ; 11$.
n: nánuktua nû papî́slh gî, 158; 53. Cf. 165; 10, 16.
$n$ and $u$ : wáuam wéash nû wilamnápka, $156 ; 30$.
$w$ : wiwiwá! nîsh sháwalsh wítnank! 153; 2.
In our prose texts nothing occurs worth noticing that could be called alliteration. A sort of rhyme is sometimes prodnced in the song-lines by repeating tho same.word at the end of two or three lines following each other. Of assonance used as a metrical help but few instances can be found.

Anakoluthon consists in a change of syntactic construction within the range of the same period. Thus we sometimes notice a change of subjects in sentences following each other, where no intimation of such a change going to occur is given by pronouns or other words.

Púl snawä'dshla Pámpiam pai'ia lupî'; tsúi wä'kala, tsúi tatá mántsak mbusie'lau gî; tsúi kä'tsa . . . . at first Paul married P'ámpi's daughter, then (she) bore a child (and he) lived with her quite a while, then (he) left her . . . .77, 1. 2. Cf. 78, 1.
Anaphora, or repetition of a term or phrase, even of a sentence, generally with interposition of some words, is more frequently met with in Klamath than any other rhetoric figure. Emphasis is the main cause for anaphora, and short, monosyllabic pronouns are chiefly figuring in these constructions. The repetition of personal pronouns has been previonsly alluded to.
a nî ná-asht gî: "hágga shlä'k!" tchî nî gî then I said: "let me shoot now!" so I said, 22, 19.
î pîl, î hissuáksl p!! shä' wanuapk wátch you only, you the husband must transfer horses, 60, 15. 16.
kaỉla nû gutila nû $I$ am crawling into the ground, 154; 5. Cf. 167; 36 . tchúi nî nû hî̀lipěli $I$ then ran down again, 23, 15.
tsưii nî shli'n, pató n shli'̀n then I shot him, I wounded him on the cheek, 30, 16.
túnep tála î skúktanuapk hînk pîl, mû́'yäns pîla lákiash five dollars you have to pay to him, to the head-ehief only, $60,8$.

Asyndeton, or lack of connective particle between two nouns, phrases, or sentences (co-ordinate or subordinate). Since the language possesses no particle corresponding to our and, this rhetorical figure is rather natural, unless it occurs where a subordinate sentence has to be connected with the principal one. And is often replaced by tchísh also and by tchúi hereupon and its compounds.
kai's wé-uұalks tsélash gî'tk, shlápsh gî'tk the ipo-plant has a fureated stem (and) has flowers, 147, 8.
lāp Mōdokíshăsh shuénka, ndān shlíuiya, etc., they killed two Modoes, they wounded three, . . . . 54, 13.
t'shî'shap p'kî'shap k'léka (her) father (and) mother died, 54, 2.
Ellipsis, or the dropping of words and short phrases from a sentence, is frequently met with in the conversational style, when the sentence can be easily understood or its meaning guessed at without their presence. Thus, the ellipsis of the verb gî to be, to say, is of a very frequent occurrence, as in: kîllitk nai'-ulaks lalákiam the laws of the chiefs are rigorous, 60,4 ; tálaak há? is that correet? tsúi nîsh sa (gî) then they (said) to me.

Metaphors and metonymies are of rare occurrence in this language. A metaphor implies a resemblance between two objects by assigning to one the name, attribute, or action of the other, while throngh metonymy we call one object by the name of another that possesses an acknowledged relation to it. The oratory of these Indians is not by far so much given to flowery, symbolic, figurative language as that of the Eastern Indians, among whom this style forms such a paramount feature. There are, however, some instances in our Texts, and we must take care not to confound them with idiomatic forms of speech.
at laláki hû'ntsak î nen lóla, kělámtsank sítk lû'dshna now ye chiefs, ye are believiny without any ground, ye walk along as with closed eyes, 64, 10. Cf also 54, 18.
p'laikî'sham palpálish shîl k'hí'ulĕzan raising the white flag of the one in heaven, 14, 2.

Syllepsis is called the construing of words according to the meaning they convey and not by the strict requirements of grammatic rules. It is
a constructio ad sensum, of which a phonetic parallel exists exemplified by me under "Assimilation," page 233. It might also be called syntactic uttruetion wherever no omission of terms has taken place as in the seventh example below.
ga-nlipkan é-ushtat gunigshtat landing on the opposite shore of the lake, Mod., where é ushtat stands for é-ush.
gémpěli î̀k Kamísh Aíshisham shû́luatnan K'múkamteh went home dressed in Aishish's garments, Mod. myth. Here shulótish garments has to be supplied between Aíshisham and shûluatnan.
ká-i î wátsam tchî'kluapk wännikî'sham you shall not ride a stranger's horse, 58,11 ; where watts would be the correct form.
kátok uî gé-u sägsä'wa I think I told my truth, 65, 7; stands for: "I told the truth as I think it to be."
Mōdokî'shăsh shîshukshé'mi at the time of the Modoc war, 55, 19; lit. "at the time of the Modocs being fought by the Americans," the latter, Bóshtimam, being omitted from the sentence.
nútak hînk shlépapka gé-utantkak lúlpatko $I$ obscrved with my own cyes. Here lúlpatko ("having eyes") is made to agree with nútak myself, whereas the correct form would be lúlpatka with cyes, by cyes, forming agreement with gé-utantka ak.
tellak gé-u my arrow. instead of télak shiúkish gé-u the arrow that killed me, 138, 1.
Tautology repeats a word, phrase, or idea by using not the same words, as is done by anaphora, but synonymous or equivalent terms:
lia' a nat wák ka-á, lä' nat wík galdsawiá-a! we do not know how to aet, not how to approach! 22, 2.
tuá nî wák giug shíukuapk? why should I have killed him? 64, 9; why is here repeated twice.

## APPENDICES.

The chapters following do not form a structural part of the grammar proper, and therefore they were relegated to the end of this section as appendices. They include many points needed for acquiring a thorough knowledge of Klanath, but could not be conveniently inserted in either the lexical or grammatic section because they partake equally of the character of both. Several of these chapters could have been made considerably more voluminous, but, as there must be a limit to everything, what is given below was thought to suffice as specimens of the subject-matter treated. The subjects are treated in the following order:

Appendix I: Idioms.
Apepndix II: Conversational form of language.
Appendix III: Dialectic differences.
Appendix IV: Syntactic examples.
Appendix V: Complex synonymous terms.
Appendix VI: Roots with their derivatives.

## I. IDIOMS.

Idioms are certain modes of expression having something striking, quaint, pointed, or unusual about them, although they are founded in the structure of the language to which they belong, and they do not unfrequently appear as rhetorical figures. Idiomatic expressions may be contained in phrases or sentences or in single words; occasionally the idiomatic use made of certain terms implies another meaning than the common one, and their pecnliar wording often renders their translation into other languages difficult. Agencies most active in producing idiomatic forms of language are the psychic qualities of the people, social cnstoms, historic occurrences, climatic associations, witty sayings, and similar causes. They impart life and color to language, and no investigator of popular thought can dispense entirely with the study of them. Books composed in our literary languages do not often exhibit them conspicnonsly, but a freer display of them is made in the conversational style, in curses, oaths and other assev-
crations, in folklore, in the comic drama, the newspaper, and the dialects, in proverbs and proverbial locutions. Among the exclamations and interjections many are idiomatic, and several archaic terms have to be considered as such also.

Among idiomatic expressions there are some special classes, and one of the more remarkable is that of the cant terms, though I have not found it to be much developed in this language. In the southern dialect we may class here the use of wéwaläksh when it is denoting generically the females, and not the "old women" only. In Klamath Lake we can regard as cant termis yáka (for yiai'ka, yéka), shnikshókshuka, tchiónlěza. and Kia'katilsh, a term invented for deriding white men who are wearing beards.

The elassifiers used with the mimerals above the number ten lave also to be considered idiomatic, although such are occuring in several other languages on the Pacific slope. Verbification of certain particles, as at giítak, hítak, léwak, lé walk ka-á, nen, etc., as enumerated in Morphology, page 457 sq ., also belongs to the idioms. Women use the same terms and phonetic forms as men, and there are no reverential or ceremonial forms found here as we find them frequently occurring firther sonth and among the tribes of the Mississippi plains. The use of certain pronouns in order to avoid giving the proper names of deceased individuals is found to be the custom all along the Pacific Coast, probably elsewhere too, and in this sense may be considered idiomatic. Klanaths use for this purpose hû́k, hû́nkt, hû'ksht that one, those ones, etc.

The mamer by which the verb to be has to be expressed in Klamath, when connected with a locative adjunct, appears to us idiomatic, though it is found in many other Indian languages, and is much less artificial than our use of the verb to be in this connection. Whenever an animate or inanimate subject or object is referred to as being somewhere, either indoor or outdoor, around, below, between, or above somebody or something, in the water or on the ground, the verb gî to be is not employed, but the adverbial idea becomes verbified in the form of some intransitive verb, so that below, e. g., becomes i-utila to be or lic below, underneath. The mode of existence has also to be distinctly qualified in that verbified term; it has to be stated whether the subject or object was standing, sitting or lying, staying, living,
sleeping. Usually the idea of staying and living coincides with that of sitting, and sleeping with that of lying on a certain spot. Moreover, number has to be expressed by the use either of the verbal singular or of the dual or plural, and exterior or form is indicated by the form-prefixes so frequently discussed in the Grammar. What term has to be used in every instance can be found out best by consulting the second part of the Dictionary.

The Texts and the Dictionary are full of instances slowing the particular use of the verbs alluded to, and the following examples will perhaps prove sufficient for a preliminary guidance of the reader:
keä'lo hátakt túya ajuniper-tree was there below (me), 30, 12.
wátch tkálamna a horse was or stood above, on a hill, 30, 2.
látchash túpka a house stands on the same level (with me).
wátch saígatat tchía, tgintga the horse is on the prairie.
wátch tchíktchikat lĕvulúta horses are (harnessed) before the carriage.
ltóks shulótishtat laliga a stain is on the dress.
nálam pû'ks käilatat ípka our eamass is, lies on the floor.
watksăm mû'na $\hat{u}^{\prime}$ sha kii'latat the waitksam-plant is or grows deep in the ground, 149, 19.
tsunî'ka käílatat lúsla the tsunika-bulb is (found) above the ground, 149, 18.
wátchag tébu1lat i-utíla dogs are or lie under the table.
kiii'm ámbutat wá fish are or live in the water.
nánuk lalâki látchashtat luxuga all the chiefs are (sit or lie) within the lodye.
wéwanuish winóta liukiámnank the women accompany (the conjurer's) song while being around him, 71, 5.

The following words and sentences may be regarded as specimens of idioms, representing both dialects; for a thorongl understanding of them the Dictionary should be consulted.
ámbu wigáta "near water," when used for island (Kl.). at kápakt gî tcláá! all be quiet now! nû kápakt gì I am quiet.
élya, d. e-álqa, elliptic for shéshash élza to give name, to name; the d . form e-álya also to read; élza also elliptic for shéshatuish or shéshash élya to sct a price or value upon; kétcha, túma élza to sell cheap, dear.
gia'tak! (Kl.) kánktak! (Mod.) stop! cease! enough of this! When a story is finished, the Klamath Lakes say: at gii'tak; the Modocs: nen ka tánni ak just so far!
gitkulsh! I cannot think of it now! (Mod.); skó "come up!" (Kl.).
lıínn! wait!
hí or hićnash, when used for brother, sister, and connected only with possessive pronouns in the locative case. From lif in the lorlge, at home; cf. -yéna, -hićna, a verbal suffix referring to an act performed indoors, within, in the lodge. Mí hiénasl, miénaslı your brother or sister; kï'gi gé-utant lî̂ (or liénash) I lost my brother, sister; gé-utant, m'nátant liiénash shléa nû $I$ see my or his brother, sister ; viz., "I see (those) within my, his lodge;" p'nátant hiénash from her brother. The locative case here indicates a dwelling or stay within the lodge.
hishuákshash, snawédshash pálla to seduce a married man, woman.
hitak î tchćm! (for tchími) hold on now! (Mod.).
î, tclıé tchînk! yes, so it is! or yes, so he, she said.
yit-uka tálaak right in the next house; just in the neighborhood.
ka-í mîslı nû ko-islıéwatko shléa I am quite glad to find you.
kiílash stáni! you dirty fellow!
ké-ash, kä'-ash bad thing; term used to prevent children from doing certain things; cf. kiii-aslitámna.
khlckípkashtala telshámpka (abbr. $\underline{k}^{\prime} \mathrm{le}^{\prime} k s l i t a l a, k^{\prime}{ }^{\prime} \bar{e}^{\prime} k s h$ telshámpka) to be moribund; lit. "to look toward a deceased one."
ko-idshi, tídshii stemash of wieked, of good disposition, mind.
kó-i gi-nápka it would not be a good way.
kó-i túmenăsh noise, elatter; lit. "disagrecable lıearing."
ná-itala télshnank hushō'tchua to rifle sideways on horsebaek.
nä'tu in fact, really, it is so (Mod.).
ndshóka nîsh nígshtant man'shok being deaf in one ear I eannot hear with $i t$; car is omitted.
pii'dshit nî m'ník ktína I slept very little last night.
pukéwish nû'sl, p. shû'm bloekhead, lit. "leather head," "leather mouth."
tídsh hémkanka, lit. "to speak favorably": to conelude peaee; to make a satisfactory arrangement; to speak in favor of order, justice ; to give laws.
tídsh, $\mathrm{k}^{6}$-i húshkanka to be or feel happy; to be sorrowful.
tuínika (for tuinizátko) tak î ûn you will be a man in woman's clothes; said to little boys, when disobedient.
tchii' m'l ̂̂k it is a bad omen for you.
tchini kěléwi then $I$, he, she, they quit; often added mmecessarily, as a standing formula, at the end of narratives.
útawa! dead broken! exclamation of despair.
wak y'unhua! wakíanua! I will be dead if I do!
wátchagr shlû'ki nā'sh liklash pála-ash the dog ate up the whole loaf: lit. "the flour lying there in one leap."

## II. CONVERSATIONAL FORM UF LAANGUAGE.

In every language two modes of speaking are easily distinguished from each other. One of these is the style of conversation used in everyday intercourse which, by its free unconventionality, differs from the more elaborate forms heard in oratory and poetry and in historic or other narratives. While the latter employs rounded up, unabbreviated, and carefully worded grammatic forms and sentences, and lias a more extended vocabulary at its disposal, the popular or conversational mode of expression shows a tendency toward brevity, truncation of words, contractions and ellipses of sounds and words, indistinct utterance of sounds and incomplete phraseology. When opportunity is offered for literary development, it is the former that will develop into a literary language, whereas the latter may degenerate into a jargon full of slang and cant terms, or, when used as means of international intercourse, lose its grammatic affixes, as we see it done in the trade jargons spoken in several parts of the world.

Of the differences existing between the two styles in the Klamath language only a few examples can be given within the narrow limits allotted,
and these I lave classified under the headings of Plonology, Morphology, and Syntax.

## PHONOLOGY.

Of unusual sounds occurring only in the conversational style of langrage I have met three: (1) a thick $l$ pronomnced with the tongue-tip applied to the middlé palate, and resembling exactly the Polish $\nvdash$ in dłony; I heard it in such terms as tápłal loon. (2) a real $f$-sound was heard in kófka to lite for kópka, piai'f daughter for pia'-ip; however, I consider it safer to spell these terms: kólhka, pai'v'h, for $v$ is known to be a sound of the language, while $f$ is not. (3) the palatalized 1 (or l) I have met in one Modoc word only: kíla to enter a lodge, which is related to gu'hlí, gulí to enter, go into. Here the unusual i sound, so common in the languages of the Willámet Valley and on Columbia River (where $f$ occurs also) probably originated from $h l$.

Some vovels show frequent interclangeability among themselves; e and ē are rather frequently replacing i and i: e, ē for î, ì thou, $\bar{e} k i$ for ike thou here; $\chi$ ellitk forcible for kíllitk; nē'l far for nīl ; Nélaks, nom. pr. for Nílakshi ; me thine for mi. In popular talk we also meet ćlua to be full for éwa; áwalues island, 74, 14, for áwaluash; keiílu juniper for kiaílu, keiè l ; kaiki, káyeke it is not for käa'gi, keē'gi; hiapátyoksh stocking for yapátyoksh; Mod. hipatzoksh. Preference is.frequently given to the deep vowels $o$ and $\hat{\imath}$ over $a$, whether thè vowel be long or short, as in mákloks pleople for máklaks, yépontk clug for yépantko, 87, 8, ishkópěli to take out ayain for ishkápěli, któpka to slap for ktúpka, nótodsha to hurl for nutṑdsha, ndsáskop'l to wipe off again for ndsháshkapěli, stóka to stal, gig for stúka, suétchuopk for shuédshuapka,. fut. of sluédsha to gamble, tấpia younger for tápia, 114, 2. In distributive reduplication, short $o$ and $u$ occasionally appear instend of siort $a$ in the second or reduplicated syllable. In many of these instances the removal of the accent had something to do with the vocalic interchange. To use paíp, pép instead of pé-ip daughter is considered a vulgarism, and might cause confusion with pé p pine-marten, sable.

Among the consonants, $s, t$, are more frequently heard in conversation thau sh and $t$ s, whether initial, medial, or final, and Dave Mill's text-pieces
will give full evidence of this. The simple sounds are also more original than the assibilated sh, tch, and belong to an earlier status of the language. Both sometimes appear in the same word, as in séshash nume, sîtldshas and shutldshas soldier. The use of $t$, tel instead of $s$, sh is not mufrequent, especially in Modoc, but is considered faulty; ef. tsuina for shuína to sing, 90,12 ; but páwatch tongue, in Molále apá-us, is regarded as more correct than páwash.

Conversational speech likes gemination of such consonants as can be doubled: genálla (k’nálla), ndánni, sassága, tchimmá-ash, etc., and also shows tendency toward nasalizing such terminals in substantives as -t, -tka, -tki into -nt, -ntka, -ntki, -ntk. Instead of -tka, the suffix of the instrumental case, we often hear -tko, -tku, -tki, -tk. Tslípa shoulder is a vulgarism for tsnípal, tclinípal.

## MORPHOLOGY.

In the second or morphologic part of grammar the difference between conversational and oratorical style is chiefly brought about by the tendency of saving exertion in speaking. Owing to hurried speaking and the retroceding of the accent consequent upon it, numerous contractions and apocopes occur, not of one sound or syllable only, but even of two syllables, so that certain words become unrecognizable. Aphacresis is of rare occurrence, except in words like 'mútcha old man for kěmútcha, this from kěmutchátko, "grown old."

Contractions by ellipsis, ekthlipsis, synizesis, and other losses from the middle of the word are not more frequent than in the oratorical style, and are observed in súlpsoks for shulápshkish forearm, cllow; lúlpatko for lúlpaltko provided with eyes; tatímnish for tatámnuish traveler.

Apocope is observed in the ending -a replacing the longer -atko: palá dried for pahátko; shésha namcd for shéshatko, $189 ; 3$; cf. page 408 ; in the loss of -tki of the verbal intentional as in lúela giug for luelátki or luéltki giúga, etc.; cf. page 417,450 ; in the loss of the verbal endings -a and -na, as in átsik for atchíga to twist, sáhamui for shahamúya, ník'kang nép to beckon for nik'kánka nép, yékä-u for yekéwa to break, smash, tyálam betwecn for tzálamna, klámtchtam for kělamtchtímna to nictate. Under the influence
of words following in immediate succession other terminals are lost in lakf for lákiash the ehief, 44, 2; laláki for lalákiash ehiefs, 90,1 ; shftk, sit for shítko alike, tiia'mant hungry for tiii'mantko, prán up to for páni, tugshtakni coming from the opposite side for tugshtalakki, múatch, obj. case of mini large, for múnish, kítchk little for kitchkini; the endings -atch and -ōtch for -ótkish, as in shúmaluatch, cf. pages 325.363 . In its abbreviated form tupaksl, the word tupakship yonnger sister is more frequent than in the fult form.
'The pronouns kat who, kaní? who? what kind of? are frequently abbreviated into ka, ga; so are also the adverbs ka-í greatly, kánk so much, aud the abbreviation ta may represent cither tála merely, but, or tála then in wák ta gíng how then? why then? or táta, tat where, whereto: tí lish giémpka î? where did you go to?

## SYNTAX.

In rapid conversation two or three words often coalesce so closely together as to be prononnced as one only; this chicfly occurs with enclitic and other short words when united to words which preserve the accent. Thus nén ak becomes nāk, ktúpka mat: ktúpkam, lá nen: hánn, gé-ishtka gî nāt let us clepart: kíslıtkāk, inuluashkípk' î, 139, 6 : imúhuashkpak. 'The enclitic pronouns appearing in pállansh for pálla nîsh, ne-ulapkím'shnî for né-ulapkar mîsh nî, tclı́yash ámbu for tchíya î ish ámbu, tchämluk for tchii málaslı ûk, and other sentences like these implying the use of object pronouns have been mentioned repeatedly; cf. pages 232. 240-242. 419. 430. and "Pronouns." The verlo gî in its different functions loses its vowel and becomes aggolutinated to the preceding word: nat-ashtg, Mod. né-ashtg; lā’pik for lápi gî ; ká-i n' gì'tkik m's píla not to you alone I tell to do it, 61, 4, and Note; kátak to tell the truth for kítak gî; cf. page 242. The frequent and unnecessary repetition of the personal pronouns nî or nı̂, î, nāt or nā, etc., is also characteristic for the conversational form of language, and is found in the conjurers' songs as well.

Apocope is of frequent occurrence in compound words, and since I have treated of these in the syntactic part, and also under the lieading of incorporation, a short mention of them will suffice here. It is the qualify-
ing word that loses some of its phonetic elements, not the qualified one, and at times the loss is so great that the word is with difficulty recognizable. Lxalzamníshti lulínash ground-up lily-seeid paeked away, 74, 10, becomes lxálzam=lulínash, and wáwakshtat tutû̀ksh ear-ucax turns into wáwa= tutû́ksh. Proper names, especially of persons, are nsually pronounced fast, and thus their first or qualifying element suffers loss by attrition:

Gúshu-Lúlp "Hog's Eye," for Gû'shuam Lúlp.
Lû' $\mathbf{k}=P s h i{ }^{\prime}$ sl " Grizzly's Nose," for Líkam Pshî'sh.
Mák-Núsh "Liyht-brown IIead," for Makmákli Nô'sh.
Tatakták=Mpátu Gî'tk "Reed Pimpled Cheeks," for Tataktáklish Mpátu Gítko.
Tchák=Pshi'sh "Sharp Nose," for Tchaktchákli Pshî'sh.
Tchúl=Pshî'sh "Piereed Nose," for Shulítko Pshì'sl.
Omission of the verb from a sentence occurs very frequently in Klamath conversation, especially in such connections where it can be readily supplied by the hearer. Several instances of this have been exemplified under "Tdioms," and under "Particles nsed as Verbs." This feature is often met with in sentences beginning with wák, úk, ûk how, and ûtch, an exclamatory particle, and nothing is more frequent than the omission of the verb gî to exist, to be, to become, to do from sentences where it is easily supplied by hearer. Cf. pages 477. 592. 614-616.
kátgash át ak î nîsh ye will believe that I told the truth (Mod.); the verb lóla is omitted before î.
pákish wák kû́tsag! how good is the gutgeon to cat! 178; 1 (Kl.).
n'k gîsh á lish! do as you like! (Mod.).
$\hat{u}^{\prime} \mathrm{k}$ hai, $\mathrm{u}^{\prime} \mathrm{k}$ hak ta how then, in whieh mamer (shall I call it; Mod.).
ûk î mā'ntch tchkásh! how long have you been away! (Mod.).
û'ts kam î nîsh ! please do not trouble me! (Mod.).

## III. DIALECTIC DIFFERENCES.

Upon the pages preceding frequent occasions were offered to refer to the discrepancies existing between the Klamath Lake and the Modoc dialect, but this topic can only be discussed systematically and in a bulk after
a full elucidation of the gramnatic laws upon which the structure of the language is resting. Only then a full comprehension of these differences is made possible, and since they extend over the lexicon as well as over the three parts of grammar the best place to consider them is the appendix part of the volume.

On the whole the two dialects differ but slightly, and this made it possible to treat them both in the same work. The existing differences are much more of a lexical than of a grammatic nature, and in grammar the morphologic part shows more differences than the phonologic portion. The Indians, having the auditory sense keenly developed, are well aware of these differences; they are very apt to find fault with unusual terms or accentuation, and hence visitors are told by the people on Upper Klamath Lake that the Modocs "do not speak correctly" (Mō'dokni kíli tílaak hémkanka), or that "their talk is strange" (wénni hémkanka). All over the world we find people that think their own dialect to be the only good one.

Other petty linguistic differences exist between each portion or settlement of both divisions, as, for instance, between the Klamaths on the Lake and the Klamaths on Sprague River ; they chiefly refer to the mode of pronunciation. The Tchakä'nkni or "Inhabitants of the Service Berry Tract," near Flounce Rock, north of Fort Klamath, intruders from the Molále tribe of Oregon, were reputed to speak the Klamath very incorrectly.

The Texts obtained from individuals of both sections clearly show some disparity in the languages of the two, but afford no distinet clue upon the length of time during which they have lived separately. Before the Modoc war of 1872-1873 they lived at a distance of sixty to seventy miles from each other; they met every year at the Klamath Marsh, when hunting and collecting pond-lily seed, and besides this often joined their forces to undertake raids in common upon surrounding tribes; in spite of the rivalry existing between both sections, intermarriages often took place. The more ancient customs and mytlis are common to both, nevertheless the name Móatokni or "southerners," which implies segmentation of the tribe, must date from an early epoch. The northern dialect is more archaic or original in some terms, as nads $\overline{\text { ēksh }}$ nine, né'g alsent, whereas the southern shows earlier forms in knanilash bat-sprecies, sliaínhish raffer.

## PIIONOLOGIC DIFIFRENCES.

In regard to the vocalism of the two dialects, the Modoc sometimes uses the diphthong ai where Klanath Lake has $\bar{e}, c$ : kokai (and kóke) river, creek, Klamath L. $\underline{k}$ óke, ḱḱka; kaílpoks heat, hot, Klamath L. kéc lpoks, kélpoksh ; shnaíligsh eyebrow, Klamath L. shnékělish.

Klamath wa-, wo-, is in a few terms replaced in Modoc by $u$-: úk for wák how ; úkash for wókash pond-lily seed.

Of more importance is the substitution of short and long $a$ of Klamath Lake by short and long $c$, also by $\ddot{a}$, in Modoc. This is observed almost exclusively in accented syllables, and even then in a few instances only; these vowels always stand between two consonants. This singular fact cannot be explained by a supposed insertion of $i$ after the $a$ of Klamath Lake because the $e$ resulting from a contraction of $a i$ would in most instances remain long, which is not the case. Examples:
gá-ash, Mod. géash thus, so.
yána, Mod. yána and yéna downward, downhill.
ná-asht, ná-ash, Mod. néasht thus, so, in this manner.
náshki, Mod. néshki to butcher, flay; nashkótkish, etc.
pádslit, Mod. pä'dshit in the morning.
pálak, Mod pélak fust, quickily.
slálakla, Mod. slélakla to cut, slash oneself.
shátma, Mod. shétma to call to oneself.
slnapémpema, Mod. shnepémpema to fool somebody.
uláplpa, Mod. uléplpa to flicher about.
wewesháltko, Mod. weweshéltko having offspring.
But there are also instances on hand where the reverse takes place, Modoc showing $a$ where Klamath Lake has $e$ :
métkla, mai'tkla, Mod. mátkla to carry on back, shoulder.
nē'g, dimin. nékag, Mod. nā'g, nákag that absent one.
wéktash, Mod. wâktash plait of females; the verb being wékta in both dialects.
The term for brown varies in botl dialects : ka-ukí-uli, kë̈-nkia'-uli, ke-uké-uli, kevkévli.

Dissimilution in the iteratively reduplicated adjectives, all ending in li , as described on page 234 , is observed much less in the southern than in the northern dialect.

In the consonaritic sounds of the Klamath language s-, sh-, sl-, shl-, when initial, are oftener replaced by ts-, telı-, tsl-, tchl- in the Modoc than in the Klanath Lake dialect, where this is considered as a corruption; tchká for slıkí it blows hard or cold, tcllkél for slikél marten, ts\%úle for slikíle lark, tchléyamua for shléyamua to hold something soft in hand, tehpál for spál ocher. Cf. pages 296. 297.

Modoc redoubles $l$ in a few words like kéllak being without, kíllin furmantle, where Klamath Lake has kéliak, kaíliu.

In a very limited number of terms Modoc has $l$ where Klamath Lake shows $n$; cf. heshelióta to barter, Mod. sheniúta ; kíntchna to go single file, Mod. kíldslna. Cf. slunúntatka (below).

Another clange, already referred to on page 230 , is the substitution of the arrested sound $!$ for the lingual $\underline{k}$ in Modoc only, which disappears in the following terms, e. g.: 'bga for kóga to bite; 'u'hpa, 'ópa for $\underline{k}$ ópa to think; 'úzpaslı for kózpash thought; 'u'llilí for ku'llis to enter, creep into; 'oke for kóke river, creek; 'olkoli for kolkoli, kúlkuli round, globiform; 'ósh for $\underline{k} \bar{o}^{\prime}$ sl, $\underline{\underline{k}} \bar{u}^{\prime}$ sh pitch-pine. When $\underline{k}$ is a final sound, or stands within the word, it is not dropped; and even when $\underline{k}$ and $g$ are pronounced, the arrested sound is always heard after them; cf. pages 216. 226

## MORPHOLOGIC DIFFERENCES

A few slight differences between the two dialects occur in the formation of the distributive reduplication, which have been alluded to under that leading.

A difference in the prefix is noticed in the verbs kpnlí to chrice into, kpin'lza to expel, kpintcla to oust, drive out, etc., where Modoc has tpulí, tpuilza, tpuitcha, or tpudshá. All these forms are used when the act of driving refers to a fow (not many) objects; cf. page 436. In botlo dialects the prefix $u$ - may also be pronounced vu-, wu-, q. v.

More difference is observable in derivational sufixation. The Modoc verbal suffix $-i$ is in some instances replaced by $-a$ in the northern dialect:
shítchpalni to tattoo; Kl. shítclıpalıa; shatatavi to stretch oneself; Kl. shupatíwa. Other Modoc verbs have $-a$ as well as $-i$ : tchlalála and tchlaláli to roast upon the coals. To designate an act almost completed, -lhíya, -liya is more frequent in Modoc than -kshska, -kska, which is preferred by the Klamath Lake dialect. For inchoative or inceptive verbs -ćga, -iéga is preferred by Klamath Lake, -támpka by Modocs, thongh both suffixes occur extensively in either dialect. Cf. List of Suffixes. For híshuaks husbamd, man, Modoc has in the snbjective case: hishuákshash; for snáwedsh wife, woman: snawédshash, and from these terms the verbs for to marry are also shaped differently. Transposition of sounds takes place in some snbstantives ending in -ksh; thns Klamath wáltoks, wáltaksh discourse, talk, speech, appears in Modoc as wáltkash; others are enumerated page 349.

As to inflectional suffixation, the most important discrepancy exists in the formation of the present participle, where Modoc has - $n$ (-an) and Klamatli Lake the compound ending $-n 7$ (-ank); a fact discussed repeatedly in the previous pages. The inflection of the noun is effected by the same case-suffixes and case-postpositions in both dialects, except that in the emphatic adessive case the compound -kshi gî'shi of Modoc is condensed into -ksíksi, -kshákshi, -ksíksi and -ksû'ksi in Klamath Lake.

Of the impersonal objective verbs many differ in regard to their structure in both dialects, as shown pages 429. 430. From this it would appear that Modoc usnally prefers to place the person in the subjective case when expressed either by a pronoun or a noml.

The following peculiarities are of a morphologic as well as of a syntactic character, and therefore may be appended here:

The future tense, composed with the particle tak, is preferred by Modoc in the incident and in many principal clanses to the future in -uápka. In the Klamath Lake Texts the future in tak occurs nowhere except in 70, 2. The particles pēn, pain, and ûn are much more frequent in the southern than in the northern dialect; this may be said of pēn especially in its function of connecting the small numerals with the decades.

In interrogative and other sentences the particle lîsh is largely used in Modoc, and placed after the interrogative or initial particle. The northern dialect employs that particle rather sparingly.

## LEXICAL DIFFERENCES.

The number of Modoc words differing in radicals, in derivation, or in somend from their equivalents in the northern dialect is considerable, as may be gathered from a short inspection of the Dictionary. I have therefore compiled a specimen list of lexical differences, including only representative vocables from the Dictionary and from information obtained lately, and placing the Modoc term with letter M. after the Klamath Lake term. With the exception of a few, the Modoc terms are readily understood by their congeners on Upper Klamath Lake, but some are not in actual nse among them, or, if they are, they have adopted a signification differing materially or slightly from theirs. The Modocs have adopted more terms from the Shasti langnage than the Klamath Lake Indians, and these more terms from Chinook jargon than the Modocs. Among the terms of relationship some differ in the formation of the distributive form and also in their meanings. Some of the Modoc terms were entirely muknown to my Klamath Lake informants, as kalnómoks glowworm, kshita to eseape, and its causative shnékshita; lumkóka to take a steam bath, tíkēsh clay, loam, tchatchákma haze is forming, tchiptchima to drizzle down in atoms.
épka to bring, haul, carry to ; M. ítpa.
héslia to send avay; M. shnī̀dsha.
húshka, híslıkanka to think, reflect; M. kópa; húshkanksh thought; M. kózpash, 'úhpash.
hushtánka to go and meet somebody; M. shm-utánka.
ísha, ilktcha, p'nána to bury, to dispose of the dead by interment or cremation; M. 1́lktcha, vumí; Kl. use vumí only for cuehing provisions, etc.
ká-ishna to close an opening, doorflap, door; M. shlá-uki.
kápka little pitch-pine tree; M. kúga, dim. of $\underline{k}^{-}$'sh pine.
kátak truly and to tell the truth; M. kána, kátak, katchán truly, surely; kána tchḗk certainly.
kē, kī thus, so, in this strain; M. kíe, ke.
klà'dsh dry, rooky land, table land; M. knā't.
k’léka to reach, to die; M. often pronounces: kankláka, kaláka.
látchash, generic term for lodye, building, housc; M. stinā'sh.
líuna to producc a roaring, rushiny sound, as a landslide; unused in K1.
lúela, luslitchóza to kill more than one olject; M. lúela, heshyia'gi, shuénka.
lúkslaksh ashes, Kl. and M.; the M. l'apkēksh means finest, atomic ashics. nads $\chi$ ékish, uáds $\chi$ ōksh nine; M. skékish.
nanílash, smallest species of bat; M. knanílash.
páhpash carwax; M. wáwa=tutû́ksl, from túta to takc from.
pála-ash flour, bread; M. slípĕle.
pápkash in the sense of polcr; M. kpá-u, kpá.
p'tislaap father ; M. t'slíshap, from t'shín to grow.
ptchíklza to pat, caress ; M. ptcháklұa.
shánhish rafter; M. shiánhish.
shawalinie'-ash companion, fellow, fricnd; M. shítchlip.
shewáťa it is noon-timc; M. gá-ulapka.
skíntchna to cravl, creep, as reptiles ; M. sxídsha.
shlélaluash eyclid; M. shlélaluish, which means cream in Kl.
shlô̂'ktclna to spit, spit out; M. distinguishes between kpítchtchna to spit closc by, and sllî̀'ktchna to spit into distance.
shnikíwa to throw, hurl, cast; M. slnnikóa.
slnúntatka to interpret ; M. shnúltatka.
spelétaklātch rake; M. wakatchótkish.
shukíkash parcnts, progenitors; M. shokekí-aslı.
shuéntcl baby-board; M. stiwizótkish.
te'hltéhli flat, depresscd, low; dcep; M. teltélhi.
túpakship, abbr. túpaksh youngor sistcr; M. sistcr.
tchátchgalam bur, pine-bur; M. tchatchgálinks.
víyukiaks armint; M. yuki'kish.
vulán to watch fish over ice-holes; M. uláwa.
wáklgish and páklgish table; M. páklgish only.
Wálamskni Roguc River Indian; M. Wálamswash.
wálish, walī'sh rock-cliff; M. wali'dsh; also generic for rim.
wáltoks, wáltaksl talk, specch; M. wáltkash.
wítchiak rainbow; M. slitchálapshtish.
wítchkinsh dew; M. telítaksh.

## IV. SYNTACTIC EXAMPLES.

What follows is a selection of sentences which were omitted while composing the previous pages of the Grammar to exemplify grammatic facts. What is dialectic in them is not so much the syntactic structure of the sentences as the morphologic and lexical character of the terms occurring in them. Sentences worded in the Klamath Lake dialect are not marked as - such, but those obtained from Modocs are designated by the letter M. When two sentences are combined in the same item, and lave the English rendering between them, the former is of the Klamath Lake, the latter of the Modoc dialect. This does not signify that any of the Klamath Lake seutences is unintelligible to the Modocs, or conversely, but that it is their more natural mode of utterance. In some of these items the decisive words are arranged alphabetically.

## Distributive reduplication.

túmi máklaks a-atíni many Indians are tall. (MI.)
gégamtchi shútka shlésh gì it looks like these things. (M.)
wa-utchága i-épâ käilanti the dogs scratch in the ground; cf. yépa.
tátaksni, îsh lúloktchi pé̛lakak shánksh-pakî'sh ehildrcn, bring me cach one watermelon, quickly.
édshash nāt púpanua nánuk we all drink milk.
tám î kátkoga nép shashtash $\chi$ ókan tkútka? do you stand with your hands in pocket because you feel cold?

The future tense.
In the third, fourth, and fifth sentence the future form is used imperatively.
tám î nálash túla genuápka? wioll you go with us?
tám întch (for' î nîsh) gen sheniútūpk' i-ámmash ? will you bartcr beuds with me? tám lish î shiyutuápka nûsh yámnash?
kí-i kaní hí gatpanuápka nobody is allowed to go there. (M.)
shumalūlasht tchēk î nûsh heméxi-uapk sjeak only after I have written. hư̂nk-slitk hak áti î heméxi-uapk, mámantchak gîtk, ge-umí hak repeut it exactly the same way (lit "you shall speak just only alike to") stopping at intervals, and but slowly.
tuá nā shute-uápka at? nād ûn nadsháshak tá-uni géntak what shull we do now? we will go to town together. (M.)
túm î nîsh wátch vulzuípka? will you lend me your horse?
tidshéwan mîsh nu ûn vî́lktak I shall lend it to you willingly. (M.) hii în lúldam á-ati kéntak at kenōlasht tchgû́mnuapka, víshmush ûn kshún késhktak pásh( t ), shtúwan ûn wénktak if deep snow falls in winter, and after the snowfull frost should come, the eattle will be . mable to eat the grass, and will starve to death. (M.)
hiii kéti któdshtak shkó, kii' gitok ûn kshún vúshmûsham if it does not rain in spring, there will be no grass for the eattle. (M.)
lé-utak nā ûn nálam pshákam lashuáshtat pä'dshit; telíntok nāt ûu today we will play in our unele's garden; he will allow it to us. (M.)
tchēks î sluéwantok húnkesh tála you have to pay money to him. (M.)
pélak mîsh nā't ûn shlé-elkitak we will soon come to visit you. (M.)

The imperative mode.
emí îsh shuéntch, or: emí îsh hand that baby (on the cradle-board) over. to me. (M.)
gen á tchélұank gépk' î; or': gin á tchélұě gépke! come (close to me) and sit down right here.
pai'n häıné $\chi$ ' ì ; ké-uni lak hemé $\chi$ ' ì say this onee more; say it slowly.

- nánka îsh shiû́ngs=bakish î'ktchi bring me some watermelons.
káti mî petéke skútash do not tear your blanket; ké-i mî spakág' î shkútash.
shátua hel gî ísh do the thiny with me; tchímè îslı túla shiloátcha î.
núsh iwiké shí-ulantchî go a short distance with me. (M.)
k'núks îsh hûn skén' î (or: skeit-an ̂̀ tak) buy a rope for me; tíntish îslı sk:á'-an $\hat{i}^{\prime}$.
kitchkáni! î shlaukípěle boy! shut that door. (M.)
shlépkipal' ísh gé-u ténish kápo briny me my new eoat.
tídsh shualaliámpl' î tuke good eare of it.
gin á tchál $\chi$ ' (or tchél $\neq$ ì) sit right here.
teheléyran hûn î mantchákash slápečle give some bread to this old man. (M.)

The present participle.
i kilíwash ínan pukéwishtat you are sewing the woodpecher-sealp upou the buckstim dress. (M.)
Utíltalsh yá-uks shewánan heshuámpěli Utiltalsh effcets curcs by giviu!, medieine. (M.)
yéua nû gén géna; guhìsht nûsh 'mutchága s\%û'lpkan ktánan hlóka $I$ went down stairs; when I came in, the old man was slecping in bed and snoring. (M.)
mā́ntch nû tchútěnan kékish heshuámpěli I treated him a lony time and cured him. (M.) The past participle.
(a). Used in an active signification.

ḱýyudsh hịshuákga hût hémkankatk gî this little boy cannot spectik yet. tunépnish láhualsh íyamna nî I had five pins; tunépni gé-u lahuálatko (abbr. from laluálaltko).
káyak toks nû hûnk shléatko gî I could not see him.
nálam lakí tídsh shishúkatki (for shislıukátko gî), tídsh sháyuaksh our chief is a good fighter and intelligent.
(b). With a passive or intransitive signification.
nîsh géeu nánuk gukuátko my uccki is all swollen. (M.)
lúlp halıantakuátko gî his eyes were wide open. (M.)
ipkípkash ánku shû́dsha āt ye are burning piled-up) wood. (M)
ímnaks mû kikanuála(-tko) beads with a vide perforation. (M.)
tchokéyaltko shá-ika (gì) the field is covered with gruect.
kēk a kshū'n ípka atí uyégatk this haystuck is very high.
tám lîsh mbúshan kátags gi-uápka? will it be cold to morrow? u'na pshín kí-a kátagss gé-uga ámpû tchípkatko wén last night it was very cold, so that the water fioze in the pail; lit. "the pailed water:" (M.)

The verbals.
(a). The infinitive:
ne-ułákta sha, kokia'kish ûnk né-ulya múash shlewítki they derided that the conjurers should order the wind to blow from the south. (M.)
knyumáshtat hû tidsh gēt utchín in muddy water net-fishiny is profitable. (М.)
kiä'm tchûká shátma they eall the fish to swim up-stream, 135, 4. Cf. also $107,2.113,1$.
(b). The verbal indefinite:
uk há pěná gishálsh in this manner he treated (me); lit. "that is how his handling was." (M.)
Yámakni tû'm yuhú luelolish kî the northern Indians (habitually) lilled many buffaloes. (M.)
tánkak ná-entk súnditka pá-ulash gé-u I ate (of it) last week.
wák lîsh hî shlè'sh kî? how does this look? (M.)
késhga nû shlé-ish húnkělam I could not see him or her. (M.)
slûhank=shítko shlē'sh kîsh shaná-uli he wauts to look alike. (M.)
tuá î shanáhuli shiyútash? for what will you barter this? (M.)
(e). The verbal causative:
ko-ishéwa mîsh nû shlé-uga $I$ am glad to see you.
tatí gen shle-úga kuұpáktak î nûsh when you see this, remember me. (M.) (d). The verbal conditional:
 me only one word at a time; I do not remember (them) when you speak fast.
ká-iu któtchasht ktchálhui sáppash before the rain the sun shines. (M.)
(e). The verbal intentional:
nû hûn tpéwa pelpéltki, léwitchta tādsh pélpelsh I ordered him to work, but lie refuses to work. (M.)
géntki málsh nû gî' I order you to go. (M.)
húnktiash we-ulii'kash mutétki ginga i-a'sh mpampatkánka the uillows were sputtering in the fire to burn up these women. (M. myth.)

The intransitive verb.
éwa vû'nsh é-ushtat the eanoe floats upon the lake. (M.)
wásh a nátch géluipk' lháya the coyotes are coming near us; wásh nálsh wigátan hōluípka.
udshaiksh huhixi the sucker fish ships out of the water. (M.)
hia yaki ánko i-utila, shlemp'le! if the seed-basket is under the tree, take it home! (M.)
lapipi ánku yámpka two stieks lie on the ground
liûpka sha waiitash (or wäitash nánuk) they sit around the whole day.
kí- hint pitchka loloks the fire is not out.
túm lish telíwa shtinā'shtat (or stiluā'sh)? hû tchíwa; was he in the house? Yes, he was. (M.)
nánuktua kaíla yutíla wá all that grows under ground (bulbs, etc.).
The interrogative sentence.
(a). Introduced by the paiticle tám.
tám kaní gitá gátpa? has anybody been here? (M.)
tám î sliléa gé-u p’tísha? i'! have you seen muy futher? yes! tám î gé-u t'shísha shléa? $\mathrm{I}^{\prime}$ !
tám î shléa p'gíshar m'na? kári! have you seen his mother? no! tám í shléa hû̂́nkelăm p'gísha? kí-i!
tím lîsh hu shíla? is he, she sich? (M.)
tám lîsh i-i tchúi túměna? î-î, nû túměna! do you hear me? yes, I hear you! (M.)
(b). Introduced by the pronoun tuá.
tuá haitch hū't gî? what is that? tuá hû?
tuá haitch wák gî? wák lish î gî? what is the matter? what does it mean?
tuá lìsh î hû́slıkank? what are you studying about? or: what do you think of this?
tuî î pélpela? shéshatuish qaí nû kî; what is your business? I am " trader. (M.)
(e). Introduced by the particles wák, wák lîsh, wák giníga.
wák lish î giúga kétí gé-u lóloksgîsh épka? kái-i lish shlč-uka why did you not bring my riffe? because I did not find it. (M.)
wák lish î gíuga káai uîsh wálza? uhy don't you ansurer me?
wák ē n'sh gì'ug kí-i wál $\mathfrak{l}$ a? why don't you reply to me? wák lîish î nen ká-i wálza?
(d). Introduced by various pronouns and particles.
wátch há hî gî? is that a horse? (M.)
tánk î méhiäsh shnókua kóketat? how many trout did you eatch in the river? láp méhiäsh! two trout! (M.)
tánni látchash málăm käílatat! how many lodges are on your land?
tánni mi t'shíshăm wátch gî? how many horses has your futher? (M.)
táta î patkělóla? what time did you rise from sleep? túsh kîsh î pátkal?
tatá mā'ntch haítch lıûk líshuakshı nuásha? how long was this man siek?
The cases of the substantive.
(a). The objective case.
î hushnakpápka nép you are holding your hands together upon something. (M.)
lúepalsh shtinā'sh powetéka the lightning-stroke shattered the house. (M.)
shmukátan' nû gét nû shuloltish I am wetting that garment; nû́toks hûn shpága shulótish.
gēk múshmush láp'ni tá-unep shésha this eow is worth twenty dollars.
pét'atko pshî'sl one whose nose-perforation is disrupted. (M.)
háshuash nû̂ láshua I am plauting maize. (M.)
hû stíni yaina-íga kimā'tch the ant-hill teems with ants. (M.)
wátchkina nûsh $\underline{\underline{k}} 0 \underline{\underline{k}} \mathrm{a}$ spéluish a raceoon bit me in the index-finger.
klásh hûn mî̀ txé-una shewán' î give this hide to your elder brother. (M.)
(b). The possessive and partitive case.
máklaksam shmńtka nā (for nálam) sltinā̄'sh the house is full of our people. (M.)
letumnóti túmi pán they have a caroussll, or fecust; lit. "many of them eat in a noise."
(c). The locative case.
kihwash ánkutat skí-ukua the red-lieaded uoodpeeker picks holes in the tree. (M.)
paílpěli hî tchî'shak yailkamāt he works in bad weather all the time; hî ko-itchánta nkillan nináklkish.
gé-n t'shíshap ámpî kiiilatat kititchna my father has spilt the water on the ground. (M.)
shewíni îsh tála gée-u kiii'mat! pay me for my fish! (M.) nánuk mî vúshun̂̂sh saígataa páwa all your eattle graze on the prairic. (M.) hû T'ítzash sha'rmóka shtina'slitat he ealled Titalio out of the house. (M.) tẽlíks i-uknikag shtináshtat the basket is inside the lodge. (M.) paidshit klalha tinōluléshtat there was a hailstorm at sundown to-day. nû neyéna tchuyéshtat I am lining a hat. (M.)
(d). The instrumental case.
túmi a gēk tẩlıtāsh gén il’hólěsh, kéa-itoks ná-entka illoláshtka túmi wii' tank there were many grasshoppers this year, but not many last year. púishtka hushútantko (gi) he wears a fringed belt. (M.)

The adjeetive.
tát pělaíwasham slnúlash wikáyanta kattínian tchă’dshui pinakpkágishtat kígatat (gî) there the nest of the golden eagle (lay) upon a low pine-tree, only that high, and dwarfed. (M.)
vúnipa î shīp áti-kaíla=gi-gíshash nadshénash máklakshash shewán î you sold four sheep to a foreigner; lit. "to one in distant-land living." káyam múmuatch nákshtanish shepátza lî̂ he tore to pieees one of a jaekass-rabbit's ears. (M. myth.)
wéwanuish maklaksánıkshkni kikashkánka wákalak i-ukogaa wonen of the tribe are walking inside of the inelosure.
nû ûnk shítka gítak hû'nksh I would aet as he did. (M.)
The udverl.
pî ûnk shnóka î yúkiak he caught a mooking-bird on the ground; lû̂ kaí hí yńkiak shnúka.
wák ka:tán nîsh ke k'léka sometling is probably the matter with me. (M.) lē nû pán, bû́nua I do not cat, drink.
snawédshash lupítkni gátpa, nutoks yámatkni the woman comes from the eust, I come from the north. (M.)
génî hunáshak nû shlä'papka I am looking at it unintentionally. (M.) tídsh sha hishuátch Zash shualaliámpka they wateh the nean elosely. (M.) túm tchátchui ámpû î búnua you drank too much water. (M.) tánk nû nā'sh illólash vúushtat šusxíyamnish gî, tánktchikni gé-u kewá wä'k last year I was able to row the eanoe, (but) since then I broke my arm. (M.)

Temporal locutions, mainly of an adverbial nature.
tína illólash tank nû hûn shléa I saw him a year ago. tína ok ilhóla pá-ulash gé-u $I$ ate (of it) last year. nálăm a shī'p tím nīl a gén illū'lsh our sheep have much wool this year. lápni tchēk illōlan shékělui shéllualsh after two years the war came to an end. (M.)
tá'htāsh géntka páta túni wá, tánktoks kaítua there were many grasshoppers this summer, but not any last year.
páta mā'ntch waíta, lúldan toks pépělak waíta in sumner the days are long, in winter they are short; lit. "the days pass rapidly."
géntka lúldam kéti gî-uápka wésh this winter there will be no ice. (M.) tánk nā'sh shíppěsh kóke wetko gî' last month the river was frozen. (M.) ma'ntchtoks at pádshit wäítash the days are long now. (M.) una há shtípa waíta it was eloudy all day yesterday. (M.) níshta wásh yéa the prairie voolves have howled all night; pä'dshit pshî'n ye-íl wásh.

## The conjunction.

(a). The particle ak, aka, ka expresses probability and potentiality. kúti ak mîsh népkia you may feel uneomfortable. (M.)
hûnk ak taksh ūn (for hû'n) nû shléat I can see him ; nû aká hûn shléa. nû kaí ak hû'nkish hû'nkptchi a ! gî) I would act, do, or be like him. (M.) shléat ak taksh ûn nû (ûn for: hî'n) I ean see that.
tám ̂̂ kokant kō'shtat? kíli ákă nû kókant can you climb the pine-tree?
I camot.
kéi-i ak nush gé-u t'slíshap wewáltant probably my father will not allow it to me. (M.)
kéti aka kěléka, or: kéti nı̂̂ lóla hû'nkesh k’’éksht I do not belicve he is dead. (M.)
kí-i aka hû́ ukauzo'sh ktchálhui pidshit at I do not think that the moon shines now, 12, 132 ; lit. "to-day." (M.)
tím hak tclıa î hushyúkta! you ask probably too much for it! túm haí î nen élqa!
(b). The particle ha, a.
nánuk a n' ûnk ho'shkanka $I$ recollect all (these) things; hû'nktaks nû huslikánka nánuk.
kēk nis\%ága ḱá-i a mîslı tidshéwa this little givl does not like you.
kó-e‘a ududómtchna úmbutat frogs live in the water; kó-e kaímputat wál. ḱá-i î pēn ha humásht gi-uápka you will never do it ayain. (M.)
(e). The particle hai (haítch, $\chi$ aí).
ké haí litchlítchli máklaks that man is certainly robust (M.) tánn' a haítch wewéash gîtk lakí? how mamy children has the chief? tánni lîsh lákiam wewéash?
káni haítch hût gî? who is he, she? káni hû? géash qaí mîsh nû kópa tchî'slak thus I always think of you. (M.) tuá llaítch î shanáhuli lúntka? what do you waut for it?
(d). The particle nen.
tuá î nen héınkank ? what do you talk about? wák lîsh î hémkank ? kéti nû nén kî I refuse to do so. (M.) wák lîsh na (for : nen a) gî? what is the matter? wák lîsh?
(e). The particle toks (taksh, tak).
láki tokslı tû s⿲ûtlpka shilóka the chief lies siek in bed. (M.)
hínkělam unák kó-idshi, pé-ip toks tidshí his son is ugly, but his daughter is pretty. (M.)
kó-idshitoks kēk yaína this momitain is quite rough or steep. (M.)

## V. COMPLEX SYNONYMOUS TERMS.

The great facility possessed by certain languages of forming complex or polysynthetic words by an exuberant power of derivational affixation is also productive of certain complex synonymous terms, which the analytic languages of modern Europe labitually express by separate words, mainly of an attributive character, or transcribe by separate sentences. Some languages of the American aborigines are rich in terms of this sort, and we are often wondering why the punctilious and seemingly unimportant distinctions embodied in them are expressed by a single word formed with this purpose. It is curious to observe how much stress is laid upon using specific terms for certain things and acts which white people do not even notiee as being distinct from other things or acts of a similar nature; and, on the other. side, objects which are totally different among themselves are called by the same term in certain languages on account of some resemblance observed upon them. Thus, green and yellow, green and blue, are expressed by the same term in many languages. The Cherokee expresses butterfly and elephant by the same term, kamáma, both being provided with a proboscis shaped alike. In Creek rablit and sheep are both called tchúfi, in Chicasa tchúkfi, on account of their woolly covering, and the horse is to the Creeks the great deer: ítchu=‘láko, abbr. tchu'láko.

Sometimes the reason for expressing the same act or condition by different verbs does not lie in the act itself, but in the difference of the verbal subject or object, its shape, quality, or number; of this we have conspicuous examples in this language in the chapter on verbal "Inflection for number," pages 433-441, to which may be added the instances, pages 460. 461, referring to the verb to give, and what is said about prefixes in general. The English-Klamath part of the Dictionary mentions six terms for gray, cight for to seize, twelve for to sever, fourteen for to wash, about as many for to wall, wear, weep, while the terms expressing the different modes of going, ruming, standing, lying, sitting, looking, rolling, placing, and lifting considerably exceed the above in number. The list of the adjectives expressing color does not reach that of a Herero tribe in Southern Africa, which possesses twenty-six terms for such cattle alone as is spotted in different ways,*

[^77]but is extensive enough to equal that of English, if we deduct from this the large number of artificial terms derived from manufactured objects. Wounds are called differently according to the weapon or instrument which inflicts them; scars, when flesh is removed, are shúktashkuish; without removal of flesl, shaktkaluish.* When a strong wind shakes a tree, the bending downward of the tree is wawiwi, but its moving up to the former position is wawilakpecli, the continual rocking wawikanka. To roll an object in the mouth is kpíamna when it protrudes from it, but when wholly inclosed in the moutl, shikpualkána.

Many more examples of this sort might be mentioned to show the keen sense of perception and graphic expressiveness traceable in the language. Utilitarians will regard this mental tendency as productive of cumbersome, unnecessary toil, while the philosophical linguist sees in it a sign of fresh and poetical ingenuity, which is manifesting itself everywhere in genuine conceptions of the untntored children of nature.

Below I present some instances of verbs and nouns, the definitions of which are ideas not simple, but of considerable complexity, and in which the great power of forming synonyms is traceable into the more minute details. Several of these terms were taken from the collection of Modoc vocables recently acquired by me.

The act of carrying a babe is expressed in many different ways, which chiefly differ among themselves by the circumstance whether the carrying is done npon the shuéntch or cradle-board or without it. The verb éma "to hand over to somebody a baby tied upon the cradle-board" forms several derivatives: émtchna "to go and carry, to bring it somewhere upon the board" (also upon the arm), for which kshéna may be used as well; émtchipka "to carry it toward somebody," émtakla (or éntkal) and émkiana "to carry on the back a babe tied to the board." "To carry on the back" any other object except a babe is tútkal, "to carry home on one's back" tútchampěli. Shmámka "to nurse or take care of a baby" is probably derived from éma also. "To carry a babe, when just born, on the back" and not tied to the board, is spukútakla and shlukútakla; stíntakla (or stíntyal) when not on the board and not necessarily upon the back. Ha-

[^78]slupat"kimna is "to tie it around the back in a piece of cloth," lashpuákia "to carry it while placing the arnis or one arm under its legs," laslikíga "to carry it on the breast."

Folding is expressed generically by spágalza, "to fold, double up;" the nouns pákalaksh and spágalaksh signify "fold, crease," and the former term figures in numeral adjectives like fourfold, sixfold.* These words are all derivatives from páka, mbáka "to break." "To fold" in such a manner as blankets or other sheets are folded in a warehouse is skípalza; "to fold" as folds appear in the dress as worn, slikaslkapshtchálza ; skítash shkashkapslitchalzátko "the blanket shows folds when enveloping the body."

To grasp, when used in the general sense of "taking, seizing," is slmíka, shnúkua, "taking to oneself" shmúkpa; "to grasp a small object," so that the fingers of the seizing land touch the thumb on the other side, shatashtánka; when the object is larger, so that the "fingers do not meet on the side opposite," shataslitzípka (-apka expressing distance); when the object is "grasped so that the fingers of one or both hands keep moving along its circumference," shatashkakiámna.

To stick up on one's head is an act expressed by a large variety of terms. Sha-íla is "to stick up something upon the top of the head" that will extend upon it from the forelead to the occiput, hence sháwalslı crest of birds and other related significations, $q$. v. "To take off that,object from the head-top" is sha-ulola; "to place erect upon, to make stand one object on one's head," is slátuala, upon "another person's head" hashátuala; hence shátualtko lásh "one feather standing up vertically on one's head," laíshátualtko lásh "on another person's liead." When many objects are "made to stand up straight on one's head in a bunch," this is shíldshuala; "feathers set up" in that manner : shíltchawaltko or síldshualtko lásh. Shákwal is "to place a bunch of feathers on the top of one's head," slákwaltko lásh "a bunch of feathers stuck up there;" shakizi is "to have it" or "wear it upon the back of the head or the shoulders;" slakíyitko lásh "one who wears it" there. "A crest of hair going over the top of the head" is líshkwaltko lák. Túta, d. tútata, tút'ta, signifies "to stick obliquely one long object upon somebody," either on his head or body; hence the reflective form slnitěta

[^79]"to stick up on one side of one's head or body;" p'laíwasham (lásh) shát'tantko "wearing an eagle's feather stuck up obliquely." But when many featliers or long objects "are stuck up obliquely on oneself," this is expressed by lashkátchka: lásh lashlıatclitántko nû'sh "many feathers fastened on one's head." Slrutéwaltko "fixed or fastened upon the head" may refer to objects of various form, not to long articles ouly. But when "I fasten a feather upon my forehead," this is nû shatelika láslı; upon "anotler's forehead," liashtelíka; hashtelikítko lásh may refer to more than one feather also, and describe it as "standing erect" or as "leaning loack across the top of the head."

Noise and to make noise is a fruitful field for word-formation in all languages, and onomatopocia often plays a large part in it. The large number of expressions compels us to separate the noises made by man and animals from those made by the elementary forces of nature. Anong the former, lia'ma is generic for all the roaring, crying, whooping, and chirping produced by animals; also for the shouts and cries uttered by man to call other people's attention. To shout at festivals, dances, is yéka, "to howl, cry, or sing in chorus;" hence probably yaúkëla "to perform a pubertydance." Yí-uya or yaiyáwa refers more particularly to a noise made with a rattle,* and noise in general is k $\delta$-i tuměnash "disagreeable to hear." "To belave in a boisterous, loud manner," is lúlula, wáltka, and tchiluy'za. "To crack with the teeth" is puikpuka. Other noises ascribed to human beings are expressed by the verbs úka and tchiricga; the noisy rejoicings heard of children when they see their parents coning is slítiaika. Yá-a, yéa is "to scream" or "howl aloud," and wawá-a "to whine." The noises made by the elemental powers are just as multiform in their lexical rendering as they are witl us. "To explode" is mbáwa; "to cause an explosion by a stroke of the hand," slnámbua. The noise made by the surf or by waterfalls is tiwisl, from tíwi "to rush with force ;" the roaring of a landslide or falling rocks limua, of other elementary noises shtchayaislla, of the wind yéwa, the cracking of plants, rotten wood, etc., wailta, the rustling, crackling of lay, straw, dry bulrushes, etc, kúslkusha. "To beat a drum" is ndintěna; "to ring," when said of a little bell, linizza, v.

[^80]intr,, hence the clapper of the bell is named liú-izatko "making noise ;" tintan lilúiza "little bells are tiukling." "The sizzling of hot water" is tehiyá-a, tchií-a, a derivative of yá-a, and the sputtering out of steam inclosed iin burning wood is mpampat'ta, the cracking of the wood mpatchitelika. Lauláwa is said of tlee clattering noise made by dry substances, as bones, striking against each other.

## VI. ROOTS WITH THEIR DERIVATIVES.

There is no better means of showing the mode of word-derivation in a language than to unite and class all the derivatives of one root systematically under the heading of that root. The functions and frequency of each derivational means employed, as affixation, reduplication, vocalic change, or the compounding of words then appear at once and illustrate each other mutually. Some roots of the Klamath language have given origin to families of derivatives of wonderful extent, and the stems or bases formed by them have branched off into different directions again, so that the progeny or offspring has expanded into a startling multiplicity. The association of ideas and the branching out of one idea from another often bear a peculiar stamp which will surprise those not accustomed to Indian thought. Many of the verbal radices quoted below gave origin to transitive as well as intransitive verbs; some show a predilection for prefixation, others for suffixation. Vocalic changes are not infrequent in the radix, and many of them can be explained by a weakening of the vowel through a lengthening of the word and the shifting of the accent consequent upon it.

The items given below do not aim at any degree of completeness, but are iutended only to serve as specimens of derivation. They will give a general idea of the method which has to be followed whenever a complete "root-dictionary" of this upland tongue should be attempted, a task which can be undertaken only at a future time, when a much larger stock of vocables and texts has been gathered among the individuals speaking both dialects.

Ena to bring, to carry, originally referred to a plurality of objects only, but its use las extended over a wider range, so that the verb may pass for being the generic term for to carry. The number of prefixes which con-
nect themselves with éna is remarkably large, as will be seen from the list following: 'ina to take away from, abstract, with ania and other derivatives; kéna it is snowing, lit. "it is carrying (snow) obliquely, or from the sides"; kshena to earry something long in the arm or arms, as a baby, a load of wood, straw, grass, etc., whence kshún hay; léna to carry a round object, or to travel upon something round, as the wheels of a wagon, car, etc.; hence gléna, kléna '1) to carry fire by means of a stick burning at the end and swung in a circle; (2) to hop, viz., "to swing one's body in a circular way" (a derivative of this being klukálgi); shléna to move something in a cirele, or in a round orbit, as is done with the small rubbing stone or lípaklish (Mod.), shílaklkish or pé ${ }^{-1}$ ksh ( Kl .), upon the mealing stone or lěmátch; cf. lē'ntko. The verb shlin to shoot appears to be originally the same word as shléna, though now differentiated from it in signification; it may lave referred at first to the curved or round path in the air described by the arrow when inpelled by the relaxation of the bowstring. Néua to carry something thin and to move something flat, as the wings ; pána to dive, plunge; piéna to serape sideways really means "to carry or bring upon the ground toward oneself." There is another verb shléna differiug from the one above as to the origin of its prefix, and signifying to take along garments, mantles, etc., or something soft or pliant. Sténa is to carry in a bucket, pail, or other portable vase of this sort. Shuéntcl betby-board, in Modoc baby, is lit. "what is carried on oneself," and presupposes a verb shuéna, which is not recorded. But there is a verb wéna to wear out, to use up, as garments, the original function of it being apparently "to wear, to carry upon oneself." A verb tcléna to go, walk, serves in Modoc to express a plurality of subjects walking or going; cf. Granımar, page 439.

Ena also forms derivatives with some suffixes; enía to earry to somebody, é'mpěli, for énapecli, to convey back or home, and é'ni spirit-land, place where spirits are being carried or wafted; cf. the Latin: manes, from manare to be moved. Ema to bring, hand over, said of infants, contains the same radix e- with the suffix -ma of motion upon the ground, and forms a large number of derivatives by means of compound suffixes.

Eiwa to be full of, to be filled up by, refers especially to water, liquids, and such substances as saud, seeds, food, etc., and forms a family of words
very instructive in regard to its prefix-elements. In its signification and derivatives it closely approaches ī'wa, but must be distinguished from it, as $i^{\prime}$ wa refers more specially to something being inside. Ewa forms ć-uslr, ia'-ush lake, shect of uater, with its diminutive ewága little lake, and a large number of verbs, some of which assume transitive functions, as éwa does itself when it signifies to cmpty upon. As an impersonal verb it means to be satiated with; hence é-una to fill oneself with food, ewísi to digest, e-unóla to clefecate. From éwa descends quite a family of terms distinct by their prefixes, as the verbs yéwa, kslıéwa, léwa, néwa, péwa, stéwa, shuéwa, tchéwa. Yéwa to burrow really means the filling of the den with winter provisions by the rodents which excavate the dens, yé-ush, the prefix i -, y - pointing to a multitude of long objects. Kshéwa to put upon or place inside refers to one long or animate object only; cf. Dictionary, page 147. Of léwa, which differs somewhat from liwa, q . v., the original signification is to be in the midst of a circle, or to be within something round; then to form a cluster, to be or exist together in the shape of bunches, clusters, grapes, the prefix 1 being indicative of round shape. Thus lé-usham, d. lelé-usham flower describes "what is in a cluster;" pushpúshli liwayaks is the pupil of the eye. Néwa to form a sheet is said of large water-sheets, prairies, and level lands; hence né-ush tilled ground, né-utko field, né-upka to run into a lake, said of rivers; knéwa to let the fish-line float on the water over day or night, the oblique direction of the pole or line being indicated by the prefix k -. Knéudshi is the object causing the line to float; this being made of light bark, the term finally came to mean bark. Péwa to be in the water refers to animate beings, and passes into the signification of batling or swimming and washing oneself in cold water, péwaslı bathing place; stéwa is to mix a substance with a liquid, and may be used in reference to kneading dough. Shućwa is a medial verb coming nearest in signification to knéwa to fish with the line, to angle; its derivatives being shué-ush, shué-udsha, slué-utka. Tchéwa means to float, as aquatic birds; when said of men it refers to a plurality of them, and belongs to géwa to go into the water; cf. page $43!$. Tchíwa to form a body of water is identical in meaning with éwa (1) and (2) in Dictionary, and forms tchí'wish standing uater, pool, or spring, tchiwizi to put a liquid into a vase so as not to fill it, and tchípka to be fill of or to contain water or some other liquid, it being a contraction of tchiwipka.
lusus, itsa to carry, transport, to malk go, to remore, appears as a verb assuming various prefixes, but also figures as a suffix or rather as a part of suffix in others. Originally it referred, and still does so in many instances, to a plurality of long-slaped objects, especially people, and ktchídsha to croul, crecp along the ground, stands for kshidsha, and in fact represents the singular form of the verb. Edslia means to suck, extract by sucking, but refers to blood, water, and milk (édshash) only, while hántclma has reference to other objects. Thus idsha forms transitive as well as intransitive verbs, one verb being often used in both senses. Thus pitchat is to become extinct (fire), but its nedial form spítcha is used for to extinguish, put out, to drag bchind or to pull ufter oneself, besides the intransitive to go out. Kídsha is to craucl, erecp, and to swim under the water's surface, to dive, originally "to make go sideways;" hence kídshash fin and kúdsha dorsal backi fin and gudgeon. More distantly derived from kídsha are kíntchna to walk, mareh, move in a filc, skintchna to crawl, crcep, for which Modoc has szídsha, and kí-insh, ki'nslı wasp. Médsla to migratc, to travel refers especially to the prairie, lit. "to remove in a curvilinear direction," hence the medial form shemáshla to migrate with onc's family, and the derivative kima'dsh cut, lit. "the one moving obliquely." Another derivative, shnīdsla, also pronounced telmi'dsha, means "to go forward in a straightout direction." The original function of ídsha to carry, transport las become reflective in the verb médsha, but reappears in midsho spoon, "what serves for carrying (to the mouth)."

Ika to take out, remove from, is another prolific derivative of the radix i-, and like ídsha, íla, íta has formed a good number of derivatives by prefixation. Thus we liave é-ika, eíza to put the head out, ktclíka to craucl off, viz. "to take oneself out obliquely," ník'ka, nika to put the arm or arms out, spai'ka to lic spread out on the ground, spika to drow, pull out, spíkanash needle, spúka to put the fcet out and to lie down, slưkis to drive out of, if this is not the medial form of híka to run at; finally tchíka to lcak. The verbs and nouns formed by suffixation from ika are all arranged in alphabetic order in the Dictionary; they are íkaga, ikayúla, íkaks, íkampěli and íkna, yíkashlıa, íkla and íklash, íkta, íktcha, íkuga and ikuákpecli with kshéknga

Káne, kiku bonc is a term which reappeurs with a nasalized initial in ugîk, ukík top of the head, skull top, which joined to gì to produce, to make,
to do forms the verb nkākgî, nzákgî to give birth. In searching after the origin of this term, the fact suggests itself that in delivery the top of the infant's head usually appears first; but we may attach to it perhapss a widely different interpretation: to produce bones, kik' gî, in view of the belief current among several tribes that life really resides in the bones, and not in the flesh, nerves, or blood; or that man has two souls, one of which remains after death in his body. In the Tonkawe language of Texas to be born is nikaman yekéwa "to become bones."* In fact, after decease the skeleton frame of a person outlasts all other parts of the body, and should the soul remain in it this is reason enough to explain the universal dread about the revenge of the one buried. This is one of the great canses accounting for the reluctance of many Indians to refer to anything recalling the memory of the deceased. Káko is formed by reduplication of the radix $\mathrm{ka}, \mathrm{ko}$, ku which we find in many verbs of biting: $\underline{\mathrm{k}}$ oka to bite, ko-hyua (plur. of obj.), ko-ítchatchta, kókanka, slikóks, shnkóka, kuátchala (Dictionary, pages 514.515), and a fow others not in the Dictionary, as kowakii'kala to eat holes into, to gnaw to pieees, to spoil by gnawing; kuakikakiámna to go around an object while eating of it. The radix is not reduplicated in kíta to gnaw, kä’dsho chin, kuátcha to bite off small pieees, kuátchaka to bite into, kuă'ka to bite or tear off from, kwû'ldsha to crode, $\mathrm{k} w \hat{\mathrm{u}}^{\prime}$ shka to bite off, kípka to bite or eat repeatedly, ké-ish rattlesnake. The jaw is our organ for biting, and is called kako just like the bone.

Láma to be dizzy, giddy, drunk, bewildered, and to eurse contains a radix lam-, the primitive signification of which is that of turning in a circle, revolving, reeling. This will appear from the following derivatives : lĕmátch (for lamo'tkish) the Indian mealing stone or Mexican metate (Aztec: metlatl), upon which the shiláklgish or rubling-stone, flat below, is moved in circular lines for grinding seeds and grains. The term for thunder, lěmé-ish, shows that this phenomenon of nature was likened to the circular motion of rolling rocks or something leavy, for l'ména, lěména it thunders is from laména. Lěmewílqa means to be moved off by eireular motion, as logs in a river. Lemléma, the iterative reduplication of láma, is to be dizzy, to reel, limlemsl, with vocalic dissimilation, dizziness, giddiness, but lám spirituous liquor is

[^81]derived from rum through the Chinook jargon. Shlamia is to feel bewillered, deeply aggrieved by the loss of a relative or friend; hence also to mourn somebody's death. Cf. lěmē'sham and leméwaliēksh in the Dictionary.

Núra to burn, to blaze up, v. intr. and impers., can turn into a transitive verb to destroy by fire. Its numerous derivatives are remarkable by the vocalic changes which the radix mu- is undergoing in them. The vowel uis preserved in the noun nút and its diminutive nutak, the small seed of the glycerium-grass, which explodes when leated; also in núyua and mútkolua to shine from a listanee. The causative form of the latter verb is slnátkolua. Níka or nóka to roast, cook, and to become ripe, forms nukéla to shrink by heat, shnū' $\chi^{a}$ to parch, nókla to roast or boil on the hot coals; n $n$ nita and uxútagia (for nokúta etc.), to burn at the bottom of a cooking vessel; by a vocalic change we get slnikanua to allow time for ripening and its iterative shmikanuánka, which is also applied to fishing, not to fruits or seeds only. Other derivatives of $\operatorname{sln} \bar{u}^{\prime} \chi a$ are shnitchí $\chi$ a to fry and shinítchkna, v. trans., to broil, to fry, to dry such substances as meet, ete. The medial form of núta: shuńta, is transitive only: to burn, to build a fire, and to parch, and from it are derived shnúya, abbr. shnúi, v. intr., to burn, to shine; also when noun : polar light; shnuitámpka to keep Znming, shnúish a peculiar smoke or foy appearing at times in the northwest and ascribed by the natives to deities; shnutchoka to barn or singe to death, a verb compounded of the two stems nu- and tchók- in tchóka to die; slnúikia to build "fire next to something, as a wall, hole, tree. The vowel $a$ appears in other derivatives of the same radix, as in natcháka v. intr. to melt by heat and its causative shnatcháka, v . trans., to melt, dissolve by fire-heat, as wax ; nátspka to be consnmed by fire; nátkalga to blaze up and its causative slmátkalga to kindle up, set on fire. N:i'hlua, nelua to be burnt on the skin or surface as by the sun, fire, begins a series of derivatives showing the vowel $e$. From it we have the causative slnélua to stain, color, dye and the noun slnéluash dye-stuff, eoloring matter. Shnćka is intransitive and means (1) to be lit up, to shine, (2) to burn oneself, and (3) to burn through; hence shnekúpka to shine from above or from a distance. Nélka, nélza to be burnt up is probably identical with nī'lka it is darning, but both are now pronounced with different vowels; nélka gave origin to slnélqa (for slné-ilya) to set on fire, to bmrn down, whence shmé-
ilaksh fire-place, hearth, and lodge. Shenena is to build a fire when out traveling; slné-ish camp-fire made on a journey, shménkish the spot where such a fire is or was made. Shnépka (for slné-ipka) to build a camp-fire habitually is a usitative verb formed by the suffix -pka; its noun slmé-ipakslı usual fire-place, also stands for the lodge or habitation itself, and differs from shéilaksh only by the circumstance that people stay longer in the latter than in the former. Ni'lka it is dawning is closely connected with nilíwa to burst into a light, and refers to the rays of sunlight shooting up from the horizon and apparently coming from a burning fire; it forms derivatives like nílakla, metathetically for nílkala, to appcar first, as daylight, the local name Nílaksli; q. v.,.nilaklóla, nilaklōltímna; cf. Dictionary, under nílakla.

This radix nu-, one of the most fecund in forming derivatives in this upland language, must be carefully distinguished from another element nu-, which signifies to throw and to fly, when round or bulky objects are spoken of. It is a contraction from níwa to drive, and is found in núdsha, núlidsha, nutolála, nutódsha, shnuntoẃá-udsha, and other terms.

Páus to be or become dry is transitive also: to render dry, to exsiccate, and does not apply to the fading processes of the vegetable world only, but as well to sickness of men and animals. A relation between disease and dryness is traceable in many languages, as disease induces fever, and fever is productive of thirst, which is the result of loss of water from the blood; our term sick, the German sicch are in fact identical with the Latin siccus dry. With the use of three different verbal suffixes the root pa-in páha
 The verb páka, among other significations, means to wither, fude, and to break, crack from being dry, and then is usually pronounced mbáka; mbákla to be parched up, to crack, is transitive also, with change of vowel mbúka, púka; when used as a noun, this means clust. Mpákuala is to dry up on the top, and is said of trees. Pa'ka to render dry, to dry out, has special reference to thirst, and appears also as an impersonal verb: pii'ka nîsh $I$ am thirsty, lit. "it makes me dry"; pä'kam is the dry moss growing below trees. Pála to be dry and to render dry also forms many derivatives, and in some of their number the 'lı after the radix pa- is still pronounced, as in the noun páhla, pála tray, originally "implement for drying seeds," etc., now used for a
matted dish, and a sort of seoop or paddle, larger than the sháplash (for shápa'hlash) matted plute, dish, or paddle. Pála also designates the liver, an organ of the body which the popular mind puts in close connection with the feelings of thirst. Pála-ash is dried food, either flour or bread, palála, an inchoative verb: to beeome dry, pailkish dry river bed, pálpali (for pálpal-li) white, lit. "bleached," or the color of dry vegetation; spíl, in Modoc tchpíl oeher, yellow paint, lit. "becoming dry upon somebody," wapálash dead tree, for upálash; stópecla and stópălsha to scrupe off the fibrous bark of pine-trees, lit. "to render dry (pine-trees) on the top ;" stópalsh fiber-bark of conifere. The verb páta it is dry season or summer also became a noun: summer, summer-heat, and in the form of páta, mpáta, mpátaslı also means milt, spleen. Páha forms páhalka to dry, v. trans., to become dry, v. intr. and to suffer of a lingering disease, whence páhlaksh emaeiated; páhalka to be permanently siek, papahuátko having dried-up eyes, pálitchna to be thirsty, pá'hpa'lish, pá'hpash earwax, lit. "what turns dry."

Pét'a to disrupt contains a radix pet- resembling in its function that of pu- in púi. The derivatives of it are petíla to be a miduife and miduife, ef. page 375; ktepéta or ktépta to notch, indent and lepéta to tear off particles from the rim of a round object and to mark the ears of cattle; lelpétatko indented. This radix also appears with change of vowel in kmapat'hiénatko wrinkled, furrowed; but petéga, pitéza to break, tear has to be derived from téga, ndéga, not from pét'a.

P'Laí, plaí up, above, on high, and upward has formed many derivatives withont and with vocalic alteration of the radix. Directly derived from it are p'laikni th:e one being above or coming from the upper parts of, p'laitankni (same), ple'entana upon the top, p'laíwash golden eagle, lit. "the one staying high up," pletoizi to lift or purse up, especially said of the lips, etc. With the vowel $e$ p'laí appears in pépela to work, which seems to refer to repented lifting of the arms or hands for mannal labor; in pélta to put out the tongue, pélhipéli to draw the tongue in; the vowel $e$ becomes displaced by anathesis in sheprílta to touch part of one's body with the tongue, shepailua to put the tongue in and out as a gesture of mockery, shepolámna to carry about on one's shoulders, an act which implies a lifting up like its causative hishplâ'mma to tow by means of a rope or string slung over the shoulder. With the vowel a
the radix appears in pálla to steal, purloin, in Modoc also pálna, to which we may conipare English terms like "to lift cattle," "shoplifter;" pálak, Modoc pélak quiekly, rapidly, implying a rapid lifting of the feet, palakmálank at a rapid gait. Thé suffix -pělí, -plí, -blí is a form not derived from p’laí, but sprung from the pronominal pî directly, as a form parallel to plaí, and from this came pipělángshta on both sides. Píl, píla on him, on her has to be distingnished from píl, píla only, but, merely, and from the former p’lu fut, grease, seems derived, together with pilui to smell, v. intr., piluyé-ash emitting smell or stink, ship’lkánka (and shipalkánka) to go about stinking, p’lín to beeome fat, p'lítko fat, adj., shnípělan to fatten.

Púr to eut into strips or fringes forms a basis which has been quite fertile in all sorts of derivatives. The radix pu-points to a separation or cutting asunder so as to cause divergence below. We meet it in the noun: pû'sh whorl, as seen on the cat-tail, etc., and in its derivatives pû'shak bunch of pine-needles, pû'shyam twig of conifere. Pû'ish is a fringe, leather fringe when loose; after being fastened to the garment it is called puitlantchish; púash a flour-sack made of cloth. Pukéwish set of fringes, fringe of a skin garment, strap and leather belongs to the same radix pu-, which refers as well to the diverging of the legs in the human and animal body, as may be gathered from terms like pû'shaklish part of leg between hip and knee, spúya, Mod., to stretch the legs, pútchka to part the legs or feet and pû́tchta, hushpû'tza to toueh with the feet, spútchta and hushpátchta to frighten, seare, lit. "to make the legs part;" pútchkanka to move the legs quickly and to hold them apart. Very probably pétch foot (and leg with smaller animals) is of the same radix, though the change of the vowel is not quite plain; cf. shepatchtifla to plaee the legs under oneself, and spiega to lelp up another on his legs. Another prefix occurs in l'bû́ka (for lpû́ka) to lie on the ground, said of round subjects, as roots, bulbs, etc.

Tkíp stalk, stem of plant, maize-stalk appears as -kap in its compounds and derivatives, $t$ - being the prefix indicating upright position of one sulbject. Tka-, tga- also forms the radix in the verbs of standing when the subject is in the singular number. Káp as a base or stem in the sense of stick or pole is found in yankápshtia and kmakápshti to place into an opening and to bar an entranee with some long object, as a stick. For stalk and
maize-stalk the Modoc dialect has káp, not tkáp; cf. kápala, kápaltcha to be ubout gathering stalks, reeds, ete. In Klamath Lake kípka, a species of low pine, Pinus coutorta, stands for thápaga, thápka, and has a dimimutive kapkága yourag kíupla-piue; for kápka Modoc prefers kī̀ga, diminutive of $\mathrm{k}^{\text {oj}}$ 'sl, $k^{\mathrm{k}}{ }^{\prime}$ 'sh pine. The radix found in kapáta to reach up to, gáptcha to hide or go behind is ka-, related to géna to go and not to káp.
.T'suî'v or těshî't!, d. t'shî't'shan and ti't'shan to grow applies to men and animals only, kédsha to plants. Though intransitive, this verb is a parallel to tchíya to give to somebody a liquid, as water, wilk; t'shín therefore means to be brought up with milk, water, etc., in the earliest stage of life. Cf. т $\rho$ épeıv to feed ou milk, to feed, to eurdle. From that verb comes t'shíshap
 the distributive form tit'shan of t'shin. The circumstance that the father or progenitor is only called the "feeder," "nourisher," throws an interesting light upon the primitive conditions once existing among these western Indians; besides this, p'gishap mother really means "the maker." From t'shî'n are further derived: (1) t'shíka to grow old, to be old, and as a noun : old mam. Its diminutive t'shika-ága is short old mau and parent. (2): ndshifo, dim. ndshíluaga female animat, lit. "the snckler, feeder." (3): hishtit́tcha, the causative form of t'shî'n, to bring up, raise, said of children and the young brood of animals.

Wékta to plait. A series of words begiming with w- possesses in common the signification of twisting, plaiting, but varies considerably in regard to the vowel following the initial sonnd, thus forming thematic roots like wa-, we-, wi-; the real radix is apparently $n$-, which as a component of diphthongs turns into w-. We also find that, e. g., wapálash dead tree is a transformation of upálash, washólal $\neq a$ for huhashólalqa, watákia for utákia. From the form wa- the radix $u$-forms terms like wapilma to tie, twist, or wiud around, wáptash water ruming through ponds and small lakes with visible motiou resembling a twisting, waptashá-iga rope twisted out of grass, stalks, etc., wákogsh bucket, called so because of the hoops winding aronnd it, wákshna moceasin, viz., garment tied around the feet. The diphthong we- stands as initial in wékta to plait, whence wéktaslı (Kl.) plait of females, for which Modoc has wáktash, a form less original than wéktash; wépla to
wind something around, to wrap up, envelop; weplakiámna to bend or coil up, to form rinys; wépiaks middle part of bow, because strengthened by leather tied around it: wípka overshoe or cover of shoe consisting of twisted material. From wítchya, v. tr., to wind around as a rope, are derived witchkátko mountain ridye and witchiak, the Modoc term for rainbow, both named after their winding shape.

Wíts to blow at contains a radix wi- meaning to blow, but greatly varying in its significations according to the suffixes that may become connected with it. Wíta and wítna form wítka to blow out of, wiť nóla to cease blowing out of; the basis wika to blow out, to cmit air, gave rise to the derivatives wikánsha to blow across, to sweep over, and to wikláwi to blow in a side direction, to drift along the ground, and to wiknish teltale, tattler, one "who blows at somebody." Wili is to blow or waft through, wilála to blow into the fire. Witcha refers to continual blowing, and forms witchóla to cease to blow, witchulína to blow underneath, witchuyektámna to blow something up continually (implying an inchoative verb witchuyéga), and wítchtka to continue blowing in return, forms witchtaks tempest, storm. Finally we have wina, which, with the suffix -na indicating gradual process and short distance, means to sing, lit. "to blow at intervals ;" winóta to sing in a chorus, especially when the song is started by the conjurer. The medial form shuina to sing referred originally to a solo chant, but now applies to choruses as well; its noun shui'sh is not song only, but also magic song effecting cures of disease and obtained by inspiration through dreams. For the other derivatives of wína and shuína see Dictionary.

1523 4

```
E Contributions to North
71
C76
v.2
pt.1
```


## PLEASE DO NOT REMOVE <br> CARDS OR SLIPS FROM THIS POCKET

UNIVERSITY OF TORONTO LIBRARY


[^0]:    * Harney Lake is the western portion of Malhenr Lake, and now united with it into a single sheet of water.

[^1]:    * Pacific Railroad Reports, 1854-’55, vol. 6, part 2, pp. 34-39.

[^2]:    * I have not been able to visit personally other parts of the Klatwath highlands than the eastern shore of Upper Klamath Lake, from Fort Klamath to Linkrille.

[^3]:    - Goose and Warner Lakes are deseribel in Lientenant Wheeler's Report, Amual Report of Chief of Engineers, $18788^{\circ}$. Appeudix N N, pp. 113-120. Goose Lake, by Stephen Powers, in "d Pony Ride ou Pit River," Overlaud Mouthly of San Francisco, Uctober, 1:74, pp. 342-351.

[^4]:    * The large pyramidal cone of Mount Pitt is a rather accurate duplicate of the celebrated Niesen Peak in the Bernese Oberland, Switzerland, as seeu from its northern and eastern side.

[^5]:    *Compare Professor Newberry's description, pp. 38, 39, and Lieutenant Williamson's report (part I), p. 68.

[^6]:    * Contributions to North Amer. Ethnology, 1n, 20゙2, 25̃3. By Shastika he means the Shasti Indians of middle Klanath River, California.

[^7]:    * Contributions to Amer. Ethnology, III, p. 253.

[^8]:    * Contributions to North Amer. Ethnology, 1LI, p. 25٪. Davis Creek euters Goose Lake from the southeast. The U. S. Geological Survey map marks "Old Indian Villages" in latitude $41^{\circ} 37^{\prime}$ and longitule $120^{\circ} 36^{\prime}$, to the sonthwest of that basin.

[^9]:    *My authosity for quotations from Iroquois dialects is Mr. J. N. B. Hewitt, of the Tuskarora tribe.

[^10]:    * It occurs even in South America: 'síni in Kechna is mouth and word; shŕm in the P'atagón of Brazil, lip; Martius, Beiträge, II, 211.

[^11]:    * We may compare the long-lasting friendly relations once existing between the Lenapo and Sháwano, the Shushoni and Bannock (Panaíti), the Chicasa and the Kasi'hta (a Creek tribe), the Illinois and the Miami Indians.

[^12]:    *This would make only six, not seren, villages.

[^13]:    - Overland Monthly, 1873, June number, page 540. His appearance had something faseinating for the Indians, and some are said to have traveled two hundred miles to eonsult him. His name appears to be Kúmětakni=" eoming from a eave," or "living in a eave."
    $\dagger$ One of these fights took place between the Shasti, Modoc, and Trinity Rivir Indians for the possession o an obsidian quarry north of Shasta Butte, mentioned by B. B. Redlling in Ameriean Naturalist, XIII, p. 668, et seq., and Arehiv f. Anthropologie, XIV, p. 425.

[^14]:    *Alex. S. Taylor, "California Farmer," May, 1859.
    t Report of the Secretary of War, 1868-99, Part I, p. 69, dated Angnst 22, 1867. Stephen Powers refers to this fight in Contributions III, p. 268.
    $\ddagger$ One of the Texts, p. 28, shows that the Snakes in one instance attacked and massacred in n very cowardly way some women near the outlet of Williamson River.

[^15]:    * Contained in the Report of the Secretary of War, 1868-69, Part I, pp 69, 70, dated Scptember 2, 1867, and March 19, 1868. The troops killed twenty-tonr Suake Indians in the expedition of 1867 . See also Texts, Note to $28,14$.

[^16]:    - Report of the Commissiouer of Iudian Adaits for 1864, p1. 81, 85 and 103-110.

[^17]:    *At the foot of Nílalishi Mountain.

[^18]:    * Cf. Revised Statntes of the Unitel States, second edition, 1878, p. 359.
    $\dagger$ Born in Newport, New Hampshire, in 1817.
    $\ddagger$ Born at Savamah, Georgia, Jannary 21, 1813; candidate for the Presidency of the United States in 1856; died in New York City, Inly 13, 1890.

[^19]:    * Reports of explorations and surveys to ascer ain the most practicable and economical route for a railroad from the Mississippi River to the Pacitic Ocean, made in 18.53 and years following. Washingtou, 1855-1s60. Quarto; illustr. with plates and maps. Thirteen volumes.
    $\dagger$ Williamson was boru 1824 in Now York, and died 1852 in San Francisco. Abbot, a native of Beverls, Massachusetts, was born in 1831.
    $\ddagger$ The finst part of Vol. VI contans Abbot's renort, and is chietly toprographical.

[^20]:    *The name for the sheet east of Klanath has not yet been determined.

[^21]:    * For the later period of the war, beginning April 16 , Frauk liddle states the number of the Modoc wartiors to have been fifty-oue; 42, 20 .
    +Captain Firlds, "The Modoc War."
    $\ddagger$ Appointed by the Secretary of the Interior, O. Delano. The particulars in Texts; note to 38,1 , page 48.

[^22]:    *Cf. Texts $5 \overline{5} ; 14,1 \overline{5}$, and Note.

[^23]:    - Sin'lks was released, and stays now at the Modoc Reservation, Indian Territory, with Scarface Charles and some other wariors of that war.

[^24]:    ＊In Nahuatl we may compare the reverential suffix－tzin，and in Shoshoni dialects the parallel one of－pich，－bits；e．g．，múbu owl in Bannock is múmbits mel in the Shoshoni of Idaho．

[^25]:    * Cf. Texts, pg. 100, 2: skiblê'slı p'lis-linlsham. Mention is made of one-eyed wives of Skèl and of Teháslikai.

[^26]:    *The sun-halo is an important factor in some Indian mythologies. The Znñi Imlians say that when a storm is brewing the sun retreats into his house, which hos huilt for his sufety, and after the storm le leaves it again. Among th" Zuñis the sull is the principal deity also.

[^27]:    * Texts, pp. 99, 4 (shláyaks ak), and 5.
    $\dagger$ Cf, the Maidn myth of Kodo-Yampē in Stephen Powers's "California Tribes;" Contributions to North American Ethnology, III, 293.

[^28]:    * The myth of Aíshish's birth forms a portion of a long cyclus of related myths, with the title: Aishisham shapkalit'ash winlamunashti. I obtained them from Lacy Faithfnl, wife of Stutílatko, or "Faithful William;" ef. Dictionary, p. 412.

[^29]:    *The councetiou of the mythic pyre of self-sacrifice with the dawn is not only based on sinilarity of nature, but also on etymological grounds; for the verb nīka, it dawns, with slight vocalic change turns into nélka, nélya, to be on fire. Cf. the Latin aurora, which is a derivative of urere, to burn, and Appendix VI to Grammar, pp, 706. 707.

[^30]:    - Uf, the Grammar, in Appendix VI, p. 710.

[^31]:    * Various functions are assigned to Tehnti; his symbol is the ibis-crane, whose long, pacing steps evidently suggested to the myth-makers ol Egynt the idea, that he was measuring the earth. The name Tehuti is derived from the Egyptian verb te $\chi$ u to be full, for the measuring of liquils, grains, etc., is fffected by filling vases possessed of certain enbic dinensions.
    $\dagger$ Derived from ukablua to linock to pirces.

[^32]:    *The belief in the Thunder-bird is found more frequently among Northern than among Southern Indians. Cf. "The Thunder-bird amongst the Algoukins," by A. F. Chamberlain, Amer. Anthropologist, Jan., 1890, pp. 51-54; and my "Migratiou Legend of the Oreek Indians," Vol. 2, 49.

[^33]:    * After Teemmseh had delivered a speech to Gorernor Harrison at Vineenues, in 1811, he was offered a chair by the interpreter, who sail to him: "Your father requests you to take a chair." To this Teenmseh male, with great dignity of expres. sion, an answer which has since become classieal: "The sun is my father, and the earth is my mother ; and on her bosom will I repose," and immediately seated himself, in the Indian manner, mpon the gromnd.

[^34]:    * Shū ${ }^{\prime} k a s h$ is the substantive of sh'hā'ka to whirl about, this being the medial distributive form of húka to run about: sh’huhóka, sh’hí oka, sh’hn̄'ka "to run about by itself in various directions."

[^35]:    * In the Tonika or Tímizka language of Louisiana télia or téliahtel signify shadove, $80 u l$, and reflection in the zeater; in the Cla'hta, State of Mississippi, shilambish is shadoio and soul, while a ghost is shílup. The Egyptian ka and the Greek ěvomov, the soul after death, really signify image, and to this we may compare the use made of the Latin imago. The Cherokees, as Mr. James Mooney informs me, distinguish between adántâ soul in the living being, nndalî' secondary soul of an animal killed once before, and asgina an ordinary specter, ghost of malevolent disposition, which last term served the missionaries for transeribing the word "devil."

[^36]:    * Cf. Dictionary, sub voce ē'ni and Grammar, Appendix VI, p. 702. The Warm Spring Indians call the spirit-land: ayayáni. See also Texts, p. 174; 11.
    vii

[^37]:    - Among the summits of the San Juan Mountains, New Mexico, there is to day a lake bounded by precipitons walls, and there is a little island in the center of the lake with a hole in it, and something sticks out of the hole that looks like the top of a ladder, and "this is the place through which our ancestors ewerged from the fourth iuto the fifth or present world." The Náajos never approach near to it, but they stand on high summits around, and view from afar thei. natal waters. (From Návajo Creation Myth, Am. Antiquarian, V, 1883, p. 213.)
    $\dagger$ G. Gibus in Pacific Railroad Reports, I, 411.

[^38]:    * Captain Wright was shortly afterward killed by the bullet of an Indian, who saw him standing nnder the door of his honse, near the ontlet of Rogue River, Oregon.

[^39]:    * Drve Hill introduces himself in the fust person as ehicf; lut many of these decisions can be given by the hemphief only, not by any of the subchicfs, to whose number Dave Hill helonged. The Morlocs at Yáneks claim to observe these regulations; the Suake Indians do not.

[^40]:    * Th surd occurs in Sháwado, in some western dialects of Yuma (Mohave, etc.), and in Tehua dinlects, Now Mexico.

[^41]:    * Dr, Phil, von Martins, "Beitrïge zur Ethographie Amerikas"; Vol. II, p. 13.1.

[^42]:    "This epenthetic use made of $h$ should not he confounded with the affix 'h by hand. Cf. below.

[^43]:    *G. Gilus: a Dictionary of the Chinonk Jargon, or Trade Language of Oregon. New York, 1863.

[^44]:    *'This dialect of Irorguoin lacke 1 , $p$, and $f$.

[^45]:    * Quoted from H. Stointhal, Charaeteristik, page 212. $\dagger$ Arte del idioma Pima 6 Nevome, in Shea's Linguistio Series. $\ddagger$ Contributions to North American Ethnology, vol. iii, pp. 560-565.

[^46]:    *Mengarini, Granm. p. 84 : Unica res pluribus pertinens, reduplicatur tantnm vocalis substantivi, non aliter ac in tertia persona plurali verborım dictum est. Vel agitur de rebus pluribus ad singulos pertincntibus, tunc tantum radix etiam nominis duplicabitur juxta naturam substantivorum in plurali.

[^47]:    ${ }^{1}$ A short stay in the Indian Territory, Modoc Reservation, has supplied me with a new stock of Modocterms. Many of these have been inserted as examples in the Grammar from this page ourard, and, though ob'ained from Modocs, the majority of them form part of the Klamath Lake dialect as well.

[^48]:    ${ }^{1}$ Refore, Inpítana, and after, tapítana, are known to him ouly as propositions or rather postpositions, not as conjunctions.

[^49]:    ${ }^{1}$ There area few nomina actoris and other nouns in -ash (short a) which I presume have all originated from-a-ish, and furmerly had their $a$ long (-ish): ki-ikash one who acts strangely, from ka-ika; sheshxella-ash noisy fellow, from sheshxēla; utiissusi-ash clorn, jester; pópamkash hairy on body, absol. form powkash not being iu use.

[^50]:    * Instances where even the suffix -a liecomer deciduons in a continuous narrative are frequent. Cf. Texts 70,$6 ; 78,7 ; 1 \cdot 22,3$. It frequently falls off in the infl. suffix -uga, -óka: -11g, -uk, -ok, etc.

[^51]:    *Examples will be found in the Syntax.

[^52]:    "Cf. what is said under "Verbal Iutentional," 1. 416.

[^53]:    *Sometimes accoupanied by prepositions, as inter in Latin, entre in Freuch.

[^54]:    * Something that slightly reminds ns of this structure is funnd in the compound transitive verb (not the simple) of Romance langnages, which varies the participle when the object precedes it in the siontence. Thns in French: "les hirondelles que j’ai vues étaient perclıfes." comparcd to "j’ai tu de•s hiroudelles prrebées"; derived from Low Latin: habeo visas, and habeo risum.

[^55]:    * ktukatko and its d. form are also inflected with the auxiliary verb g1; cf. below.

[^56]:    ${ }^{1}$ Cf. Note to Texts, p. 90, 7, aud Texts 90, 7, 10.
    ${ }^{2}$ Hence the genius of the language considers them as of the inanimate order.

[^57]:    'Cf. käkii'kli wátiti "yellow metal": gold, copper ; pálpali wátiti "white metal": silver, silverpluted ware.

[^58]:    ${ }^{1}$ Compare the Modoc phrase: batokt ulsh a gishi when $I$ am there or while $I$ was there, 22, 2.3.

[^59]:    At the place where they became old squaws or women.

[^60]:    ${ }^{\text {1 }}$ Signifies "toward the Shasti country", or, when used as a suljective case, it means "the eountry of the Sbasti."

[^61]:    ${ }^{1}$ Other instances of substantives with duplicate dıminutive endings are paishkaga little cloud, an nkashkiaga belly, if this stands for nkashka-aga, trausformed by vocalic dissimilation.

[^62]:    * The Sháano lauguage, Algonkin family, forms its ordinals by prefixime mawi- aul suflixing -sene, thene to the earclinal nnmeral. Thns nisathif seven forms mawiuisuathéne seventh. The suflix can also be iropperl, and then we have mawinisuathní seventh.

[^63]:    * Grohgr Giblse, Instrietions for research relative to the ethnology and philology of America, pages 40 shcl. (Smithsonian Miscell. Coll., vol. 7, 1863). H. Iof, Charexcer; Des explétives numérales dans les dialectes de la famillo Maya-Quicho, in "Revuo de Linguistique," 1880, pages 339-386. THE samp, Dn systeme de numeration ehez les peuples de la famille Maya-Quiché, in Lo Muséon, Louvain, 1882 , vol. 1, No. 2. 80.

[^64]:    * Cf. Gradation of the Aljective, page 5\%2.

[^65]:    *The proper signification of the Greek term syntaxis is that of "arrangement", "putting in order."

[^66]:    * For further discussion of this topic, cf. page 253 of this Grammar.

[^67]:    * The nearent approach to a verl in this condition, which I was able to find, is contained in Fr. Mitller, Novara-Reise, linguistischer Theil, 1867, page 247 sqq ., where the author speaks of lauguages of Sonthern Australia. I subjoin an extract in the words as osed by Professor Melleer: "Ia anstralischen Sprachen wird dieselbe Form activ und passiv gebraucht, die letztere jedoch mit Olyjectivpronouen: puntau pán, ich schloge, loch nicht 'schlagend ich'; puntan tia, ich werde geschlagen, wörtlich,: schlagon mich.' Das dortige Verb ist demnach ein abstractes Nomen, unpersölich zu fassen und erst dann ainsscrlich auf das Nomen bezogen. Dio Handlnng tritt abstract, unpersönlich ein und wird crst da mit einem Subject oder Olject in Verbindung gesetzt: 'das Schlagen trat ein und ich vollfiihrto es.' Snloject und Prüdicat sind unr änsserlich anf einander bezogen; das Pronomen, das das Verbuin begleitet, ist indess stets ein rein subjectives."

[^68]:    * From Mor, Malf's Notes on the Nez-I'Peree Language and PaNdosy's Yakama Grammar, we gather that in some Sahaptin dialects the subjective case is supplanted hy the possessive, even when the verl is used in the active sense.

[^69]:    * Local adverbs and other parncles often assume temporal significations. Cf, the adverb alvays; the German häufig.

[^70]:    *The sane suffix, -napka, appears also in a contracted form as ōpka, -ūpka, forming desiderative verbs. Mentioned under Suflix -ōpka, r. v.

[^71]:    * We have a parallel to this in the Creek language, where -ofa, -6fan means within, inside of, when appended to nonns; while, during, when suffixed to verbs.

[^72]:    * Mention was made of them in this connection on page 416.

[^73]:    *Other ways of expressing ownership or possession in varions North American languages are referred to in "Aluericau Anthropologist" of 1888, page 340.

[^74]:    - In the Sioux. Dakotan dialect, pa-indicates an act performed by pushing or rubbing with the hand; na- an act performed with the feet; ya- with the month; ba-by entting or sawing; ba-ly picreing; kar by striking with a stick or ax.

[^75]:    * In the same manner our when is derived from hva, the radix of the relativo and interrogativo pronoun ; if, in Gothic ibu, is the instrnmental case of the pronominal radix $i$; the Latin si if is a contraction of svai, sei, and with tho Oscan svae is the fominine locativo case of the reflective pronominal radix $\varepsilon^{2} a$-.

[^76]:    * Preface to his "Ftudes sur six langues américaines," Paris, 1878, page vii.
    $\dagger$ On polysynthesis and incorporation as characteristics of American langnages; Philadelphia, 1885, pages 14, 15 (forms part of 'Transact. An. P'hilosoph. Soc., Plila., vol. axiii, 48-86).

[^77]:    - Cf. H. Magnus, d. Farbension bei d. Naturvalkerm, pages 9. 10. 19-21 (Jena, 1880).

[^78]:    * Cf. also u'blopátaua and upátia in the Dictionary.

[^79]:    * Cf. shantchaktantko in Dictionary and on page 5.31 of Grammar.

[^80]:    *To ralle when sainl of the rattlesuake is shmat"lablehna, its rattle: whá-imugsh.

[^81]:    *Cf. Journal of American Folk-Lore, Vol. I, 237 sq. and II, 68 (Cambridge, Mass., 1888. 1889).

